

Ever been to a warehouse and been wound up?



wrong stock! wrong prices!
no stock! no returns!

NOT AT

ACORN

THE LEADING CITIZENS BAND WAREHOUSE
WE STOCK THE LOT!



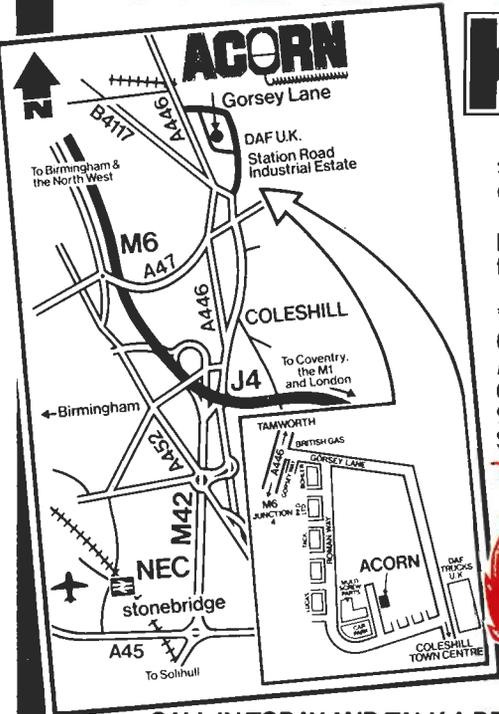
How many times have you called in on your local C.B. Warehouse and found the wrong stock — no stock — wrong prices, in addition to being told that you are unable to return damaged or faulty stock! **NOT AT ACORN buddy!**

In our superbly appointed 3000sq.ft. showroom we stock the lot including all the popular lines plus some specials and to keep ahead of the field, we are adding more and more products to meet demand.

All Acorn's prices are competitive and special discounts are available on bulk purchases. * CASH & CARRY * TRADE ONLY * DELIVERY ANYWHERE IN G.B. (FREE FOR PURCHASES OVER £400) * FREE ADVICE TO NEW RETAILERS. * SPECIAL BIG VALUE STARTER PACKS AVAILABLE.

OPEN MON.-FRI.
9.30a.m.-6p.m.
SUN. 10a.m.-4p.m.

**BE A REGISTERED ACORN DEALER BY RETURNING COUPON TODAY
SPECIAL FREE GIFT OFFER FOR ALL NEW ACCOUNTS**



Name _____

Company _____

Address _____

Tel _____

Position _____

CALL IN TODAY AND TALK A DEAL WITH ACORN

ACORN TRADING (CB) LTD.

UNIT 43, OFF ROMAN WAY, COLESHILL INDUSTRIAL ESTATE, COLESHILL,
BIRMINGHAM B46 1JT. TEL: COLESHILL (0675) 64136

CB/11

Editor:
Rick Maybury
Senior Art Editor:
Andrew Sawyer
Advertisement Manager:
Roy Perryment

Cover This Month

We would like to thank the Home Office for printing such luvverly licences, Tandy (UK) Ltd for making such pretty rigs and Phil Gerring, our ace lensman for sorting out the focus on his Brownie. Technical buffs may like to know that the cover pic was taken on a Kodak Brownie (circa 1934) F4 at 1/28th second with the twiddly knob business set at 'cloudy'.

Copyright. All material in this publication is subject to world-wide copyright protection. Permission to reproduce any material in part or whole must be sought from the publisher. All reasonable care has been taken in the preparation of this magazine to ensure accuracy but Argus Specialist Publications cannot be held legally responsible for any omissions or mistakes that may occur. © 1981 Argus Specialist Publications.

CITIZENS' BAND is normally published on the third Friday of each month prior to cover date.

CITIZENS' BAND, 145 Charing Cross Road, London WC2H 0EE. 01-437-1002. Published by Argus Specialist Publications Ltd. Distributed by Argus Press Sales & Distribution Ltd., 12-18 Paul Street, London EC2A 4JS. Printed by Alabaster Passmore & Sons Ltd., London & Maidstone.

The publishers of CITIZENS' BAND would like to point out that it is at present a contravention of the Wireless Telegraphy Act of 1949 and 1968 to use, manufacture, install or import CB transmitting equipment not conforming to Home Office specifications MPT1320 and MPT1321. It is not the intention of Argus Specialist Publications Ltd to incite, encourage or condone the use of such equipment.

Group Art Editor:
Editorial Assistant:
Drawing Office Manager:
Managing Editor:
Managing Director:

Paul Wilson-Patterson
Judith Jacobs
Paul Edwards
Ron Harris BSc
T J Connell



CONTENTS

NOVEMBER 1981

VOLUME 1. NUMBER 12.

| | |
|---------------------------------------|-----------|
| Update | 6 |
| News and reviews | |
| Ice Pick | 15 |
| Moving sounds | |
| Rigs, Twigs and Prigs | 18 |
| Legalisation, the full facts | |
| Rig Review | 22 |
| The Tandy Trio | |
| Inside CB | 26 |
| UK FM Synthesisers | |
| Base Station Microphones | 28 |
| Table-top talkers | |
| Legal At Last! | 36 |
| What now? | |
| Interference-The Facts | 38 |
| Noise nuisances nullified | |
| Antenna Review | 42 |
| Tandy twig | |
| CB Q & A | 44 |
| Your Questions answered | |
| Rig Checklist | 46 |
| We've got 'em all | |
| Mack Chat | 49 |
| Will Mack go legal? | |
| Back Chat | 51 |
| You tell us | |
| Club News | 54 |
| Regional round-up | |
| Club Directory | 56 |
| Latest additions | |
| Channel Check | 58 |
| Speaker saver | |



CB TRADERS COMPARE



- * If you are already a C.B. wholesale Trader or are thinking of expanding into this field in time to take full advantage of CB becoming legal, Now's the time. Make sure that your getting the best Service and the best range of quality products at realistic prices.
- * Biggest, most comprehensive selection always in stock.
 - * Normal delivery within 24 hours.
 - * Free delivery on most wholesale orders.
 - * Most competitive prices.
 - * Over 8,000 sq.ft. of warehouse.
 - * Own transport fleet.
 - * All leading and most popular brands.
 - * F.M. Legal sets available soon (Details Now)

Simply compare the service we offer with the services you could get elsewhere, then pick up the phone and talk to Ged, Dave, Elliot or Chris.

**SERVICE
& VALUE
FROM**

CB Traders —
Compare the service
you get now with
the service we offer

Mura ||||| 295-297 HIGH ROAD,
WILLESDEN,
LONDON NW10
TELEX 8956073 MURA UK-G

01451-4141-2-3

L & M

Shirts

14 - 14

ALL BREAKERS

Eyeball this page for the finest quality CB Sweatshirts with your handle and breaking channel printed FREE OF CHARGE with superb flock lettering. Never before have Sweatshirts of this quality been sold at anything like this price.

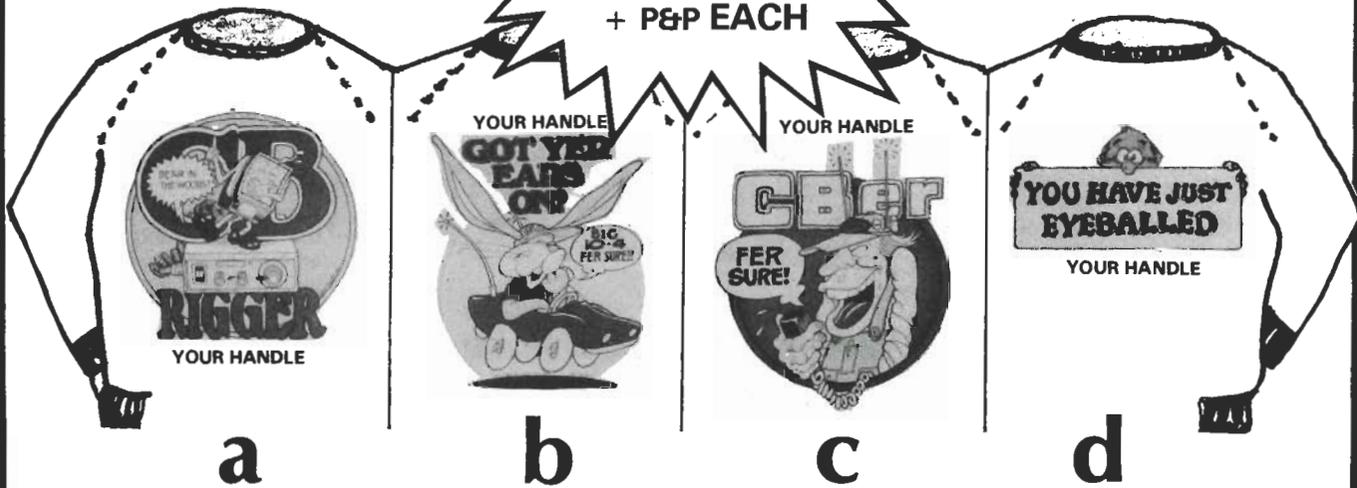
Available in a choice of SEVEN colours: Red, White, Navy, Black, Bottle Green, Sky Blue & Yellow.

To compliment these already unbeatable Sweatshirts, we have put together a range of 4 colour CB transfers which we will print for an additional 60p each.

T-Shirts are also available in the same colour range with printing at £2.75 + 30p p&p.

ONLY
£5.75

+ P&P EACH



HOW TO ORDER

Please print your order in Block Capitals stating clearly your Name, address, size (S, M, L, XL), colour choice (2nd choice if possible) Handle and breaking channel also transfer letter.

Please make cheques/P.O.'s payable to L & M Shirts including 40p p&p per garment.

Send your order to

L & M Shirts, 12 Cornmarsh Way, Lyncroft, Swindon, Wilts.

UPDATE

News from the world of CB

News from the world of CB



New Lines from SSE

Four new pieces of equipment from SSE came our way at our recent CB Show. Three new accessories include two TV filters, one designed to fit into the rig antenna line and one into the TV aerial lead. Both items are the usual very high quality we have come to expect from SSE. The filters are both encased in strong metal boxes and sturdily constructed. Again, as usual with SSE products they have the endearing habit of actually working and not costing the earth. Both splitters cost under £5.

Third of the accessories is none other than an S-meter/watt meter. Just in case you're wondering why on earth you might need an S-meter combined with a watt meter when your rig probably already has one, then consider this: most in-built S-meters are so small, and so vaguely calibrated, that you'll probably need glasses after half an hour's squinting at those miniature meters. This meter is large, easy to read and sturdily constructed — great for base station use. The Extension S-Meter can be all yours for £15.

Last but by no means least is a 12 channel hand-held UK FM rig that's got to be a winner. The rig is designed with portability firmly in mind. A selection of three antennas are available, including a short rubber ducky, centre loaded telescopic and a tape antenna that will withstand an incredible amount of abuse. The transmitter pushes out around 1.5 watts and a selection of half a dozen or so crystals control the channel allocations. The designers have used a cunning double conversion technique to limit the number of crystals required to just eight. A tone button will, in conjunction with the PTT button, send a short tone burst for paging and the PTT itself is lockable. The transceiver is powered by a pack of re-chargeable batteries which can be exchanged quickly by just swapping the battery module. All in all this is a very well designed, sturdily constructed little unit and should retail for around £50. More information on this and the other SSE products can be obtained from: *Solid State Electronics (UK) Ltd, 6 The Orchard, Bassett Green Village, Southampton SO2 3NA.*



Change Of Name

No, we haven't changed, just the name. From now on we will be known as **Argus Specialist Publications Ltd**, not *Modmags*. Don't worry though, our address and telephone number are still the same so just for the record it's now; **Argus Specialist Publications Ltd, 145 Charing Cross Road, London WC2H 0EE, telephone 01-437-1002.**

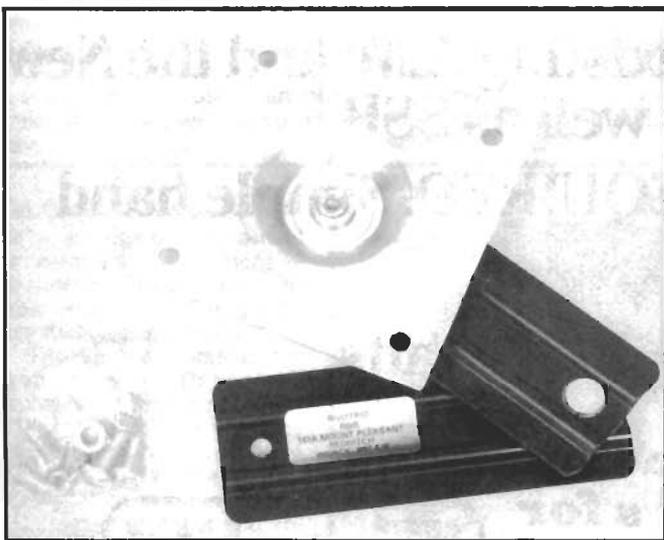
UPDATE

New From Binatone

As reported exclusively in this magazine some months ago Binatone will be offering some very interesting products for UK CB in the next few weeks.

Shown here are two new Binatone SWR metres, the 02-5798 also has a power measuring capacity. Also here are the re-styled Route 66 and all new Speedway rigs which are shown for the first time at the *First National CB Show*. Both rigs conform to the UK FM specs.

Binatone have put together a small booklet on CB designed specifically for first timers and newcomers. This handy little book contains just about everything you need to know to get you on the road. Proceeds from the sale of the booklet will be going to the World Wildlife Fund — good on yer Binatone. For the complete lowdown on all Binatone products get in touch with them at *Binatone House, Beresford Avenue, Wembley, Middlesex*.



Mounting Interest

Now here's a thing. The *Pivotrig CB Swing Mount* for CB rigs. This rather unusual device is designed to be mounted under the dashboard of your mobile and attached to the top of your rig. The idea is fairly obvious: the rig can be swung out from under the dashboard ready for use, or, conveniently tucked away, out of sight of Buzby or light fingered people.

The bracket which consists

of two jointed arms extends up to 9 inches and the arms themselves are made from ribbed steel, finished in satin black enamel.

The Pivotrig sells for around £4.50 (inc VAT) and should be available from most good accessory shops. However, in case of difficulty the manufacturers, *R & R of Redditch*, should be able to help. They can be found at *Crescent Works, 141a Mount Pleasant, Redditch, Worcs B97 4JE*.

Totem Poles?

A new name in legal CB antennas will be making itself known in the next few months. The name is actually part of a new image for Valor antennas, which for some, had rather unfortunate associations with room heaters. Two new names you'll be seeing almost immediately will be *Cherokee* and *Half Breed*. The Cherokee is the new name for the good old Dial-A-Match, that's the one with the superbly simple SWR adjustment rings on the coil body. The other antenna will be new to many, that's the Half Breed, and we hope to be putting this in our Antenna Review pages in the not too distant future. Both of these twigs will be distributed by a new force in CB which consists of a tie-up between **OCT** and **Breaker One Nine**, to form yet another part of the immensely successful OCT Group. Look for both of these new antennas in your local shop soon, and hopefully we'll be reporting on the outcome of the Half Breed test shortly.

Lighting Up The Sky

Young Dave Rogers, gentleman CB dealer of the parish of Enfield, has a rather interesting

range of Astatic microphones. The run-of-the-mill stuff, excellent though it is is completely overshadowed by what must be the most important development in microphone technology this century — it's the *Astatic D140 table lamp*. This masterpiece of engineering and design is actually a D104 mike with a lamp fitting on the top. Initial reports from our test team are most enthusiastic. It appears that the field tests show that the unit functions faultlessly under virtually all operating conditions, spreading high quality illumination over an area of around six square feet. We ask you how many other CB base mikes can do that?

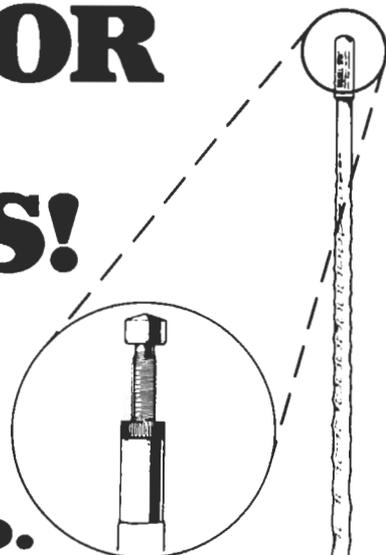
Dave and his amazing collection of Astatic mikes can be found at *Skyriders, 557 Hertford Road, Enfield*.

Please note that the item in the Update September issue of CB entitled 'Card Sharps' regarding a printing service for Eyeball Cards stated wrongly that the price for 250 cards was £5. The correct price is £5.50 and the address for sending new orders has now been changed to: *Rigs and Twigs, 51 Eaton Road, Margate, Kent*. ▶



THE FIRST TUNABLE TIP ANTENNA FOR THE BEST OF BOTH WORLDS!

Introducing 'Diesel-Stik';
the revolutionary
antenna concept from
the 'Firestick' Antenna Co.



'DIESEL-STIK'™

- ⚡ Tunable over the full 27MHz Range
- ⚡ Operates on existing A.M. and the New British F.M. as well as SSB.
- ⚡ NO TOOLS REQUIRED. Simple hand adjustment.
- ⚡ Power Rating - 1000 Watts.

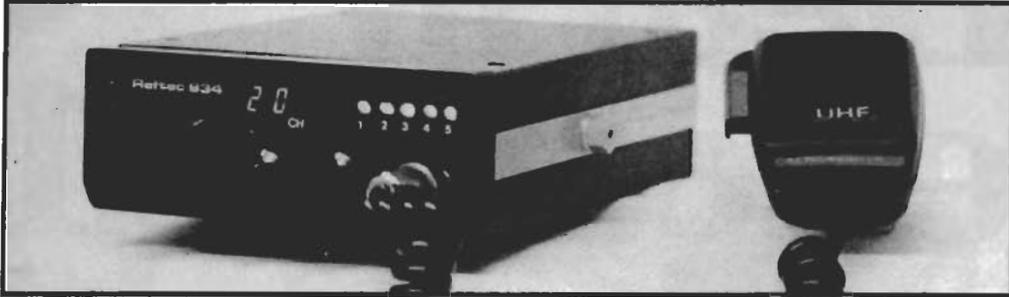
**Only available from Connexions,
sole UK Distributors for**

Furrow Way, Cannon Lane,
Maidenhead, Berks. SL6 3NY.



Trade Enquiries welcome. Tel: 062 882-4338/9.

Connexions



934 Rigs A Reality

Shown here is one of the finest examples of a 934 MHz CB rig produced in this country by a company called **Reftec**. As yet details are a little on the slim side but we hope to have a full review in the next few months. The rig itself will retail for something like £200 and has the full 20 channels allocated to 934 megs.

According to Jeffrey Smith, the Managing Director of Reftec, tests on pre-production prototypes achieved ranges of several miles, sufficient for mobile and static communications over quite a large area and well up to the ranges we have come to expect from 27 MHz equipment.

It's possible that 934 megs

transceivers could find a lucrative market in business communications where the minimal security afforded by 27 megs equipment could prove a limitation. For more details on this interesting enterprise contact **Reftec** at *Leyton Avenue, Industrial Estate, Mildenhall, Suffolk* or give them a buzz on **0638 715053**

A Woolfe in Cheap Clothing

John Woolfe Racing, famous for ally wheels and customising goodies, have announced a range of three new UK FM rigs. The cheapest of the range is the M2 and that should retail for around £59.95. This is a full specification 40 channel FM rig and as you can see from the picture is distinctively styled and reasonably compact. We're pleased to see that JWR rigs feature SWR protection circuits that will withstand a mismatch of 20:1 for up to five minutes.

Second rig in the range is the M1. This will retail for around £65 and has a number of interesting features including channel free and busy indicators, hi/lo attenuator switch for the 10 dB antenna restriction and dual polarity. Again, the M1 features a SWR protection circuit.

The last of the three is aptly named the M3. Like the M1 it has a hi/lo switch, SWR protection and dual polarity working. In addition it has a switchable ANL/NB (automatic noise limiter/noiser blanker) switch that will go a long way in cutting out excessive ignition interference. Price for this unit is expected to be around £90.

To back up the rigs JWR are introducing their own range of CB accessories, packaged in JWR colours. All of these items should be available for L-Day and additional information can be obtained from **John Woolfe Racing, Woolfe House, Norse Road, Bedford MK41 0LF**.

Snippets

Midland CB rigs will be sold in this country by **Plustronics Ltd.** The important Midland name, known to millions of CBers worldwide, will be appearing on three new UK FM models on sale this autumn. The three new units include hand-held transceiver, the *Ready Rescue* emergency rig, very like the *GEC HELP* unit, and a home base unit. Three mobile transceivers previously seen in other CB markets will also be on sale.

David Allen Insurance Consultants have announced a new CB insurance plan offering better terms and cover than many comparable plans. The basic cost of cover is calculated at 10% of the value of the equipment plus an optional cover for confiscation which works out at £7 for mobile rigs and £5 for home base units. More details of the policy can be obtained from **David Allen (Insurance Consultants) Ltd, Carlton Chambers, 24 Queen Street, Huddersfield HD1 2SP.**

Another insurance scheme has just been announced, this one from **Holman General Facilities Ltd.** The basic premium for insuring equipment with a value of up to £300 is just £10, and up to £500 worth of gear can be insured for as little as £15. The cover is for all risks, excluding the first £10 of each claim. For further information contact **Holman General Facilities Ltd, John Holman House, The Broadway, Wickford, Essex SS11 7AN.**

Teutonic Threesome

We've got rigs coming out of our 'earoles at the moment — the latest additions to our ever-expanding checklist come from **Radiotechnik Ltd.**

The rigs are produced by, deep breath, **Drahtlose Nachrichtentechnik GmbH & Co** or **DNT** to those with only one set of false teeth. This is where the story gets interesting: although the rigs are produced in Germany they are manufactured in the Far East and are imported into this country by **Direct Input Ltd** in Jersey. By the time they reach these shores they must be very confused.

Anyway, the threesome include the M40, a 40 channel mobile, the B40FM, a three channel hand-held. Hot on the heels of this little lot will be the HF 13/40 FM — that's a 40 channel hand-held — and **DNT** suspect they might be fairly popular. In fact they reckon that they'll have 25,000 of them for L-Day.



Unfortunately we've got no prices on these units as yet but **Direct Input** are happy to say that their whole range will be competitively priced, and that can't be bad.

Direct Input are now living at **19 Clos Du Briand, St Helier, Jersey** and are awaiting your enquiry on **0534 36493.**

UKCB22B1

We've got some good news and some bad news for you concerning our **Win-A-Rig** Competition in the August issue.

First the good news — the prizes are still up for grabs.

Now for the bad news. For some unknown reason the entry forms have gone astray somewhere between Charing Cross Road and Wantage in Oxfordshire, where the judges **Maureen** and **Richard Woodward** live. We've initiated a search for the parcel and the **PO** are hopeful it'll turn up. Now don't blame us, we're as sick as anyone so keep your fingers crossed and hopefully we'll have some good news next month. If any **PO** staff are reading this, please keep your eyes open for a large parcel, about 1ft by 2ft containing thousands of small pieces of paper. They're of no use to anyone except us, so please contact us if you come across such a parcel. A suitable reward will be forthcoming to the finder!

Deal in America's No.1 CB radio-Colt*

There'll be a big choice of CB radios—the difficulty will be selecting the winner.

COLT has already proved itself in the tough American market—now it's to be introduced to the U.K. so we are looking for dealers.

The COLT has a great track-record for quality, reliability and back-up service. The price is right, too.

What's more, we'll be supporting COLT very strongly with national advertising, window stickers, posters, customer leaflets—the lot.

The profit potential is tremendous. You can join this COLT bandwagon. Simply complete the coupon below and post to: Keith Johnson, Shellpost Limited, 185 The Rock, Bury, Lancashire. 061-797 7146



SHELLPOST LTD—the electronic source.

*COLT is the registered trademark of Colt Communications Inc., Illinois.

I am interested in Shellpost's distributor network for COLT.
Name _____
Address _____
Post to Shellpost Ltd.,
185 The Rock, Bury,
Lancashire.



More British Power

Early fears that British companies would lose out on UK CB are being proved groundless almost daily. Although it is clear we won't be able to compete with the cheaper Japanese rigs we can make an impression on the mid to upper end of the transceiver market and what is becoming more and more apparent, the accessory

market.

Here we have two wholly British mains power supplies from a company called *Fisher Karpark Industries Ltd.* The two new units can supply up to 3-5 amps and 6-8 amps respectively. Protection from overload etc is handled by an electronic cut-out circuit that should react faster than the conventional fuse. Both units are guaranteed for 12 months and as you will

see, are very reasonably priced. The 3-5 amp model should retail for around £15.90 and the 6-8 amp supply for £20.45. The Powerpacks should be available from most reputable accessory dealers but in case of difficulty the manufacturers can be contacted at *Fisher Karpark Industries Ltd, Gratrix Works, Gratrix Lane, Sowerby Bridge, West Yorkshire.*

Trouble And Squeak

Two new products, one designed to eliminate interference and one, some might say, to generate it, are shown here.

The first is a new TVI filter, and in common with many we've seen in the last few months, actually works. The *Kayfilter* fits in the TV aerial line and consists basically of a UHF bandpass filter with a braid beaker, something that should cut down on RF breakthrough, caused by a CB rig being operated close to a TV receiver. The bandpass filter cuts out any signals that are not in the UHF bandprice for the filter is around £4.95. The second item is called the *Kaybleep* and is designed to fit onto the microphone input circuitry on almost any rig. When the PTT switch on the microphone is released the *Kaybleep* generated a rapid succession of tones, conforming to Morse 'K', which signifies the end of a transmission. The installation instructions supplied with the *Kaybleep* should enable anyone capable of welding a soldering iron and reading a circuit diagram to fit the unit inside the rig case. However, be warned that it does necessitate some tinkering around inside the rig's innards and only the confident should attempt such modifications. The *Kaybleep* should be in the shops now for around £14.50. If you have any difficulty in obtaining either the *Kaybleep* or the *Kayfilter* then write to the manufacturers at: *Citizens' Band Rig Services, 23 Birkbeck Road, North Finchley, London N12 8DZ.*

Ringing In The Changes



Ever get annoyed when someone you're trying to phone asks you to hold on? That could all change now with this new phone from *DMM Business Machines Ltd.* On the *Dialog H* you can instruct the phone to play a well known tune, though we must admit that the one we heard wasn't that well known — in Charing Cross Road at least. Anyway, Robin Conoway, the gunner at DMM, assures us that a new selection of tunes will be available soon.

The other model is the *Dialog DJ* and this as the capacity to remember up to 11 numbers of 16 digits each and recall and dial them at the touch of a button. The two units connect directly to the phone lines (which is a little dodgy at the moment but DMM assure us they are seeking PO approval) and there is no need for any batteries or external connections. The *Dialog DJ* will be retailing for £36 and the *Dialog H* for £44. Both units should be available from a number of well known outlets but if you don't want to go round hunting for one the people to talk to are DMM themselves, who live at *Unit Ten, 10 Melon Road, London SE14 5QW.* Ring for a demonstration on 01 701 8178.

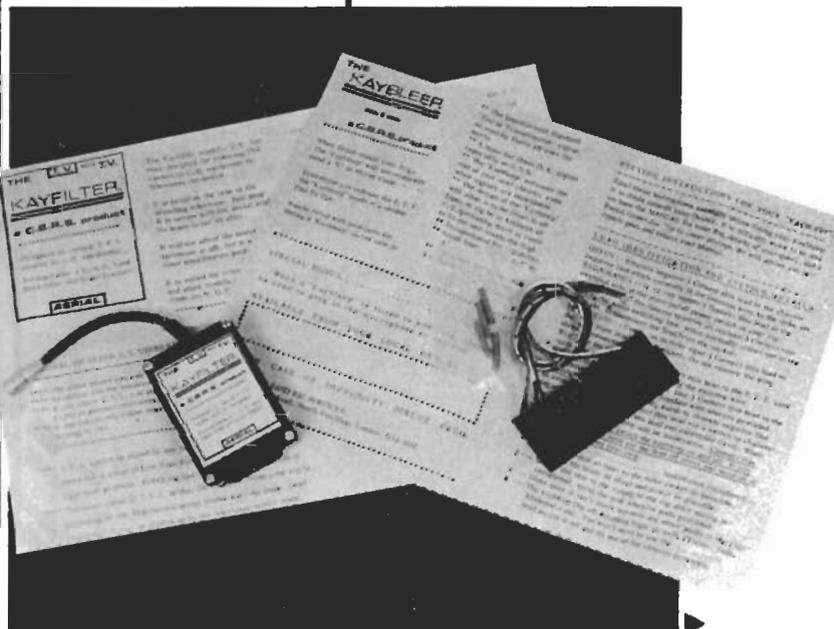
Ranger Rigs

The address we gave last month for *Ranger* portable rigs has since been changed. The new address is *Autumn Products PO Box 30, Letchworth, Herts.* By the way, *Autumn Products* are now able to supply ready built *Rangers* in quantity, so if you just can't wait, this new British CB rig is on sale right now!

Search It Out

Medium wave DXers might like to know that a booklet listing hundreds of European stations has been compiled. Not only that but 'Dial Search' contains compass bearings from the South Coast of England have also been included along with a short list of VHF stations on the Continent.

The booklet is priced 80p, plus 20p postage and packing, and is available from *George Wilcox, 9 Thurrock Close, Eastbourne, East Sussex.*



AVOID DISAPPOINTMENT

BY ORDERING NOW



major CB RADIOS

It is probable that once CB radios become legal, there will not be enough sets to meet the demand.

That is why we are prepared to reserve you a set now.

Major is already an established name and its radios are probably continental Europe's most popular sets. They are manufactured by Cybernet, which ensures not only very high quality and reliability, but also long term availability of parts and accessories.

Major Model 4000 Base Station

Features include: walnut cabinet, volume with ON/OFF switch, squelch control, tone control, delta tune, DX/LOC switch, phone jack, on-the-air light, receive light, S/RF meter, channel selector.

Only £115.00

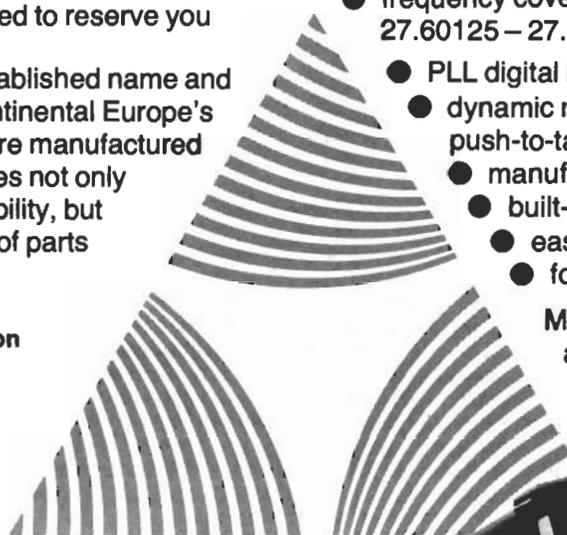


Major CBs are simple to install and operate. They come complete with microphone, mounting brackets, cable and instruction manual.

