# SDU5500 OPERATING MANUAL ADDENDUM

## 1. Use with the AR3000A

If using an AR3000A receiver with the SDU5500, section 4-2 page 17 describes the configuration of the AR3000A for use at 9600bps. Please ignore this reference and leave the radio configured to the factory default of 4800bps (the baud rate selection slide dip switch pressed to the edge of the PCB).

In addition, when the SDU5500/AR3000A combination is used for the first time, the SDU5500 may display the wrong centre frequency (receive frequency), receive mode and tuning step. Simply switch the SDU5500 off and on again to correct this. The combination will continue to operate correctly until completely powered down and back on again... in this case simply switch the SDU5500 off and on again following configuration.

## 2. Flash upgrade of CPU

The initial release firmware was V1.050 while later production carries V1.010, V1.011 (*or higher*), hold the decimal key of the SDU5500 to display the firmware version number. As the CPU is flash up-gradeable, it is possible to upgrade ANY SDU5500 by transferring a HEX file via the RS232 link using Windows HyperTerminal or similar software. Full details of upgrade and the HEX file can be found on the AOR UK web site http://www.aoruk.com/software (follow the links to the SDU5500). The paperwork describing the upgrade process and added RS232 commands is in Adobe Acrobat format on the same internet site, a free Acrobat reader is available from the Adobe internet site at http://www.adobe.com/acrobat

## 3. RS232 changes with later firmware releases

On the later versions of the SDU5500, the RIGD command is made invalid. In place of RIGD, RICD and RIFD should be used.

#### **RICD** command

Examples of response to RICD command "ICD" + (CR)(LF).... Acknowledgement "f" + frequency (MHz)... Frequency ", " .... divider "I" + level(dbm)... Level (CR)(LF)...... End

Basically this is equivalent to J command of the earlier SDU5000 with the exception of "ICD" up front. *Typical example of response* 

ICD f80.0000,I-75

## RIFD command

"IFD" + (CR)(LF).... Acknowledgement "K" + (CR)(LF)...... Start of data download Data (0 - FF, max 304 byte)..... Data "k" +(CR)(LF)...... End of data download

This is equivalent to K command of the earlier SDU5000 with the exception of IFD up front.

With the SDU5500, volume of data is variable (in step resolution mode, etc) the length of data is also variable. WAIT when remote-controlling the receiver via the SDU5500. The SDU5500 has a buffer which enables the operator to send commands continuously.

Extra SDU5500 RS232 commands for the later firmware can be found in the UPGRADE Acrobat file stated above.

#### 4. PC Windows software - FREE

A free software package to control the SDU5500 has been loaded onto the AOR web sites. The software provides a virtual display of the SDU5500 with video recording via AVI files to the computers hard drive for later re-play and analysis. Visit http://www.aoruk.com/software or check out the other AOR web sites http://www.aorja.com http://www.aorusa.com

