Audeon Receivers RX5 - RX6

Technical Note - 21st June 2005

We are now shipping the new RX6 receiver in place of the RX5. There are a few changes to the design which came into effect from serial number 05-04-9500. The user will not notice any change in performance

The following changes have been implemented in the new design

PLL   National Semiconductor discontinued their part so this has been replaced by one manufactured by Atmel.

Noise Reduction   A fire at the Philips factory in France destroyed their production facilities. Philips do not intend to produce the chips at another factory and have made them obsolete so we have decided to use a Motorola part.

These changes have resulted in us having to redesign the receiver PCB so we have also taken the opportunity to include a few other design changes

PLL Crystal   Changed from 4.0 MHz to 8.0 MHz to avoid possible pick up of the 21st harmonic of the crystal at 84.0 MHz..

PIC   Changed to one which has a built in EEPROM. This allows for the following new facilities.

                   Reassignment of individual channel frequencies on site by the installer.

                   Recording the number of hours the battery is used.

                   Recording the number of times the receiver is switched on.

                   Recording the number of times the receiver switches off due to the headphones being disconnected.

                   Changing the time out of 40 minute switch off timer

RX6 Software Versions

RX6v0   Interim program to convert the software from RX5 to RX6 so that production
               and delivery are not affected This version does not include the EEPROM
               features.

RX6v04   Replaces RX5v5 for 4/8 channel frequency plan.

RX6v06   Replaces RX5v8 for 6/8 channel frequency plan.

Please note   that RX6 software cannot be used with the RX5 and RX5 software cannot be
               used with the RX6.

RX6v1   This program which has all the new features will be used on all receivers
               despatched from 21st June 2005 (Serial No 9956)

Interface Module

To communicate with the serial EEPROM from a PC serial port an interface module will be
required. This module, which is also being developed will allow installers to pre load the channel
frequency plan and reassign the frequencies without having to manually program each receiver
individually so saving time. The installer will also be able to read the battery use time and the
number of times the receiver has been used. A software program to accompany the interface
board will also be available for use on a PC.

Frequency plans can also be preloaded at the factory before the new receivers are despatched if
required at no extra charge.

A copy of the new instruction leaflet will be included with all deliveries and wil be available on
the website at www.m-jay.co.uk/pdf/rx6ins.pdf