AOR AR5000 OPERATING MANUAL ADDENDUM (earlier serial numbers)

From the first release, the microprocessor of the AR5000 has encountered a small number of changes. The final version manual (V1.0) is based upon production sets in the latter half of 1996 with serial numbers around 7xxxx. While "most" of the final version operating manual is applicable to the earlier release AR5000, there are a number of important differences.

This addendum provides a quick reference, listing the main differences then describes in greater detail the implications and specific key stroke substitutes in order of appearance in the manual. Although it is not possible to "update" the microprocessors of earlier production sets, each version has its own merits: Earlier sets offer memory swap, copy and edit facilities not included in later versions. Later versions provide simple search user adjustable variables to enhance the VFO search (not program search) facility.

The word "manual" refers to the "final version operating manual" and not to any receive operating mode nor previously supplied provisional operating manual(s). The final version operating manual is version 1.0

Quick reference (read this):

Two front panel keys are different (lower left corner).

OPTION MENU: The front panel key **[VFO]** has a second function of "OPTION" rather than "V.MODE" as referred to in the manual and shown on the manual's front cover. To access the OPTION MENU, press **[FUNC] [VFO]**, *not [FUNC] [0] as described in the manual.*

EDIT MENU: The early production AR5000 has an additional MEMORY EDIT facility for copying, swapping and editing memory information. To access this menu press **[FUNC] [0]**, the ZERO key having a second function of "EDIT", *not "OPTION" as described in the manual.*

*Note: It is possible that some sets are a half-way between models having largely the microprocessor operation as described in the final version operating manual but front panel of the earlier production sets. In this case, simply ignore the second function **legends** of the two affected keys.*

Ignore reference to V.MODE

V.MODE: This facility is not supported in earlier production units, ignore section 12-3 of the final version manual and other references to V.MODE.

Different key stroke to access AUTOMODE

AUTOMODE: Automode (automatic selection of receive mode, I.F. filter bandwidth etc.) is activated by a MOMENTARY PRESS of the **[MODE]** key and not by a prolonged press as suggested in the manual. Substitute all reference to this key stroke.

AUTO AERIAL: The programming of auto aerial switching (section 6-20 of the manual) is slightly different, refer to the more detailed text later in this addendum.

ATTENUATOR & PREAMP: The selection of attenuator and preamp is by different menus; they are not directly coupled as described in the manual (section 6-14 of the manual).

STEP SIZE: Not all step sizes for the MAIN DIAL and SUB DIAL shown in the manual are available from the menu, this is largely unimportant as the operator may define alternative step sizes.

RS232 control: The computer control delimiter and carriage return (DELI & CR) may be specified in the CONFIG MENU, this is not supported on later production units. The available RS232 transfer rates are 2400, 4800 & 9600 bps (19200 is not available).

kHz / MHz: Automatic legend display is set at 1.6 MHz (1600 kHz) rather than at 3.0 MHz (3000 kHz) as suggested in the manual.

"SR" legend during SEARCH: The legend "SR" is NOT displayed, instead a STEADY "SCAN" legend is displayed. As no memory channel location is displayed, it is clear that SEARCH is in operation as opposed to SCAN. This is applicable to all search types.

Selection: - [UP] [DOWN], SUB DIAL, [PASS]

In various menus, the selection device (key or SUB DIAL) may vary from that specified, although this addendum catches "most" cases, you may need to experiment if things don't appear to work out!

Section-by-section key stroke changes:

If, when operating the AR5000, things don't appear to follow the examples described in the manual, refer to this section bearing in mind the points noted in the previous quick reference section of this addendum.

2-1 Key information and menus:

Mode selection (6-9) - *page 3*

Automode is called by a quick press of the **[MODE]** key

Option menu (6-12, 6-13, 15-2, 16-2) - *page 3*

To access the option menu the sequence **[FUNC] [VFO]** is used

Config menu (6-16, 6-17, 6-18, 6-19, 6-20, 6-21) - *page 3*

Add the DELI CR+LF item between BPS and ANT selection

Additional VFO facilities (12-3) - *page 3*

Delete this list and replace by CPY (copy) SWP (swap) EDT (edit) memory manipulation accessed by the key sequence **[FUNC] [0]**

5-1 Liquid Crystal Display - *page 8*

18 Attenuator setting: Selection of the attenuator / preamplifier are available in separate sub menus called by pressing the **[ATT]** key. The **[UP] [DOWN]** keys are used to step between the menus and the SUB DIAL is used to make selection ON/OFF. The preamplifier cannot be switched on when listening to frequencies above 230 MHz. The attenuator cannot be switched on when listening to frequencies above 1,000 MHz. The displayed attenuator setting is 0dB and 10dB.

19 kHz / MHz: Automatic legend display is set at 1.6 MHz (1600 kHz) rather than at 3.0 MHz (3000 kHz).

20 AMP: Refer to "18" above.

28 SEARCH: In SEARCH mode, only two digits (bank) are displayed (while in SCAN mode three digits are displayed indicating bank and channel data). The "SR" legend is not displayed.