- frequency coverage
27.60125 – 27.99125 MHz FM
- PLL digital logic synthesizer circuitry
- dynamic microphone with push-to-talk switch
- manufactured by Cybernet
- built-in circuit protection
- easy to install and operate
- four models to choose from

Major CB radios meet all the Home Office regulations relating to CB radio.

They operate on 27 MHz FM.



Major Model 5000 Transceiver

'Up-market product' features include: volume, RF gain, squelch, tone, CB/PA, Channel 9 priority, ext/int speaker switch, d/tune, channel selector, S/RF meter, Tx and Rx lights.

Only £84.00

Major Model 2000 Transceiver

Features include: volume, squelch, LED read-out, channel selector.

Only £68.00

Major Model 3000 Transceiver

Features include: volume control with ON/OFF switch, squelch control, channel selector, CB/PA control, RF gain control, delta tune etc.

Only £76.00



include a 50% deposit with this order coupon (see below). You will be sent a receipt and be notified when the balance is due.

Cheques/POs should be crossed and made payable to Major (UK) Ltd. We will send you your set as soon as possible after the law permitting the use of CB radio is passed (expected to be November 1981).

All Major radios have a 12 month guarantee. Prices include VAT, postage and packing. FREEPOST. No stamp necessary. Fill in your name and address in capital letters.

50% deposit included for (please tick):
 Model 5000 (£42).
 Model 3000 (£38).
 Model 4000 (£57.50).
 Model 2000 (£34).

Total enclosed £ _____

Name _____
 Address _____

Major (UK) Ltd FREEPOST
 Unit 2, Station Yard,
 Fulbourn,
 Cambridge
 CB1 5ET.

Milan SIM Show

Funny place Italy, everywhere's two hours and ten minutes or 100 miles from everywhere else. That conclusion was arrived at after Citizens' Band magazine was invited over to see the Milan SIM Consumer Electronics Show, courtesy of CTE, one of Italy's foremost manufacturers of CB equipment and garden gnomes.

At the SIM show CTE were showing their very impressive range of CB goodies, from transceivers to antennas. Unfortunately the SIM show itself was rather less orientated towards CB than we had hoped but if you were prepared to forage around the half dozen or so massive halls some interesting products were to be found.

The real purpose was, however, to look round some of the CTE factories in Italy. We were treated to some interesting sights, ranging from an antenna manufacturing plant (which inexplicably seemed to share the same premises as an injection moulding plant turning out plastic garden gnomes and Grecian urns). The electronic assembly plants were particularly impressive, with one factory turning out nothing but wickedly large burners and another involved in research and development of CTE products, ranging from cordless telephones to antennas. The CB dealers who accompanied us on the trip were particularly impressed with the back-up service offered by CTE which included just about every spare part for the very extensive range of CTE imported rigs. CTE have certainly done their homework: they offer an extensive range of branded products, which are made to a very high quality.

The trip itself was extremely interesting, not least in opening our eyes to Italian nightlife and the drinking habits of CB dealers, one of whom distinguished himself by being featured in an Italian newspaper — a Knight on the tiles perhaps, nuff said?

Rig doctors will be pleased to note that Roger-D of Nottingham now have a comprehensive stock of difficult-to-obtain spare parts at very competitive prices. Roger-D also have a circuit diagram library and an 'Odd Ball' service that promises to locate almost any item required. Roger-D can be contacted on 7 Thyra Court, Mapperley, Nottingham NG3 5GT.

A CB weekend is being organised by the *Beach Breakers* in Tyne & Wear. It's planned for the weekend beginning Friday 30th April 1982 and ending on Monday 3rd May. The weekend promises to be kept going by a number of special events including fun and games. For details of booking etc contact the *Beach Breakers* at 54 Kingsley Avenue, South Shields, Tyne & Wear, enclosing an SAE, or telephone South Shields 567352.

The *Halcyon Cheeta* is reported to be the first legal CB receiver ever imported into the UK though regular readers will know we reported on the Elftone FM monitor last month. The technical director of Halcyon, Roy Grant, also announced plans for a wholly British CB transceiver that will be available very soon, we hope to have details of that in the next few months.

OCT CONSUMER NOTICE

Early models of Bremi BRS27 power supplies imported by OCT, in common with other currently imported makes, were designed for the Continental market and therefore did not contain the internal protection and three core flex required to meet the British Standards.

OCT have accepted all the recommendations of the BSI (British Standards Institute) and all Bremi power supplies now on sale are made to this higher specification.

OCT are the sole importers of the 'British Market' Bremi power supply.

Consumers should beware of Bremi power supplies that meet the Continental specification that may be available from other importers.

The British CB Book

At last! A genuine British CB book, devoted to British CB. It's called, not surprisingly *The British CB Book* and it comes from the pen of Peter Chippindale. The book itself covers just about every aspect of UK CB including the full specifications for our FM system and some very interesting history on the fight for legalisation.

To get you ready for legalisation Peter has included some very comprehensive chapters on the new equipment and how to install it, what sideband and DXing CB mean and how to use it plus a couple of good chapters on UK CB slang

Citizens Band The FM Way — Book Review

Oh no, not another UK CB book? But yes, and it's a very good one too, even if it does come from the hot and sticky typewriter of our very own Keith Townsend. Keith, for those of you not in the know has been involved in UK CB from almost the first day. Keith has variously been secretary, treasurer, nuisance and general know-it-all as far as the club scene and legalisation campaign is concerned and could justifiably claim to be one of the country's leading experts.

So much for the flannel, now onto the book. Keith has started from scratch, assuming no prior knowledge of CB and two-way radio. The book gently deals with the technical side of CB right up to the getting-your-hands-dirty-installing-the-equipment-in-your-car aspect. Just about every question you're ever likely to ask will be answered in this book in a clear and concise manner. Keith has deliberately avoided obvious padding with 'slanguage', codes, etc and has concentrated on the prac-



ticalities of CB. It may lack the humour of some of the other books on the market but it deals with its subject in a very down-to-earth way. Even the most technologically ignorant of us should be able to understand CB after reading this book.

Citizens' Band The FM Way is published by **O21 Publishers** and will cost £2.95 — highly recommended for both beginners and old hands alike.

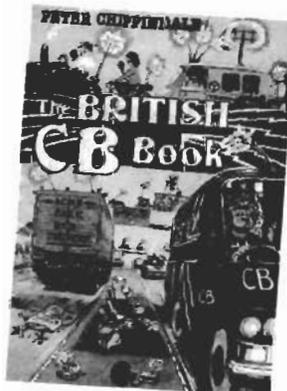
Knight Time

Knight CB Specialists, or the Luton Loonies (some might say) launched their new range of **Power Stik** antennas at the *First National CB Show* last month. These rather interesting looking devices are based on the well tried 'chunky fibreglass helical' principle that we have all come to know and love. The Power Stik is different, though — the designers claim that this type of antenna puts out and receives even further, and make no secret of the device's construction by sheathing the rod in transparent plastic sleeving.

Find Charles, Les and Paul at 201 Dunstable Road, Luton, Bedfordshire or ring them on 0582 425722.

Truckstar Ltd have just released details of the 'Official CB Slang Language Dictionary' published in the new, enlarged UK version. The book contains over 250 pages of CB slang, codes and town names. The book is a completely revised version of an American book written by Lanie Dennis and at only £1.95 is pretty good value for money. The dictionary should be in the shops about now, or can be obtained direct from *Truckstar Ltd, Number Ten, Marshalsea Road, London SE1 1HL*.

and city names. At the end of the book there is a very interesting chapter outlining the tests carried out by the Home



Office on 900 MHz CB, and the results of the tests come as quite a surprise.

This is a very well written book, lacking only the very latest information that has been published in the past few weeks. The *British CB Book* looks set to become a standard reference for UK CB and the thorough coverage of the law and the legalisation campaign makes interesting reading.

The book should be available from most bookshops about now price £2.95. Should you have trouble obtaining a copy you can write to *Kona Publications* at 335 City Road, London EC1V 1LJ.

CB

WE'VE DONE IT AGAIN!!

NEW GOLO-40 Piggyback BOARD
GIVES EXTRA 40 CHANNELS LOW **£19.95**
-26.515-26.955 MHZ Inc. VAT, P&P

PLUS THE ORIGINAL UFO-40 Piggyback BOARD
GIVES EXTRA 40 CHANNELS HIGH **£19.95**
27.415-27.855 MHZ Inc. VAT, P&P

Please state make & model of rig when ordering
Full Instructions • Easy to fit • 1 1/4" Sq. Board

COMBINE BOTH BOARDS FOR AN EXTRA 80 CHANNELS!

Digi-Scan UFO-1604
Frequency Expander
1200 Channels Sideband
400 Channels AM **£89.95**
Inc. VAT, P&P



APOLLO

POWER MIKE with Switchable ROGER BLEEP

£15.95 INC VAT P&P



TRADE ENQUIRIES WELCOME ON ALL PRODUCTS-ASK ABOUT OUR FULL RANGE....

KNIGHT
CB SPECIALISTS

201 DUNSTABLE ROAD, LUTON BEDS.
TELEPHONE: (0582) 425722/3

49-860MHZ **Sounder Walkie-Talkie**

Wrist Strap • On-Off • Volume Control
Telescopic Antenna • Superheterodyne receiver • Push Button to talk or send • Morse Code/Alarm Signal • Approx ± 1 mile range • 9 Volt Batteries incl.

£24.95 Inc. VAT, P&P

ALSO AVAILABLE - 3-5 mile range models
PHONE FOR DETAILS



SUPER FILTER

ADJUSTABLE UK-TV INTERFERENCE FILTER

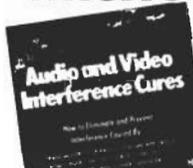
£9.95 Inc. VAT, P&P
Max Power-70watts AM

MONEY BACK IF IT DOESN'T WORK!



Audio and Video Interference Cures.

£4.75 Inc. VAT, P-P



SPECIAL OFFER ALL FIVE BOOKS **£20** INC. P&P

How to Select & Install CB ANTENNAS **£3.95** INCL P&P

CBers SSB HANDBOOK **£4.95** INCL P&P

CBers FACT BOOK **£3.50** INCL P&P

MODERN CB RADIO SERVICING **£5.95** INCL P&P

CB ACCESSORIES YOU CAN BUILD **£3.95** INCL P&P

THE TANK
MOBILE LINEAR AMPLIFIER

30Watts AM-60Watts SSB COMPLETE with Patch Lead

£24.95 INC. VAT P&P

50Watts AM-100Watts S.S.B. Model
NOW AVAILABLE **£66.59** INC. VAT P&P



TO: KNIGHT CB SPECIALISTS, 201 DUNSTABLE ROAD, LUTON, BEDS.

Please send me the following items:

- 1 _____ £ _____
2 _____ £ _____
3 _____ £ _____

Use separate sheet if necessary

Please allow up to 21 days for delivery

TOTAL £ _____

NAME _____

ADDRESS _____

I enclose Cheque P.O. Payable to

KNIGHT CB SPECIALISTS for £ _____

I wish to pay by BARCLAYCARD ACCESS tick

Card No. _____

SIGNATURE _____





ICE PICK

Everything You Need To Know To Operate A CB Radio Gateway Records GSLP 4500

On the reverse of this album sleeve you get information on SWR, mobile antennas, base antennas, TVI, CB glossary, 10 codes, and a CB dictionary (you also get the American channel numbering system chart but it is of little use).

Although an American import, this album is widely available in most CB shops. A flip through our pages will reveal several dealers who stock this disc: our copy came courtesy of Electra Marketing.

Although some parts of this record are 'American only', I found it very informative. It gives clear insight into American CB (don't forget - they started it), and would be helpful to newcomers and experienced CBers alike.

It's well worth a listen. Items include: Introduction to CB, Courtesy on the air, How best to be heard, Ten codes, Choosing a handle, Obtaining a radio check, Emergency channel uses, Having an eyeball, Smokeys - with and without ears, also How to obtain a traffic/time/weather/bear check.

There are a number of CB transmissions used which illustrate all the points very well. Basic rules and regulations are explained intelligently in easy to understand terms.

All in all, despite being made for the American market, this record is excellent value for money and would benefit any CBER. It could even convert some 10.12's. We done, we gone, bye bye

AS

Pablo Cruise 'Reflector'***** (LP AMLK 63726)

At some time in our adolescent years of record collecting, we must all have been guilty of purchasing an album because of its artistic presentation.

The latest album from the Pablo Cruise Band is enough to persuade me to break open my economy size piggy-bank and buy a copy - sure enough the album sleeve is impressive, but so is the music. I have always had great hopes for this band, ever since they recorded 'Love Will Find A Way' in 1978 and 'A Place In The Sun', their third album, which I could only describe as a memorable affair.

A major part of the band's success has been in North America but they have yet to find a convenient slot in this country. 'Reflector', their sixth album, with its tonal sharpness has all the right ingredients to justify a well-earned place in the British recording market.

'Reflector' was produced by Tom Dowd, whose track record includes hit records by Kenny Loggins, Eric Clapton, Rod Stewart and Aretha Franklin. It was rewarding to hear in the final product that the Band still retained their distinctive vocal and guitar arrangements.

The album is a compilation of

Each month we hope to bring you reviews of the latest CB tapes, truckin' music C&W, in fact any sounds you can listen to on the tape player in your car when you turn off the chicken box. In the coming months Ice Pick will include reviews of the latest In-car Entertainment equipment and accessories.

some expressive mid-tempo ballads and contemporary rock arrangements. Of the 10 songs in this collection, 'Cool Love' is the single which is just outside the American top 10. If it receives the same air-play in this country it should do equally as well.

SR

Freewheelin' Rap c/w Wedding Rap **** Barnsley Bill Mother-in-Law Records. Nag2.

Cautiously, I dropped stylus to vinyl. I didn't know quite what to expect. The press release mentioned silly names, drinking and soul music. The photograph revealed a young Stan Ogden, complete with flat cap and colliery engine. Could this be Barnsley Bill? Could this be a whole new concept in music? Could I pay this week's rent? Next paragraph please.

Thank you. It's a mixture, nay, a blend of soul, funk and Albert Tatlock. It's very funny, very clever and would liven any party. Barnsley funk strikes - Debbie Harry, eat your heart out. Helooks and sounds like the sort of lovable fool one meets at the Help the Aged mountaineering outings. As a token gesture he ends up going to sleep as his 3 mins 35 seconds tick round. A good tongue-in-cheek CB single that deserves more than it will get.

And on the flip flop. . . Wedding Rap. Barnsley's answer to insomnia raps his way through weddings, drinking, weddings, suppin', and Lady Di haircuts. If you can't beat him, mine's a Southern Comfort.

AS

Joan Armatrading 'Walk Under Ladders'***** CAM 64876 (AMLH 64876)

Where do you start to praise the virtuoso talents of a young lady who has never taken a guitar lesson but simply relies upon her creative instincts to guide her in attaining a unique melodic, lyrical content that defies most musical conventions?

The album is produced by Steve Lillywhite (Peter Gabriel, Ultravox, XTC, etc). This couldn't be more apparent than on the opening track ('I'm lucky') which includes a chromatic synthesiser arrangement - a masterpiece on its own. Also worthy of a mention are cuts like 'No Love' (a saxophone solo featured on this track is delicately executed), and 'Weakness In Me', a track on which I felt the bass drum syncopation could have been more

rhythmic.

There is a notable line-up of renowned session musicians who accompany Joan, such as Ray Cooper (percussion), whose work with Elton John is internationally known; Mel Collins (sax); also members of established bands such as Andy Partridge (guitar - XTC) Rico Rodriguez (horns - the Specials), and Gary Sandford (guitar - formerly of the Joe Jackson Band). Sly Dunbar also puts in an appearance on drums.

The recording quality is excellent and the staccato effect of the percussion section provides a definite attack to enhance Joan's vocal style.

SR

CB For Beginners Mindpower Record Co Cassette D109 £3.50 inc p&p

'After hearing this tape, a person with no knowledge of the subject should be able to make a Break with confidence' quotes the info supplied. Read on. . . The cassette begins with selected records of 'typical' breaker chat. Confusing at first, but by the time a rubber-bander has listened once or twice all is revealed. Subjects covered include: A brief history of CB; Do's don'ts and legalities of CB; Popular code words explained (also reasons why the language was developed and how); and use of handles and code names (with some dubious examples provided). Another section is set aside for how a transciever works, use of the correct antennas and how not to lose your rig to a tea-leaf.

Also included are the usual terms used for general motoring, working a rig basic fault-finding, how to break onto a channel, use of channel 9 and emergency procedure. CB conversations are used, but in moderation.

I am told that the pukka tape has a nice inset card with 10 code, phonetic alphabet and other goodies but our tape arrived without (bearing the legendary words - trade sample, not for sale). So as far as I am concerned it's only a rumour.

A good CB cassette, comprehensively put together and British to boot (but don't - it might break). Being on cassette it's handy to keep in your car to refresh those parts other tapes don't quite reach.

It is available from Mindpower Record Company, 3 Cannons Field, Welwyn, Herts AL6 0QB.

AS

Kenny Seratt Ridin' the Big 'A'**** Big R Music BRA 1007

Now I don't usually go a bunch on Country/Country & Western music but this one I like. The man himself - Kenny Seratt - looks like Charles Bronson with some of the cracks Polyfilla'd. Mean looking dude, y'all.

Kenny made his name over the years in California, then throughout Texas, Oklahoma, Louisiana and Arkansas where he was attracting crowds of up to 3,000 at a time. On this album he is aided and abetted by some very fine musicians - Willie Rainsford on piano, Fred Newall on lead guitar, and Lee Jackson on drums to name but three, not to mention the man himself on acoustic guitar, so I won't

Naturally enough the songs have all got a strong truckin' theme. Side 1 starts off with 'Ridin' the Big 'A' which is a bit of a stormer with some neat picking by Fred Newall. 'Queen of the Road' tells of a lady who spends all of her time hitching rigs, followed closely by 'It Ain't No Good to Love a Truck Drivin' Man', which seems to support the previous song's sentiments. 'Diesel Devil' is the one with the red tail, red body stocking and chrome-plated pitchfork, who makes you disregard the laws and lay-bys. 'I'm Truckin' My Way to Glory' is a welcome inclusion. Spiritual Country and Western that swings like a pendulum do. 'Jody's on the Run' closes Side 1 with a wet eye and a runny nose.

Side 2 opens with our hero weighing up the pros and cons of having a truck and a woman in 'I've Got a Truck'. Next up is 'No Longer Mine', with more snuffles and sobs. Track three is a classic - 'Six Days on the Road' and is executed with customary flair and panache. Steel and pedal steel guitars courtesy of Jim Baker and Gene O'Neal respectively. Merle Haggard (to whom Kenny owes a great deal) wrote the next track - 'White Line Fever' - another classic truckin' song. The closing track on this album is 'Snow Mountain'. This reminds us that the glamorous life on the road is not all the fun it's cracked up to be. The lousy weather, long hours, schedules to keep, sleeping rough and the rest of it didn't always add up to a good time.

In my 'umble opinion, this is some of the best Country music ever to have graced my earholes. This man has lived and breathed the road and it shows. His voice has more grit than my neighbour's budge. This one I recommend strongly.

AS

Star Guide

- Very poor
- Poor
- Average
- Above average
- Excellent

CB

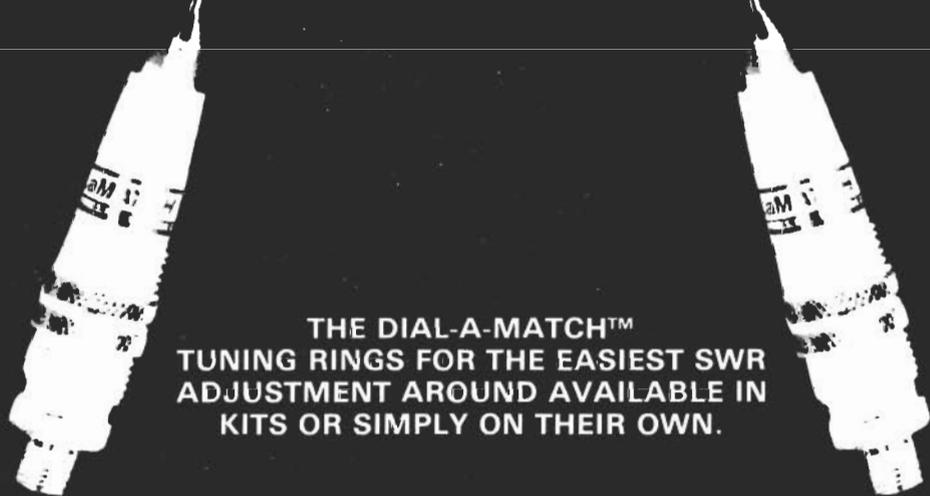


OF ALL THE TRIBES, THE CHEROKEE WAS
THE MOST FEARED AND RESPECTED
BECAUSE HE NEVER GAVE UP... AND
SURVIVED EVEN UNDER THE SEVEREST
CONDITIONS.

CHEROKEE

— A TOUGHER BREED OF ANTENNA.

THE CHEROKEE DIAL-A-MATCH™
THE ORIGINAL AND THE BEST.
DON'T SNEER AROUND LIKE A
THIEF — BE PROUD LIKE A CHIEF.



THE DIAL-A-MATCH™
TUNING RINGS FOR THE EASIEST SWR
ADJUSTMENT AROUND AVAILABLE IN
KITS OR SIMPLY ON THEIR OWN.

THE CHEROKEE RANGE IS AVAILABLE IN
THE UK FROM ALL GOOD CB STORES
Traders call OCT on (01) 808 5656 or 0636 74688
for details of your nearest wholesale stockist.



CHEROKEE LEGENDS TELL OF A MYSTERIOUS STICK WHICH HELPED THEIR CHIEFS TO TALK TO ONE ANOTHER OVER GREAT DISTANCES IN TIMES OF EMERGENCY AND IN BATTLE.

CHEROKEE

— A TOUGHER BREED OF ANTENNA.

MODERN TECHNOLOGY NOW ENABLES THE SAME RESULT THE CHEROKEE HALF BREED — ITS LIKE MAGIC.



DESIGNED FOR AM/FM/SSB
EXCELLENT SWR ACROSS 120
CHANNELS.
AVAILABLE IN KITS OR SIMPLY ON
THEIR OWN

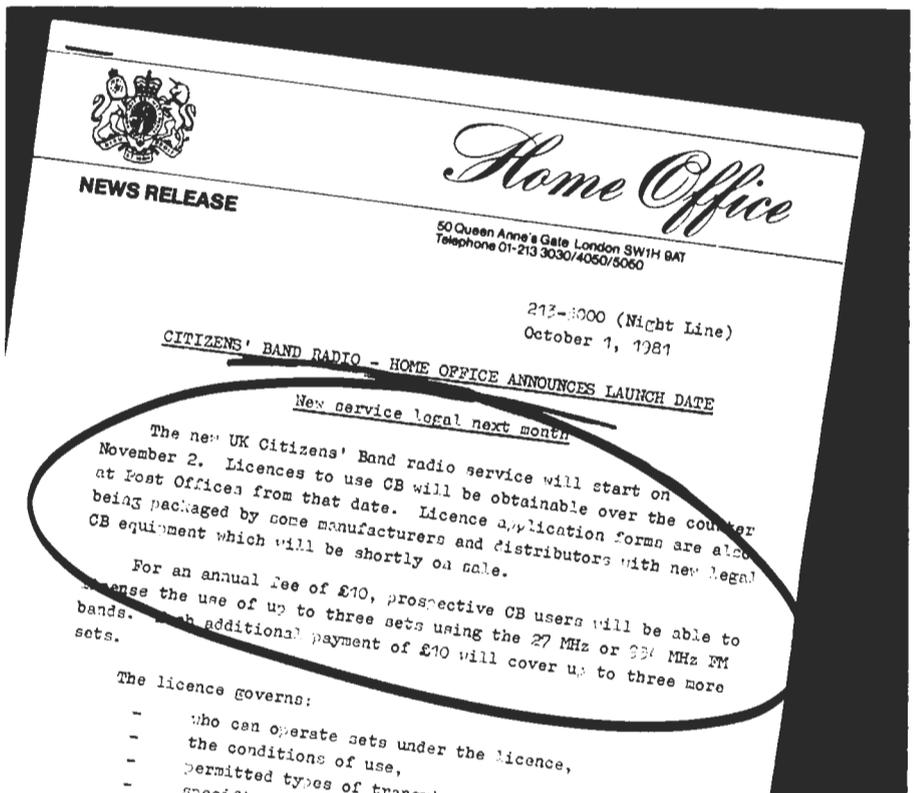
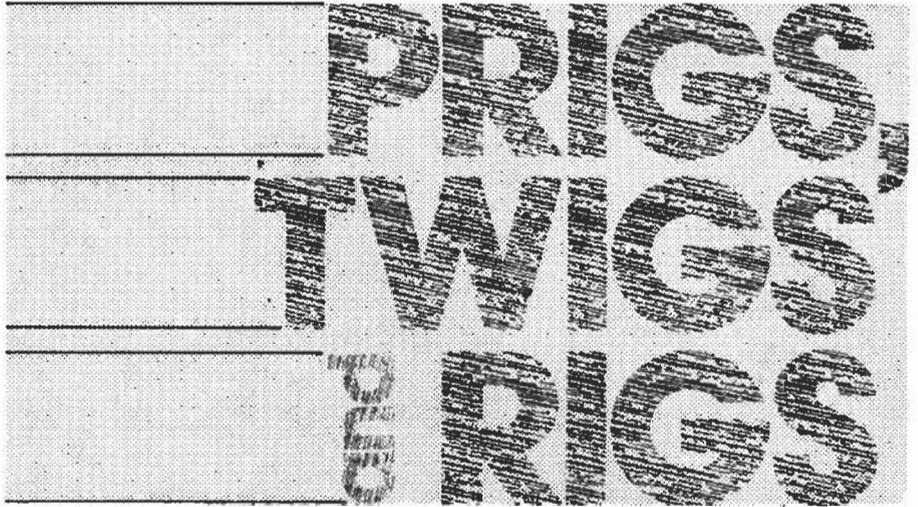
SUGGESTED RETAIL
HALF BREED ANTENNA
DIAL-A-MATCH 24"
DIAL-A-MATCH 48"

£9.95
£10.25
£10.95

Ask your dealer for details of the various kits and mounts he stocks.



On 2nd November 1981 Citizens' Band radio will be introduced into the UK. For the first time in this country the British public will have the opportunity to indulge in a unique form of free speech breaking the total Post Office monopoly on communications. The introduction of CB follows an intensive three-year campaign. Citizens' Band magazine has been a part of that campaign, and we are enthusiastic over the new FM system about to be introduced. Now the long months of doubtful rumours, misleading information and uninformed opinion are over. Whether or not this new service will succeed depends upon how well we use the system — we have the chance to make it work, and prove the pessimists wrong, so, let's give it a try.



First, an apology. Regular readers may have noticed that this issue of Citizens' Band is a mite late—no guesses as to the reason. Second, as you picked up this copy of your favourite CB mag you may have noticed a small blue form drop to the floor. Pick it up and keep it safe, we'll come to its purpose in a minute.

Righty-ho, now down to business. All the bally-hoo should have died down by now and you should be aware that on 2nd November 1981 Citizens' Band radio will be officially sanctioned in the UK. The system will be that already outlined in the two specification documents MPT1320 and MPT1321. You should know the score by now, but in case you've been living in a cave for the past year or so, we will have a two-tier service operating on two entirely different frequencies. The main frequency will be on the 27 MHz band, between 27.6 and 28 MHz. The

service will use FM (frequency modulation) and have a maximum output power of 4 watts RF (2 watts PEP out of a HO approved antenna). The antenna in question will consist of a single element rod or wire antenna not more than 1.5 metres long with a loading coil on the base.

This is NOT the same system as that being used illegally in the UK at the moment. Though some may doubt it, the new UK CB system is actually superior both technically, and in practice. Don't take our word for it, you'll have plenty of opportunity to try it out in the coming weeks.

The second system uses a much higher frequency — 934 MHz. In short, the higher frequency system will not appeal to the majority of CB users as the equipment will be fairly expensive. It does, however, have great potential for business communications. We'll be dealing with 934 MHz in greater depth in the coming months, though at the

CB OPERATING CODES, PRACTICE AND PROCEDURES

THE CB CODE OF PRACTICE

READ YOUR LICENCE — It tells you what you can and cannot do. The conditions have deliberately been made simple with few restrictions. It is up to you to develop this service as you wish for the benefit of all. This means having consideration for one another and recognising that no-one has preferential rights at any time or place or on any channel. NATCOLCIBAR, the Parliamentary CB Working Party, and representatives of industry have, in consultation with the Home Office, prepared this simple code of practice. If you work to it you will help the system to help you.

HOW TO OPERATE

- 1. LISTEN BEFORE YOU TRANSMIT.** Listen with the squelch control turned fully down (and Tone Squelch turned off if you have Selective Call facilities) for several seconds, to ensure you will not be transmitting on top of an existing conversation.
- 2. KEEP CONVERSATIONS SHORT** when the channels are busy, so that everyone has a fair share.
- 3. KEEP EACH TRANSMISSION SHORT** and listen often for a reply — or you may find that the station you were talking to has moved out of range or that reception has changed for other reasons.
- 4. ALWAYS LEAVE A SHORT PAUSE BEFORE REPLYING** so that other stations may join the conversation.
- 5. CB SLANG ISN'T NECESSARY** — plain language is just as effective.
- 6. BE PATIENT WITH NEWCOMERS AND HELP THEM.**

EMERGENCIES AND ASSISTANCE

- 7. AT ALL TIMES AND ON ALL CHANNELS GIVE PRIORITY TO CALLS FOR HELP.**
 - 8. LEAVE CHANNEL 9 CLEAR FOR EMERGENCIES.** If you have to use it, (for instance to contact a volunteer monitor service) get clear of it as soon as you can.
 - 9. IF THERE IS NO ANSWER ON CHANNEL 9,** then call for help on either channel 14 or 19 where you are likely to get an answer.
 - 10. IF YOU HEAR A CALL FOR HELP, WAIT.** If no regular volunteer monitor answers, then offer help if you can.
 - 11. THERE IS NO OFFICIAL ORGANISATION FOR MONITORING CB AND NO GUARANTEE THAT YOU WILL ALWAYS BE IN REACH OF A VOLUNTEER MONITOR.**
- CB IS NOT A SUBSTITUTE FOR THE 999 SERVICE.**

Now, that you've decided to get on the air, what do you say? We have the 'official' suggestions right here with the long-awaited CB Operating Codes Of Practice, produced in co-operation with the Home Office and NATCOLCIBAR. It's common sense really.

CHOICE OF CHANNEL

12. RESPECT THE FOLLOWING CONVENTIONS:

- Channel 9:** Only for emergencies and assistance.
- Channel 14:** The calling channel. Once you have established a contact, move to another channel to hold your conversation.
- Channel 19:** For conversations among travellers on main roads. (Remember, if you are travelling in the same direction as the station you are talking to, not to hog this channel for a long conversation). Give priority to the use of this channel by long distance drivers to whom it can be an important part of their way of life.
- Other:** You may find that particular groups in particular areas also have other preferred channels for particular purposes.

