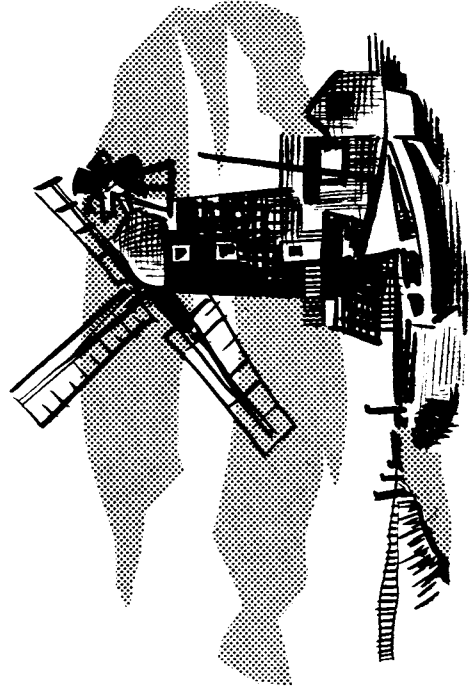
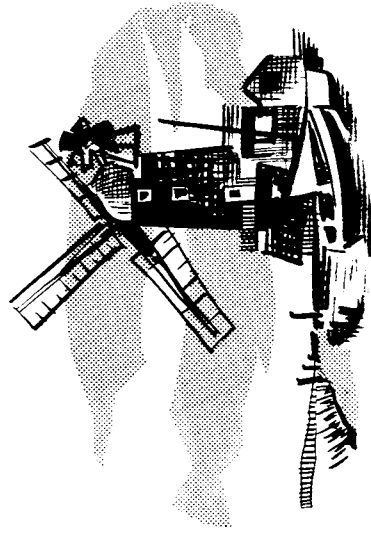


**Instructions for installing and operating**



# *FemMam II*

*FM-AM Table Model  
for A.C. Mains Operation*



**PYE LIMITED**  **CAMBRIDGE**

**PYE LIMITED · CAMBRIDGE · ENGLAND**

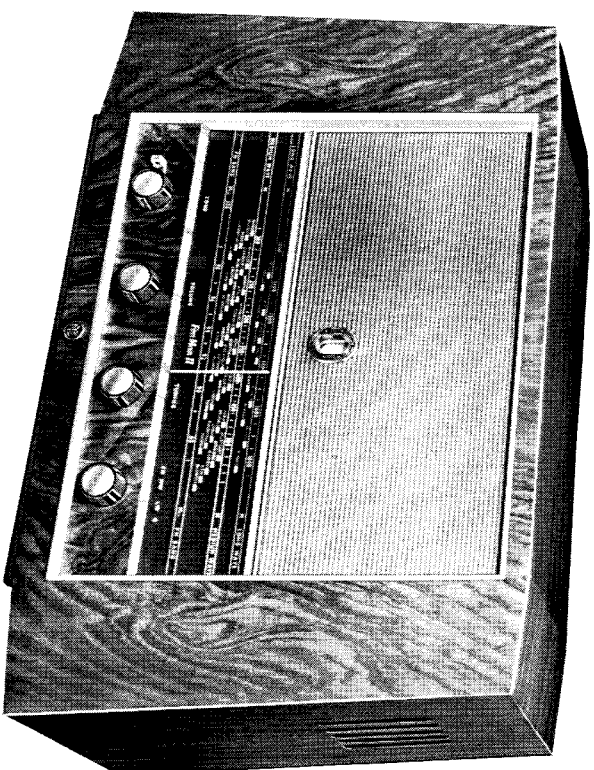
PART NO. 070576

Designed in the famous Pye Laboratories at Cambridge, this new luxury F.M.-A.M. Receiver incorporates the latest proved advances in electronic research.

