SECTION 1
PRODUCT SUPPORT POLICY

EQUIPMENT COVERED

The service policy covers the following ranges of equipment;

(a) FX5000 multi-channel synthesized base station - VHF bands, E,A,B and UHF bands U,T,W.

(b) Base station option cards - CTCSS/Assort and M80RCM.

FX5000 OUTLINE DESCRIPTION

The FX5000 comprises a range of base station equipments. It is of modular construction, each of the functional units being housed in a separate module and plugged into the common shelf from the front to both maximise the flexibility of options and to simplify the service and repair procedure.

The following is a list of the units of which the FX5000 is comprised;

Power supply unit	: AT04878/- used on all versions
Control Module	: AT04872/- used on all versions
Receiver Module	: AT04880/- (VHF and UHF synthesized)
Transmitter Driver	: AT04881/- (VHF and UHF synthesized)
Power Amplifier	: AT04874/- (VHF 30W); AT04879/- (VHF 50W); AT04882/- (UHF 25W); AT04883/04 (E Band 50W)
Shelf/backplane unit	: AT04875/- used on all versions
M80RCM option	: AT14920
CTCSS/Assort option	: AT29061

For the purposes of this service policy all of the above units are repairable and available as Field Exchange Units (FEU's).

SERVICE LEVELS

MINIMUM TRAINING REQUIREMENT

It is essential that this product is only serviced (to any of the following four levels defined) by Philips RCS trained and authorised service workshops personnel.

LEVEL 1 SERVICE/MAINTENANCE

(a) Recommended Field actions

The first level of on-site service and maintenance of the above equipment may involve:-

(i) Routine monitoring of meter points.
(ii) Fault diagnosis by local alarm interpretation.
(iii) Checking of RF, Audio and logic interface connection integrity to the base station.
(iv) Adjustment of the following parameters in accordance with handbook information:-

Tx deviation.
Rx and Tx frequencies.
Rx audio output level and Tx audio sensitivity.
Rx squelch level.

(v) Replacement of the following field exchange parts:-
Unit front panels, fasteners and control knobs.
Externally-accessible fuses.

(b) Test Equipment Requirements

(i) F5000 metering panel.
(ii) AF 600Ω level test set.
(iii) Multimeter.
(iv) Modulation meter.
(v) Field service manual.
(vi) Frequency counter.
(vii) F5000 handset.

Note: Refer to Section 3, Table 3.1, for suitable types.

LEVEL 2 SERVICE/MAINTENANCE

(a) Recommended Field and Service Depot actions:-

As for level 1, and additionally:-

(i) Mechanical repairs

(ii) Replacement of following field exchange parts:-
Tx and Rx Unit crystals.
Tx and Rx Crystal oven assembly.

(iii) Replacement of following FEU's:-
Control module audio card.
Control module logic card.
Control module front panel and PCB assembly.
M80RCM Option assembly.
CTCSS/Assort Options card.
Power supply unit.
Receiver unit.
Transmitter driver unit.
Transmitter power amplifier.
Control module.

(iv) Replacement of the following workshop exchange unit:-
Power amplifier control board

(v) Adjustment of replacement modules as in level 1, but in addition;
Setting of RF output power.
Measurement of Rx sensitivity.
Distortion measurement. (Tx & Rx)
Customisation of control module by link selection.
Adjustment of metering controls.
Station checks and air check.
Alignment of replacement RF units on customer frequency.

(b) **Test Equipment requirements**

Additional to level 1:-

(i) RF power meter and attenuators.
(ii) RF signal generator.
(iii) Distortion analyser.

Note: Refer to Section 3, Table 3.1, for suitable types.

LEVEL 3 SERVICE/MAINTENANCE

Level 3 is defined as 'servicing of boards and modules to component level'.

Workshop Facilities Required

Level 3 Service/Maintenance is to be undertaken at well equipped workshops with suitable skill level available and necessary environment and equipment to maintain the original quality standards for the product.

Test Equipment requirements

(i) Full Service Manual (TP94)
(ii) Full complement of test equipment as detailed in TP94, Section 3, Table 3.1.

LEVEL 4 SERVICE/MAINTENANCE

This level of repair is carried out at a Central Repair Unit and is intended to cover the complete cosmetic, electrical and mechanical repair of faulty radio units.

The units repaired by the Central Repair Unit are designated as Field Exchange Units (FEU's). All faulty and repaired FEU's shall be routed to and from the Central Repair Unit via Consumer Service. It is essential that faulty and repaired units are packed in a manner that prevents any damage during transit.