SAFETY

13. USE COMMONSENSE WHEN USING CB and do not transmit when it could be risky to do so. For example, don't transmit:

- a. when fuel or any other explosive substance is in the open — e.g. at filling stations, when petrol or gas tankers are loading or unloading, on oil rigs, or at quarries.
- b. when holding a microphone may interfere with your ability to drive safely.
- c. with the antenna less than 6 inches from your face.

INTERFERENCE

14. INTERFERENCE can be caused by any form of radio transmission. Avoid the risks. Put your antenna as far away as possible from others, and remember that you are not allowed to use power amplifiers. In the unlikely event that your CB causes interference, co-operate in seeking a cure using the suggestions from a good CB handbook. Moving the set or antenna a few feet may cure the problem.

Rig Review



This month we preview three new rigs from Tandy. The TRC 1001 shown here is a development of one of the world's most popular 40 channel hand-held rigs. How will it fare in the UK FM market?



TANDY RIGS

A Realistic Selection

Tandy are big, very big — with something like 8,000 retail outlets throughout the world they are the world's largest electronic retailer. Their formidable manufacturing abilities coupled with their numerous factories will almost certainly make them the force to be reckoned with in UK CB.

Tandy, or to give them their proper name, Radio Shack Corporation, are possibly the world's leading supplier of CB rigs, feeding the vast North American markets. It will therefore come as no surprise to learn that their assault on the UK market will be no less devastating.

We have managed to obtain, through the kind assistance of Tandy HQ, the very first pre-production prototypes of three of the range of new UK FM CB rigs to be sold in Tandy shops. As you can see from the pictures, the two mobile units are good solid, if rather gaudy, rigs that will hardly set the world alight but, if Tandy can maintain their impressive quality control record, will soon earn themselves a reputation for good reliable operation. The rig we're really enthusiastic about is the TRC 1001 hand-held portable, which sharp-eyed readers may recognise as the UK version of the TRC209 FCC rig, in different clothes. This rig is probably one of the most popular portable units ever made, and such is its reputation that we have seen 209s selling for up to three times their US price (about £60). The TRC 1001 is simply a development of the 209, with re-programmed synthesiser and re-designed antenna (which is a shame) and the appropriate changes from AM to FM.

The 1001 is a fully synthesised, 40 channel, full specification UK FM CB rig with numerous interesting features.

First, the 1001 has a full range of input and output sockets, including antenna, mike, power, ex speaker and DC charger. Put another way, the 1001 can be used in literally any situation — from simple hand-held portable to full system mobile to static base operation, just by plugging in the appropriate selection of



antennas, mikes, speakers and power connections.

Second, the RF output of the rig is switchable between 3.5 watts RF and (via a 10 dB attenuator) 0.3 watts as decreed by the HO specs.

Third, the rig can be powered by rechargeable batteries — a must for continual portable use — 10 nicads can be supplied as an optional extra and for the less well off 8 AA alkaline cells will keep it fed.

Fourth, the rig has a full set of controls and displays: a two digit LED display shows the channel in use, which automatically cuts out after a few seconds to save power. There is a neat volume and squelch control and the PTT bar features a display illuminate button so you can double check you're on the right channel. The edgewise meter on the top of the rig shows battery condition and relative output power — very neat. Internally the circuitry has been extensively re-designed and provision is now made for the latest ceramic filters, making the selectivity and sensitivity of this rig ideal for hand-held work.

The only gripe with the 1001 is the antenna. The TRC 209 had a superbly long centre-loaded telescopic which unfortunately does not conform to HO spec. It's not Tandy's fault really, it's just a shame to see that this antenna wasn't used on the UK version — the price of legality!

One unique feature of the 1001 is the range-boost side panels which couple the user to the rig thus forming a sort of ground plane antenna, with the user as part of the antenna. All in all the 1001 is likely to dominate the multi-channel hand-held market for some time. Comparable rigs from Sommerkamp and Midland are a way off and as yet there is no news of any other manufacturer into the 40 channel portable market. Although how long it will remain this way is anybody's guess.

Mid-range Mobiles

The two mobile rigs in the Tandy range do deserve a mention. The bottom and middle of the market is covered by the TRC 2000. The rig is fairly uninspiring as far as features and design go, which is a definite throwback to some early American designs. However, as previously stated, while the cosmetics may be dated, the undoubted Tandy quality will never go out of style. The 2001 features a full range of controls, including RF and mike gain plus hi/lo switch for a 10 dB attenuator. The rather unusual centre channel selector switch is something of a departure and may find favour among those people who gripe about the usual positioning of these controls. Tandy had better get their mike sockets re-sited too for the UK market.



RIG REVIEW DATA PANEL

Model Realistic TRC 1001
Supplier/Distributor Tandy Corporation (UK)
Typical Price £60-80

| Features | Yes No | | | Yes No | |
|-----------------------|-------------------------------------|-------------------------------------|---------------------|-------------------------------------|-------------------------------------|
| | <input type="checkbox"/> | <input type="checkbox"/> | | <input type="checkbox"/> | <input type="checkbox"/> |
| PA Facility | <input type="checkbox"/> | <input checked="" type="checkbox"/> | ANL/NB Switch | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| External Speaker Jack | <input checked="" type="checkbox"/> | <input type="checkbox"/> | CH9 Switch | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| TX Indicator Light | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Variable RF Gain | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| RX Indicator Light | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Mike Gain | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| PA Indicator Light | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Delta Tune | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| S/RF Meter | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Tone Control | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Hi/Lo Power Switch | <input checked="" type="checkbox"/> | <input type="checkbox"/> | LED Channel Readout | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

| Facilities | Superb | Good | Fair | Poor |
|-------------------------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|
| Ease Of Controls | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Built In Speaker | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Microphone Location | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Cabinet Construction | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Quality Of Control Switches | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Channel Indicator Readability | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Mounting Bracket | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Hand Book/Instructions | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| Specifications | | | |
|--------------------|-----------------|---------------------|-----------------|
| Modes Of Operation | FM only | RF Output Power | 3.5 watts |
| No. Of Channels | 40 | Frequency Stability | 2 watts |
| Weight | — | Modulation | 90-100% |
| Dimensions | 260 x 80 x 65mm | Sensitivity (RX) | 0.5uV for 10 dB |
| Supply Voltage | 12v DC | Image Rejection | — |

CB VERDICT

| | | | |
|---------------|------|----------------------|------|
| Range | xxxx | Ease Of Controls | xxxx |
| Clarity of TX | xxx | Ease Of Installation | — |
| Clarity of RX | xxxx | General Performance | xxxx |

We rate our samples on a scale of one to five. Five stars is the highest rating, three and four stars are good to average and one and two stars mean it's not doing so well.

Left: The TRC1001 40 channel portable CB transceiver. As you can see Tandy have fitted a Hi/Lo power switch and external antenna, power, speaker and mike sockets — a truly versatile rig. Above right: Tandy 2001 mobile rig

The last rig in the current range is the 2001 mobile. This rig is frontally very small, but is a little on the long side. It is ideal for awkward installations, especially in cars from the Far East and especially in those which have storage space only for a packet of cigarettes, let alone a sizeable CB rig. Features on the 2001 are fairly sparse: switchable attenuator and CB/PA switch, it will work on either polarity (ie positive or negative earth) which will be useful for owners of older cars.

The complete Tandy/Realistic range will, for obvious reasons, include many more items than we could hope to show in such a limited space. The Realistic/-Archer name will be appearing on numerous accessories and antennas (see this month's *Antenna Review*) plus of course additional rigs like base stations and single and two channel walkie-talkies.

A couple of months ago many CB pundits predicted that the hand-held market would not develop for at least a year after legislation, Tandy, and a number of other companies, have changed all that. The Tandy rigs will cost up to 10% more than similar rigs but you get what you pay for. Tandy have a reputation to live up to, and we think that they won't be disappointing anyone — the TRC 1001 will be our first choice for a good hand-held rig . . . unless anyone knows of something better!



CB

Above: The Tandy 2000, a slightly more up-market mobile transceiver. The styling may be a little gaudy but it's still an excellent rig

021 PUBLISHERS LTD

BRITAIN'S FIRST F.M. BOOK!
FORWARDED BY RICHARD TOWN OF CB WORLD

**Citizens
Band
The F.M.
Way**

BY KEITH TOWNSEND



590/2 BRISTOL ROAD,
SELLY OAK,
BIRMINGHAM
B29 6BQ. 021-472-6448.

OUT SOON!

**PLACE YOUR
ORDER NOW!!**

AVAILABLE AT ALL GOOD CB
RETAIL OUTLETS
R.R.P. £2.95

**CONTACT ABOVE FOR TRADE
ENQUIRIES**

This way up ↖

December Citizens' Band

Mickey taking, modulating, Mack Hacking, project making, burn smacking, risk taking, beer swilling, antenna reviewing, rig reviewing, question answering, money saving, club flashing CITIZENS' BAND.....

PLUS:
Your complete guide to UK FM CB, Rig Checklist-We help you decide, installing a CB Rig, Buying a CB Rig

PLUS:
It's our FIRST Birthday — to celebrate we're giving away hundreds of pounds worth of CB rigs in a FREE to enter competition.
On sale Friday 20th November-place your order now!

Now for the next big date in the CB calendar...

MARCH 19-21 1982 — ROYAL HORTICULTURAL HALLS LONDON

**LARGER HALL
— BIGGER AND
BETTER SHOW**

CB
Citizens' Band

**80 STANDS
TRADE AND
PUBLIC DAYS**

Britain's Leading CB Monthly
PRESENTS THE

1982 National Citizens' Band Show!

TRADE/PRESS PREVIEW — MANUFACTURERS — IMPORTERS — WHOLESALE
— RETAIL — ACCESSORIES — PUBLICATIONS

Advance details, floor plans and booking forms are now available. There are some very special terms for 'early bird' company's who reserve their stands — quickly! This is your chance to display, demonstrate and **Sell** your products to the national CB audience both trade and public.

FULL DETAILS PHONE OR SEND COUPON TO: **ROY PERRYMENT Citizens Band**
01-437-1002

Return to: Roy Perryment — Advertisement Manager — Citizens Band Magazine, 145 Charing Cross Rd, London WC2H 0EE. Please send all available show information to:

M.....

Messrs.....

.....

Tel:

Our products are:



Inside CB

This month we look at the long - awaited PLL synthesiser chip that had to be designed for the UK FM CB market. Don't worry too much about the technicalities, take it from us, they work, and what's more they offer a number of new features.

Now the story can be told, the heart of most new multi-channel CB rigs destined for the UK market will be a component called the LC7136. That rather uninspiring title belongs to a semiconductor integrated circuit or chip called a Phase Locked Loop (PLL) synthesiser, a component so important and so unique to our FM system that some pundits predicted it would not appear this side of Christmas.

The LC7136 is manufactured in the Far East by the erstwhile Sanyo Corporation, who are already one of the largest manufacturers of PLL chips for other CB markets. Between Sanyo and Toshiba they make just about all the chips for CB worldwide. For the technically minded we have included some brief specifications.

Sanyo LC7136 40 channel CB transceiver PLL Frequency Synthesiser.

Features:

- *High speed programmable divider to enable to divide 16MHz VCO frequency directly.*
- *Only one crystal required.*
- *Digital out-of-lock output to inhibit transmission when PLL is unlocked.*
- *Instantaneous call capability on channel 9 and 19.*
- *Built in amplifiers for crystal oscillator and active low pass filters.*
- *BCD input for channel selection.*
- *20 pin configuration.*

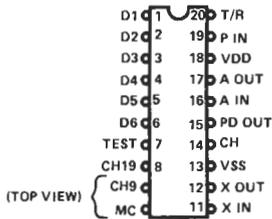
Confused? Well not to worry 'cos unless you're into CB manufacture most of that needn't concern you. However, one or two points may have caught your eye. The first is the provision for calling channels 9 and 19

directly. Put another way, a simple three position switch on the rig will enable you to select channels 9 and 19 without having to twiddle the channel selector knob. It's also conceivable that an auto-scan system may be fitted to some rigs which will monitor channels 9 and 19, looking for transmission. For instance, the rig could be programmed to listen out for emergency calls on channel 9, so if a copy breaks through whilst you're on channel 14, say, the rig would automatically switch to channel 9 to receive the call. Sounds like a great idea for emergency monitoring teams.

The second things worth noting is the provision for single crystal operation. In simple terms this means two things; first, the rigs will require less components, and second, fewer components mean higher reliability — less to go wrong.

Now for the really high-brow stuff. If you've ever wondered what goes on inside a PLL synthesiser you're in the right place, because figure 1. is a block diagram of the LC7136, and figures 2 and 3 show how the chip is connected up to the outside world. There's no way we could ever describe what's going on inside a PLL without writing a 200-page book on the subject, but we hope this short piece will clear up a little of the mystery surrounding PLLs for the UK market and hopefully demonstrate once and for all that they do actually exist.

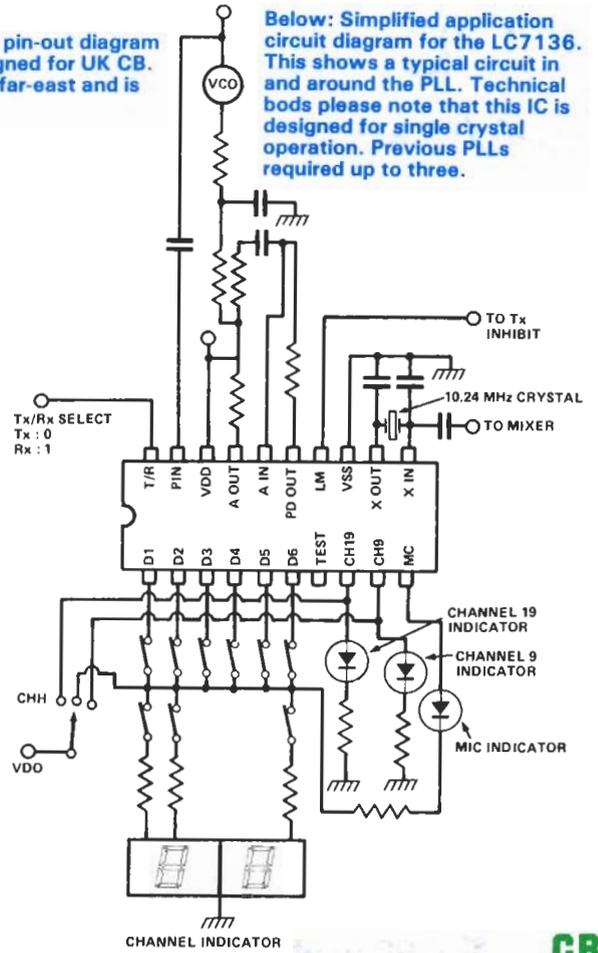
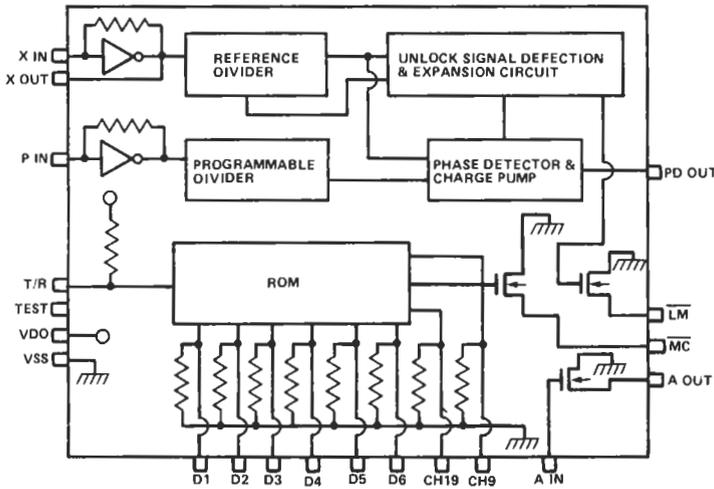




Left: For the technically minded this is the pin-out diagram of the LC7136 PLL synthesiser chip, designed for UK CB. The chip is manufactured by Sanyo in the far-east and is already used in a number of UK FM rigs.

Below: Simplified application circuit diagram for the LC7136. This shows a typical circuit in and around the PLL. Technical bods please note that this IC is designed for single crystal operation. Previous PLLs required up to three.

Below: The block diagram of the LC7136 PLL. The really important change in the design of the device, over existing PLLs is the box marked ROM or Read Only Memory. This is unique to UK CB.

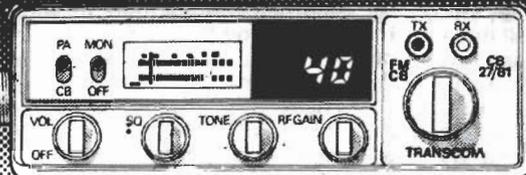


CB

TRANSCOM International

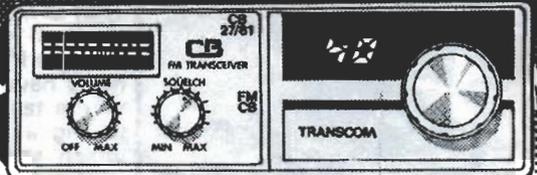


FM CB



MODEL GBX 4000

Just look at these features * 40 channel LED display * True FM for transmission and reception * Built in roger beep * IC circuitry + 2nd IF circuit * FET front end * ALC (Automatic modulation limiter) * Absolute maximum legal power output * PLL synthesizer * Dual conversion super-Heterodyne system with RF stage. CONTROLS - volume on/off - squelch LED 40 channel selector - RF gain CB/PA switch - Monitor off - Illuminated S-RF meter - TX and RX - Indicators 4 pin mike jack - ext spkr jack - PA speaker jack complete with microphone/hanger installation, kit and instruction manual.



MODEL CBX 2000

FM circuitry 19 transistor 3 IC 23 diode 2 FET 1 crystal PLL synthesizer * 40 channel LED * PLL controlled dual conversion super-Heterodyne system * dynamic 600 DHB mike with Push to talk. CONTROLS - on/off volume * squelch * channel selector * illuminated S-RF meter.

LOOKS GOOD TOO!!
In keeping with the 1980's, all our unit fascias are finished in Brushed Aluminium.

This will be Britain's best selling CB range

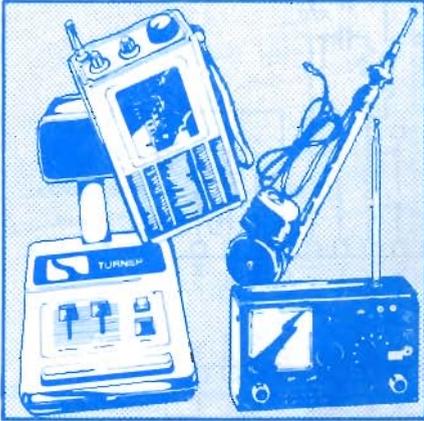
TRANSCOM ... OUT OF THIS WORLD

International

1-12 MARKET STREET, BRACKNELL, RG12 1JG
TELEPHONE: BRACKNELL (0344) 55308. TELEX: 848448

TRANSCOM reserve the right to change specification without prior notice.

Equipment Review



Following last month's look at hand-held and cordless microphones, Andy R. Giles has been examining a few of the base station mikes that are currently available.

BASE STATION MIKES

TABLE TOP TALKERS

Last month I posed the question, 'Why buy another microphone when your rig was supplied complete with a matching one?' Part of the answer then was that it's nice to have a microphone that you don't have to hold when you're driving and the same applies, although to a lesser extent, when you're using a base station. If you keep a log book, it's nice to be able to sink back into your armchair and ramble on without having a tightly stretched cable between you and the rig.

Base station microphones, as their name suggests, are designed to be used with base stations and the reason that they are a totally different shape to a fist microphone is because you are not supposed to hold them in your fist. They all have flat bases so that they will stand on your bench and they all have lockable PTT mechanisms so that you don't have to hold on to them while you're talking. Some achieve this by having a split PTT bar, one half of which stays down only as long as you're holding it and only releases when it is pressed again. Some have

separate levers to lock the PTT and some have bars that can be slid sideways to hold them down but the end result is always the same — hands-free operation while you're speaking.

Another of the advantages of base station microphones is that they nearly all have built-in preamplifiers. This allows you to speak from further away and that means that instead of crouching over the microphone you can sit back in your chair and, if the gain control has been properly set, you will sound quite normal, even if you are speaking from several feet away. It is important not to wind the gain up too high as this could lead to over-modulation and the resultant splatter could lead to all sorts of nasty things such as bleeding and TVI.

Another disadvantage of winding the wick up too high is that the microphone will pick up all the other sounds in the room and broadcast them.

There are dozens of different microphones available and I've looked at what I hope is a representative sample in the £20-£100 price range.



| MAKE | MODEL | SUPPLIER | PRICE |
|------|--------|----------|--------|
| AOI | UD-114 | 2 | £22.50 |

This unusually shaped desk microphone contains a dynamic microphone capsule with a built-in preamplifier powered by an internal Eveready 216 9 volt battery. The output impedance is switchable (50k ohm or 600 ohm) which makes it suitable for a larger selection of rigs although the 6 foot coiled microphone lead has only 4 cores (3 inners and a screen), which may in some circumstances mean that it can't be used with some makes of rig. If you buy one of these microphones, check with your supplier to make sure that it will work with your rig. There is another switch underneath that allows it to work with either electronic or relay switching. Not bad value, considering its price.

| MAKE | MODEL | SUPPLIER | PRICE |
|------|--------|----------|-------|
| AOI | UD-113 | 4 | £25 |

This is a small desk microphone that has an external slider to control the gain of the internal preamplifier. The label on the front says that it also has *Automatic Level Control* but we couldn't find out what they meant as there was not enough time to run it through the lab and the supplier has no literature on this particular model. The label also calls it uni-directional. We found it to be anything but when we tried it, and at about this stage we lost interest. We've only included it so that you can see what a not very interesting microphone looks like.



| MAKE | MODEL | SUPPLIER | PRICE |
|--------|--------------|----------|--------|
| Turner | Expander 500 | 2 | £49.50 |

This is one of the best known base station microphones, it's been used by hams and Cbers for quite a while and it has performed consistently well. It's quite large (5 3/4" x 8 3/4" x 9 1/2") and it has a good solid feel to it, perhaps because it weighs 1 3/4 lb. The front panel contains the volume and tone sliders that control the internal compression preamplifier. It has a frequency response of 200-4,000 Hz and is powered by an Eveready 216 9 volt battery. The meter on the front displays either the audio level or, at the touch of the appropriate button, the condition of the battery.

The black and satin chrome case is made of high impact Butadiene Styrene, a plastic that is apparently remarkably resilient.

The 6 core (5 inner and a screen) lead measures 1 1/2 feet when coiled and 6 1/2 feet when extended, and as the microphone can handle both relay and electronic switching you should be able to connect it to almost any make of rig.

If you're looking for a base station microphone and you can afford to spend nearly £50 on one, I don't think that you'll do much better than the Expander 500.



| MAKE | MODEL | SUPPLIER | PRICE |
|--------|-------|----------|--------|
| Turner | + 3B | 4 | £32.95 |

This desk-top microphone is quite small — approximately half the size of the Expander 500 — but it weighs almost as much, perhaps because it seems to be made of cast iron. The case is matt black with a hammer-finish surface that is definitely metallic and which is very pleasant to touch. It has a built-in preamp which can be adjusted with the external rotary control and which is powered by an internal Eveready 216 9 volt battery. The coiled leads has 6 cores (5 inners and a screen) and so it should be suitable for connection to most makes of rig.

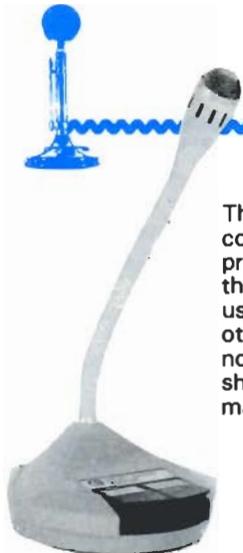
It may only cost just over £30, but it still has the Turner quality about it and certainly represents good value for money.



| MAKE | MODEL | SUPPLIER | PRICE |
|--------|-------|----------|--------|
| Handic | 80 | 4 | £28.25 |

Although the case is a totally different shape this small desk-top microphone seems to be made out of the same material as the Turner + 3B, ie it feels like cast iron. In fact, not only does the case not look like the Turner, it doesn't look like any other microphone that I've ever seen. The shape, despite being rather stark, is attractive and it is extremely comfortable to hold. The slider on the front of the stem controls the internal preamplifier which is powered by an Eveready 216 9 volt battery. The meter on the front of the case indicates the audio level. The coiled 6 core (5 inners and a screen) that comes with it should mean that it is suitable for most rigs.

I was very impressed with this little microphone and although it may look a little weird, it seems to be well worth the money.



| MAKE | MODEL | SUPPLIER | PRICE |
|--------|--------|----------|--------|
| Arista | CB-810 | 4 | £28.25 |

The unusually shaped stem of this tiny desk microphone contains an electret capsule that feeds into the internal preamplifier. This is powered by a single 1 1/2 V AA size cell that fits into the base. The lead seems to be far longer than usual because it is straight and not coiled like most of the others. As it has only 4 cores (3 inners and a screen), it may not be suitable for all makes of rig and if it appeals to you, you should check with your supplier before you buy it just to make sure that it will fit your rig.

| MAKE | MODEL | SUPPLIER | PRICE |
|------------|-------|----------|--------|
| Ham-Master | 4200 | 4 | £24.95 |

The die-cast metal case of this microphone contains a compression amplifier that can be adjusted by means of the rotary volume control on the front of the case. The power is supplied by an internal Eveready 216 9 volt battery, the frequency response is 200-5,000 Hz and the output impedance is approximately 4.5k ohm. The coiled lead has only 4 only 4 cores (3 inners and a screen) and so you should also check with your dealer before you buy this one, just in case it won't fit your rig.

Compared to some of the bigger base station microphones such as the Turner Expander 500 this one appears quite small, but it works well and it is certainly worth £25.



| MAKE | MODEL | SUPPLIER | PRICE |
|-------|--------|----------|--------|
| Leson | DT-251 | 2 | £38.50 |

This is a quite large base station microphone that has a built-in compression amplifier with a frequency response of 300-5,000 Hz. The power comes from an internal Eveready 216 9 volt battery or from an external 9 volt DC supply because there is an external power supply socket on the back of the rugged die-cast metal case. On the front of the case two sliders control the tone and volume of the microphone. The meter on the front of the case normally displays the audio level but can be used to show the condition of the battery.

The head contains a dynamic microphone capsule and the output impedance is approximately 5kR. The 6 feet of coiled lead contains 6 cores (5 inners and a screen) and so it should be suitable for most rigs.

This is a very wide and bulky microphone but it is well laid out and it has a comfortable feel to it. I found it very easy to use and I have received consistently good audio reports from it.

Shure

If you've ever bought a new cartridge for a hi-fi record deck or if you've ever played with a microphone inside a television or recording studio, you will have seen the name Shure — a name that has been synonymous with quality for many years. Anyone who works with microphones will recognise

the name instantly but even they may not know that Shure also make communications microphones for both mobile and base station use. Needless to say, they are the same high quality as their studio mikes and I was impressed by the two that I looked at.

| MAKE | MODEL | SUPPLIER | PRICE |
|-------|-------|----------|--------|
| Shure | 526T | 1 | £44.16 |

This is a dynamic microphone that has a built-in preamplifier with a tailored frequency response and the expected Shure audio quality. It's powered by an Eveready 216 9 volt battery and as the current drain is so small, it should last about a year with normal use. The Armo-Dur (plastic) case is claimed to be immune to oil, grease, fumes, salt spray, sun, rust and corrosion and it has a 'million cycle' leaf type PTT bar.

This microphone can be used to replace ceramic or dynamic, high or low impedance microphones and as it has a 6 core (5 inners and a screen) lead combined with a triple pole double throw switch, it should be possible to connect it to almost any rig with an input impedance of more than 500R. A booklet that lists a selection of the most popular rigs and shows the wiring connections for the microphone is included in the price.

This microphone has been made to a very high standard and performs consistently well.



| MAKE | MODEL | SUPPLIER | PRICE |
|-------|-------|----------|--------|
| Shure | 444D | 1 | £36.57 |

This is the model that is probably of most interest to the CBER who is interested in chasing the DX. It's a dual impedance base station microphone with a magnetic cartridge and a built-in preamplifier, and has had its frequency response tailored for maximum speech intelligibility under difficult communications conditions. This doesn't improve the strength of your signal but it does mean that your voice will be more readily understood even if it's way down in the noise.

There is also a switch that allows it to be used in the VOX (voice operated) model when it is connected to a rig that has this facility. In most other respects the 444D's specifications are almost the same as the 526's, and they are both very good microphones.

Astatic

Those of you who read last month's microphone survey will already know that Astatic make exceedingly good microphones, even though they do look a little funny and, as you can see from this month's photographs, their base station ones look even stranger. Sometimes they are affectionately known as 'candlesticks' although their quaint design makes them look like something that Auntie Beeb was using 40 years ago, they contain the latest high quality electronics and they perform superbly.

Until recently the Astatic range has not been marketed very enthusiastically in Britain and as a result they have only been bought by the real enthusiasts. Now a firm in Enfield, *Skyriders*, have started to import them and they intend to promote them heavily and I think we will soon be seeing a lot more people using Astatic microphones.

| MAKE | MODEL | SUPPLIER | PRICE |
|---------|------------|----------|--------|
| Astatic | T-UP9-D104 | 4 | £49.95 |

Shown here are two versions of the best known style of Astatic microphone, the T-UP9-D104. The one with the bright chromium plating and the circular mouthpiece is the well-known 'Silver Eagle'. It's a power microphone that has a built-in two stage transistorised amplifier with an output impedance that is suitable for most makes of rig and a tailored frequency response that ensures excellent modulation. It takes an Eveready type 2169 volt battery and as the current consumption is only 1.2 mA, the estimated battery life is approximately six months with normal usage.

The microphone capsule contains a high quality metal sealed type crystal insert and the quick release bracket on the top of the stem allows the complete microphone capsule to be changed very quickly. The gain control is on the back of the head and it has been recessed to prevent it being changed accidentally and perhaps causing over modulation.

The 6 core (5 inners and a screen) coiled lead allows the D104 to be wired for just about any rig on the market.

The PTT is operated by either squeezing the bar on the side of the stem or by pressing down on the bar on the front of the baseplate. To lock it on transmit the small ring on the side of the stem can be slid up to hold the bar in position.

Also shown is the same model microphone but fitted with a matt black base and an SSB head instead of the circular general purpose one. This head is best for SSB working because it has a frequency response that has been tailored for maximum speech penetration under difficult conditions.

The third model shown here is the famous 'Golden Eagle'. This is a special that was only produced in limited numbers to celebrate the American Bicentennial and although it looks much the same in a black and white photograph, it is unmistakable in the flesh because it has been completely gold plated. *Skyriders* have bought the last of them and they are selling them for £92 each. They are exactly the same size as the 'Silver Eagles' (C12" x 5 1/2") and they work just as well and the reason that they cost a lot more is not just because they have been covered in gold, it's also because they are collectors items. When you buy one, you know that you are buying something that not too many other people have and when they have all been sold you will



also know that no more will be made and this gives them a rarity value.



| MAKE | MODEL | SUPPLIER | PRICE |
|---------|-------|----------|-------|
| Astatic | 1104C | 3/4 | £POA |

This is the odd one out in the Astatic line-up. It's a normal looking contemporary styled base station microphone that doesn't look anything like their other models. It contains a two-stage low noise FET amplifier that has external volume and tone controls. There is also an internal master gain control that can only be reached through the battery compartment door. This arrangement prevents the overall gain being accidentally changed with the resultant possibility of over modulation. The 1104C has a durable moulded plastic case that is available in a variety of colours and although it looks totally different to their other models, it contains the same high quality microphone capsule and the same quality electronics that give all the Astatic range such excellent audio. ▶

The Astatic Corporation have obviously realised that not everyone will appreciate the charm of their 'candlesticks' and so they have produced a normal looking microphone that has all the features of the originals plus a couple of extras such as the two external controls. If the quality of the Astatic microphones appeals to you but not the old fashioned look, then this is the microphone for you.