On the F.M. band, the PenMan II offers a completely new standard of faithful radio reproduction with much greater freedom from interference than is usual on the normal broadcast (A.M.) bands, whilst on the long and medium wavebands the usual B.B.C. and Continental A.M. programmes are available. A multiple loudspeaker system maintains a true balance of treble and bass in every part of the room and adds an unusual realism and depth to the reproduction.

In the pages following, detailed instructions are given for the installation and operation of this model. To be sure of obtaining the high performance and beauty of tone for which this instrument has been designed, it is most important that these instructions are followed carefully, particularly in regard to the tuning in of F.M. stations and the use of the tone controls.

PYE LIMITED,  
CAMBRIDGE.

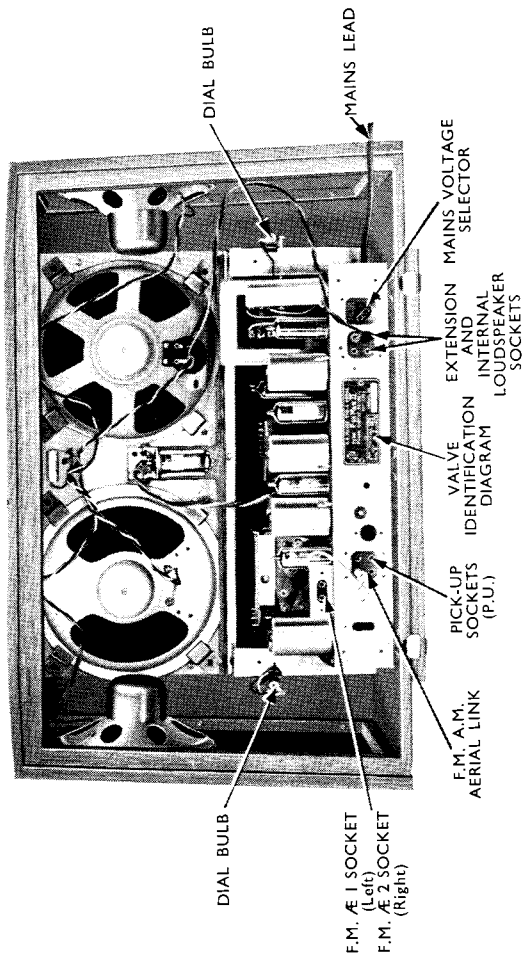


*PenMan II*

## INSTALLATION INSTRUCTIONS

Complete the Record Card, which will be found with this set, in accordance with the instructions given under the heading **GUARANTEE** on page 11.

Remove the card back of the receiver. Remove all packing and see that the valves are in their correct positions as indicated by the Valve Identification Diagram, see Fig. 1, and pushed firmly down into their sockets. Make sure that the Voltage Selector, see Fig. 1, is fitted in the appropriate position for your mains. Uncoil the Mains Lead, Fig. 1, and attach a suitable mains plug; this can be obtained from your Pye Agent. If



**fig 1**

mains hum is excessive during operation, it may be reduced by reversing the connections to the mains.

The Pye Model FenMan II is designed for use with alternating current (A.C.) mains of 200-250 volts, 50 cycles. **IF YOU HAVE DIRECT CURRENT (D.C.) MAINS THIS SET MUST NOT BE USED OR SERIOUS DAMAGE WILL RESULT.**

## IMPORTANT

The card back must be in position before the set is connected to your electricity supply.

To allow for free ventilation a space of at least 4 inches should be provided between the back of the set and any obstruction such as the wall or curtains.

This receiver incorporates four loudspeakers and in order to obtain full advantage of this arrangement, it is recommended that the receiver should be placed across a corner of the room: other positions and, in particular, obstruction of the speakers in the ends of the cabinet will give less realistic quality of reproduction.

## AERIAL CONNECTIONS

(A) F.M. Aerial

Reception of the V.H.F. F.M. band requires the use of a special aerial and, within the primary service area of the transmitter, the internal aerial of the receiver will in many cases prove adequate. However, in "fringe" service areas an external aerial will be necessary; this is similar in pattern to a television aerial lying horizontally. Your Pye Agent will advise you on the most suitable

type of F.M. aerial for your locality. Unless an adequate signal is provided by the aerial, the full advantage of F.M. reception will not be obtained.

