

SONY

VC61-1-2

**FM STEREO/AM 2 BAND PLL
SYNTHESIZED RECEIVER**

SRF-M40W

REVIEW BY RICH TOEBE

a Walkman with digital readout and 7 presets per band is perfectly suited to my needs! I had to get my hands on this receiver. Considering the cost (\$55 at Macy's "special introductory price" but I paid \$49 at Whole Earth Access in Berkeley), I wanted to see how it compares with my GE Superradio and Sony 2010.

Recently I was looking for a Walkman type radio to replace the one I have, but hasn't been operating properly. A Macy's ad in a Sunday paper recently showed the radio that I'm doing this review about;



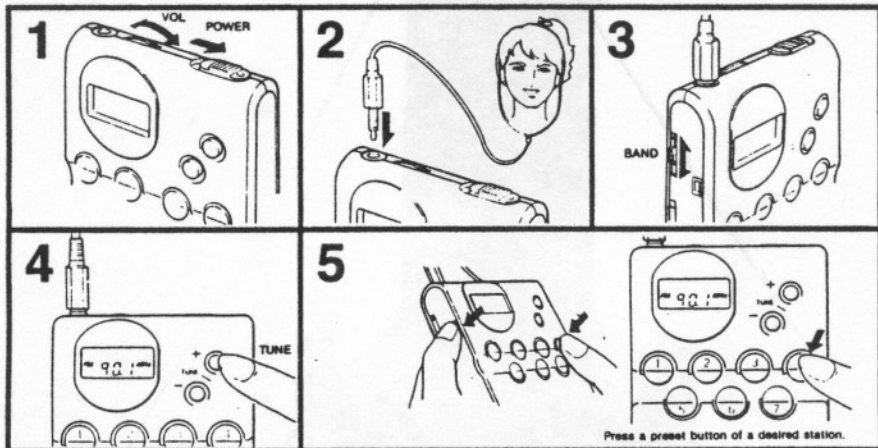
1. Physical Characteristics

The first thing that struck me about the Sony SRF-M40W is its appearance. Unlike most "personal radios", all corners are rounded and it has a black matte finish to resist fingerprints. The LCD readout is large (about the same size as the numerals on the clock of the Sony 2010) and easily readable and all buttons are large enough for fumble-free operation even when you are not looking at the unit (in other words, when strapped to your belt). The seven preset buttons have a unique shape to them; a recess runs through the front of the receiver between the two rows of presets, and the buttons are shaped to blend in. A bump in the center of the recess orients you much like the bump on the "5" key on the keypad of the Sony 2010. Tuning is accom-

plished by the use of up and down buttons; these are smaller and colored light gray. No knobs of any kind are on this receiver; volume is adjusted by a wheel in the top of the set, next to the power switch. The headphones plug into the top, right next to the volume adjustment. The FM stereo/FM mono/AM switch and FM DX/local switches (both sliding type) are located on the left side, as is the enter switch. There are no tone controls. The size is such so as to fit comfortably in the palm of your hand. The belt clip is detachable, and access to the 2 AA batteries is on the back of the radio.

2. Using the Set

Sony's engineers obviously decided that most people will use the set while strapped to the belt; I've found that the design ergonomics make it a breeze to use if you don't look at it (or if you're blind). Finding the locations of the individual presets is simple once you understand the orientation of the buttons, and tuning the radio is facilitated by the fact that whenever the frequency is changed, the radio beeps. It's much the same pitch as the scanning beep on the Sony 2010. Tuning on AM moves in 10 kHz steps and on FM in 100 kHz steps. This means, of course, that when you scan up or down the band you hear beep beep beep...every time the frequency changes! Holding the button down causes the radio to continue to tune up or down, or you can push it down once for a step tune. Pushing a preset button also causes a beep to be heard. Setting the presets is quite simple; you tune in the desired frequency, push the "enter" switch on the side of the set and push the desired preset button while the "enter"



SPECIFICATIONS

Frequency range FM: 87.5-108 MHz AM: 530-1670 kHz	Battery life Approx. 27 hrs. with Sony SUM-3 (NS) batteries
Scan step FM: 0.1 MHz AM: 10 kHz	Dimensions Approx. 82 x 94.5 x 27.5 mm (w/h/d) (3 1/4 x 3 3/4 x 1 1/8 inches)
Antennas FM: Headphones cord antenna AM: Built-in ferrite bar antenna	Weight Approx. 170 g (6 oz) Including batteries.
Output Headphones jack (stereo mini-jack) load impedance 32 ohms	Accessories supplied Stereo headphones (open-air type, 1) Carrying holder (1)
Power output 18 mW + 18 mW (at 10% harmonic distortion)	Design and specifications subject to change without notice.
Power requirement 3 V DC, two size AA (R6) batteries	

switch is still depressed. Each band has 7 presets; you cannot mix them by band as you can on the 2010, so if you set the set to AM, the presets call up 7 AM channels. Going to FM gives you 7 FM frequencies. To change a preset, you just "reset" the preset with no need to erase a memory; it's done automatically. An interesting fact about the AM tuner is that it goes up to 1670 kHz!