We would like to thank the following for their help in the preparation of this article and for the loan of their products.

1. Lea Electronics, 400 Edgware Road, London W2 (Tel: 01-723 5521)
2. Mura Electronics (UK) Ltd, 295/297 High Road, Willesden, London NW10 (Tel: 01-451 4141)
3. Radio Shack Ltd, 188 Broadhurst Gardens, London NW6 3AY (Tel: 01-624 7174)
4. Skyriders, 557 Hertford Road, Enfield, Middlesex (Tel: 01-805 6400).



BASE STATION MIKE SURVEY DATA PANEL

| MAKE | MODEL | SUPPLIER | TYPICAL PRICE |
|------------|--------------|----------|---------------|
| AOI | UD-113 | 2 | £25.50 |
| AOI | UD-114 | 4 | £22.50 |
| Arista | CB 810 | 4 | £28.25 |
| Astatic | 1104C | 3/4 | £ |
| Astatic | T UP9-D104 | 4 | £49.95 |
| Astatic | Golden Eagle | 4 | £92.00 |
| Ham Master | 4200 | 4 | £24.95 |
| Handic | 80 | 4 | £28.25 |
| Leson | DT 251 | 2 | £38.50 |
| Shure | 444D | 1 | £36.57 |
| Shure | 526T | 1 | £44.16 |
| Turner | +3B | 4 | £32.95 |
| Turner | EX500 | 2 | £49.50 |

THE RANGER

27FM CB PORTABLE

BRITISH MADE FOR U.K. MARKET
 (Project described in Practical Electronics, Sept issue onwards)

THE RANGER CB rig has been designed to fit the new legal Home Office specification, and starts off as a hand held unit complete with aerial, mic., and rechargeable batteries.

The unit plugs into the mains, 12V car outlet, or runs on built-in rechargeable batteries (built-in charger). Up to 5 miles range in town to keep in touch with family and friends.

KITS EX-STOCK INTRODUCTORY OFFER

£49.95

(+£2.50 PP + VAT)

£97/matched pair (+£5.00 PP+VAT)

This offer price includes rechargeable batteries, mic., aerial, mains lead and 2 channels.

Extra channels £2.25 each + 50p P.P. + VAT

Extra aeriels £3.95 each + 80p P.P. + VAT

(Postage free with kit)

Tunable Whip aerial magnetic or permanent

car mount (state which)

£13.95 each + £1.00 P.P + VAT.

SPEC.

R.F. Power Output ¼-1 Watt
 AF (internal speaker) ½ Watt
 Modulation: FM: freq. 27.6MHz-28MHz (CB Band) (excellent speech quality)
 No. of channels (max): 6
 Fully protected against bad aerial connection.

Coming soon...

BASE/MOBILE ADD-ON UNIT TO GIVE 4 WATTS AND 40 CHANNELS

Ready Made Units are Available - ring Sales Office 04626 74468 for Details.

PHONE YOUR ACCESS/BARCLAYCARD ORDER FOR FAST SERVICE

Autumn Products Ltd.

P.O. Box 30, Letchworth, Herts, SG6 3DQ Telephone Letchworth (04626) 74468/76392



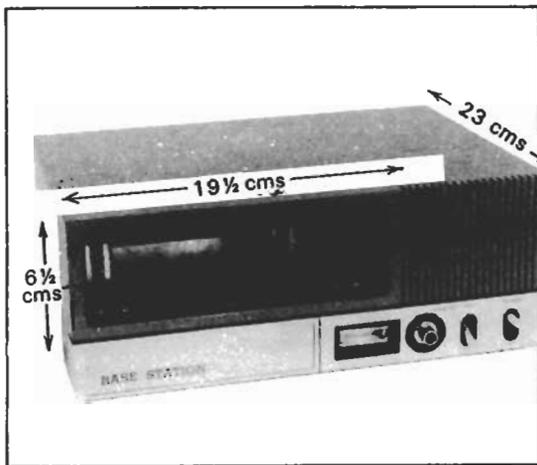
CHELMER CB EXCLUSIVE!

50 DUKE STREET, CHELMSFORD, ESSEX. TEL: 87698/351359

THE ONLY ONE OF IT'S KIND ON THE MARKET.

"WINTER IS ON THE WAY! GET OUT OF YOUR
WRAPPER AND INTO YOUR BASE — 20!!!"

THE XCB-71



SPECIAL
OFFER
TO
CITIZENS
BAND
READERS
£39.95
+
£3.50
p&p



(CHEQUES & P.O.'s PAYABLE TO CHELMER CB)

PLEASE STATE 2 OR 3 PIN LEADS WHEN ORDERING*

Feature Sensitive Dual Conversion Circuit with PLL Automatic Noise Limiter (ANL), converts to public address system, SWR Switch and Meter, 4 Watts audio output, filter tuning switch, built-in power supply

TRADE ENQUIRIES WELCOME

NAME _____

ADDRESS _____

I enclose Cheque/P.O. Payable to

CHELMER CB for £ _____

I wish to pay by BARCLACARD ACCESS tick
Card No. _____

SIGNATURE _____

PLEASE ALLOW 21 DAYS FOR DELIVERY



Solid State Electronics are the **only** company in the U.K. with 10 years legal professional experience in CB. manufacturing, design, development, marketing. SSE have a highly sophisticated range of test equipments and are in the unique position of having official type approval for CB Radios to cept standard in Finland, Norway, Denmark, Sweden and W. Germany. SSE will be selling together with Ambit International, high quality state of the art CB Radios.

ACCESSORIES THAT WORK...

Buy your CB Accessories with complete confidence. Get SSE quality plus full manufacturer guarantee. Why waste time and money on Accessories that don't work correctly. SSE have tested many items made in Far East and in U.K. The results of these Electrical and Mechanical Tests have shown any items to be of inferior quality and some are completely useless. SSE make products that work ... and the price is right...

CB. REPAIRS — BY THE EXPERTS

Get your FM CB Radio repaired or even modified (selective call fitted etc) with 100% confidence, by a professional company with 10 years of CB experience. Full test equipment facility. Comprehensive tests to the Home Office specifications and also to Solid State Electronics own CB Radio minimum basic requirements as published in Radio and Electronics World Magazine. Quick service with 1 year guarantee.

TO NEW HOME OFFICE SPEC!

12 channel semi-professional 1.5 watt FM hand-held; supplied with 3 channels, rubber-duck antenna, carrying case etc. Can be used with rechargeable batteries or external 12 volt DC supply.

The set will be one of the best sets in the UK and will be available in November.

Approx Price £60 inclusive 1 year guarantee and full service back-up.

UNIVERSAL EXTENSION 'S' METER

R.R.P.
£15

Very high quality Universal 'S' Meter the best. Can be used with most CB sets with base units, mobiles and is great for 'fox-hunts'. Full instructions.

AUTOMATIC AF SWITCH ESA-15

R.R.P.
£14

Audio controlled electronic switch. Activated by the squelch action (on-off) of any CB set,

SIGNAL SPLITTER 10-2WP

R.R.P.
£6.50

The best signal splitter on market. From SSE who designed original HMP filter.

SIGNAL SPLITTER 10-2NP

R.R.P.
£5.50

Same as 10-2WP no cables, can be used with scanning receivers etc.

LOW PASS FILTER 10-40CB

R.R.P.
£4.50

Minimise harmonics from CB transmitter use with CB unit.
(UK manufactured jumper-lead 50cms 95p)

TVI-RFI INTERFERENCE FILTERS

R.R.P.
£4.90

HPF 10-9, high pass filter for use with UHF TV only.
BSF 10-8, stop band filter for use with VHF-UHF TV

Solid State Electronics (UK) Ltd.
6 The Orchard, Bassett Green Village,
Southampton SO2 3NA, England.
Tel: 0703-769598

Separate Info Sheets on all products available with data and installation instructions.

Now—the right rig for Britain – 27MHz FM from **uniden**—the world's top CB rig makers

size
140 × 40 × 205mm



Fully legal Rig and Twig*—£96.95 (+ P&P)

UNIACE 100 — the first CB rig built specially for British breakers by Uniden — the world's largest CB rig makers and known to experienced CBers for their **Cobra** and **President** rigs.

It's fully legal on 40 channels.*

It uses the new signal-hugging PLL ICs from Toshiba.

It has a separate Hi/Lo power switch on the front panel to regulate output — eliminating the need for an attenuator.

It also has a PA/CB switch, auxiliary external speaker jack and super-accurate signal strength meter. Yet it's still as compact as 'cheapie' mobile rigs. (140 × 40 × 205mm).

With the rig comes a quality dynamic-type mike and a Panorama base-loaded, tunable whip antenna, complete with 5 metres of cable and fitted plug, fully corrosion-resistant with magnetic car-mounting base (no drilling — instant dismounting). So for this surprisingly low all-in price, all you need is a licence to break in on legal CB in style. You'll be producing a maximum legal power of 4 watts 'wall to wall' every time. You'll be receiving 'armchair copy' all the way — no 'hash and trash', no 'bleeding'.

And just in case you're coming in on CB brand new, we've thrown in an up to date 2500 item CB Jargon Dictionary **free** for good measure.

Send for your Uniace 100 now. It's the perfect rig for Britain.

FULLY GUARANTEED. MONEY BACK OFFER

This superb rig and its antenna are fully guaranteed for 12 months. In addition, Valinor Distribution make you their own money back offer. If you are not 100% delighted, return the whole set in its original condition and packing within 7 days and we'll refund you your money in full.

**UK SUPPLIES ARE LIMITED
SO HURRY —
ORDER NOW WHILE
PRESENT STOCKS LAST**

VALINOR

Valinor Distribution Services Ltd,
7 Leopold Road, London W5 3PB.
Tel: 01-993 5109

* From November 2nd.

CHECK THE SPECS

- ★ Range: up to 6 miles in town and up to 18 miles out of town. ★ 40 channels.
- ★ Maximum legal output power.
- ★ Toshiba Phase Lock Looped ICs.
- ★ Front mounted Hi-Lo power switch.
- ★ 5 quality control checks on every component.



Telephone orders from credit card holders are welcome at any time on 01-993 5109.

Please send me..... Uniace 100 CB Rig(s) with antenna and free CB Jargon Dictionary at £99.95 inclusive of postage, packaging and insurance.

I enclose cheque/PO for..... Remittances should be made payable to Readers' Account Valinor Limited and shall be held on your behalf in this Account until the goods are despatched.

Or please debit my Barclaycard/Access card.

My number is



Signature _____

Name
(BLOCK CAPITALS)
Address _____

Tel: _____

Allow up to 28 days for delivery. Registered in England no. 1399183.
Valinor: Distribution Services Ltd, 7 Leopold Road, London W5 3PB.
Offer applicable to UK only.



LEGAL at LAST

LEGAL at LAST

LEGAL at LAST

We thought it would be appropriate to let Keith Townsend say a few words on the imminent legalisation. Keith has been there from the beginning — how does he feel now that the battle is almost over?

At long last I'm a breaker. After years of campaigning, thanks to the kind help of Fidelity Radio Ltd, I recently became the proud user of one of the first legal rigs to go into circulation and the envy of many of my friends who, not so long ago, had sworn undying allegiance to the great god, AM. How fleeting a thing is loyalty. For, despite their earlier protestations, these are the very people who have offered to cross my palm with silver in exchange for the type of rig they once damned to eternity.

Well, they ain't getting it. I'm far too impressed with it myself to want to exchange it for mere baubles, even in large quantities. Its performance is far superior to any AM rig I have ever seen and the quality of tone just has to be heard to be believed. What's more I didn't have to worry about Buzby knocking on my door. If his little wings will waft him to the step he is welcome to cheep away on this rig for as long as he likes. It has already passed tests for frequency stability, power output and harmonic radiation and I have no doubt at all that it will pass any other test that Buzby can find in his book of spells.

"Its performance is far superior to any AM rig I have ever seen and the quality of tone has to be heard to be believed"

All I can say to those who have not yet had the opportunity to try out FM is, 'Eat your hearts out. It's fantastic!'. I know that a lot of you have got what the manufacturers euphemistically call AM/FM rigs but believe me they are not a patch on the real thing, and I challenge anybody who has poured scorn on the idea of an FM service to remain unconvinced after they have tried the real thing.

Now that we know when CB licences are to be issued I am more than ever certain that the majority of breakers will flock to the new system and do away with the risk of landing themselves with a hefty fine just for the privilege of using a set which, com-

"... what incentive will the new breaker have to buy a AM rig when, for about the same outlay he can go almost anywhere and buy a rig which offers at least equal usually better performance"

pared to the one in my car, is an also-ran. Gone will be the days of looking over your shoulder every time you see a little yellow van. Gone will be the controversy and gone, before long, will be the screams of protest from a dwindling bunch of die-hard AM operators.

I was recently accused of being an FM fan by a couple of excitable club leaders at a time when I really didn't have any strong opinion one way or the other. If they would like to repeat the accusation today they may do so with total justification. If this Fidelity rig is a fair example of the quality which we can expect licences to herald then I can only wonder why I wasn't an FM fan right from the beginning.

Over the years rigs will come and rigs will go but I will always retain a certain affection for this, the first legal rig I've used to any extent, since it is the one thing that has convinced me that the battle for legalisation was worthwhile and that three years' hard graft has not been in vain.

Perhaps now we will see an end to all the rumours and wild speculations and those who have stood on the sidelines, waiting in a state of total bewilderment for the day to arrive, will be able to join in one of the fastest growing hobbies in Britain. Make no mistake — there are thousands of them out there who were not prepared to spend their money until the uncertainties were resolved, and I am pleased to be able to tell them that they were right.

"All I can say to those who have not yet had the opportunity to try out FM is 'Eat your hearts out'. It's fantastic!"

Licences are easy to obtain, easy to understand and totally free from the form of petty restriction which we once feared would surround them, and the interest which legal rigs has created wherever they have been shown suggests that they will sell like ice-cream in a drought. If you are one of those to whom the idea of a CB licence is a dream come true, don't wait too long before making your application. This little three-page document is destined to become a best-seller in record time.

Although there are bound to be those who scorn the idea of a licence in the beginning — probably the same people who, over the years, have repeatedly asked me why I wanted to see CB legalised, since it wouldn't be any fun if it were legal — I can only see the number of AM rigs in circulation going one way. Down. After all, what incentive will a new breaker have to buy an AM rig when, for about the same outlay he can go almost anywhere and buy a rig which offers at least equal, usually better performance without falling foul of the willing band of predators who have had such a wonderful time over the last couple of years trying to make CB a dirty word.

Maybe then we can begin to reap the real benefit of instant communication. With the fear of prosecution removed doughnuts can become traffic islands once again, rough 20s can become exact locations and, if we are really lucky some of us might even remember to show their mettle and the instant friendship of the air which ex-

"Gone will be the days of looking over your shoulder everytime you see a little yellow van".

"Perhaps now we will see an end to all the rumours and wild speculations".

"By all means let's have fun but let's not fall into the trap of treating CB as a toy".

". . . my own short experience of a legal rig is enough to make me think that not all the mistakes have been on the HO's side".

isted when I first entered the campaign can be reasserted in those areas which have not had the benefit of the motorways, where the truckers alone seem to have maintained this spirit through whatever came and went. Listen to CB on any motorway if you want to see for yourself just how well it can work.

The battles are nearly all won and lost and legal CB is now a reality. Those with previous experience of the airwaves have a great opportunity to help those coming into the mysterious world of breakers, rigs, twigs and wrappers for the first time and considerable patience will be needed when the airwaves are crowded. Let's make it work, if only to prove to the doubters that they were wrong and that we should have been given this freedom years ago. By all means let's have fun but let's not fall into the trap of treating CB as a toy, forgetting its value as a serious medium for communications.

There will always be the minority who hide behind a microphone to impose feeble humour and even foul language upon anyone close enough to hear them but 99% of all breakers are ordinary folk who enjoy their ability to talk to each other and I, for one, salute the opportunity which the new FM service offers them.

I have long been critical of the Home Office handling of CB and I offer them no bouquets now, but my own short experience of a legal rig is enough to make me think that not all the mistakes made have been on their side. I still believe that we can win a few concessions from them in the fullness of time, but only if we prove that the new system works and that our critics were wrong.

To those new to CB, I am happy to offer encouragement and the knowledge that they are joining a great bunch of people.

CB

SHEFFIELD WHOLESALE CB SUPPLIES

132 Pennistone Road North,
Sheffield, Yorks
Tel: 0742-346234

We have full trade range at unbeatable prices including:

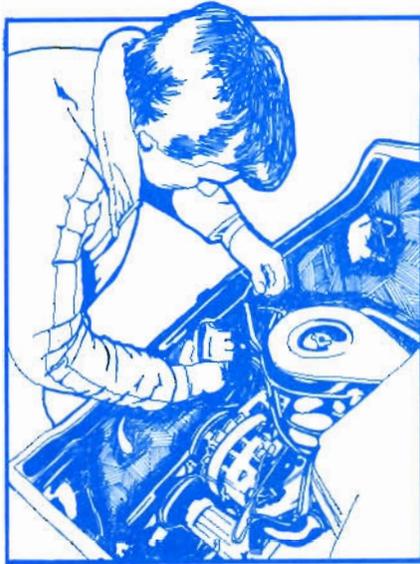
**AVANTI — FULL STOCK 241M, 241T,
241 PDL II**

**K-40
VALOR RAMA**

PLUS MANY OTHER LEADING BRAND NAMES.

PHONE MICK NOW!!

D.I.Y.



Interference to, as against from, CB radios can be a real problem. J Armitage looks at some of the most common sources and suggests a number of ways to combat mobile CB interference.

SUPPRESSION -THE FACTS.

One of the major, and most overlooked, factors contributing to poor reception on two-way CB radio, both AM and FM, is interference from external sources. In a mobile installation this is caused by the electrical system of a motor vehicle. This interference can be caused by numerous sources and can usually be eliminated by fitting various forms of suppression.

Installation of the set and antenna is the first consideration and a lot of problems can be overcome if this is done correctly. Ensure that good quality coaxial cable has been used to the antenna and that the base of the antenna and the transceiver chassis are properly grounded. The transceiver should be connected, where possible, directly to the battery.

A simple test for interference can be conducted, bearing in mind that on an AM radio interference shows up as an increase in background noise that can drown weaker signals and, in the case of FM, although not audible, will desensitise and reduce the operating range of the transceiver. With the car engine switched off and the ANL/NL/NB switches in the 'off' position, turn on the set and select a channel with a weak signal. Start the engine and if the signal weakens further or disappears or is obliterated by noise, then suppression is required.

Identifying the source is the next step and the chart in Fig. 1 can be used as a guide. It should be noted that worn generator or alternator slip ring brushes and points contacts (distributor) are all causes of interference and should be replaced if their condition is suspect.



| Symptom | Cause | Cure |
|---|---------------------------------|--|
| 1. Musical whine which increases in pitch with engine revs. | Alternator/Generator. | Fit alternator filter or generator wave trap. |
| 2. Constant popping which increases in frequency with engine revs. | Ignition system. | Fit resistor spark plugs and leads or plug suppressors. Fit resistor lead between coil and distributor (HT) or in-line suppressor. Fit feedthrough capacitor between coil and ignition switch. |
| 3. Intermittent popping or rasping noise. | Voltage regulator. | Fit regulator filter (see text). |
| 4. Electric motor noise. (in conjunction with heater, wipers, etc.) | Heater-blower or wiper motors. | Fit feedthrough capacitor next to motor (high amps). |
| 5. Hissing or crackling sound | Electric instruments or gauges. | Fit bypass capacitor to gauge wire. |
| 6. Pop when key turned on followed by irregular popping. | Electric fuel pump. | Fit bypass capacitor to pump wire. |
| 7. Slushing sound when vehicle moving with engine off. | Wheels or tyres. | Wet wheels |

Fig.1

After identifying the possible source of the interference the next step is to fit a suppressor to eliminate it. Alternator and voltage regulator noise can usually be cured by fitting a filter on the voltage regulator (Fig.2). On a typical installation the following steps should be followed:

- Remove any existing suppressors from the alternator and voltage regulator.
- Attach the wire (usually black) from the noise filter on to the ground terminal of the voltage regulator.
- Locate the wire leading from the alternator to the voltage regulator and cut it. Bare the two ends and attach one on each terminal of the noise filter ensuring that all connections are tight and secure.

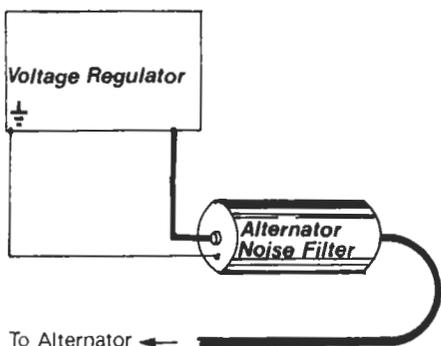


Figure 2. Fitting a filter on a voltage regulator.

The most popular ways of suppressing ignition noise are by fitting resistors in-line (in series) with the existing spark plug and distributor leads or by replacing the plugs and leads with special resistor types. On no account should in-line suppressors be fitted to these resistor leads as it will tend to be detrimental to the engine performance. Figures 3a and 3b show the 'clip on' type of in-line suppressor and Fig. 4 the screw type which necessitates cutting the leads to plugs and distributor/coil and inserting the suppressor by screwing the contacts into the lead. Always make sure that good contact is made and that the suppressors are securely connected. (This may entail 'crimping' the clip-on types slightly).

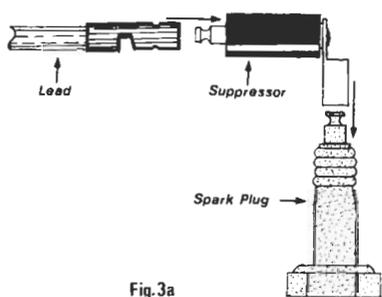


Fig.3a

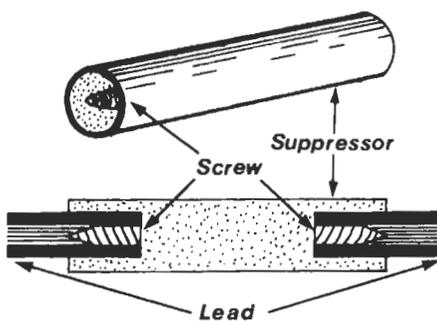


Figure 4. Screw-in type suppressor.

It is advisable, when replacing the plugs and leads, to remove and replace one lead at a time to prevent connecting them incorrectly. Resistor plugs (Fig.5) and leads (Fig.6) are available for most cars in this country and are manufactured by companies such as NGK and Champion. It is internationally accepted and recognised that suppressor plugs have the letter 'R' in the part number (eg BPR6ES - NGK part no. for Sunbeam Lotus resistor plus).

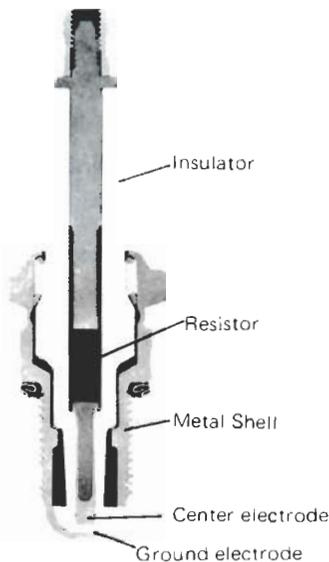


Figure 5. A resistor fitted inside a spark plug.

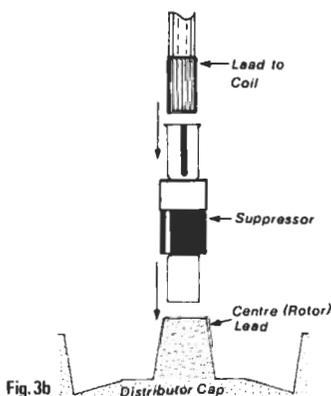


Fig.3b

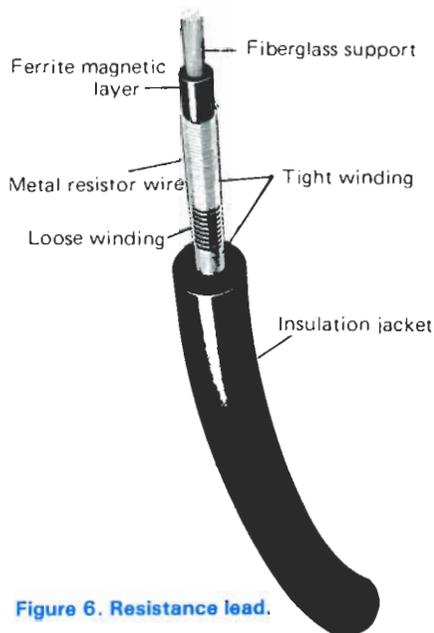


Figure 6. Resistance lead.

On the wiper, heater or screen washer motors (Fig.7), a high current feed-through capacitor should be fitted in-line with the power lead to the device and the mounting bracket of the capacitor must be grounded to the chassis of the vehicle. The power lead has to be cut and bared then fitted to each terminal of the capacitor and mounted as close as possible to the electric motor.

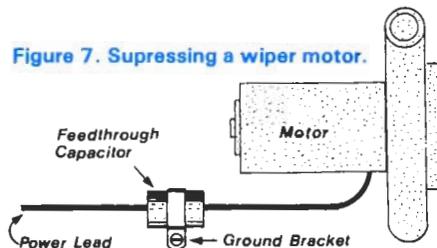


Figure 7. Suppressing a wiper motor.

Instrument (Fig.8) and electric fuel pump (Fig.9) interference can be reduced by connecting a bypass capacitor on the feed wire terminal (usually marked +) of the unit and the grounding bracket should be secured to the chassis.

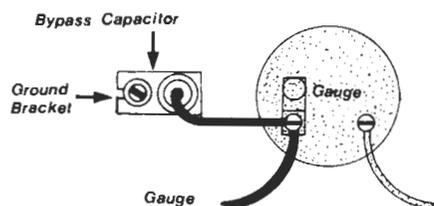
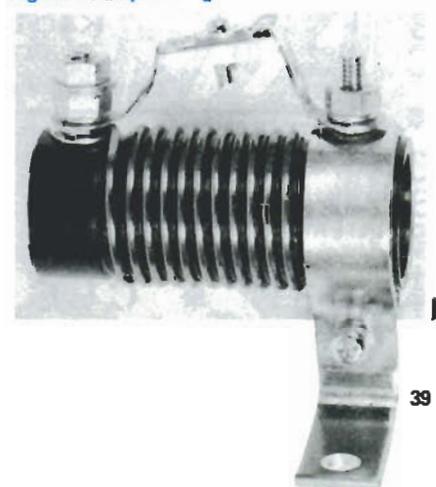


Figure 8. Suppressing instruments.



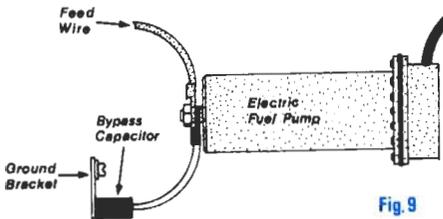
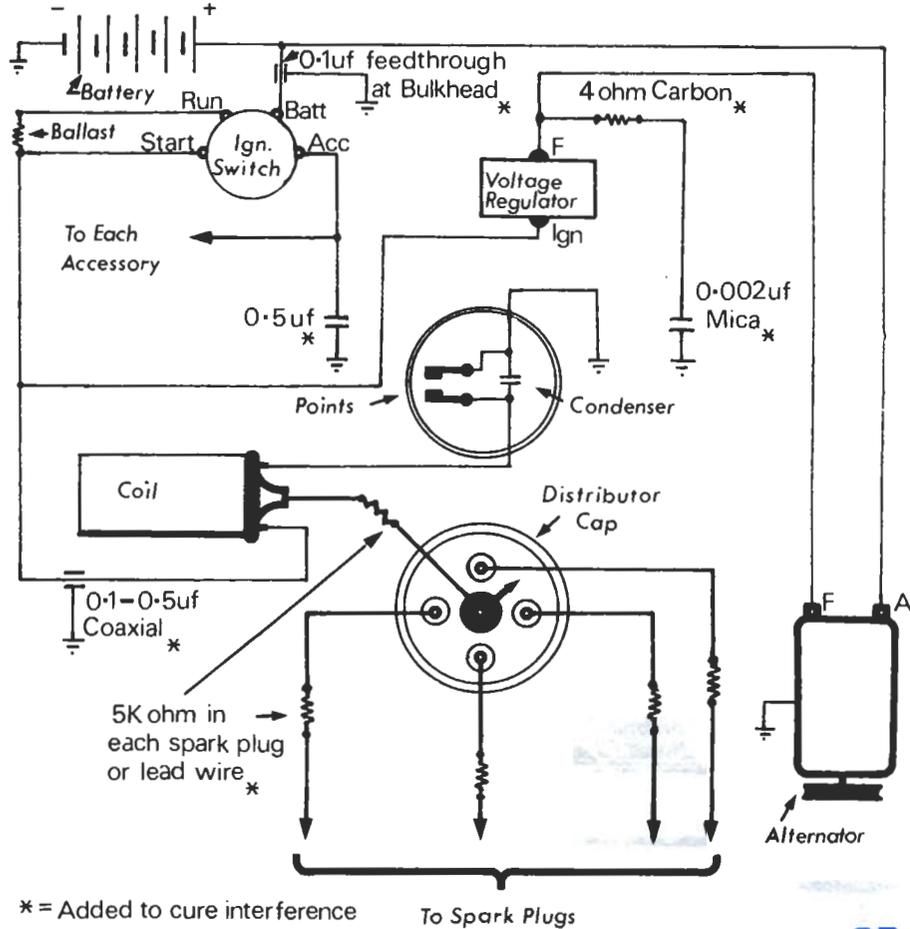
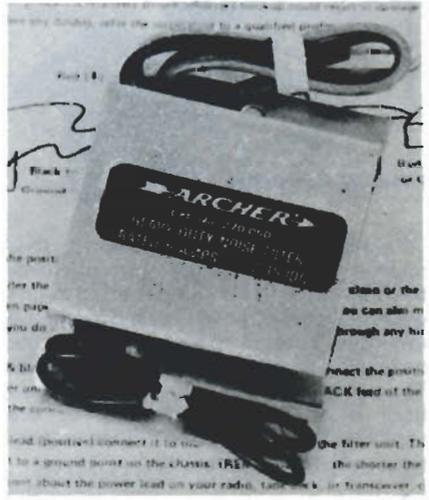


Fig. 9

Wheel and tyre static is not usually encountered in this country as it generally occurs in hot, dry climates but should the problem ever arise it can be remedied by simply pouring water on the wheels to enable the static charge to ground. Static reducing springs, which fit in the grease hubs, are available but not generally stocked by dealers in this country.