When using the internal aerial, which is mounted on the card back of the receiver, the yellow and black plugs attached to the twin flex lead should be inserted in the two sockets marked F.M. $\mathcal{A}E$  1 and 2. When using an external F.M. aerial the internal aerial lead plugs should be removed from the sockets and the external aerial plugged in instead. The aerial and downlead impedance must be 75-80 ohms.

Two plugs, one yellow and one black, are provided for connecting the external aerial downlead to the set. If the downlead consists of a twisted pair of wires or is a twin flat type, the plugs attached to the lead can be plugged in either way round to the F.M. $\mathcal{A}E$  sockets. If the downlead is a coaxial type, the inner conductor must be connected to the yellow plug and inserted in the F.M. $\mathcal{A}E$  1 socket and the outer conductor to the black plug and inserted in the F.M. $\mathcal{A}E$  2 socket.

(B) A.M. Aerial

It is a feature of this model that the F.M. aerial may be used to receive broadcasts on the Long and Medium wavebands. To use this facility insert the white plug on the short flex lead into the A.M. aerial socket, see Fig. 1, F.M.-A.M. aerial link. The receiver will now operate on the Medium and Long wave-bands from the F.M. aerial being used. When not required, the white plug can be fixed in the clip on the card back.

In areas where satisfactory reception of L.W. and M.W. broadcasts is difficult, it may be necessary to use a separate aerial for them, which

should consist of a length of up to 100 feet, including downlead, of insulated copper wire erected as high as possible from the ground. The downlead should be connected to the white plug supplied and inserted into the A.M. aerial socket, see Fig. 1.

Your Pyc Agent will advise you on the most suitable type of aerial combination to use.

**EARTH CONNECTION**

In order to minimise the effect of electrical interference on L.W. and M.W. broadcasts, a good earth connection is recommended. It will also help if mains hum is troublesome when operating the receiver with a gramophone pick-up. Here again your Pyc Agent will advise you if necessary.

To connect an earth to your receiver fit the large black plug to the end of the earth wire and insert it in the earth socket, see Fig. 1. A good earth can be obtained by connection to a rising cold water main or to a copper tube driven into moist soil. The lead to the set should be as short as possible. Note: a gas pipe must *not* be used.

**RADIO OPERATION**

The Pyc Model FenMan II will receive stations in the following three wavebands:

Long Wave	..	..	950-1900	Metres
Medium Wave	..	..	185-560	"
F.M. Band	..	..	87.5-100	Mc/s

Switch on by turning the Treble Tone Control ON/OFF switch (outer left-hand knob) in a clockwise direction until the switch is heard to operate. Wait approximately 1 minute for the set to warm up. The illumination of the tuning

scale will indicate that the set is connected to the electricity supply.

## WAVEBAND SELECTION

Set the Wavechange Switch (outer right-hand knob) to the required waveband. The wavebands and gramophone position are marked as follows:

Gram. . . . .	..	..	Marked "G"
Long Wave . . . . .	..	..	"LW"
Medium Wave . . . . .	..	..	"MW"
F.M. Band . . . . .	..	..	"FM"

## TUNING L.W. & M.W. (A.M.) BANDS

The TUNING INDICATOR ensures accurate tuning. Select the station required by turning the tuning knob until the pointer behind the tuning scale is opposite the name or wavelength of that station. Adjust the tuning control until the green V-shaped sections of the tuning indicator extend to maximum width: the station is then correctly tuned.

## TUNING F.M. BAND

The tuning in of an F.M. station is different from that of an M.W. or L.W. (A.M.) station. Each signal gives three responses; the two outer ones are usually rather weak and distorted, while the centre one is much broader and louder. The correct tuning point is in the middle of this centre response, where programmes should be received free from distortion and background noise.