3. Reception Characteristics

So far, I've decided the radio is comfortable to hold, nice to look at and easy to use; how well does it receive stations? Is this a possible DX machine? I decided to do a direct comparison of reception with the GE Superradio and Sony 2010. In the case of the 2010, I handicapped it; no sync mode will be used. What I'm interested in is readability of signal and rejection of interference from adjacent channels. No "S" meters are used; this is clearly subjective, based on what my ears hear. All receptions are done with the same headphones to even up the sound quality. I'm using a "SIO" scale for brevity; S for signal quality, I for interference, and O for overall quality. Scale goes from 0 to 10; for signals, 10 is local quality, 0 means nothing detectable. For interference, 10 means absolutely none, 0 means the offender completely wipes out the desired signal. The test was done at home in Pleasanton, in the evening hours 1 to 3 hours after sunset. First, AM stations:

frequency	received signal(s)	possible interference	Walkman	Superradio	Sony 2010
570	(Talknet)	560-KSFO (A's BB)	5-9-5	6-9-7	6-9-6
690	XETRA	680-KNBR (Giants BB)	8-8-8	8-8-8	8-8-8
790	KXTC/KABC	780-KROW/810-KGO	7-9-7	8-9-8	8-9-8
890	KDXU	---	7-10-8	8-10-9	8-10-9 (narrow)
1040	WHO	1030KTWO/1050KOFY	3-9-3	3-7-2	3-9-3
1180	KERI	1170KLOK/1190KEX	5-6-3	5-6-3	6-6-4
1270	(Giants BB)	1260KOIT/1280KJOY	7-9-7	7-9-7	7-9-7
1410	KERN/CFUN	1400KBLX/1420KSTN	4-9-4	4-8-4	4-8-4
1540	KSKQ/KNZS	1530KFBK/1550KKHI	6-9-6	7-9-7	7-9-7
1600	KGST/KMNY	1590-KLIV	6-9-6	7-9-7	7-9-7

On AM, the Walkman suffers from a higher level of hiss in the signal; this is especially noticeable in weaker stations (this accounts for the lower S numbers). Amazingly, though, the little Walkman rejected slop from 1030/1050 better than the other two sets except when the 2010 was set in narrow; then they were equal. I also did a general scan of the dial only with the Walkman; I found general reception pretty good. Clear channels such as 850-KOA, 1190-KEX, 1160-KSL, 1070-KNX, 640-KFI, 660-KTNN, and 1030-KTWO were all well received, but nothing was heard on 540. The set nulls well. I had 2 or 3 signals on 800, one was XEROK, the other two were beneath and most likely were KPDQ and a Canadian, yet there was only slight KGO splash. Now the FM stations:

88.5	KQED	---	8-9-8	8-9-8	9-9-9
91.1	KCSM	90.9 KXPR	7-8-7 on 91.2	8-8-8	8-8-8 on 91.2
92.5	KAER	92.3 KSJO	7-7-6 on 92.6	8-9-8	8-9-8 on 92.6
95.1	KDJK	94.9 KSAN	9-9-9	9-10-9	9-10-9
96.5	KOIT	---	10-10-10	10-10-10	10-10-10
98.5	KOME	---	9-10-9	8-9-8	10-10-10
100.5	KOPT	100.3 KBAY	9-9-9 on 100.6	8-9-8	7-8-7 on 100.6
104.1	KHOP	---	10-10-10	10-10-10	10-10-10
105.3	KITS	105.1 KRAK	9-10-9	10-10-10	10-10-10
105.7	KARA	---	6-7-4	6-8-5	6-7-4

On FM, keep in mind I set the Walkman to "Mono" for a fairer comparison. The Walkman's interference rejection is comparable to the 2010 (which is to say only fair). Fortunately there are the 100 kHz tuning steps, this made it possible to hear KCSM, KAER and KOPT when on their real frequencies slop from adjacent channels made reception impossible. The short headphone cord doesn't do too badly as an antenna; in the case of KOPT, the Walkman did better than the two larger radios! I had to touch the whip on the 2010 to get a clear signal. Of course, the Walkman can be held outstretched in various ways for directionality.

