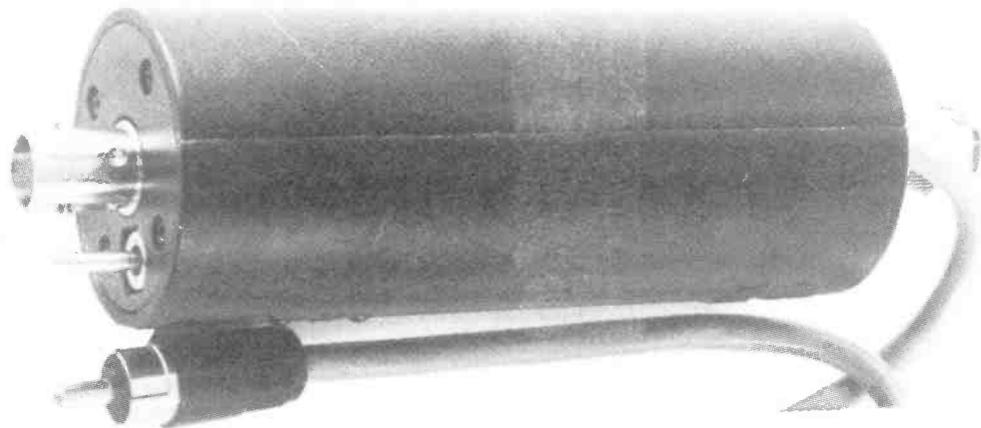


# Review: Puma 2m PA



## and battery pack

His comment about the weight of the power pack slips my mind at the moment but I seem to recall some mention of a hernia. Anyway, puzzled by what I was letting myself in for, I took delivery of the said items and was immediately struck by the rather amusing model numbers *BIT-02* (that's the PA bit) and *BIT-B* (the power pack. . .). Now I must confess to being a little sceptical as to why anyone would want to operate 20W portable but, as you shall see, my general impression of the unit changed as I went along.

### BIT-02

Yes it does look like a four inch length of black pipe with a BNC at each end and a short length of power cable sticking out of the bottom. When one opens the die-cast case, there is a quite neatly laid out board containing a small transmit/receive relay with a couple of transistors (presumably for RF sensing and relay drive), a few trimmer capacitors and coils, and a lonely RF power transistor plus biasing components doing all the hard work. A red and a yellow LED indicates ON and TX respectively. All this gives a quoted output of 7W to 20W depending on the drive level (1W to 3W). Ap-

By Peter Metcalfe  
B.Sc, G8DCZ

**When the Editor asked me to review this piece of equipment, his description intrigued me: "imagine a four inch length of exhaust pipe — with a BNC at each end — well you stick it on top of your portable rig and it gives about ten or twenty watts out!"**

parently, there is a 70cm. version (*BIT-07*) with reduced output power (4W to 15W) available as well. As there was no external indication of the frequency range on the reviewed 2m version, confusion could arise if both versions were purchased.

The use of a relay to switch the RF transmit/receive seems a little odd at first, for, while admittedly this technique introduces lower losses, it will consume rather more current than the alternative PIN-diode switching and this could be an

important design consideration for portable usage. However, the rather hefty power pack supplied reduces this problem.

The instruction leaflet (?!) says that the unit "can be used for all types of portable transceiver" and, coupled with a quoted frequency range of 144-146MHz, this could lead to confusion, especially by newcomers to the hobby. With multi-mode portables becoming very popular (eg. *FT290* and *C58*), it must be appreciated that this device is a non-linear amplifier ie. FM *only* and would cause some terse comments if used on SSB.

### BIT-B

The power pack is practically the same size as a *Trio 2400* (ie. rather larger than the *IC2E*). The leaflet says it's a "small and lightweight unit with a high quality leather case". Now I am not disputing the "high quality", for it is quite well made (it has to be, as this is the main container for the battery) but perhaps "leather-type" would be nearer the mark. The case has attached a shoulder strap and a belt loop. Here the terms "small" and "lightweight" take on their relative meanings for, after carrying this pack around at the