Turn the tuning control until the pointer is opposite the frequency of the required station and then adjust it until the Tuning Indicator shows maximum width of the green V-shaped sections: the receiver is now tuned to the correct response. A further small adjustment must be made to obtain

best reception, as explained in the preceding paragraph. In weak signal areas the setting which gives minimum background noise from motor car ignition and other interference is quite critical.

## VOLUME CONTROL

The Volume Control should be adjusted so that the volume of sound is at the level required to suit the particular programme to which you are listening. Some allowance should be made to avoid too much volume when loud passages of music are played.

## TO NE CONTROLS

The Treble Tone Control is provided mainly to reduce whistles and other types of interference prevalent on the L.W. and M.W. bands. Its effect is to reduce the treble response and to make the tone more mellow and is greatest when the control is in a fully clockwise position.

When receiving an F.M. broadcast it is recommended that the Treble Tone Control should normally remain in the anti-clockwise position (i.e. just switched on) to obtain the high fidelity of which this type of transmission is capable. Occasions when it is useful to reduce the treble response on F.M. are:

- (a) to correct the balance when the treble is over-emphasised in the transmitted programme;
- (b) to reduce background noise or distortion which is sometimes present in the transmission, for example, when the programme consists of records;
- (c) to reduce background hiss if signals are weak or subject to severe noise interference.

The Bass Tone Control is a three position switch operated by a lever projecting to the left of the Treble Tone Control; the centre position is recommended for the majority of broadcasts but for speech the lower position (reduced bass) may be preferred. To increase the bass reproduction, the switch should be moved to the upper position.

To switch off, turn the Treble Tone Control ON/OFF switch fully anti-clockwise until the switch is heard to operate.

## NOTES

**USING A GRAMOPHONE PICK-UP.** This receiver has been provided with facilities for connecting a gramophone pick-up for the reproduction of records. Any normal type of crystal pick-up may be connected to the set by inserting the two plugs on the Gramophone Pick-Up Leads into the sockets marked "PICK-UP," see Fig. 1. If one lead from the Pick-up is connected to the gramophone metal work, this lead should go to the lower socket on the receiver.

When reproducing gramophone records the Wavechange switch must be turned fully anti-clockwise to the position marked "G" on the Tuning Scale. The Volume and Tone Controls are then available as described under Operating Instructions.

**AN EXTENSION LOUDSPEAKER** can be used with this receiver enabling programmes to be received in any part of the house without moving the set. A high quality loudspeaker having a wide, smooth frequency response and an impedance of  $1\frac{1}{2}$  to 3 ohms must be used in order to retain the excellent performance of which this receiver is capable. If a speaker having a different

impedance is used, it must be matched by a transformer to 2 ohms. If it is to receive the full output of the receiver, the Extension Loudspeaker must be rated to handle a peak power of 7 watts.

The Extension Loudspeaker can be used either with or independently of the speaker incorporated in this receiver. For simultaneous operation, the Extension Speaker leads should be plugged into the spare sockets marked L.S., see Fig. 1. For independent operation, remove the internal speaker plugs.

**DIAL BULB REPLACEMENTS.** Should it become necessary to renew either of the bulbs illuminating the tuning scale, switch off and remove the mains plug and back of the receiver. Withdraw the bulb holders which are clipped on to the scale backplate, see Fig. 1.

The faulty bulb can be replaced with a standard 6.5-volt 0.3-amp. bulb.

## GUARANTEE

This receiver is covered by the Pye Guarantee for a period of 12 months from the date of purchase, provided that the Record Card is filled in and returned to Pye Ltd. within seven days of purchase date. The guarantee must be completed by your Pye Agent.

The valves are covered by their manufacturer's guarantee.

## SERVICE

If at any time your receiver does not work satisfactorily, reference should be made immediately to the Pye Agent from whom it was obtained, or your nearest Pye Agent.