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Back to AM: I managed to do some quick bandscanning with it at work; situated about a mile from the KFAK-1100 and brand new KOFY-1050 multi tower array, I found only one image on the set: KFAK was coming in on 1000 kHz, but sounded at first like a semi-DX signal; it was being splashed by KIQI-1010; for a moment I wondered if it was a new daytimer! Lots of weak signals were heard, like KCTY-980 with little splash from KKIS, and 1540 from Capitola was holding its own against KKHI. This was done around noontime.

4. Improvements This Set Could Use

The most glaring omission on this set is the lack of AM stereo; they must have thought about it, because just under the frequency readout, the set is labeled exactly as follows:

FM/AM PLL Synthesized
Stereo Receiver
14 Memory Presets

Kind of misleading, isn't it? When I saw the Macy's ad, I was led to believe it had AM Stereo capability. The box it comes in, however, is clearly labeled "FM Stereo/AM".

Secondly, although the headphones are comfortable the frequency response could be a little better. Using the headphones from a top of the line Aiwa "walkman" produced much nicer sound quality, especially on FM. The supplied headphones compare, performance wise, to the Sony headphones I bought for \$10 to use with my Sony 2010.

Third, although the LCD readout window allows for the word "Preset" and a number from 1 to 7 above the frequency whenever a preset button is pushed, no stereo indication appears. Even a pilot light could easily have been installed, and could have doubled as a power level indicator, which is also lacking. Every other "walkman" I've used has one that dims as power is used up. The only indication Sony gives on this is that if, when you turn on the set and no frequency shows up, the power is low or almost completely gone and you have 3 minutes to replace the batteries or else the preset memories are cleared.

Fourth, while I'm glad to see the AM dial extended to 1670 in anticipation of the band extension, I wonder why they didn't go all the way to 1700? A switch to a 9 kHz progression would have been great too; as it is, the set's only good for our hemisphere, although they did set the FM tuning steps so it can be used worldwide. I may open the the set one day to see if there's an internal switch; I can't imagine them building a special version just for us, I would think they'd sell this unit in Japan too, at least.

5. Closing Remarks

I'm pleased with the radio, obviously; unlike most Walkman-type receivers, this one is pretty sensitive and selective. Tuning is easy, even in the dark (no light on the readout; use a preset as your starting point and count the beeps, hi). It compares well to the Superradio, except for the higher level of hiss, and is comparable to the 2010 in the wide position. Stereo separation on FM is good, and reception quality is adequate, better than my old walkman. Have we got a mini-version of the Superradio on our hands? Maybe someone with measuring equipment can answer that question more scientifically, but based on my limited testing, I'd say the answer is yes. (Now to hook up a beverage to it, hi!)

FOOTNOTE FROM BRUCE PORTZER: I was so impressed with Rich's description of this radio that I ordered one for myself. The compact size, digital readout, and ability to pick up a reasonable amount of DX all made it rather appealing as something I could throw into a briefcase on business trips. I couldn't find it locally, but did come across it in a catalog on a TWA flight - it's available from an outfit called Crutchfield (1-800-446-1640 or 1-800-336-5566) for \$49 plus \$2 S/H; a decent price, and I also got 500 frequent flier miles! Observations, at night, the dial is filled. I've heard something on every freq except 830 (too much KGNW-820), and can easily null most of my locals for adjacent, and sometimes co-, channel DXing. It's quite a thrill to lay in bed and listen to, say, KSTP-1500 on something smaller than the palm of your hand (in mid-August yet). The set is not as sensitive as it could be, but coupling it to a longwire produces lots of spurious signals from locals. So they did the usual tradeoff of desensitizing the radio to reduce overload from locals. Without a longwire, the only such problem was an image from KARR-1460 on 560 kHz at my office, about a mile from the KARR xr site (this implies the i.f. is 450 kHz, instead of the standard 455. I opened the case to see what was inside. Nope no switch to select 9 kHz spacing. There are two circuit boards. One for the display and preset switches, the other for the rf/af circuitry. Unfortunately, the latter one is on the bottom and I couldn't figure out how to get the other board out without destroying the radio. The loopstick is about 2" long. Overall, it's a really wonderful little radio, and the advantages definitely outweigh the drawbacks.