* = Added to cure interference

To Spark Plugs

Figure 10. Complete suppression diagram.

CB

* CBC *

CB CENTRE

HAVE MOVED THEIR RETAIL & WHOLESALE TO NEW & LARGER PREMISES
20c SELSDON ROAD, SOUTH CROYDON, SURREY

01-680-4503

WE BUY DIRECT FROM ABROAD & CUT OUT THE MIDDLE MEN

DIRECT IMPORTER AND PASS THE SAVINGS ON TO YOU DIRECT IMPORTER

We are now K40's Main Distributor for their products throughout the south of England

So to promote this success we are offering for a limited period

| | |
|---------------------------|--------|
| K40 Speech Processor Mike | £24.95 |
| K40 Mobile 500W Antenna | £24.95 |

These prices include VAT + P&P

You can order and pay by Access & Barclaycard

FULL RANGE OF C.B. ACCESSORIES AVAILABLE
FOR FREE CATALOGUE SEND A S.A.E.
HELP & ADVICE GIVEN ON ESTABLISHING NEW CB OUTLETS
WHOLESALE ENQUIRIES 01-680-4503

K40

APPROVED
DISTRIBUTOR

* CBC *

Nobody sells for less than Custom Equipe*

We have been supplying CB products and accessories nationwide, for nearly two years — you might say that we were one of the first names to get CB moving in the UK. Now we've something even better to offer to our trade and retail customers.

We have just opened a new retail showroom, offices and warehouse complex on Gardners Crescent in central Edinburgh. You can now see our extensive range of CB equipment displayed to its best advantage in professional setting. you can order and buy in comfort.

We have a separate facility for all you trade clients to enable you to select at leisure... or get quick service if you're in a hurry! All orders are promptly made up in our despatch bay and are speedily delivered. We use overnight transport to most UK towns and have our own fleet for local drops.

As always Custom Equipe offers you all that's better in CB.....
**BETTER PRODUCTS... BETTER PRICES... BETTER DISCOUNTS...
BETTER DISPLAYS ...AND BETTER THAN EVER SERVICE.**

Officially Appointed Distributors for:

- HMP ● KHI ● ALPINA
- ANTENNA SPECIALISTS
- EURATRONICKA
- ALBRECHT
- EDGEWORTH ELECTRONICS

Distributors for:

- TELECO PRODUCTS
- AVANTI
- TURNER ● MIDLAND
- HAM MASTER ● CTE
- GC ELECTRONICS
- HAM INTERNATIONAL
- ZETAGI ETC

Other new ranges are being constantly introduced — it'll pay you to get on to our regular mail list!

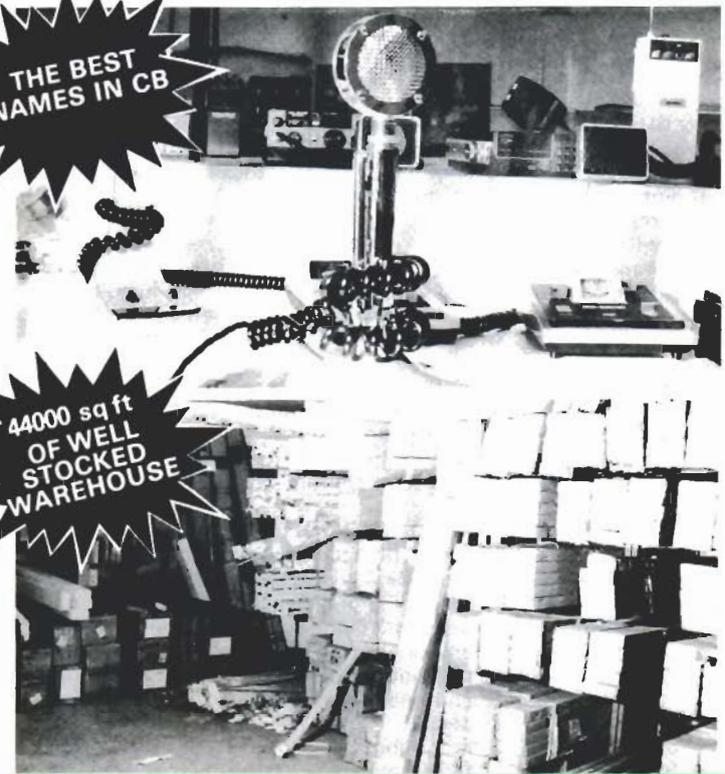
*'Nobody sells for less than Custom Equipe — if you can find one of our lines currently available anywhere else at a lower price... WE'LL NOT MATCH IT — WE'LL BETTER IT! (This offer is for both retail and trade but doesn't apply to certain competitive Special offer's/Close down sales etc').

THE BEST NAMES IN CB

44000 sq ft OF WELL STOCKED WAREHOUSE

SPACIOUS MODERN SHOWROOM

NATIONWIDE QUICK DELIVERY



Serving you through over 120 trade customers — 'wall to wall' coverage of the UK.

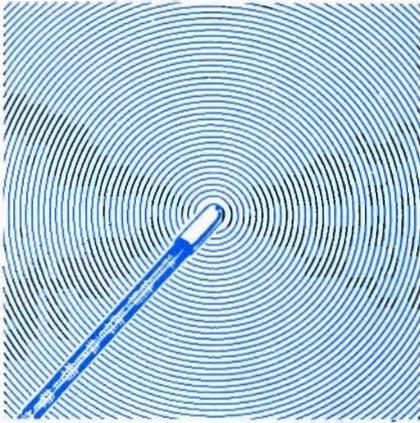
TRADE ORDERS AND ALL ENQUIRIES TO
**38 GARDNERS CRESCENT
EDINBURGH EH3 90G**

TELEPHONE AND TELEX
(ORDERS/ENQUIRIES)
TRADE: 031-229-8830
TELEX 727053 OMTECH G
RETAIL SHOP: 031-229-8830
MAIL ORDER: 031-229-8202

OMTECH I.O.M. LTD & ASS. CO.s

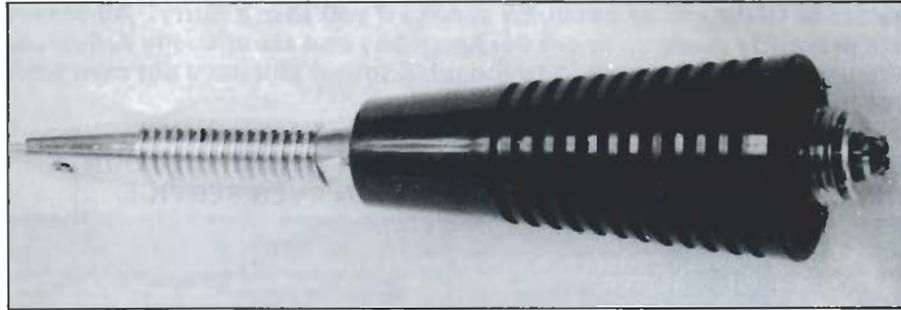


Antenna Review



It's no secret that Tandy will be going into the UK CB market with a vengeance. We look at one of the extensive range of Tandy antennas this month — the Archer 21-904.

BOLT-ON BASE LOAD



As you will have seen elsewhere in this issue Tandy, or to be precise, Radio Shack (as the parent company is called), are getting into CB in a really big way. Apart from rigs your local Tandy store will also be able to supply you with an impressive range of antennas and accessories under their Archer brand name. Our Antenna Review this month looks at one UK legal CB antenna that has a very unusual method of fitting to your mobile.

The Archer 21-904 Rooftop Mount is basically a 3' 6" stainless steel whip with a loading coil built into the base, below a hefty steel spring. The antenna is attractively packaged in a bubble pack and comes complete with all the fitting bits and pieces, 16 feet of coax and an Allen key for SWR adjustment.

This antenna is primarily designed for permanent car roof installation so be warned, you have to drill a hole in the roof of your car or van if it's going to be done properly. This is obviously not a problem if you drive a panel van but things may get a bit awkward if you try to drill through the roof of the wife's new Cortina, making an ugly hole in the roof lining. You have to be committed to this type of installation and be perfectly prepared for the consequences if it goes wrong. On the other hand this type of antenna, mounted in the centre of the roof, is quite simply the best, even better than a rooftop mag-mount.

Mounting the antenna requires a 3/8" or 9.5 mm hole in the metalwork. The mounting stub is a press fit into the hole: once it's in place the nut is tightened up and it's in forever, 'cos there's no way of getting it out without resorting to major surgery — see what we mean about committing yourself to this type of antenna?

The cable supplied with the antenna should be fitted to the connector, either by soldering or relying on the press-in fittings supplied. Soldering is the safest bet if the car is likely to be left out in the rain, as water might get into the connecting stub sooner or later.

Once it's all fitted in the base coil and spring and whip assembly just screw it in. A couple of turns, and it's on. It comes off just as easily for those weekly sessions at the car wash and when putting the car into the garage. It also stops it being nicked, by the light-fingered sections of the community who get their kicks from tying knots in car aerials.

Hooked up and ready to go, the 21-904 (what a boring name Tandy, can't you do better than that?) is easily adjusted for SWR. The rod slips in and out of the mounting spring and can be fixed in position by tightening up a small grub screw which can be adjusted by the Allen key provided. Our test samples consistently SWRed in below 1.5:1 and the adjustment was sufficiently coarse to allow a low SWR over 26.9 to 18 MHz without any problems.

In Operation

A delight! That's the only way to sum up the 21-904. It operates extremely well and passed all our mechanical and electrical tests with flying colours. The range of the antenna during our field trials was consistently well above average for a rooftop antenna, and far greater than we had expected. The reason, we felt, was the high mounting position and the direct electrical coupling through the car body to the ground plane.

It would be easy to say that virtually any type of antenna mounted in a similar fashion would perform in the same way but it became clear during the long-term field trials that the problems we normally experience with antennas just weren't happening. For instance, the metalwork is extremely well protected against corrosion. The SWR stayed exactly where it was during our field trials and even managed a creditable 3:1 while bent almost double when it was carelessly parked one night in a garage.

So far, so good. It's not all praise, though. The chromium-plated plastic trim supplied is a disaster. It is cheap and nasty and not in keeping with the rest of the antenna, and that disappeared into a ditch pretty quick. The complete lack of instructions on our samples was a little

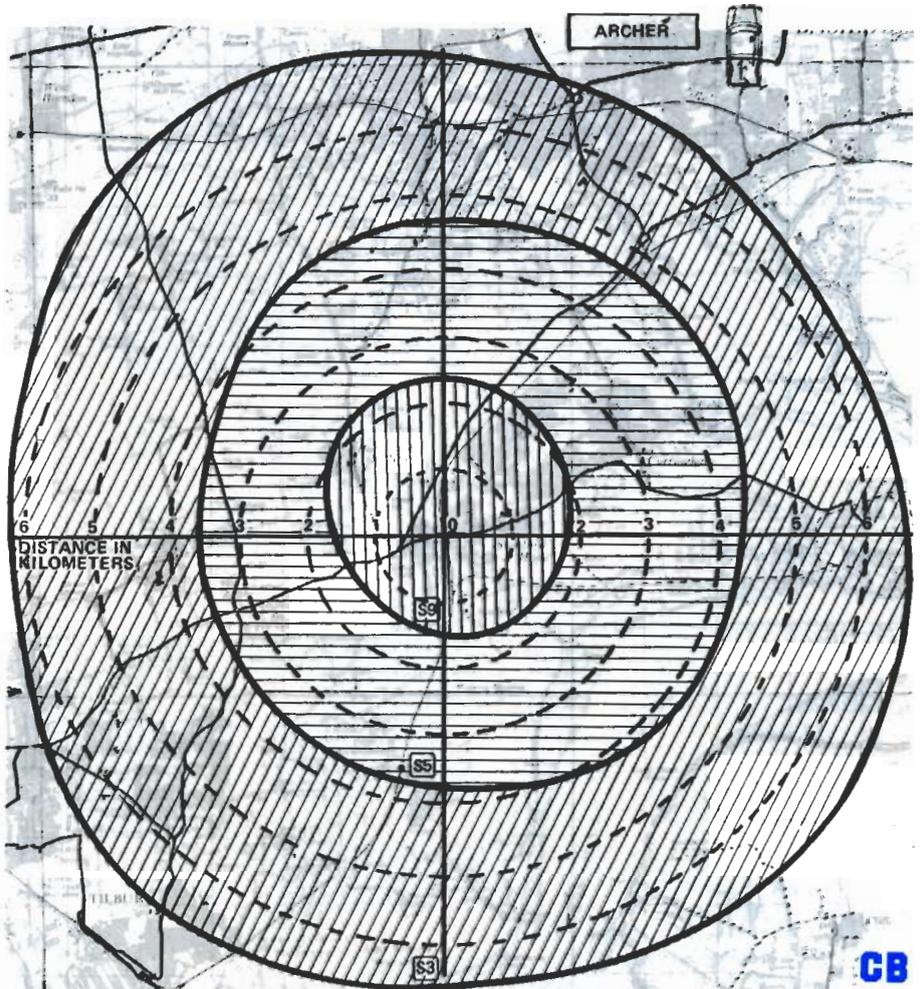
puzzling. Tandy should ensure that explicit instructions are supplied, especially when the mounting method is so potentially damaging.

In conclusion, a great antenna — a touch pricy but worth it, and a real good worker for those brave enough when it comes to mounting, or those with panel vans.

Right: Radiation pattern of the 21-904.



Above: The 21-904, complete with cable and fixing kit.



ANTENNA REVIEW DATA PANEL

SPECIFICATIONS

| | |
|---------------------------|--|
| Model | Archer 21-904 |
| Type | Single element base located stainless steel whip |
| Length | 42" |
| Frequency Range | 26.9-28 MHz |
| Max Power Handling | up to 50 watts |
| Impedance | 50 ohms |
| Cable Supplied | 16 feet |
| Mounting Details | 3/8" snap-mount |
| Supplier | All Tandy outlets |
| Typical Price | £ 19.95 |

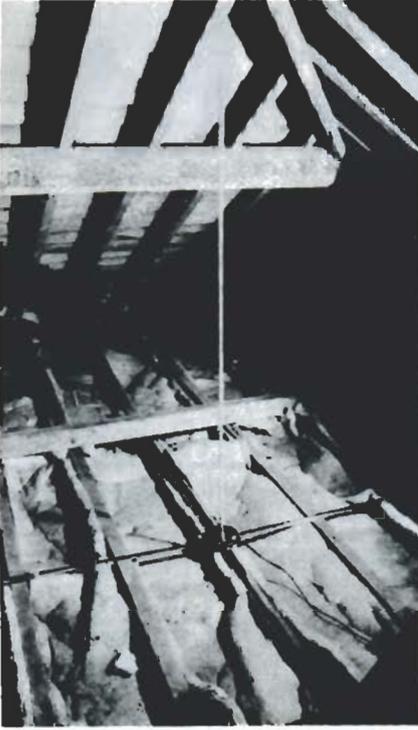
REVIEW VERDICT

| | | | |
|-----------------------|------|---------------------|-----|
| Performance | XXXX | Installation | XXX |
| SWR Adjustment | XXX | Instructions | — |
| Construction | XXX | Value | XXX |

We rate our samples on a scale of one to five. Five stars is the highest rating, three and four stars are average to good and one and two stars mean it's not doing so well.

The Tests

We have used our standard test procedure to assess the efficiency of this antenna. Just to bring new readers up to date this involves two tests, one static and one mobile. Our test sample is fitted to a stationary mobile and a second mobile follows a pre-arranged route that orbits the stationary test vehicle, sending and receiving signal reports at measured intervals. This is then repeated with the test antenna on the mobile test vehicle and the signals are sent and received between a stationary vehicle. A standard rig and antenna is used in all the tests. With the results obtained we are able to draw up the radiation pattern shown here. This is simplified to make the results more easily understood. The antenna is also subjected to a series of 'lab' tests to assess their durability, quality and construction, etc and finally we hand it over to a panel of CBers for comment.



accurate anyway, you've no need to worry.

Most rigs draw less than 0.5 amps on receive and rarely more than 1.5 amps on transmit. A 3 or 4 amp power supply is more than enough.

Loft antennas are many and varied, we've tried quite a few of them and can say quite happily that all have worked very well. Again, choose the biggest one that will fit into your loft. Obviously they are not as good as a roof mounted antenna. In the first case it will not be as high and in the second place the structure of the house will reduce the signal, though the differences are quite small and unlikely to worry you unless you're into DXing. Remember, though, that the Government have restricted all antenna to 1.5 metres in length. Make sure you use a good quality co-ax as long runs of cable will attenuate the signal. Look for a low-loss cable and avoid at all costs 50 ohm co-ax that is too cheap to be true, 'cos it generally is!

Down to Penzance in Cornwall and David Brown, who has a slightly tricky problem.

Q. I would like to know whether or not there are any rigs on the market that will cover both the old AM frequencies (26.965 to 27.405 MHz) and the new FM frequencies (27.60125 to 27.99125 MHz). If so, could you tell me which model it is?

A. Write out a thousand times, 'I must not ask Citizens' Band magazine awkward questions'. The answer is yes(ish). A number of rigs have appeared in special versions, notably the Lafayette 1200M, Ham Multimodes, and Cobra 148 GTL. These rigs have a facility that is known as High Channels with 8 kHz shift. In a nutshell they can cover most of the new channels (usually the lower 30). These rigs are quite rare, unless you know the right people, and usually cost



the earth (typically £200 plus). They have the dubious claim to be illegal all over the world. We'll leave the rest up to your conscience and your bank balance.

Antenna Review has been one of our most popular features now for some time. D H Ames has a query, all the way from Southampton — yet again!

Q. In the polar diagrams used in Antenna review, you have, since July reduced your weakest signal from S3 to S2. Why is that? Also, in the Bandit review (September) you place it second to the K40 when you show the K40 to have a smaller overall circle at S3.

A. You are quite correct, we have changed the style of our Antenna Reviews. The new reviews are now carried out on UK FM frequencies in this country and as such it is difficult to relate them directly to previous reviews carried out on the Continent on the AM frequencies. The comparisons we draw now are related to previous tests (as yet unpublished) carried out on the K40 and Moonraker etc on the new frequencies. The change from S2 to S3 for minimum copy levels was to allow us to keep to the same distance scales. Copies at S2 on UK FM are much further due to the reduced background noise and due to our test site having a much flatter terrain the polar diagram is, in one or two cases, going beyond the boundaries of our map.

Time for a few quick ones to round off this month.

Q. I live in a block of flats. Will CB interfere with TVs in and around our flat? Tony Reynolds, Liverpool.

A. So much will depend upon the equipment used and how close your antenna is to other TV aeriels. You'll find out soon enough. If you do cause TVI, sort it out fast before the neighbours complain to the PO or they'll sort it out for you!

Q. Will channel 9 still be the emergency channel on UK CB? Nigel Thompson, Gravesend.

A. As far as we know, yes. It is the internationally agreed emergency channel and there is no reason why it shouldn't continue to be so.

Q. Will it be OK to use the cordless Magic Mike you featured last month on UK CB rigs? Mark Delaney, Slough.

A. No. They operate on 49 MHz which is still illegal.

Q. When will someone produce a rig for 934 MHz CB? Ahmed Parek, Dunstable.

A. They have already, see this month's Update.

Q. I've just bought a CB radio set and I'm unable to receive any BBC stations on it. Can I fit an adaptor? John Ellis, London.

A. (Before you ask, that was a genuine letter). The only suggestion we have is to summon immediate medical help with a view to brain surgery to remove the blockage (unkind, ain't we?)

Another awkward question, this time from Larry Miles in Ilford, Essex.

Q. Your mag is the best in the — wait for it — Universe. Okay, glad that's over, now for the question.

Why are all my local CB shops putting up notices in their windows, large enough for the Buzbys and Police to see, that say 'Legal 27MHz AM rigs in stock now, Colt, Jaws, etc'.? I haven't yet seen a CB shop in my area that hasn't got one of these notices. One shop even has a typed document saying that it is now legal to sell the Colt, etc etc.'

Surely everyone knows it's going to be 27 FM, not AM. What's going on? Why doesn't the law nab them for misleading advertising????

A Funny thing, the law, especially the WT Act which has so many loopholes you could strain cabbage through it. To be perfectly honest the only applicable loophole we know of is the lack of import controls on 27 megs gear on the Isle Of Man. It seems that you are able to import disassembled rigs into the IOM and reassemble them before shipping them to the UK mainland. Obviously we're not lawyers and if this is so you can be sure it'll be plugged up pretty soon. At the moment, however, a rig that has been imported in this way, duty and VAT paid, can be sold over the counter. Don't forget though the minute you connect it up to power it's an offence — press the mike key, and it's another offence. We'll leave the rest up to your conscience and wallet. Oh, and by the way, the word is that HQ, PO and C&E are going to have a bit of a crackdown in the next few weeks. You have been warned!

CB

Problems should be sent to: CB Q & A, Citizens' Band, 145 Charing Cross Road, London WC2H 0EE.



BRITISH FNN

Presenting the first instalment of the exclusive Citizens' Band British Rig Checklists. Every month we will catalogue all the latest rigs, together with details of facilities etc. In the coming months we will be featuring similar checklists for antennas and accessories.



| NAME | ADDRESS | MODEL |
|---------------|--|--------------|
| AMSTRAD | Amstrad Consumer Electronics, 1-7 Garmen Road, London N17 | CB 900 |
| AMSTRAD | | CB 901 |
| BINATONE | Binatone House, Beresford Avenue, Wembly, Middx HA0 1YX. | BREAKERPHONE |
| BINATONE | | BEAM BREAKER |
| BINATONE | | ROUTE 66 |
| BINATONE | | LONGRANGER |
| BINATONE | | POWER BASE 5 |
| BINATONE | | SPEEDWAY |
| CYBERNET | Goodmans Loudspeakers Ltd, Downley Road, Havant, Hants PO9 2NL. | BETA 1000 |
| CYBERNET | | BETA 2000 |
| CYBERNET | | BETA 3000 |
| FIDELITY | Fidelity Radio Ltd, Victoria Road, London NW10. | CB 1000M |
| FIDELITY | | CB 2000M |
| GRANDSTAND | Bee-Wara Ltd, Ripon Way, Harrogate, North Yorkshire. | BUZZING BEE |
| GRANDSTAND | | MERCURY |
| GRANDSTAND | | GEMINI |
| GRANDSTAND | | APOLLO |
| INTERCEPTOR | Chelsea CB Centre, 73-77 Britennis Road, London SW6 2JR. | MOBILE |
| INTERCEPTOR | | ONE HANDER |
| INTERCEPTOR | | BASE |
| JWR | John Woolfe Racing, Woolfe House, Norse Road, Bedford MK41 0LF. | M1 |
| JWR | | M2 |
| JWR | | M3 |
| MAJOR | Unit 2, Station Yard, Wilbraham Road, Fulbourn, Cambs. | 3000 |
| RADIOMOBILE | Goodwood Works, North Circular Road, London NW2 7JS. | 201 |
| RADIOMOBILE | | 202 |
| RANGER | Modus Systems Ltd, 29a Eastcheap, Letchworth, Herts SG6 3DA. | RANGER |
| SHADOW | Shadow Communications Ltd, Lumen Road, Royston, Herts. | ALPHA 1000 |
| SHADOW | | ALPHA 2000 |
| SHADOW | | ALPHA 3000 |
| SHADOW | | BASE |
| SIRTEL | 24 Alfric Square, Off Maxwell Road, Woodston Ind Est, Peterborough. | SEARCHER |
| TANDY | Tandy Corporation, Tame Way Tower, Bridge St., Walsall, W. Midlands WS1 1LA. | TRC 1001 |
| TANDY | | TRC 2002 |
| TANDY | | TRC 2000 |
| WR ELECTROTEK | 33 Grove Street, Wantage, Oxon, OX12 7AG. | TBA |
| YORK | Sulkin (UK) Ltd, 73 Grosvenor Street, London W1X 9DD. | JCB 861 |
| YORK | | JCB 863 |

RIG CHECKLIST



| TYPE: M, B or P | NO. OF CHANNELS | SQUELCH | NB SWITCH | ANL SWITCH | MIKE GAIN | RF GAIN | STONE CONTROL | S/RF METER | S/RF LED R/O | HI/LO OUTPUT | PA FACILITY | EX. SPEAKER JACK | TX IND. LIGHT | RX IND. LIGHT | CH 9 SWITCH | SUPPLY VOLTAGE | RETAIL PRICE | |
|-----------------|-----------------|---------|-----------|------------|-----------|---------|---------------|------------|--------------|--------------|-------------|------------------|---------------|---------------|-------------|----------------|--------------|---------------|
| M | 40 | ● | | | | ● | ● | | ● | ● | | ● | ● | ● | | 13.8VDC | £TBA | AMSTRAD |
| M | 40 | ● | | | | ● | ● | | ● | | ● | ● | ● | | ● | 13.8VDC | £TBA | AMSTRAD |
| M | 40 | ● | | | ● | | | | ● | ● | ● | ● | ● | | | 13.8VDC | £99 | BINATONE |
| M | 40 | ● | ● | | | | | ● | | ● | | ● | | | | 13.8VDC | £79.95 | BINATONE |
| M | 40 | ● | | | | | | ● | | ● | ● | ● | ● | | | 13.8VDC | £79.95 | BINATONE |
| M | 40 | ● | | | ● | | ● | ● | | | | ● | ● | ● | | 13.8VDC | £80 | BINATONE |
| B | 40 | ● | | | | ● | ● | ● | | | | ● | ● | ● | ● | 240VAC | £99 | BINATONE |
| M | 40 | ● | | | | | | ● | | ● | | ● | ● | | | 13.8VDC | £69.95 | BINATONE |
| M | 40 | ● | | | | | | | ● | | | ● | | | | 13.8VDC | £TBA | CYBERNET |
| M | 40 | ● | | | | ● | ● | | ● | | ● | | ● | ● | | 13.8VDC | £TBA | CYBERNET |
| M | 40 | ● | | | | ● | ● | | ● | | ● | | ● | ● | ● | 13.8VDC | £TBA | CYBERNET |
| M | 40 | ● | | | | | | ● | | ● | | ● | ● | | | 13.8VDC | £60 | FIDELITY |
| M | 40 | ● | | | | ● | | ● | | ● | | ● | ● | | ● | 13.8VDC | £80 | FIDELITY |
| M | 40 | ● | ● | | | ● | | ● | | | | ● | ● | ● | | 13.8VDC | £60 | GRANDSTAND |
| M | 40 | ● | ● | | | ● | | | ● | | ● | ● | ● | ● | | 13.8VDC | £70-80 | GRANDSTAND |
| M | 40 | ● | ● | | | ● | | | ● | | ● | ● | ● | ● | | 13.8VDC | £70-80 | GRANDSTAND |
| B | 40 | ● | | | | ● | ● | ● | | | ● | ● | ● | ● | | 240VAC | £150 | GRANDSTAND |
| M | 40 | ● | | | ● | ● | ● | | ● | | | | | | | 13.8VDC | £70-80 | INTERCEPTOR |
| M | 40 | ● | | | ● | ● | ● | | ● | | | ● | ● | | | 13.8VDC | £100 | INTERCEPTOR |
| B | 40 | ● | | | ● | ● | ● | ● | | | ● | ● | ● | ● | | 240VAC | £180-200 | INTERCEPTOR |
| M | 40 | ● | | | | | | ● | | ● | | ● | ● | | ● | 13.8VDC | £65 | JWR |
| M | 40 | ● | | | | | | ● | | ● | | ● | ● | | ● | 13.8VDC | £60 | JWR |
| M | 40 | ● | ● | | | ● | | ● | | ● | | ● | ● | ● | | 13.8VDC | £90 | JWR |
| M | 40 | ● | | | | ● | | ● | | | ● | ● | ● | | | 13.8VDC | £TBA | MAJOR |
| M | 40 | ● | | | | | | | ● | | | ● | | | | 13.8VDC | £80-90 | RADIOMOBILE |
| M | 40 | ● | | | | ● | ● | | ● | | ● | ● | ● | | ● | 13.8VDC | £120 | RADIOMOBILE |
| P | 6 | ● | | | | | | | | | | ● | ● | | | 12VDC | £80 | RANGER |
| M | 40 | ● | | | | | | ● | | | | ● | ● | | | 13.8VDC | £50-60 | SHADOW |
| M | 40 | ● | | | | ● | ● | ● | | | ● | ● | ● | | | 13.8VDC | £75 | SHADOW |
| M | 40 | ● | | | ● | ● | ● | ● | | ● | ● | ● | ● | | | 13.8VDC | £80 | SHADOW |
| B | 40 | ● | | | ● | ● | ● | ● | | ● | ● | ● | ● | ● | ● | 240VAC | £TBA | SHADOW |
| M | 40 | ● | | | | | | ● | | | ● | ● | ● | | | 13.8VDC | £TBA | SIRTEL |
| P | 40 | ● | | | | | | ● | | ● | | ● | | | | 12VDC | £TBA | TANDY |
| M | 40 | ● | | | | | | ● | | | | ● | | | | 13.8VDC | £TBA | TANDY |
| M | 40 | ● | | | | | | ● | | | | ● | | | | 13.8VDC | £TBA | TANDY |
| M | 40 | ● | | | | | | ● | ● | | | ● | ● | ● | | 13.8VDC | £TBA | WR ELECTROTEK |
| M | 40 | ● | | | | ● | ● | | | ● | ● | ● | ● | | | 13.8VDC | £65-70 | YORK |
| M | 40 | ● | | | ● | ● | ● | | | ● | ● | ● | ● | ● | ● | 13.8VDC | £85-90 | YORK |

Midland Telecom (Open Channel) Ltd

133 FLAXLEY ROAD
STECHFORD
BIRMINGHAM 33

TV EYE

021 784 3129

BIRMINGHAM'S FOREMOST

021 742 5617

IN CB RADIO EQUIPMENT

Full range of CB Radio equipment including:—
AVANTI, C.T.E., MIDLAND, COBRA, HAM
INTERNATIONAL, COLT, STALKER, A.C.1,
K40, TURNER, ANTENNA SPECIALIST, ANTENNA
INCORP, H.M.P. and LOTS MORE.

| | | | |
|------------------------------|---------|--------------------------------|---------|
| Avanti Sigma IV | £42.90 | Pro-Micro 007 Mic | £19.90 |
| Avanti P.D.L. II | £79.90 | C.T.E. Galazy 1KW Linear | £249.90 |
| Avanti Moonraker 4 | £129.90 | C.T.E. Jumbo 600W Linear ... | £191.90 |
| Avanti Astro-Beam | £69.00 | C.T.E. Speedy 70W Linear | £85.00 |
| Avanti Moonraker 6 Mag | £35.90 | C.T.E. Jaguar 200W Linear ... | £107.90 |
| K40 Antenna | £21.90 | Hirschmann Rotor | £39.90 |
| K40 Mic | £22.90 | | |

Yaesu equipment available, prices on application, Crystal available to convert to 27 Mag.

Full Service Dept, While You Wait Repair Service (subject to parts), Aerial Rigging Service, lots of help and technical information

WHEN YOU'VE FOUND THE BEST — FORGET THE REST.

