

GLOBAL AT-2000

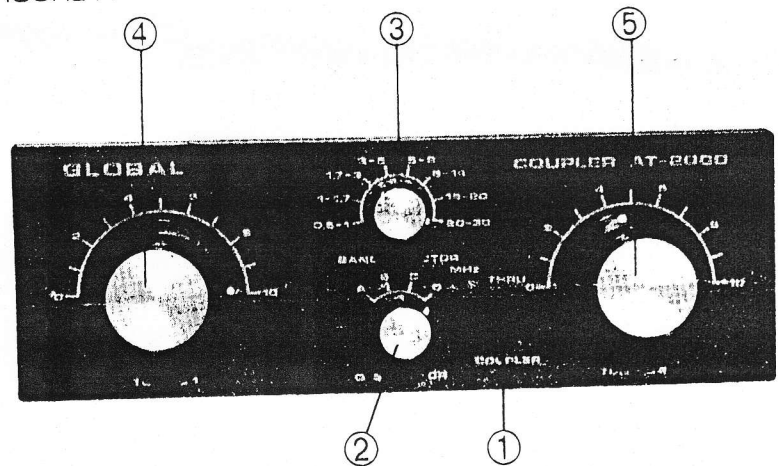
ANTENNA TUNING UNIT FOR SHORTWAVE RECEIVER

Global produce the most popular antenna tuning units for shortwave receiver stations on the market today. In fact, they are now accepted as "Industry Standard" and feature in most serious shortwave receiving stations throughout the world. The AT-2000 is a simple, yet rugged and reliable antenna matcher of classic design which can be installed in seconds. Simply disconnect the antenna feed from your receiver and connect it to the rear of the AT-2000. Then run a lead between the AT-2000 and the receiver. No power is needed. The AT-2000 can be used to good effect on any type of received signal in any mode. This simple device will enable you to obtain the best results from your chosen receiver. When using a random length antenna a receiver needs a tuner to work to its full potential as theory tells us that we need a different length antenna for each different frequency we wish to listen to. Quite simply, the tuner corrects impedance mismatches caused by using 'incorrect' antennas and improves the signal being sent to the receiver, which is particularly important for weak signals. The AT-2000 helps improve the selectivity of the receiver by reducing the effects of interference from strong signals adjacent to the wanted signal.

FEATURES:

- (i) Effective over a wide frequency range, medium wave and shortwave 0.5 – 30 MHz.
- (ii) Impedance matching for improved weak signal reception and maximum signal transfer.
- (iii) Improved "front end" selectivity.
- (iv) At the heart of this unit are copper coils wound onto a large 25mm bobbin giving high "Q" characteristics. This enables the unit to cover a wide range of frequencies easily and efficiently.
- (v) The coupler circuit employs a Pi-Matching system and the unit incorporates two large variable capacitors of very high quality, making it useable with any short wave receiver and any antenna.
- (vi) The "Q" selector is a unique feature only found on the AT-2000. The "Q" control's main function is to prevent cross modulation interference from adjacent strong signals that frequently occur with modern receivers. This results in lower noise levels and has the effect of increasing the front-end selectivity of the receiver, especially on the lower frequency bands. It has four switched positions. When the control is rotated fully anti-clockwise it provides the highest "Q". When it is rotated fully clockwise the control is out of circuit. As the "Q" of the AT-2000 is increased, using this control, so the selectivity will increase and the main tuning control adjustments will become more critical. There will also be a reduction in signal strength but on crowded bands, particularly at night, this will often result in the background noise being reduced and the signal will be easier to copy. The improvement in reception gained when using the AT-2000 very much depends on radio conditions at the time, and the bands being monitored.
- (vii) Can be used with coaxial feeds, long wires, tuned feeder and loop antennas.
- (viii) The AT-2000 is a passive device so no power supply is needed.
- (ix) A straight through position switch is selectable.
- (x) Compact size.

FIGURE A



OPERATION OF AT-2000

You will soon learn how easy it is to tune radio signals for the best reception when using the AT-2000. Follow carefully the directions as listed below in conjunction with FIGURE A. First set the slide switch ① marked 'THRU' and 'COUPLER' to 'COUPLER' (the lower position). Next, set the "Q" SELECTOR knob ② to "A" initially. Turn on your receiver and dial up the first frequency that you are going to listen to. Then using the 'BAND SELECTOR' switch ③ on the AT-2000 select the range that includes the frequency displayed on your receiver. When you have done this use both hands to turn 'TUNING 1' ④ and 'TUNING 2' ⑤ knobs alternately until the signal is at its strongest. Once maximum sensitivity has been attained and because of the difference in characteristics between the widely differing variety of aerials, it is worth re-setting the 'BAND SELECTOR' knob first one step higher and then one step lower, each time re-tuning with 'TUNING 1' and 'TUNING 2' knobs alternately to see if a better signal can be obtained. Finally, try the "Q" SELECTOR in its other three positions to obtain the very best reception point. Choose the 'THRU' position on the 'COUPLER' switch only if you want to check reception without the tuner in circuit or if using an antenna for a specific band that does not require tuning.

SPECIFICATIONS

TUNEABLE FREQUENCY RANGE	:	500 KHz – 30 MHz (IN 8 SWITCHED BANDS)
INPUT and OUTPUT IMPEDANCE	:	5 – 600 OHMS
ANTENNAS	:	LONG WIRE/LOOP/COAX/TWIN FEED
CONNECTORS	:	2 x SO-239 and 4 x WIRE TERMINALS
DIMENSIONS	:	162mm WIDE x 55mm HIGH x 101mm DEEP

N.B. The unit comes complete with instruction leaflet and connecting lead.
PL-259 50 Ohm patch lead available as an optional extra.