LYNDON RADIO & TV SUPPLIES
244 LYNDON ROAD
SOLIHULL, WEST MIDLANDS
021 784 3129 or 021 742 5617



Mack Chat

Mack The Hack muses about legislation, CB Shows and Zulus! — Confused, well read on

I jump out of bed each morning and the first thing I do is to cross off another date from the calendar. As I write this it is only a few more days to L day. I have waited a long time for legalisation and at times I felt that it might never happen. It will be almost 3 years to the day since I purchased my first AM rig. Even then the talk on channel was about legalisation, and I heard of the early organisations such as the CBA and UKCBC that were pushing for legal CB and both got my support.

For me the battle is now over and I feel that I have reached the end of an era. I feel satisfied that I have helped do my bit in this battle. I wrote many letters to the Home Office, my M.Ps, magazines and newspapers. I have taken journalists mobile to demonstrate CB, and even had my say on radio.

Add to this that you nearly always saw me at the London demonstrations and marches. Illegal AM CB has been fun, I have made many new friends and out of my many hobbies in the past, CB has been a hobby that all the members of my family have participated in and enjoyed without any need for encouragement from me. In fact, many times I have been unable to use my rig because my children have commandeered it.

To earn a living, I can spend up to eight hours a day behind the steering wheel. Those trips during the rush hour traffic were made easy with the aid of my rig and, of course, the breakers that would ratchet with me.

I have at times felt guilty about breaking the law, with more to lose than most, I could well do without the hassle of a prosecution. So that is one reason and maybe even a good reason why I shall go legal. Many of the present breakers say that this could well be true, but isn't AM crowded? And not just with English breakers but with Italians, Americans, Germans, Portuguese and Dutch to name just a few. I have an idea to overcome the problem of overcrowding on F., but it's my secret at the present.

I have ordered my legal FM rig, and the Zulu plans a party on the eve of L day and at midnight will open his shop to sell FM rigs. I have promised to be his first customer and it is then my intention to burn rubber to the all night Post Office in Trafalgar Square to pay my fee and have my licence stamped. Then perhaps a quick dip in the fountain to celebrate. Maybe some of you keen FM supporters might like an eyeball at the Post Office after midnight on 2nd November. Bring your own booze, and your legal FM rig!

If you've been to one, you've been to them all. This saying is very true, particularly of shows and exhibitions, but this was not the case at the recent show that was organised by this mag. I agree that there were many exhibitors that one sees at most of these eyeball shows, but this one was a little different in the respect that at last I saw and used the new legal FM rigs. It was, I suppose, obvious that these legal FM rigs would attract most attention, and at times it was impossible to get near these stands.

If you looked closely at some of the goodies on display you could find new items, some useful and others just

gimmicks. One item that caught my eye was on the *Sirtel (UK) Ltd* stand, and was a small black box that one attaches on the mike plug. When a breaker asks for a 10-36 you press a button on this box which speaks the time for you. On the *Chelmer CB* stand I noticed an extremely useful accessory called simply 'Base station'. Its function is to transfer your mobile rig into a base unit. The mobile rig is slotted into the front of the unit that houses power supply, speaker, and SWR meter and it costs under £45. Definitely a must for me when funds allow!

As expected there were many legally imported AM rigs on sale. The rig that I liked best on show was a legal FM set by *Binatone* named 'Breaker Phone'. It is an all-in-the-hand unit, and as the name suggests, is shaped like a phone hand set. It has a speaker and mike at each end with all controls in the centre. You can, if you wish, switch the speaker of the hand set to an external speaker. The rest of the unit is tucked away somewhere in your mobile. (Perhaps after these kinds words Binatone might throw one of these units my way? Hint, hint.) (*I'm first — Ed.*) I spent a few hours on Saturday and Sunday on the Citizens' Band stand, chatting to breakers and signing copies of the mag. By the way, thanks to the dealers who threw the odd goody my way.

'Eyeball eyeball the breaker in the silver roller'. I picked up the mike. 'Come back the eyeballer, where are you?' 'About 3 motors behind you', came back the reply. I glanced into the rear view mirror, I saw a white tin can, a blue Volvo, and a yellow Telecom van with twigs. The Telecom van was coming up on my offside fast, and in my mirror I saw that one of the twigs was a dirty great big DF loop. After many hours of practice I believe that I have perfected a super-fast rig dismantling procedure for occasions such as this. The mike was pulled from its socket and thrown over my shoulder into the back of the mobile, wires were pulled, clips released and the rig fell to the floor. Well, they won't get me for installation, I thought. As the yellow van approached I saw two grinning faces through the windscreen and as it overtook me I recognised one of the faces that was now laughing. I mouthed obscenities at him and cast doubts as to the legal relationship of his parents. The front half of this unusual set of wheels was almost identical to a Telecom mobile but the rear half carries artwork in the form of a rig, mike, and cable going to the twigs that are mounted on the roof! The owner of this set up is 'Zulu One', another well known breaker from my area. With his CB shop of the same handle in the East London 20, he has also formed an excellent club called the Zulu One Four club. Meets are held alternative Tuesday evenings in the United Services Club Hall, Powerscroft Rd, E5. Admission is 50p and that includes sandwiches, disco, and the booze is cheaper than normal pub prices. I must add that Zulu is the first dealer that I have met who believes that there is a future for the new FM frequencies, and that the 934 megs is definitely underestimated by the majority of breakers. 10-4 mate. Finally an apt description of Zulu comes from Misty Lady: "He has more whoosh than most!"

CB

CB AND AMATEUR RADIO ACCESSORIES AND TEST EQUIPMENT.

ALL PRICES INCLUDE VAT
OPEN 6 DAYS A WEEK 9am-6pm

RETAIL MAIL-ORDER TRADE

PROTECT YOUR RIG
Top quality locking slide mounts
Fitted leads/plugs etc. **£3.95** (c/p 75p)
Also hump mount **£1.95** (c/p 55p)

MOBILE AND BASE MICROPHONES
(c/p 60p)
DX344 Built in amplifier directional with flexible neck **£19.95**
DX354 Piezo punch mic. 'on air' indicator **£27.95**
TURNER Expander 500 indicator **£44.95**
DFI Low cost base mic. with DETACHABLE STAND
AVAILABLE 500hm/600ohm 50k (state which) **£9.50**

HAND MICS with switch and bracket (c/p 55p) Replacement 50k or 600ohm **£4.95** each
CH219 Ceramic power mic. **£16.95**
K40 Speech processor **£26.95**

LINEAR AMPLIFIERS (30 MHz max)
L25 AM/FM 25W. 12 volt. **£22.95**
SKIPLASTER AM/SSB 150W. 12 volt **£129.95**
LABO AM/FM/SSB. 50w. 12 volt **£89.95**
LA120 AM/FM/SSB 100w. 12 volt. **£149.95**
BV130P Mains operated AM/SSB 80 watt Base amp. **£115.95** (UK c/p **£1.00** each. L25 **55p**)

POWER SUPPLIES
13.8 volt. Output regulated mains operated (c/p **£1.00**)
3 to 5 amp **£15.50**
5 to 8 amp **£17.95**

HORN AND EXTENSION SPEAKERS
All models 8 ohm with leads (U.K. c/p 55p)
Speakers boxed with bracket (TC40) **£5.95**
Pod type speakers per pair **£3.95**
5" White horn **£4.95**. 6" Grey **£8.95**
DM307PA Mobile PA amp and siren with mic/bracket etc. **£15.95**

ALARM SIRENS
12 volt DC Operated (post 55p) Electronic horn (Gold) **£8.95**
Mechanical (Red) **£6.95**

MOBILE-HOME-PORTABLE AERIALS
For 27 MHz and 144 MHz Bands.
MOBILES (For Gutter or Magmounts)
DV27 **£5.95** : DX27 **£5.95**
T27 **£7.95** : OT21 **£5.95**
Magmounts **£5.95**
Guttermounts **£3.95**
Angle Ball Mounts **£3.95**
M60 Base DU27 **£8.95**

SHORT MOBILES WITH MAGMOUNTS
CB27 **£6.95** : 9167 **£5.95**

DISAPPEARING ELECTRIC
T025 with AM/FM Splitter **£25.95**

BASE AERIALS
GPA27 **£22.95**
RH **£9.95**
Silver Rod **£21.95**
Whisky **£19.95**
Rubber Duck **£4.40**
2 metre Rubber Duck (259) or (BNC) **£3.95** each
20 2 metre Whip with Guttermount **£12.95**
2MWH 2 metre Whip (259) **£5.95**

NOTE: Home and mobile aerials etc. callers only please

LEGAL RIGS
When the 'green light' is given to FM CB we will have a selection of rigs in stock. Please enquire or call in.

SWR-POWER-AERIAL MATCH-FS METERS
SINGLE METER-MOBILE
310 0/10w : SWR : 3.5-150 MHz **£8.95**
SWR9 0/1kw : SWR : 3.5-150 MHz plus F/S **£9.50**
110 0/10/1004 : SWR : 1.5-144 MHz plus F/S **£11.95**
175 1.5-144 MHz SWR : F/S AE Match 25-40 MHz **£13.80**
176 0/5/50w : SWR : FS : 1.5-144 MHz AE Match 24-40 MHz **£16.95**
178 0/10/100w : SWR : FS : Modulation : 1.5-144 MHz AE Match 25-40 MHz **£19.50**
UH74 0/10w : SWR : 50-144-430 MHz Bands with detachable couplers for remote use **£17.95**
RT7 0/10/100w : SWR : FS : Modulation 3.5-150 MHz : Detachable coupler **£19.95**

TWIN METERS-MOBILE
SWR50A 0/1kw : SWR 3.5-150 MHz **£13.95**
171 0/10/100w : SWR : F/S 1.5-144 MHz **£14.50**

MULTIMETERS. SWR POWER MULTIMETER
POCKET KRT100 12 Range 1k/v **£5.50**
NH55 10 Range 2k/v **£6.50**
PORTABLE NH56 22 range 20k/v **£11.95**
AT1020 18 Range 20k/v plus **£16.95**
TRANSISTOR TESTER ETC 500019 Range 50k/v **£17.95**
HM20 16 range 20k/volt multimeter plus 0/20/2000/1000w RF power and SWR 3/2 - 150MHZ **£28.95**

ACCESSORIES (post etc 45p 1-4 items)
380 CB/AM/FM Splitter **£3.30**
LP30 Low pass filter **£4.35**
CX3A AE switchbox **£5.95**
CB30A Aerial Matcher **£5.95**
NF1000 Noise filter kit **£7.95**
30 watt dummyload **£5.95**

PORTABLE SCOPE
SC110 10 MHz single Battery track scope ideal for mobile testing with batteries (nicads and charger **£14.30**) **£159.85**

20HZ-100MHZ FREQUENCY COUNTER
8110A Battery operated 8 digit for on-the-spot tests **£95.45** (post 85p)
Also 8610A 20 HZ-600 MHz **£110.40**

20 HZ-200 MHZ FREQUENCY COUNTER PFMA Hand held battery operated counter. New facilities **£67.50**

1.5-250 MHZ DIP METER
6 range + modulation Built in Battery supply KDM 6 **£38.50** (post 50p)



27 MHZ FM

Massive Range of Low Priced C.B. Rigs e.g.
40 Channel Standard from **£49.20**
40 Channel Medium from **£54.60**
40 Channel Deluxe from **£59.20**

Boosters CVS
2 - 15 watts from **£14.95**
2 - 25 watts from **£19.75**
2 - 35 watts from **£28.50**

Walkie Talkies 1 watt-3 Channel Professional WT. Designed To Take 4 watt Booster. **£44.00** each
4 watt Booster **£11.50**
All Items Subject To VAT

FREE....
BUTTON BADGE!

when you send for details of our entire range of 27 MHz FM C.B. Rigs, Accessories and Walkie-Talkies.

ORDER NOW, PAY LATER, WRITE FOR DETAILS!

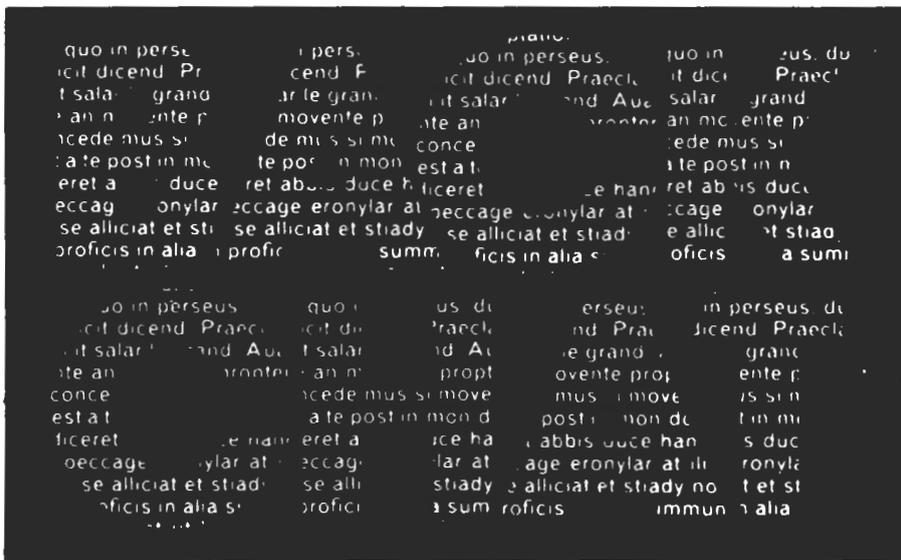
AIR BEAR U.K. LIMITED

Wortley, Sheffield.
Tel Sheffield 886237 or 885388

ORDER BY POST (OR PHONE) OR CALL IN ALL PRICES INCLUDE VAT

Cubegate Limited
AUDIO ELECTRONICS
301 Edgware Rd. London W2 1BN
Tel: 01-724 3564
Also at Henrys Radio 404 Edgware Rd. W2

CB and Test Equipment Catalogue send large 20p SAE



With L-Day almost here the FM vs AM controversy still rages. We also hear from a none-too-amused folk concert organiser, an old breaker and receive yet another suggestion for improving reception on multiband CB monitors — the simplest yet?

Hamming It Up

Dear CB,
It is entirely understandable why the radio hams have been rather concerned about the appearance of legalised CB.

I have been listening to the illegal AM breakers, and in this area at least they seem to be a rum lot.

Some monopolise a channel with endless meandering chit-chat, while others barge in on others transmissions with stupid comments and bad language.

When CB is legalised I hope users will be given an official call sign so that there is not a profusion of Black Foxes and Rubber Ducks in one area.

An operators' code of practice should be given with each licence which might prevent the present constant bickering that occurs now with breakers starting to transmit on a channel without finding out if somebody is already using it.

I don't wish to spoil anybody's fun, but chaos is the alternative.

Michael Burberry
Oxfordshire.

Side Issue

Dear CB,
What will happen to the sidebanders now that HMG's new frequency will move into their domain? With a year or so before the skip dies down, things are looking very black.

Rumour has it the new 934 MHz UHF band will be used for future DXing, using satellites to bounce the signals off, instead of the ionosphere. Maybe Citizens' Band will be publishing something on this in the future? It should be very interesting; 934 MHz may have something to offer after all.

The Jackall
Hartlepool.

Look Alike Rigs

Dear CB,
Are we about to experience the same situation with FM rigs as we have in the past with TVs etc? This is typified by one chassis inside numerous cases bearing numerous names with numerous price tags.

It was highlighted with your review of

the Radiomobile 202 (September CB) which looks a lot like the Cybernet Beta 3000 which has been advertised at £85, as opposed to the suggested price for the 202 at £120.

How the extra £35 can be justified is anybody's guess. Breakers beware, all that glitters is not gold!

Andy Sutton
Cambridgeshire.

RIP AM?

Dear CB,
AM is dead! Unfortunately the United Breakers' Association (UBA) don't think so. However, it is an outdated mode: FM is better!

The UBA have fought a great battle against the powers that be but they are living in the past. AM is not for the eighties: FM is!

We want a national organisation for CB users, not a hotch-potch of organisations. Unless such an organisation is set up mayhem will prevail. The behaviour on the bands at the moment is disgusting, swearing is rife and having only one calling channel is stupid.

I propose the following. It must be implemented for CB to last:

- A sensible set of rules for everyone to adhere to.
- One organisation controlling CB users.
- One national channel and three calling channels.
- 40 channels FM and at least 80 channels SSB by 1983.
- The use of the 28.5 amateur band, in conjunction with the RSGB.
- A working party to promote ideas, made up from members of the RSGB and the proposed National Association.

Chris Lee
Romford.

FMI (Folk Music Interference)

Dear CB,
I noticed your magazine while browsing in our local newsagent and noted your address so that I could bring something

to your attention.

On three different occasions in the past 10 days folk music concerts that I have been involved with have been badly disturbed by the voices of idiots jabbering in fake American accents, being picked up by the PA systems. In all cases, the venues and PAs have been used many times before without this problem (in fact one is right next to a police station).

Are you aware of the disruption that you CB people cause by your cowboy games? It may well be that rock and disco PA systems will hardly be affected because of the continuous high sound levels, but for anything with quieter passages this will be a growing problem as, presumably, big businesses cash in to sell everybody and anybody the latest toy craze.

I am perfectly aware that there are more serious applications for CB, but you and I know full well that there are many people for whom this will be little more than a game, regardless of the disturbance caused. Why should others have to invest large sums of money on new equipment to prevent this happening? Is there nothing that can be done at the radio users end?

Ian Anderson
Folk Music Services
Farnham, Surrey.

Hopefully this kind of interference will not be so prevalent with the new FM system, we shall wait and see. In the meantime, use your commonsense and stay away from events such as these that use powerful PA systems.

Justice?

Dear CB,
Undoubtedly the most interesting letter I have read recently is the piece written by Chris Crotti of Warrington (*Sept '81 Backchat*) concerning 'Old Breakers'. This guy's got it sussed.

I have worked 27 AM for just over 2½ years and truly believe we have been given justice with FM, after all we only need it for the interchange of helpful information and not to chat to someone that you have been in the pub with all evening.

When I first started out on CB things got a little hot at times with the PO (as Mack The Hack might possibly remember) but things are now so slack that some of the 'Muppets' are creating havoc, knowing that the chances of getting caught are slim. Alright, we've been taking risk of getting busted, until L-Day anyway. This is a risk we all accept, but why should these spoonbrains get away with this lunacy and spoil it for the more serious breakers — one reason for the old gang disappearing, in my view.

G. Clayton
Doncaster.

Monitors, The Last Word

Dear CB,
Further to your Backchat letters regarding the HH857/Hira/Flight multiband monitors, I have yet another suggestion as to how they can be improved.

The simplest method was missed by your correspondents — there is no need to purchase Rubber Duck antennas, or solder crocodile clips etc. My cure is to

twist the TV coaxial lead around the receivers antenna two or three times. No physical connections need be made. Now I can listen to breakers both locally and on the skip when the conditions are right.

M Scivier
Epsom.

Ferroline 27

Dear CB,
I am writing in answer to your plea for help in last month's issue. On page 9, *Update*, under the heading 'Anonymous Antenna', you asked for the address of a company called *C-Brit*. The address is as follows: *C-Brit, Unit 3, Wembley Commercial Estate, East Lane, Wembley, Middx.*

At this point I must make reference to one of your competitors — *CB Radio* magazine.

In their September issue, a Mr F.C. Judd said that he had been involved in the design/specification of an antenna which would meet the legal requirements for the proposed 27 MKz FM system. This was the *Ferroline 27* and I duly sent an SAE to the address given for further details. Shortly after I received those details which gave the specifications, nearest dealer, but no RRP (you quote £28) and on the leaflet three photographs showing the antenna mounted. One of these was shown in your article last month, but one thing puzzles me: according to every summary of the HO specifications *MPT1320* I have seen, it states that the only permitted antenna system acceptable will be one that is no longer than 1.5 metres, and only base loading is permitted. The photographs of the *Ferroline 27* clearly shows a lump halfway up the antenna. Now, is this lump a fancy anti-static device or is it a loading coil? If it is the latter, surely this antenna will not comply with *MPT1320*? This will mean that the only legal antennas will be the K40, Bandit, Moonraker etc — oh and a piece of wire not more than 1.5 metres long.

It would be interesting to hear your views at a later date when you have done some tests.

Keep up the good work you are doing for all of us who intend becoming breakers and, I'm sure all those who are breakers already. I will sign off with the handle I intend using after L-Day: so 10-10 from the *Cosmic Warrior*.
Weymouth,
Dorset.

Thanks to Cosmic Warrior and the dozens of other readers who wrote in about C-Brit. We are planning a test of this antenna for a future issue. As for legality, at the moment our current understanding of the specifications precludes any kind of centre or top loading. The Ferroline does appear to have some kind of loading coil in the whip. However, until we've conducted our tests we cannot say yet whether or not it does conform to MPT1320. So we'll let you know when we know.

Marine Radio And CB

Dear CB,
I see from your September 1981 issue that you will be shortly running an article on CB at SEA. I am sure that as a responsible magazine you are aware that the Marine Band has a built-in distress system, and for their own safety all ships radios should be of a marine type.

By all means, CBers, take your rigs to sea if you must (when it becomes legal) for fun but when it comes to distress (hopefully you won't need it) the most important factor in any SAR is to be able to have direct communication with the co-ordinators (in this country HM Coastguard) and the casualty. The moral is if you want a first class rescue fit marine.

I trust it is your intention to make this clear in your article for the well-being of both rescuers and rescued.

D-P Gough
Swanage,
Dorset.

Under no circumstances would we ever recommend CB as an alternative to marine radio. However, on small inshore craft, river boats and small yachts where a marine radio installation is impractical, or prohibitively expensive, CB offers a form of communication, where none previously existed and surely, in an emergency any radio system is better than none at all. Remember that a marine transceiver can cost several hundred pounds, which is a lot of money for most people. A CB rig, suitable for a small boat, will cost a fraction of that and enable many people who could not afford a marine set-up to have access to the airwaves, and hopefully access to someone who could help in an emergency. CB is widely used on boats in Scandinavian countries for emergency traffic.

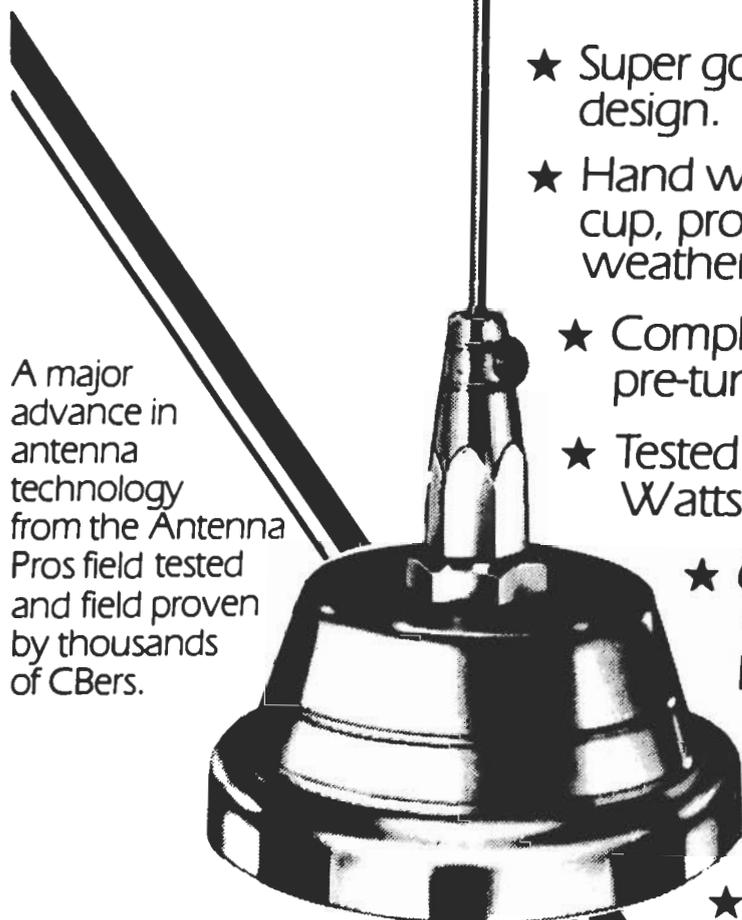


CB

Letters intended for publication should be addressed to: Backchat, Citizens' Band, 145 Charing Cross Road, London WC2H 0EE. Letters not containing a name and address will not be considered for publication.

OUTPERFORMS ANY SIMILAR
ANTENNA INCLUDING K-40 ON
PRICE AND PERFORMANCE.

Persuader Antennas



A major
advance in
antenna
technology
from the Antenna
Pros field tested
and field proven
by thousands
of CBers.

- ★ Super good looking low silhouette design.
- ★ Hand wound hand tuned coil in the cup, protected against damage and the weather.
- ★ Completely pre-assembled and pre-tuned.
- ★ Tested at 500 Watts rated at 100 Watts continuous.
- ★ 60" stainless steel tapered whip – no spring – increases performance and distributes shock evenly.
- ★ Choice of cup colours to complement your vehicle.
- ★ Complete with Super Mag the magnet mount with 300% more holding power than conventional magnets.

Persuader Antennas made by

 **Antenna** Incorporated 
from

MOCOM

**Full range of antenna
Incorporated base loaded
antennas and mounting
hardware available.**

140 Sandy Lane, Camp Hill, Birmingham.
Tel: 021-772 1994

DEALERS REQUIRED –
PHONE CALL OR WRITE.



CLUB NEWS

Further to our comments a couple of months ago about some kind of unity between CB clubs we are happy to report that we're hearing of CB associations being formed almost daily. What we need now is some kind of national body to represent the interests of clubs up and down the country — any offers?



Catch a Rig Thief UK (CART)

To all CB Breakers

As a follow-up to the article published in this magazine in July we would like to inform you that the response we have had has been tremendous and that many more branches of our organisation are being opened as a result of this much appreciated publicity. We are hoping that eventually our organisation will cover the whole of the UK and thus offer protection to you all by acting as a deterrent to prospective rig thieves.

As explained in our previous article the CART organisation is purely voluntary and is also non-profit making.

The badges of both our supporters and representatives are shown here. These may be obtained from EL Cid on application for membership. The price is 50p for supporters' badges and £1.50 for representatives'. It should be pointed out that representatives must be over 18 and have no criminal record for theft.

Applicants for membership will each receive a full list of serial numbers up to date, and also information on how to set up CART in your own areas.

The CART organisation is also interested in discovering whether any confiscated rigs have been resold. To do this we would ask that all breakers who have had their rig confiscated give the serial number to their club secretary for forwarding to CART. CART will then compile a complete list so that any resold rig can be traced.

Should you require further information please contact:

Mr P Duggan (EL CID)
Chairman
CART (UK)
72 Wood Street,
Ilkeston,
Derbyshire DE7 8GE.

The Garath Payne Appeal

My committee would like to thank all the CB clubs who have donated sums of money ranging from £10 to £900 to our Appeal. We are trying to raise the vast sum of £40,000 to send a two-year old child, Garath Payne, who lives in Lye, Stourbridge, West Midlands, to Denver Colorado, USA for a liver transplant.

To date we have managed to raise approx £29,500, approx £7,000 being donated by Breakers' Clubs throughout the country. We know that we have a very hard struggle to reach our target, but

with the help of the generous good buddies we will reach our objective. Please keep the good work up and keep the cheques rolling in, and may you all earn the freedom of the air, which you so rightly deserve. All donations to The Garath Payne Appeal Fund, The Castle Inn, Balds Lane, Lye, Stourbridge, West Midlands. Tel Lye 2799.

Herts Citizens' Band Radio Association

Let us introduce ourselves. We are the Herts CB Radio Association (HCBRA). We have formed this association so that we can join together all of the CB clubs in the county of Hertfordshire as an association.

We would like other clubs in the county to become affiliated to our association so that breakers from other clubs can drop in and meet us, or drop in to any of the other clubs that are part of the affiliation.

As so many small clubs have been formed in Hertfordshire, we think it would be a good idea for us all to get together and form one big organisation. We do not wish to interfere in any way in the running of affiliated clubs, working on the same lines as the Working Mens' Clubs, providing valuable assistance not only to the members but also the clubs involved. Just think of it — so many clubs combined together would enable us to organise some very special 'get togethers'.

As a service to the affiliated clubs we provide regular newsletters detailing events of club local and national interest and through the exchange of ideas we hope that we can help organise bigger and better social events, charity and fund-raising activities and possibly emergency assistance, in co-operation with the emergency monitoring organisations such as REACT and THAMES. We aim to develop and administer certain public information projects and publicise, with the aid of local press etc, the potential benefits and proper use of CB radio for individuals, organisations, local industry schools etc.

All affiliated clubs and their members who become part of the association may participate in any other clubs activities, with the agreement of the clubs in question of course.

We only charge our own members a joining fee — clubs pay nothing, we only



ask that you include HCBRA on your membership cards and paperwork and likewise, we will include your club in all of our handouts, publicity notices etc.

If any clubs would like any further information on the HCBRA then write to us at:

HCBRA
c/o Stafford Arms Public House,
Mutton Lane,
Potters Bar,
Herts.

Newark Breakers' Club

On Sunday, 24th May, we held a sponsored 10-mile walk in which the Minster Town club aided our cause. With a lot of effort, blisters, twisted muscles and the mental breakdowns we had started our account rolling with a figure of £629.

We then decided we would hold our own Summer Fayre behind the Maple Leaf public house, alias the 'Canadian Flag', which is where we hold one of our eyeballs. After about two months' preparation we were ready for the big day, Saturday, 6th June, and in the lap of the Gods regarding the weather. We had side stalls, a ducking stool, medieval stocks, a café stall, horse rides, a tombola, skittles, a hot dog stall, a junk stall, a fairground courtesy of Steve Gray of Long Bennington, a Karate demonstration by the Shotokan Karate club, a six team tug-o-war competition, which was eventually won by a worn out team from the Lincoln Breakaway club, and a disco. After a day of reasonable weather we had finally raised a further £375 towards our cause.

At the end of all this hard work and lots of fun we had finally reached our target of £1,000 for the Gateway Club with £4 extra.

We asked our Lady Mayor, Mrs Dobson, to present the cheque to the Gateway Club on our members' behalf on 2nd September at the 'Canadian Flag' which she very kindly did for us.

The Committee of the Newark Breakers' Club would like to thank all the people who donated and helped to make this a success and prove that CB is not just an implement for TVI.

JWT Ledger
Newark Breakers' Club
c/o 173 Barnby Gate,
Newark,
Notts.

Associated Breakers' Club Bolton

The ABC stands for the Associated Breakers' Club in Bolton. It was formed in February this year and is a serious breakers' club and social. The reason for the name associated is so that we can be in contact with all the other clubs in the area.

To date we have raised £200 for the Guide Dogs for the Blind Appeal by staging outdoor events like a tug-o-war and welly throwing contest against a local club.

The club meets every Monday night, 7.30 till 9.30 at the Aquarius Club where we have a good ratchet. At the moment we are discussing ways of sorting out TVI and misuse of CB in our area. After 9.30 there is either a disco, group, singer or some kind of entertainment till midnight.

We charge 50p to visitors to cover our costs and all newcomers are made welcome but they must be over 18.

Breakers are encouraged to eyeball other breakers in the club and we are also open to advice and comments from other CB clubs for the good of CB in general.

Eric Openshaw (PRO)
528 Lever Edge Lane,
Bolton
(Tel Bolton 653442).

Central England Breakers' Association

The CEBA was formed in March of this year. At present the club has well over 600 members with many new members joining each week.

Our meetings are held every Tuesday night at the Staffordshire Volunteer. Membership is £1.10 for life and 20p each week for subs.

Since the club was formed we have organised a number of fancy dress events, discos, film shows, singers and fox hunts. In the near future we hope to be holding a treasure hunt.

Two months ago we started a yard-of-ale competition between the members: it went so well that we decided to make up a drinking team. We then had a large shield made and sent out a few challenges to other clubs, and so far we haven't lost a challenge, or our shield.

Any clubs wishing to take up our challenge, or anyone else wanting to find

out more about CEBA should write to us at the following address:

Central England Breakers' Association
Staffordshire Volunteer,
Collingswood Road,
Bushbury,
Wolverhampton.

CB Search And Rescue UK

As we are all aware, every CB club has members who are interested in the welfare of Channel 9 monitoring and the active participation on 10-33s. CB Search and Rescue is a newly formed group of volunteers which started in the Yorkshire area and it is our intention to approach every CB club in the area and introduce our ideas and procedure. We are well aware that most clubs have their own methods of dealing with 10-33s, but what we are trying to do is to combine the efforts of all the different clubs.

Every club will be classed as a different section and each club will cover the 10-33s within its own area, while every assistance will be available from the other sections if required. I would like to suggest that every club appoints a section leader who will be able to organise an effective team and also be prepared to attend a general meeting once a month. This meeting will be to discuss 10-33s which have taken place and also to exchange various club ideas and events for fund raising for charity and to discuss what we can do for CB in general.

I hope that with the assistance of interested clubs, we can produce an emergency service second to none, and that we can form an alliance between breakers throughout Great Britain.

Copies of the emergency procedure that we have adopted are available on request.

Policy of the Organisation

1. To assist all members of the general public whenever possible.
2. To provide an effective team of trained volunteers to assist local authorities, ie police, fire and ambulance services, with first aid, traffic control, accident and search procedure.
3. To assist Hospital Authorities and Social Services with transport and manpower for the disabled and aged.
4. To maintain a respected alliance between CB and members of the public and local authorities at all times.

Kenneth E Elbourne (Jersey Bean)
National Co-ordinator
CB Search and Rescue
13 Hastings Avenue
Wakefield
W Yorks WF2 7JZ
Tel: 0924-256710

CB

And finally, we would like to thank the Isle of Man CB Club for sending us their very professional newsletter. We would like to see many more local newsletters as it enables us to keep tabs on what's going on up and down the country. Send your club newsletters, badges, stickers and reports to:

Club News,
Citizens' Band, 145 Charing Cross
Road, London WC2H 0EE.





All the newly registered English, Welsh, Scottish and Irish CB clubs are featured in this month's Club Directory. If you wish to register your club in the country's leading Club Directory drop us a line at our usual address, giving details of contact address, place and time of meetings and a few words on what the club members get up to.

CLUB DIRECTORY

ENGLAND

BUCKINGHAMSHIRE

MILTON KEYNES CITY BREAKERS
Chairman: W Weir,
2 Buckfast Avenue,
West Bletchley,
Milton Keynes.

CHESHIRE

CHAPEL SIDEBAND RADIO GROUP
Secretary: Ron Shatwell,
PO Box 2,
Whaley Bridge,
Stockport,
Cheshire.
Weds 8pm, Roebuck Inn.

CLEVELAND

CLEVELANDS' RADIO 16 BREAKERS
PRO: Little Mole,
PO Box 29,
Stockton-on-Tees,
Cleveland.

SOUTH TEES DXING CLUB
Secretary: Steven Maloney,
73 Tawney Road,
Eston,
Cleveland.

ESSEX

WESTCLIFF BREAKERS CLUB
Chairman: C Hull,
54 Glenwood Avenue,
Westcliff-on-Sea,
Essex.

GLOUCESTERSHIRE

VALLEY BREAKERS STROUD
Secretary: Hattersley,
24 Highfield Road,
Stroud GL5 1ES.

HAMPSHIRE

VICTORY BREAKERS
Chairman: The Rebel,
77 Deerhurst Crescent,
Paulsgrove,
Portsmouth,
Hants.

SOUTHAMPTON BREAKERWAY 79 CLUB

PR: J C Jordan,
93 Outer Circle Alder Moor,
Southampton,
Hants SO1 6GX.

HUMBERSIDE

FISH TOWN INDEPENDENT BREAKERS
President: CU12,
c/o Lynton Hotel,
Taylors Avenue,
Cleethorpes,
S Humberside.

KENT

THE GARDEN OF ENGLAND DX CLUB

Secretary: Lady Go-Diver,
The Becketts,
Southborough Lane,
Bromley,
Kent.
Mons 8pm.

LANCASHIRE

CBA MANCHESTER
Please note that the above club has now been dissolved as of 7th July 1981.

LEICESTERSHIRE

NORTH WEST LEICESTERSHIRE BREAKERS CLUB
Secretary: Speedbird,
c/o 57 Wood Street,
Ashby de la Zouch,
Leics LE6 5EL.

REYNARDS BREAKERS CLUB
PR: Rythmn Rocker,
PO Box 149,
Leicester.
Weds 8.00pm, New Inn, Enderby.

LONDON

NORTH LONDON BREAKERS ASSOCIATION
Chairman: Paul Smith,
6 Granville Road,
Childs Hill,
London NW2 2LJ.

MERSEYSIDE

APOLLO CB CLUB
Secretary: The Hool,
Apollo Social Club,
Pasture Road,
Moreton Wirral,
Merseyside.
Mons 8pm.

MIDDLESEX

HEART OF OAK BREAKERS CLUB
Now the HOBD BREAKERS
PR: Scarlet Lady,
c/o The Albert,
Staines Road, West,
Sunbury,
Middlesex.

NORFOLK

NORTH WALSHAM BREAKERS CLUB
PRO: W M Hurren,
Bankside,
Lower Street,
Southrepps,
Norwich,
Norfolk NR11 8UB.

NOTTINGHAMSHIRE

GENERAL BREAKERS CB CLUB
Secretary: S Stevenson,
8 Caulston Gardens,
Bullwall,
Notts.
Suns 7.30, The Old General,
Radford Road.

ENGLAND, SCOTLAND, WALES, N. IRELAND

NORTH NOTTS CHARITY BREAKERS
 Secretary: Sweezy,
 40 Eldon Street,
 Tuxford,
 Newark,
 Nottinghamshire.

TRENT BREAKERS
 c/o Damark Marina,
 Gunthorp,
 Nottingham.

OXFORDSHIRE

ABINGDON GAOL BREAKERS
 New Address:
 62 Wooltan Road,
 Abingdon,
 Oxfordshire.

STAFFORDSHIRE

SIERRA KILO
 Secretary: Dave Adams,
 7 Swallow Close,
 Rugeley,
 Staffs.

SURREY

GODALMING AREA BREAKERS
 Secretary: Queen of Hearts,
 c/o The Freeholders,
 Farncombe,
 Godalming,
 Surrey.
 Fris 8pm.

SUSSEX

COUNTY TOWN BREAKERS
 Secretary: Mother Goose,
 29 Hereward Way,
 Old Malling Estate,
 Lewes,
 Sussex.
 Cleos Club, Malling Street.

EASTBOURNE BREAKERS
 PR: Dennis Bonnici,
 Kings Country Club,
 Suns 8.00pm.

WARWICKSHIRE

WARWICK AND LEAMINGTON JUNIOR BREAKERS ASSOCIATION
 Chairman: R Chamberlain,
 39 Millbank,
 Warwick,
 Works CV24 5TH.

WEST MIDLANDS

LAZY ACRE BREAKERS
 Secretary: Goldfinger,
 32 Ebrington Avenue,
 Solihull,
 West Midlands B92 8HU.

WILTSHIRE

HALFWAY BREAKERS
 Secretary: Butterfly,
 12 Moot Lane,
 Downton,
 Salisbury,
 Wilts.

JACKDAW CITY BREAKERS
 Secretary: Pacemaker,
 The Rose and Crown,
 Lea,
 Nr Malmesbury,
 Wilts.
 Alt Suns, Rose & Crown.

NORTH WILTS DX CLUB
 Secretary: K C Williams,
 20 Willows Avenue,
 Swindon,

Wilts.

WHISKEY MIKE MIKE CLUB
 Secretary: Babycham,
 PO Box 11,
 Calne,
 Wilts SN11 0HD.

WORCESTERSHIRE

SQUARE WHEELS BREAKERS CLUB
 Chairman: Firelighter,
 The Fox Inn,
 Edward Street,
 Redditch.

YORKSHIRE

CB SEARCH AND RESCUE UK
 Nat Co-ordinator: Kenneth Elbourne,
 13 Hastings Road,
 Wakefield,
 W Yorks WF2 7JZ.

CODLAND ALBION BREAKERS CLUB
 Secretary: Big-D,
 c/o Albion Club,
 Kirkleatham Street,
 Redcar,
 Cleveland.

CIRCLE CITY BREAKERS
 PR: Silver Sixpence,
 13 Carr Hill Grove,
 Calverley,
 Leeds.

SCOTLAND

Still no wiser regarding Scottish geography so the new Scottish CB Clubs are still listed in alphabetical order.

CHARLIE BROWN BREAKERS CLUB
 Secretary: Cherry-B,
 17 College Bounds,
 Fraserburgh,
 Aberdeenshire AB4 5JQ.

HELENSBURGH & DISTRICT CB CLUB
 Secretary: Moonshadow,
 c/o Ardencaple Hotel,
 Rhu,
 Dunbartonshire.
 Weds 8.00pm.

SCOTTISH TRUCKERS CLUB
 Secretary: J Cairns,
 c/o 3 Cornton Crescent,
 Bridge of Allan,
 Stirling,
 Central Region.

WINDY CITY BREAKERS
 Secretary: Mrs T Guthrie,
 19 Lochlibo Crescent,
 Barrhead,
 Glasgow.

WALES

CARDIFF & DISTRICT BREAKERS
 Secretary: G Kemp-Philip,
 80 Richards Terrace,
 Roath,
 Cardiff.

LOWER RHONDDA BREAKERS CLUB PORTH
 Secretary: Steve Bradshaw,
 40 Birchgrove Street,
 Porth,
 Mid Glamorgan.

RIVERTOWN & DISTRICT BREAKERS CLUB
 Chairman: Red Leader,
 61 Bridge Street,
 Gwent.
 Alt Tues, Three Salmons Hotel.

NORTHERN IRELAND

COASTLINE BREAKERS CLUB
 Secretary: Texas Queen,
 PO Box 4,
 Carrickfergus,
 Co Antrim,
 BT38 7JA.

QUEBEC SIERRA LIMA CLUB
 PR: Allan,
 PO Box 18,
 Lieburn BT28 2LT.

TANGO SIERRA CB CLUB
 Secretary: Blue Max,
 15 Grattan Street,
 Lurgan,
 Craigavon,
 Co Armagh.

CB

To register your CB Club with us simply write down the name and address of the club together with details of meeting place and time plus the name and address of your club Chairman, Secretary or PR Officer. Send it to: Club Directory, Citizens' Band, 145 Charing Cross Road, London WC2H 0EE.

CITIZENS' BAND CLUB DIRECTORY REGISTRATION FORM

CLUB NAME ()

CHAIRMAN ()

Secretary ()

PR Contact ()

Contact Address ()

..... (Tel No.)

MEETING PLACE, DAY AND TIME ()

No. of members Position in club

Fee/sub etc (Committee members only please)

Please mark (*) information that may be published.



Never before in the history of Citizens' Band magazine have we ever offered you a T-Shirt. As you can see, it has been custom designed with legalisation firmly in mind. You can wear your CB T-Shirt safe in the knowledge that it does not render you liable to prosecution under the *Wireless Telegraphy Act 1949 & 1968*. We absolutely guarantee that it will not interfere with hospital paging systems or model aircraft, nor will it be liable to seizure under the *Customs and Excise Management Act*.

How To Order

We have devised a number of different ways to relieve you of your money including cheques, postal orders and credit cards. Each T-Shirt (you can have Sweatshirts too, if you want to be awkward) will be despatched within 14 days of receipt of your order. Just fill out the form below and don't forget to include full remittance, plus the appropriate postage and packing, and we'll do the rest.

T-Shirts £2.95 Sweatshirts £5.95

Yes Please. I would like to be the first kid on my block to ownT-Shirts/Sweatshirts (Delete as applicable)

I eat Shredded Wheat regularly and I am a:
 Small Person (34/36) . . .
 Medium Person (36/38) . . .
 Big Person (38/40) . . .

(Tick the type of person that you are)

My Name/Handle is:

My Address/Home 20 is
 (BLOCK CAPITALS)

I have enclosed £

My Access/Barclaycard No is:

Please Note. Postage for T-Shirts is 30 pence. Sweatshirts 50 pence.



Send your order to:
CB Tee-Shirt Offer,
 Citizens' Band, 145 Charing
 Cross Road, London WC2H 0EE.

CHANNELCHECKS

Speaker Switcher

Buying an extension speaker for your CB rig can work out fairly expensive: £10 to £15 is about the going rate for anything that could justifiably replace the speaker already built into most rigs.

This month we show a circuit that will allow you to use one of the speakers used in most in-car stereo systems which normally have the same 8 ohm impedance as CB speakers.

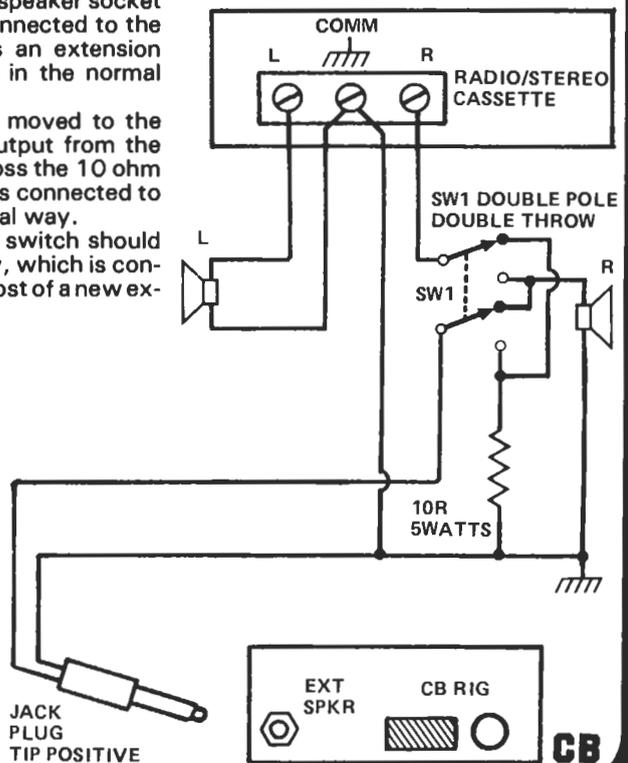
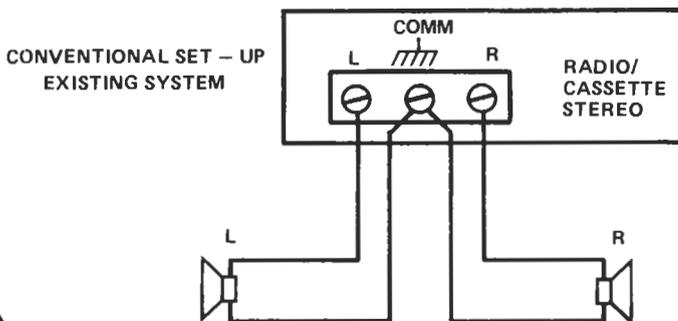
The switch S1 has two positions. In the 'CB' position the output from one channel of the stereo is disconnected from its speaker and connected across a 10 ohm resistor to protect the output circuitry on the stereo system. The out-

put from the extension speaker socket of the CB rig is then connected to the speaker which acts as an extension speaker for the CB rig in the normal way.

When the switch is moved to the 'Stereo' position the output from the CB rig is connected across the 10 ohm resistor and the stereo is connected to the speaker in the normal way.

The resistor and the switch should cost less than £1 to buy, which is considerably less than the cost of a new extension speaker.

Design by D J Black





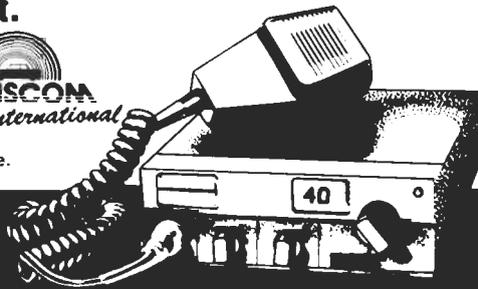
We need you!

To go with the right product range, we want Sole Distributors in your area (some exceptions). Specially manufactured C.B. units to U.K. specification. Backed by a very large national advertising campaign for you to increase your profits. National advertising starts October 1981 - Demand will be high. Don't miss out.

Enquiries in writing only
PLEASE write to:



1 Market Street,
Bracknell, Berkshire.
RG12 1JG.



EXPRESS ELECTRONICS



Heading for the border?
— you can still buy mail order!
Let us rush you the **FREE**
illustrated catalogue.

"CHOICES — MORE, PRICES — LOWER"

NAME

ADDRESS

DEPT C.B.D. EXPRESS ELECTRONICS, 25B CHURCH
LANE, COLDEN COMMON WINCHESTER SO21 1TW

NOTICE

CB
27/81

We are now taking orders for legal 27MHz FM rigs. Due to heavy demand rigs will be available on a first come first served basis only. By ordering today you can ensure you are one of the first legal breakers.

Send a crossed cheque payable to P & S Electrical stating the type of rig required to the Box number below. We will despatch your rig within days of legalization. You will receive an official receipt and your money is fully refundable should we not be able to fulfil your order.

Orders to:- P & S Electrical, Box No. 10, ASP Ltd,
145 Charing Cross Road, London WC2.

- Type A** Mobile Rig:- Squelch, Volume, On/Off Switch, No. PA £72.62 including VAT & P/P
- Type B** Mobile Rig:- Squelch, RF Gain, CB/PA, Delta Tune £80.34 including VAT & P/P
- Type C** Mobile Rig:- Squelch, RF Gain, CB/PA, Channel 9 priority, Delta Tune, S/RF Meter, EXT/IN Speaker, RX/TX Light £88.95 including VAT & P/P
- Type D** Base Station:- Squelch, RF Gain, Tone Control, Delta Tune, S/RF Meter, RX/TX Light £116.48 including VAT & P/P

TAKE IT UP A CHANNEL



With J.W.R.'s
Big Range
for Breakers.
Over 450 listed items
Send £1 for
Accessory Catalogue



John Woolfe Racing Ltd., Woolfe House,
Norse Road, Bedford, MK41 0LF England.
Telephone: 0234 41441. Telex: 825483.

27 FM LEGAL RIG
DEMONSTRATIONS
BY APPOINTMENT ONLY

We stock
over 1000 items.
Send for our full list.

TELECOMMS

We have over 1000
sq.ft of showrooms
— well worth a visit.

★ South Coast CB Superstore ★

Same Day Despatch. Our Hotline 0705 662145. Simply ring quoting your Barclaycard/Access number for immediate despatch of items listed

BASE STATION ANTENNAS

| | |
|---|--------|
| Starduster/Skylab 6.2 Dbs | £21.74 |
| Silver Rod 3.8 Dbs | £26.84 |
| GPA 27 Half Wave End Fed 3.2 Dbs | £21.56 |
| Alcomm DPA II VR Very Popular 4 Dbs | £24.95 |
| Avanti Sigma IV highest gain base ant. | £69.95 |
| 3 Element Beam, 8 Dbs | £34.41 |
| Sattelite Dipole 2.2 Dbs gain | £10.26 |
| C.T.E. Boomerang loaded base ant. | £10.78 |
| Phillips ¼ wave base ant. fascia mounting | £25.44 |

MOBILE ANTENNAS

| | |
|----------------------------------|--------|
| Avanti 6 ft Moonraker Mag Mnt. | £49.95 |
| Avanti 4 ft Moonraker Mag Mnt. | £26.56 |
| C.T.E. MG27 base loaded mag mnt. | £10.33 |

We stock the complete range of C.T.E. Avanti, Valor and Sirtel antennas. Ring us for a quote.

LINEARS/PRE-AMPLIFIERS

| | |
|--|---------|
| Zegati 150 watt Dummy Load/TWR | £58.24 |
| C.T.E. Colibri 60 watt SSB 30W AM | £39.95 |
| C.T.E. Colibri 100 watt SSB 50W AM | £59.69 |
| C.T.E. Jaguar 200 watt SSB mobile | £123.86 |
| C.T.E. Speedy 140 watt mains amp. | £97.29 |
| C.T.E. Jumbo 600 watt mains amp/pre-amp. | £199.77 |
| C.T.E. Galaxy 1000 watt mains amp/pre-amp. | £363.75 |
| C.T.E. "On Air" pre-amp de-luxe model | £24.61 |
| Zetagi P27/1 pre-amp | £17.18 |

POWER SUPPLIES

| | |
|---------------------------------|--------|
| 3/5 amp 13.8 volt | £12.24 |
| 3/5 amp 13.8 volt De-Luxe | £13.70 |
| 5/7 amp 13.8 volt | £19.83 |
| C.T.E. RG1200 12 amp adjustable | £99.95 |

INDOOR/LOFT ANTENNAS

| | |
|-------------------------------------|--------|
| C.T.E. GP127 popular loft ant. | £17.71 |
| C.T.E. Mini Boomerang | £16.68 |
| Ground Plane kit for DV27 loft mnt. | £7.85 |

SWR METERS

| | |
|---|--------|
| Basic SWR Meter | £8.54 |
| SWR/Power Meter | £12.42 |
| C.T.E. FM1000 SWR/2kw power meter | £28.64 |
| C.T.E. Twin meter SWR/100w power meter | £19.95 |
| Reace RC1000 SWR/mod/power (3 meter unit) | £57.78 |
| Zetagi SWR/power meter 2kw | £25.09 |
| Zetagi SWR/power meter 2kw twin mtr | £41.71 |

ANTENNA ACCESSORIES

| | |
|---|--------|
| Zetagi TM1000 2kw ant matcher/SWR/power | £58.75 |
| Zetagi M27 500wt. matcher | £14.86 |
| Zetagi MM27 100wt matcher | £9.59 |
| Zetagi ant. Splitter FM/MW/CB | £9.32 |
| C.T.E. 2 way ant. switch | £7.25 |
| C.T.E. 3 way ant. switch | £8.86 |
| C.T.E. De-Luxe ant. splitter AM/FM/CB | £6.95 |
| C.T.E. 300wt ant. matcher | £13.69 |
| C.T.E. Super TVI filter | £10.58 |

| | |
|------------------------------------|--------|
| Ferrite rings (per pair) | £1.60 |
| Retractable Mast 6 meter | £20.70 |
| Retractable Mast 9 meter | £31.05 |
| Wall Brackets 12" stand off (pair) | £6.77 |
| Wall Brackets 18" stand off (pair) | £7.90 |
| Double Chimney Lashing Kit | £5.86 |
| Dummy Load 30 watt | £6.80 |
| Dummy Load 5 watt | £1.06 |
| Zetagi B30 50W SSB/25W AM | £16.50 |

ACCESSORIES

| | |
|--|--------|
| PA Horn 15 watt | £9.23 |
| PA Horn 5 watt | £5.08 |
| Kraco Extension speaker | £5.09 |
| Headphones with boom mic | £12.50 |
| C.T.E. Communications Headphones | £6.79 |
| Slide Mount (sledge) | £4.95 |
| C.T.E. Car Alarm with Pocket Bleeper (range 5 miles) | £85.45 |
| C.T.E. Frequency Counter FD40 5 digit | £88.67 |
| C.T.E. Frequency Counter FD50 | £59.27 |
| C.T.E. Frequency Counter FD3000 6 digit | £99.28 |

POWER MIKES

| | |
|--|--------|
| Ham Master 4500 Base Mic (or equivalent) | £36.95 |
| Ham Master 4200 Base Mic (or equivalent) | £29.00 |
| K40 Power Mic | £27.00 |
| Cobra Power Hand Mic | £16.31 |
| Turner JM + 2V quality hand Power Mic | £27.05 |
| Turner Expander 500 De-Luxe Base Mic | £48.95 |

TRANSISTORS AND ICs

| | | | |
|--------------|--------|----------|--------|
| 2sc 1306 | £2.20 | UPD858UR | £10.20 |
| 2sc 1760 | £2.00 | UPC575C2 | £13.10 |
| 2sc 2029 | £2.20 | LC7120 | £7.50 |
| M51513L | £4.00 | 2sc 1307 | £3.60 |
| TL102A/PLLO2 | £10.20 | 2sc 2028 | £2.00 |
| TA7205P | £3.75 | BA521 | £4.25 |
| TA7310P | £2.75 | UPC2816 | £11.30 |
| UPC1156H | £3.75 | AN612 | £4.30 |

NOW IN STOCK. 40 CHANNEL FM CB RADIO TO UK SPECIFICATION.

ATTENTION TRADE BUYERS

We are the South's leading wholesale distributor and offer a weekly delivery service to the following counties — Hampshire, Wiltshire, Dorset, Somerset, Berkshire, Surrey and Sussex. Contact Bob Devereux of our Trade Dept. for further details. Other areas — 24 hour delivery by carrier as usual.

NEW TRADE CUSTOMERS

Write in for our comprehensive catalogue over 1,000 accessories at the lowest prices.

189 LONDON ROAD, NORTH END
PORTSMOUTH (0705) 662145

TELEX: 86646 VYNER G.



When CB's are legalised, the market for antennas will boom along with the demand for CB equipment.

Shellpost Ltd., HMP's sole U.K. agents, gives you a golden opportunity to become part of the dealer network and take advantage of lucrative sales.

As an HMP

retailer, you'll be selling the brand that's recognised throughout Europe as the cream of CB antennas. For quality, reliability, price and back-up service, HMP antennas are top of the range.

They'll be supported by national advertising and an

impressive show of promotional material—point-of-sale, window stickers, consumer leaflets and posters.

Become part of this profitable dealer network and establish yourself in the CB antenna market NOW by posting the coupon below to:

Keith Johnson,
Shellpost Ltd., 185
The Rock, Bury,
Lancashire.
061-797 7146

COMMUNICATION
ANTENNAS ↓ ↓ ↓



**Give your
customers
a better reception.
Stock HMP
antennas.**

I am interested in
Shellpost's distributor
network for HMP.

Name _____

Address _____

Post to Shellpost Ltd., 185 The Rock, Bury, Lancashire.

SHELLPOST LTD
- the electronic source

ICs AND TRANSISTORS FOR TRANSCEIVERS

| | 1 + | 50 + | 100 + |
|--------------|------|------|-------|
| 2SC 1306 | .98 | .89 | .83 |
| 2SC 1307 | 1.64 | 1.48 | 1.38 |
| 2SC 1957 | .48 | .44 | .41 |
| 2SC 1969 | 1.94 | 1.76 | 1.64 |
| 2SC 2028 | .93 | .85 | .79 |
| 2SC 2029 | .93 | .85 | .79 |
| 2SC 2166 | 1.65 | 1.50 | 1.40 |
| AN 612 | 2.80 | 2.54 | 2.37 |
| AN 7150 | 3.33 | 3.02 | 2.81 |
| BA 521 | 1.56 | 1.41 | 1.31 |
| LC 7120 | 7.03 | 6.37 | 5.93 |
| MB 3712 | 1.28 | 1.16 | 1.08 |
| PLL 02A | 5.32 | 4.82 | 4.49 |
| TA 7205P | 1.25 | 1.14 | 1.06 |
| TA 7310P | 1.04 | .95 | .88 |
| UPC 1156 -H2 | 2.56 | 2.32 | 2.16 |
| UPC 1182 | 1.67 | 1.51 | 1.41 |

All prices EXCLUDE VAT.

Please include .50 pence for Carriage for all mail orders.

Send SAE for full list.

Strutt Ltd.

Barley Market St. Tavistock,
Devon. PL19 0JF.

Tel: 0822-5865/5247 Telex: 45263.

RADIO AND  ACCESSORIES

CHANNEL ONE

GROUND PLANE KITS

52" for loft installation to improve reception. Pretuned to accept DV27s and FIRESTICK aerials.

Special Offer **£7.25** inc. Post & Packing

A complete kit (52") with DV 27 aerial is only...

£12.25 inc. Post & Packing

ALSO AVAILABLE 9ft kits - only... **£11.75** inc. Post & Packing FULL RANGE OF ALL CB ACCESSORIES IN STOCK ALL TRADE ENQUIRIES WELCOME All prices include VAT



GET THE BEST from your CB STATION

JUST TWO BOOKS FROM OUR EXTENSIVE RANGE

CB OPERATORS GUIDE

£4.95

inc. Post & Packing

PLEASE TELEPHONE OR WRITE TODAY FOR FURTHER DETAILS OF OTHER TITLES



CBers MANUAL OF SSB

£2.55

inc. Post & Packing

17 GOLDEN CROSS PARADE, ROCHFORD, ESSEX



Tel: (0702) 540455



THE CITIZENS BAND CLUB OF GREAT BRITAIN PROTECT YOUR HANDLE. REGISTER WITH THE CBC GB.



Once your registration is accepted, we won't allow anyone else to register the same handle. Don't delay, make sure your application reaches us first!

Your registration fee includes: ● life membership at the CBC GB ● laminated personal membership card ● CBC GB windscreen sticker ● CBC GB patch badge ● life protection of your Handle.



To: The Registrar, CBC GB, 39 Upper Norwood Street, Cheltenham, Glos. I enclose cheque/postal order made payable to CBC GB for £6.50 to include registration, membership card, patch badge, car sticker, postage and packing.

Name _____

Address _____

Handle _____

Please allow 21 days for delivery - fee returned if registration refused.

At the time of going to press, it is an offence to operate, import or install an unlicensed transmitter in the UK. CBC GB raises this as a point of interest but it is not our deliberate intention to encourage the illegal use of CB equipment.

CB

HAMMERSMITH CB CENTRE FIRST WITH THE BEST



INTERCEPTOR FM TRANSCEIVERS

The only make with built-in SWR and polarity protection. from £79.95.

Book your set now and be the first with a legal rig of quality. We also have a large selection of mobile and base accessories at very good prices. Mail order list available. Trade enquiries welcome.

HAMMERSMITH CB CENTRE

216, King Street,
Hammersmith,
London W6.

Tel: 01-748 6982.

Open: 7 days a week.

ELECTRONIC GAMES

COLOUR CARTRIDGE T.V. GAME



SEMI-PROGRAMMABLE T.V. GAME
• 4 Cartridges • Mains Adaptor
Normal Price £73
NOW REDUCED TO: £39.50 inc VAT

DATABASE T.V. GAME



FULLY PROGRAMMABLE CARTRIDGE T.V. GAME
14 Cartridges available
Normal Price £87.86
NOW REDUCED TO: £59 inc VAT

ATARI T.V. GAME



The most popular T.V. Game on the market with a range of over 40 cartridges including SPACE INVADERS with over 112 games on one cartridge
£95.45 inc VAT

SPACE INVADERS



Hand-held Invaders Games available **£19.95**
• Invaders Cartridges available to fit ATARI RADOFIN ACETRONIC PHILIPS G7000
• Cartridges also available for MATTEL TELENG/ROWTRON/DATABASE/INTERTON

CHESS COMPUTERS



MANY UNITS ARE COVERED BY THE EXCLUSIVE SILICA SHOP 2 YEAR GUARANTEE

We carry a range of over 15 different Chess computers:
Electronic Chess **£29.95**
Chess Traveller **£39.95**
Chess Challenger 7 **£79.00**
Sensory 8 **£119.00**
Sensory Voice **£259.00**
SPECIAL OFFERS
VOICE CHESS CHALLENGER
Normal Price £245 NOW **£135.00**
SARGON 2.5/BORIS 2.5
Normal Price £273 NOW **£199.95**
All prices include V A T

TELETEXT



ADD-ON ADAPTOR £199

THE RADOFIN TELETEXT ADD-ON ADAPTOR

Plug the adaptor into the aerial socket of your colour T.V. and receive the CEEFAX and ORACLE television information services

THIS NEW MODEL INCORPORATES:

- Double height character height
- True PAL Colour
- Meets latest BBC & IBA broadcast specifications
- Push button channel change
- Logic circuitry to remove the unit to watch normal TV programmes
- Solid state circuit board for reliability
- New SUPERIMPOSE News Flash facility

SPEAK & SPELL



Normal Price £49.95
NOW REDUCED TO: £39.50 inc VAT

Teach your child to spell properly with this unique learning aid. Fully automatic features and scoring. Additional word modules available to extend the range of words.

ADDING MACHINE OLYMPIA HHP 1010



Normal Price £57.21
NOW REDUCED TO: £34 inc VAT

Uses ordinary paper! No need to buy expensive thermal paper!
Fast adding listing PRINTER
CALCULATOR 2 lines per second 10 digit capacity
Uses normal adding machine rolls. Battery or mains operated.
Size 9 1/2" x 4 1/2" x 2 1/2"
(Mains adaptor extra)

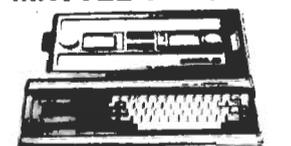
24 TUNE ELECTRONIC DOOR BELL



Normal Price £19.70
NOW REDUCED TO: £12.70 inc VAT

Plays 24 different tunes with separate speed control and volume control. Select the most appropriate tune for your visitor, with appropriate tunes for different times of the year!

MATTEL T.V. GAME



The most advanced TV game in the world. 20 cartridges available. Add on KEYBOARDS costing £199.95. MATTEL is a home computer with 16K RAM, fully expandable and programmable in Microsoft Basic. Other accessories will be available later in the year.

HAND HELD GAMES EARTH INVADERS



These invaders are a breed of creature hitherto unknown to man. They cannot be killed by traditional methods — they must be buried. The battle is conducted in a maze where squads of aliens chase home traps. The only way of exterminating them is by digging holes and burying them.
£23.95 inc VAT

THE OLYMPIA — POST OFFICE APPROVED TELEPHONE ANSWERING MACHINE WITH REMOTE CALL-IN BLEEPER

This telephone answering machine is manufactured by Olympia Business Machines, one of the largest Office Equipment manufacturers in the U.K. It is fully POST OFFICE APPROVED and will answer and record messages for 24 hours a day. With your remote call-in bleeper you can receive these messages by telephone wherever you are in the world. The remote call-in bleeper activates the Answer/Record Unit, which will at your command repeat messages, keep or erase them, and is activated from anywhere in the world, or on your return to your home or office. The machine can also be used for message referral, if you have an urgent appointment, but are expecting an important call. Simply record the phone number and location where you can be reached. With optional extra



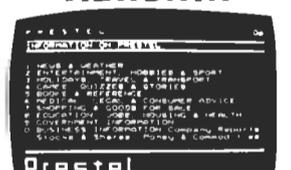
bleepers (£13 each) this facility can be extended to colleagues and members of the family. Using a C90 standard cassette you can record as many as 45 messages. The announcement can be up to 16 seconds long and the incoming message up to 30 seconds long. The machine is easy to install and comes with full instructions. It is easily wired to your junction box with the space connectors provided or alternatively a jack plug can be provided to plug into a jack socket. Most important of course is the fact that it is fully POST OFFICE APPROVED. The price of £135 (inc. VAT) includes the machine, an extra light sensitive call-in Bleeper, the microphone message tape, A.C. mains adaptor. The unit is 9 1/2" x 6 1/2" x 7" and is fully guaranteed for 12 months. The telephone can be placed directly on the unit, no additional desk space is required.
£135 inc VAT

HAND HELD GAMES GALAXY 1000



The 2nd generation Galaxy Invader. The invaders have regrouped and have a seemingly endless supply of spacecraft whilst the player's arsenal is limited to just 250 missiles to be launched from 3 missile stations. You have to prevent the invaders landing or from despoiling your home defences.
£19.95 inc VAT

PRESTEL VIEWDATA

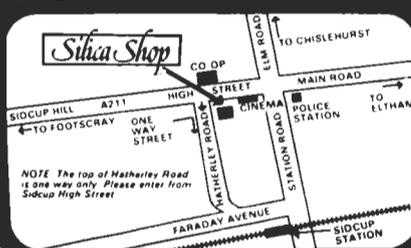


The ACE TELCOM VDX1000 Prestel Viewdata adaptor simply plugs into the aerial socket of your television and enables you to receive the Prestel Viewdata service in colour or black & white.

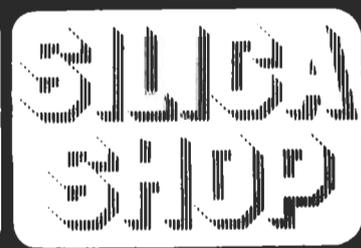
- Features —
- Simplified controls for quick easy operation
 - Special graphics feature for high resolution
 - State of the art microprocessor controller
 - Standard remote telephone keypad with 16 speed keys
 - Auto dialler incorporated for easy Prestel acquisition
 - True PAL colour encoder using reliable IC circuit filter and data line incorporated for minimum picture interference maximum clarity
 - Includes convenient TV — Prestel switchover
 - Easily converted to standard home or office telephone lines
 - Fully Post Office approved

SPECIAL PRICE £228.85 inc VAT

FOR FREE BROCHURES — TEL: 01-301 1111



For the illustrated brochure and view our range of electronic games, please telephone 01-301 1111. If no delivery service available. To order by telephone please quote our name, address and ACCESS # (MAGAZINE CARD number) and leave the rest to us. Post and packing. Free of Charge. Express delivery service available.
• CALLERS WELCOME — Demonstrations daily at our Sidcup shop, open from 9am-6pm (Monday-Saturday, Earth Closing Thursday 1pm — Late Opening Friday 8pm)
• 2 YEAR GUARANTEE — All goods are covered by a full 2 years guarantee and may be further covered by our exclusive SilicaShop 2 year Guarantee.
• MONEY BACK GUARANTEE — If you are unsatisfied with your purchase and return within 7 days we will give you a full refund.
• AFTER SALES SERVICE — Available on all machines out of guarantee.
• COMPETITIVE PRICES — We are never far from your doorstep.
• HELPFUL ADVICE — Available on the reliability of each machine.
• BREAD CRUMBS — Full credit facilities available over 10, 20 or 26 months at competitive interest rates.
• PRANT BULKY MACHINE SCHEDULE — Available on second hand machines.
• CREDIT CARD ACCESS — Access: Barclaycard, Diners Club, American Express.
SILICA SHOP LIMITED CB1181
1-4 The Mews, Hatherley Road, Sidcup, Kent DA14 4DX
Telephone: 01-301 1111 or 01-309 1111



INTERESTED IN RADIO?

You must be, or you wouldn't be reading this. But do you know about the exciting things you can do if you become a licensed radio amateur? Like talking to people on the other side of the world, exchanging pictures by television, and experimenting on frequency bands up to microwave, or with satellite communications!

It's not as difficult as you might think... want to find out more? Then read Britain's No. 1 magazine for the radio enthusiast.

Practical Wireless

EVERY MONTH



Multitesters 100,000 opv
 AC volts - 0 - 5 - 10 - 250 - 1000
 DC volts - 0 - 0.5 - 25 - 10 - 50 - 250 - 1000
 DC current - 0 - 10ua - 25ua - 500ua - 0 - 5 ma - 50 ma - 500 ma - 10 amp
 AC current - 10 amp
 Resistance - 0 - 20 ohms - 200 ohms - 5 K ohms - 200 K ohms - 50 K ohms - 200 K ohms - 5 meg ohms - 50 meg ohms

As a transistor tester
 HFE - 0 - 5 (NPN) - PNP
 ICO - 0 - 5 ua (NPN - PNP)
 Dims - 178x 140 x 70 mm
 Please add 30p P.P. per unit order as MT 20

Multitester 1,000 opv
 AC volts - 0 - 5 - 150 - 500 - 1000
 DC volts - 0 - 15 - 150 - 500 - 1000
 DC current - 0 - 1 ma - 150 ma
 Resistance - 0 - 25 K ohms - 100 K ohms - 100 K ohms
 Dims - 90 x 61 x 30 mm
 Please add 30p P.P. per unit order as MT

Multitester 20,000 opv
 AC volts - 0 - 10 - 50 - 100 - 250 - 500 - 1000
 DC volts - 0 - 0.5 - 5 - 25 - 125 - 250 - 500 - 1000
 DC current - 0 - 50 ma - 0.5 ma - 250 ma
 Resistance - 0 - 3 K ohms - 300 K ohms - 3 meg ohms
 Deribels - 20 to + 63 db
 Dims - 127 x 90 x 32 mm
 Please add 30p P.P. per unit order as MT 7

Headphones
 High velocity mylar diaphragms. Coiled lead finished in a combination of bright aluminium
 Impedance - 8 ohms
 Frequency response - 15 - 22000 HZ
 Weight - 350 gms
 Please add 30p P.P. per unit order as PH 12

ARROW AUDIO CENTRE
 20 NORTH BAR BANBURY OXON OX18 0TF.
 TELEPHONE BANBURY (0295) 3877
 TERMS: CHEQUE/PO WITH ORDER. CALLERS WELCOME

COPY THIS!!

SIMPLE LOW COST INSURANCE FOR ALL RIGS AND ACCESSORIES

We are pleased to offer ALL RISKS (loss or damage by any cause) INSURANCE COVER for the owners of CB Radio equipment. Competitive rates, minimum formality, under-written at Lloyds.

*Sum insured up to £300 Annual premium £9 (October '81-August '82)

*Sum insured up to £500 Annual premium £13.75 (October '81-August '82)

Simply complete the application form and forward, with the appropriate premium. COVER WILL COMMENCE IMMEDIATELY ON RECEIPT. Certificates are normally issued by return of post.

Main exclusions: Loss or damage—(1) From soft top vehicles, motor cycles or scooters (2) To car aerials (3) By confiscation (4) By electrical breakdown or derangement. ... The first £10 of each and every claim.

J.L. BARKER & CO.
 (Insurance Services)
 27a, Shambles,
 York YO1 2CK.

COMPETITIVE RATES FOR INSURANCE OF WHOLESALE AND RETAIL PREMISES AND STOCKS. PHONE FOR DETAILS (0904) 37677.

NAME

ADDRESS

EQUIPMENT DETAILS

MAKE:

MODEL:

SERIAL NO:

VALUE:

PREMIUM ENCLOSED: £

DATE: CB/11/81



Tel. Orp, 22491
 13a High St, St Mary Cray, Kent.



RIGS FOR SALE
 All types of 27 MHz AM and legal FM equipment.
 Openly for sale;
 Customs duty paid.
 Open 7 days a week.

ORPINGTON 22491

CLASSIFIEDS

RATES
 1-3 insertions £6.00 per scc
 4-11 insertions £5.50 per scc
 12+ insertions £5.00 per scc
 21p per word (Min. 15 words)
 Box No. £2.00 extra

All advertisements in this section must be pre-paid.
 Closing Date: 3rd Fri. month preceding publication.

Advertisements are accepted subject to the terms and conditions printed on the advertisement rate card (available on request).

SEND TO CB CLASSIFIED

145 CHARING CROSS ROAD, LONDON WC2H 0EE.

TEL: 01-437 1002 Ext. 50.

ENGRAVED HANDLE BADGES are easy to produce and highly profitable with a Gravograph Engraving Machine — Beech & Son Ltd., Meridian House, Swanley, Kent. Tel: 0322-63211.

TOP QUALITY HANDLE BADGES in two ply "Gravoply" Plastic are hard wearing, stain resistant and available in five sizes, Round or Oblong and in over thirty different colour combinations — ideal for use with Gravograph Engraving Machines and Hot Blocking Machines — Beech & Son Ltd., Meridian House, Swanley, Kent. Tel: 0322-63211.

SILVER ROD £19.95
 1/2 WAVE BASE DIPOLE £10.50
 and lots more goodies;
AVANTI, HIGH GAIN, TURNER rigs.
 We have been in the twig business for 24 years
AAC LTD., 132 Hermon Hill, E18.
 01-530 6118.

CALLING ALL CLUBS — Stickers, Patch Badges, Posters, Pens, QSL Cards, Key Fobs, Pennants and much, much more. Supplied to your design. Royal Wedding year QSL cards in stock — 6 for £1.00 plus 20p P&P. Raymac Display, National Works, Bath Road, Hounslow, Middx. Tel: 01-570 9116.

HANDLECARDS 1000 £7.20 Q.S.L.
CARDS 5000 £38. (S.A.E. samples).
 C.B.Print, 89 Derwent Street, Consett, DH8 8LT.

FAST
BLOWN YOUR RIG?
REPAIRS AND FITTING
AND YOUR 20.
01-467 4879

NEW FORCE LTD
 Trade CB spares full range of IC'S crystals transistors etc
 In stock now
Tel: 058082386 Telex: 957505
We buy bigger You buy cheaper

PLASTIC MEMBERSHIP CARDS
 EXACTLY LIKE A CREDIT CARD. Same size, shape & material.
 INCLUDING DESIGN, ARTWORK, SETUP, PACKING.
 POSTAGE
 QSL V.S. **£16.00** per 100
IDEAL FOR CB CLUB CARDS
FOR FREE SAMPLES & ORDER FORM
 ☎ phone 0344 - 84455
 or write to Data Plastics, 113 Lizcombe, Bracknell, Berks.

ANTI-T.V.I. C.B. base station aerials,
 half wave dipoles £30 complete.
 Leaflet SAE, Anti-T.V.I. guide £1.
G2DYM Aerials, Beerdown,
 Uplowman, Tiverton, Devon.

CLOSE ENCOUNTERS GROUP Personal introductions/dances, parties, talks, social events. Meet interesting attractive people. All Areas. Tel: 051 931 2844 (24 Hrs).

CB FOR BEGINNERS
 The **BEST** recording available for the beginner or experienced Breaker.
 This LP cassette tells you in simple language **EVERYTHING YOU NEED TO KNOW TO MAKE A BREAK.**
 Approved by many Breakers Clubs
 Price £3.50 including P&P.
MINDPOWER RECORDS (CBB),
3 CANONS FIELD, WELWYN, HERTS
AL6 0QB.

PLEASE MENTION
CB WHEN
REPLYING TO
ADVERTISERS

CITIZENS' BAND
 The British guide to CB radio
 Contained within this comprehensive guide is an introduction for the beginner to CB radio in the UK; an impressive set of glossaries with over 1,500 entries explaining all the popular UK CB terminology and eight appendices listing the frequencies, Ten-, Q- and Thirteen-codes, the phonetic alphabet, abbreviations, reception quality and police codes.
ISBN 0 9507133 2 5
ONLY £2.10 (+ 30p UK P&P)
 available from
JACKSON PUBLICATIONS,
36 MOAT ROAD, LOUGHBOROUGH,
LE11 3PN, LEICS.

HERE ARE THE I/C NOS.
YOU HAVE BEEN WAITING FOR

| | |
|----------------|-------------|
| TA 7205P | £2.35 each. |
| MB 3712 | £2.35 each. |
| TA 7310P | £2.30 |
| TA 7222 | £2.85 |
| LA 3350 | £2.35 |

All fully tested and new. Terms: Cash with order plus p&p 50p.
 We shall soon be stocking power transistors. Please let us know your requirements.
 Write for quantity discounts of 10 up pieces per line item.
 2SC2078 equiv to 2SC1306
 £2.80 || LC7120 | £5.90 |
| LC7130 | £5.60 |
| LC7131 | £5.70 |

The above 4 nos. available 3 weeks, all other items delivery by return.

R. Guess Electronics,
13 Crabtree Hse, Archery Rd,
St Leonards-on-Sea, East Sussex
TN38 0YN.

"Attention breakers cure TVI interference problems with our three position relay controlled variable power reducer hundreds already sold bargain price £8.85p Postage packing £1.25 Ring Derby 0332-515613."

"NEED POSTAL FINANCE FOR YOUR RIG? HOLD A CHEQUE CARD? — **SALISBURY (0722) 24942. EVENING/WEEKENDS.**

"SEND YOUR COUNTRY FLAG with your next QSL — Union Jack, Irish Tri-Colour, St. Andrews Cross or the Welsh Flag — 1 1/2" x 1" on sticks — 50 flags — £2.90 inc. P&P. Send cheque/PO to Wilcur Enterprises, 35, Woodview, Pinecroft, Douglas, Cork, Ireland.

ELECTRONIC CLEARANCE PACKS

HUGE SCOOP PURCHASE

Containing Transistors, capacitors, resistors, pots, switches, radio and audio items, connectors, relays and many electronic devices. Must be worth over £20 per pack. Our price £5 car. £1.75

JUMBO PACK. Must be worth over £50. Our price £10 car. £2.50. Money back if not delighted.

HAVE YOU SEEN THE GREEN CAT?

1000's of components (CB, Radio and Electronic). Aerials, plugs, SWR meters, and accessories at unbelievably low prices. Something for everyone. Send 35p P.O. or cheque for list and receive FREE C.B. Gift.

MYERS. (Dept CB), 12 Harper Street, Leeds LS2 7EA. Tel: 452045.

CHEAP CB ACCESSORIES

| | |
|---------------------------------|--------|
| Aerials | |
| DV 27..... | £4.50 |
| T 40..... | £22.36 |
| Rubber Duck..... | £8.90 |
| Mikes | |
| Ham Master 4200..... | £25.77 |
| Home Base Mike..... | £14.00 |
| Turner M&2U..... | £22.00 |
| Accessories | |
| Power Supply 3.5 Amp..... | £12.50 |
| SWR Meters..... | £6.75 |
| Non-Sus Aerial..... | £14.50 |
| PA Horn..... | £4.50 |
| 100 Watt Graphic Equaliser..... | £37.00 |
| Bremi 25 Watt Burner..... | £21.75 |
| Extension Speakers..... | £2.75 |

Plus lots, lots more.
Allow £2 P&P on all small items, aerials etc, or telephone for postage before ordering.

FREE CB BADGE WITH ALL ORDERS OVER £10.

MATCON LTD
INDUSTRIAL ESTATE
MAYLAND, ESSEX
0621 740216
or call in for an eyeball

SEND A STAMP for a price list of CB accessories. Low prices top quality. FOREMAN'S 31, WATLING ST., BEXLEYHEATH, KENT. Mail Order Only.

HANDLE TAGS

Your handle hand-cut in real cow-hide. Use as key ring or hang it anywhere!



State handle and colour choice: tan, dk brown, red, blue & green. Leather handle belts available £6.00
Terms: money with order.
Orders despatched by return post.

PETE KELLY
CRAFT MARKET
CHURCH LANE
BARNSTAPLE N. DEVON

MODULATE

IN A T-SHIRT OR SWEATSHIRT PROFESSIONALLY SCREEN PRINTED WITH YOUR CLUB LOGO DESIGN ETC.



MINIMUM ORDER ONLY 10
BRITISH GARMENTS USED
VERY COMPETITIVE PRICES

Artistik Designs

SEND FOR DETAILS TODAY

NAME

ADDRESS

..... CB/11/81

ARTISTIK DESIGNS, 55 LOW RD.
STOWBRIDGE, KINGS LYNN,
NORFOLK.

EXPORT SURPLUS OFFER

SUPERBUG

Highly sensitive radio microphone picks up voices up to 30ft away and transmits to any VHF 88 — 108 MHz radio, RADAR. For baby alarm disco, surveillance etc. Range up to 500 yds. Operates off PP3 battery. Only £7.95 + 40p P&P.



BAND ALARM II

Professional burglar alarm kit for houses & shops etc. comprising of large plastic coated steel bell box containing high output siren & automatic reset electronic control panel, 5 door/window magnetic contacts. 1 large pressure mat & 1 key switch for on/off control. Easy to install, in less than a day. Only £54.90 + £4 P&P.

RIGTEC

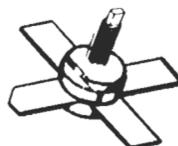
Car burglar alarm with CB rig protection circuit. Comprising of automatic reset control unit, high output siren & key switch protect car doors & CB rig against theft. Only £19.95 + £2 P&P

All guaranteed 12 months. Send SAE for data sheet details to
Airewas Electronics, 136 Main Street, Airewas, Burton-on-Trent, Staffs.

Trade & Wholesalers supplied.



"Rubber Duck to Logi Baird, say good buddy, where do I get transistors and J.C.'s for C.B. and R.F. applications?"



"ANGLIA of course! They are the U.K.'s leading supplier of Motorola & Japanese types."



BURDETT ROAD, WISBECH
CAMBS PE13 2PS
TEL: 0945 63281
TELEX: 32630



IC's Transistors

S.A.E. for prices of component

Roger D

7, Thyra Court,
Nottingham, NG3 5GT.

THE MOBILE CB RADIO FITTING SERVICE.

We come to your home 20, anywhere in the South-East. Mobile and base stations. Big base station aerials rigged. Cars, motorcycles, boats trucks, houses, airplanes. Tel: 01-467 6334.

CB TELEPHONE LINK. Use CB to make telephone calls. Units — £25; CB 27MHz FM rigs — available soon — £43 + VAT; S.A.E. details — Johnson Electronics, Star Warehouse, Chalk Farm Road, N.W.1 — 01-286 6119; 01-485 4308.

HANDLE BADGES

"You have just eyeballed" badges with your own handle printed. Maximum 15 letters or spaces. Only 75p each incl. postage. Breaker Club enquiries welcome. Send cheque or PO to
Matcon Ltd., 1 Mayland Ind. Estate, Mayland Essex.

QSL and HANDLE CARDS illustrated and printed to order. Don't buy mass-produced, be original. Send S.A.E. for samples and prices. HIGHVELD, BRAES OF ULLAPOOL, ROSS-SHIRE.

YOUR HANDLE in pin on button badge with C.B. 27 MHz motif send S.A.E. 50p P.O. handle colour choice. Coupland 68, Pugh Crescent, Bentley, Walsall, West Midlands.

RIG SPARES, C495 60p, C1306 90p, C1307 £2, C1923 25p, C1957 50p, D471 40p, 1S34 6p, 1S953 6p, 1S1V50 £1, TA7205 £1.80, TA7310 £1.80, 10.24 MHz crystal £3; Plus 30p Postage BITZ, P.O. Box 64, NOTTINGHAM.



tagra

ANTENAS

RADIOTELEFONO TODAS LAS BANDAS

RADIOTELEPHONE ALL BANDS

RADIOTELEPHONES TOUTES BANDES

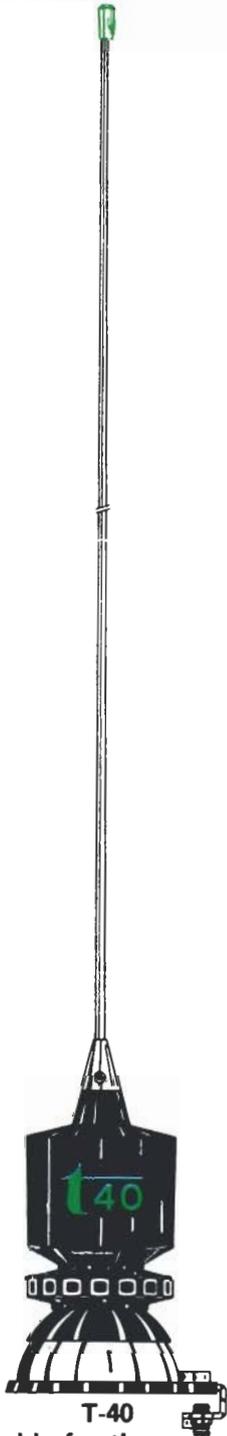
MADE IN SPAIN

SOLE UK DISTRIBUTOR

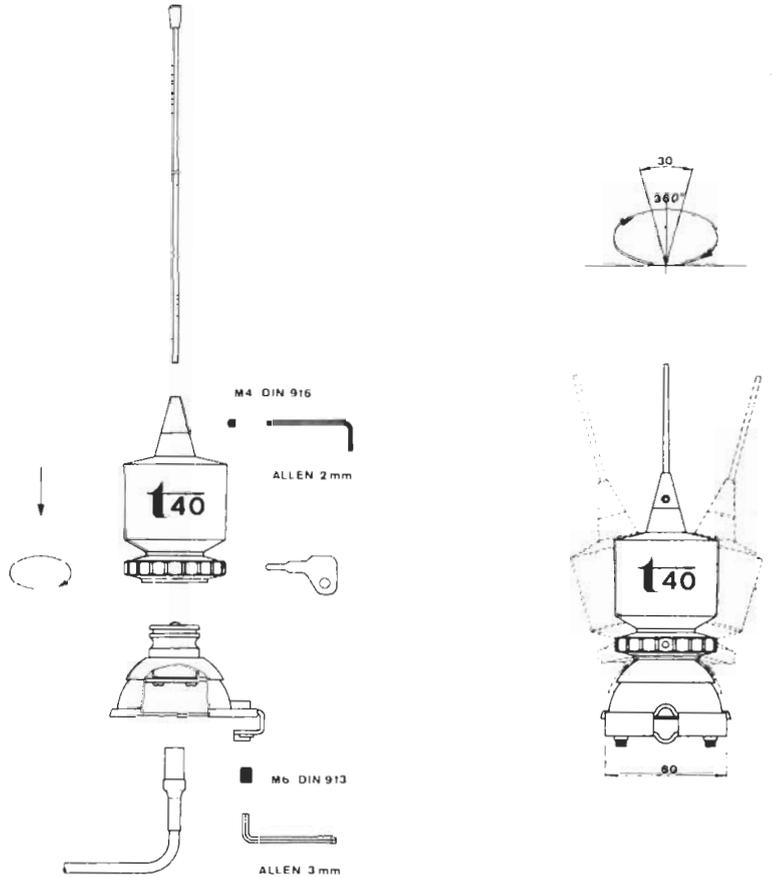
EUROPASONIC (UK) LTD

5 BURY NEW ROAD

MANCHESTER M8 8FW



T-40
Suitable for the new FM specifications



THE ALL NEW T-40 FROM TAGRA

WE ARE STILL LOOKING FOR DEALERS
THROUGHOUT THE COUNTRY
PHONE OR WRITE TO:-

EUROPASONIC (UK) LTD
5 BURY NEW ROAD
MANCHESTER M88FW
061-834-8818 TLX 668652

CLYDE IMPORTERS LTD
24/32 COBURG ST,
GLASGOW G5 9JF
041-429 2058

In one year our **K40™** antenna has become the largest selling CB antenna in the world!

1. It's more expensive ...

£29.95

suggested retail
vat included

And when you pay more, you expect more!

MORE PERFORMANCE:

The K40 is guaranteed to transmit further or receive clearer than any antenna it replaces. We know it will. We've tested it with 771 CB'ers just like you for one year.

MORE FLEXIBILITY:

You can fit your K40 to any mounting surface. It will fit any vehicle you'll ever own! That includes choppers, dune buggies, gutters, mirror mounts, luggage racks, trunks, hatchbacks, through roofs, semis, pick ups and RV's.

MORE QUALITY:

It's not imported. It's not made in Taiwan, Korea or Japan. It's American made in an American town. It's made with better materials that cost more and by professional people we pay more. And we designed it in the U.S.A.

*Including optional mounts at extra cost.

...This Antenna is so DYNAMITE you receive a ...

2. It's made better...



3. It's proven best!

...Here's what the leading U.S.A. CB publications said.

CB TIMES: "... it's not often that a product bursts onto the market scene, dominates and improves CB'ing for everyone. American Antenna and the K40 are doing it—repeated tests showed the K40 could out-perform the major competitive brands."

RADIO ELECTRONICS: "The results of our tests showed that, in three different positions of the monitoring receiver, the model K40 equaled or out-performed the competitive antenna. Apparently, American Antenna's advertising is not merely Madison Avenue showmanship."

PERSONAL COMMUNICATIONS: "... an impressive 95% of the trials, the K40 out-performed the existing mobile antennas. We had to try one for ourselves. ... in every case, the K40 either equaled or out-performed its competitor."

"No ifs, ands, or buts! The K40 Antenna from American Antenna would have to be just about the best antenna around."

CB MAGAZINE: "introduced in October, 1977, the K40 quickly became the top seller and in mid 1978, became the number one selling antenna in the nation."

...Here's what CB'ers all across the U.S.A. said.

ANTENNA SPECIALISTS: "... truck driver and CB'er for 10 years ... 50% further than my M410 'Big Momma'."

—J.H. Collett, 207 McFee, Bastrop, LA

AVANTI: "I'm an electronic technician with a Second Class FCC license ... I was able to transmit 70% further and tune the SWR 75% lower than my Avanti."

—H.R. Castro, VRB, Monserrate D-67, Salinas, Puerto Rico

PAL: "... 20% better in transmission and reception than my 5/8 wave Pal Firestik."

—John A. Blum, Box 446, Zelenople, PA

SHAKESPEARE: "... I've been a CB'er for three years and the K40 is the best I've ever had. Better in reception and transmission than my Shakespeare."

—H. Bacher, Jr., 15 King Rd., Park Ridge, NJ

HUSTLER: "Compared to my Hustler XBLT-4, the K40 can consistently transmit 40% further and the reception was better. The K40 is the perfect way to complete a CB system."

—Jerome R. Brown, 7800 S. Linder, Burbank, IL



PERFECT FOR FM TOO!!



(SPECIAL NOTE) IF YOU'RE A BEGINNER:

Our K40 Dealers will be happy to sell you any of the older style and less expensive antennas that are great bargains for any beginning CB'er.

AMERICAN ANTENNA
ELGIN, IL 60120 U.S.A.
COPYRIGHT AMERICAN ANTENNA 1979

**K40
POWER!**

DOUBLE GUARANTEE
GUARANTEE I: The K-40 will transmit farther and receive more clearly than the antenna it replaces and the customer will receive a prompt and full refund from the Registered K-40 Dealer who installed and tuned it.
GUARANTEE II: Unconditionally guaranteed for 12 months. Guaranteed against cracking, chipping, or rusting. Guaranteed against mechanical failure. Guaranteed against electrical failure. Guaranteed against accidental breakage. No exclusions. No gimmicks. For a full 12 months.

...Sold exclusively by 5000 K40 dealers throughout the U.S., Canada & U.K.