5-13 Front panel keys - *page 10*

Illustration of keypad: The second function displayed above the **[VFO]** key should be "OPTION". The second function displayed above the **[0]** key should be "EDIT".

[VFO] - V.MODE - *page 11*

Replace the second function "V.MODE" with "OPTION". To access the OPTION menu use the key sequence **[FUNC] [VFO]** *(the manual shows the key sequence [FUNC] [0] to access the OPTION menu)*. Remove any reference to V.MODE.

Consider the heading as reading **VFO - OPTION**

[0] - OPTION - *page 12*

Consider this as reading **0 - EDIT**

The second function is "EDIT" rather than "OPTION". To access the OPTION menu, use the key sequence **[FUNC] [VFO]** *rather than [FUNC] [0]*.

To access the menu for manipulating memory data press **[FUNC] [0]**, which is the "EDIT" menu.

CPY - COPY

It is possible to COPY (CPY) the contents of one memory channels to a different location (bank and channel). This may be useful if you have changed many of the user definable variables such as receive mode, I.F. bandwidth etc as the need to re-enter data is eliminated.

COPY mode may only be used while in memory recall or VFO mode. If you are not already in memory recall mode or VFO mode, press **[VFO]** once. To enter copy mode press **[FUNC] [0]**, the legend "CPY" will be displayed toward the centre-right of the LCD.

Use the keypad to select the three-digit memory location which you wish to copy FROM (or use the MAIN DIAL or SUB DIAL in the usual manner).

Press **[ENTER]** to accept the location to copy FROM.

The LCD arrows will reverse prompting you to select the memory location you wish to copy TO (use the keypad to select the three-digit memory location or use the MAIN DIAL or SUB DIAL in the usual manner).

Press **[ENTER]** to accept the location to copy TO.

The LCD arrow legends reverse again allowing you to continue copying FROM and TO other locations should you choose. To escape this operating mode, press **[CLR]**.

SWP - SWAP

It is possible to SWAP (SWP) the contents of one memory channel with the data from another. In other words, you can copy the data from (for example) memory channel 123 into channel 876 while simultaneously copying the data from memory channel 876 back into channel 123... they are swapped!

SWAP mode may only be used while in memory recall or VFO mode. If you are not already in memory recall mode or VFO mode, press **[VFO]** once. To enter copy mode press **[FUNC] [0]**, the legend "CPY" will be displayed toward the center-right of the LCD. Press the **[UP]** key twice to enter SWAP mode, the legend "SWP" will be displayed center-right of the LCD.

Use the keypad to select the three-digit memory location which you wish to swap FROM (or use the MAIN DIAL or SUB DIAL in the usual manner).

Press **[ENTER]** to accept the location to swap FROM.

The LCD arrows will reverse prompting you to select the memory location you wish to swap WITH (use the keypad to select the three-digit memory location or use the MAIN DIAL or SUB DIAL in the usual manner).

Press **[ENTER]** to accept the location to swap WITH.

The LCD arrow legends reverse again allowing you to continue swapping locations should you choose. To escape this operating mode, press **[CLR]**.

EDT - EDIT

It is possible to EDIT (EDT) the contents of any chosen memory channel, this is especially useful for "adding" a text comment, if only frequency, mode data "less TEXT" has previously been stored. *Note: Only receive frequency and text comment may be edited via this menu.*

EDIT mode may only be used while in memory recall or VFO mode. If you are not already in memory recall mode or VFO mode, press **[VFO]** once. To enter copy mode press **[FUNC] [0]**, the legend "CPY" will be displayed toward the center-right of the LCD. Press the **[UP]** key four times to enter EDIT mode, the legend "EDT" will be displayed center-

right of the LCD. *Note: If a memory channel is already displayed (in memory recall mode), you may edit text immediately by pressing the [DOWN] key once.*

When using the main edit menu, use the keypad to select the three-digit memory location which you wish to EDIT (or use the MAIN DIAL or SUB DIAL in the usual manner).

Press **[ENTER]** to accept the location to EDIT.

The LCD will display the current receive frequency. Key in the new frequency followed by **[ENTER]**... if you just wish to change or add a text comment, press **[ENTER]** without entering a new receive frequency.

The flashing legend "TXT" invites you to enter a text comment in the usual manner, complete the entry by pressing **[ENTER]**. The display will revert to VFO or MEMORY RECALL, whichever was previously in use**.**

5-13 [ATT] - ANT - *page 14*

Selection of the attenuator / preamplifier are available in separate sub menus called by pressing the **[ATT]** key. The **[UP] [DOWN]** keys are used to step between the menus and the SUB DIAL is used to make selection ON/OFF. The preamplifier cannot be switched on when listening to frequencies above 230 MHz. The attenuator cannot be switched on when listening to frequencies above 1,000 MHz. The displayed attenuator setting is 0dB and 10dB.

M.TUNE: The SUB DIAL makes selection between AUTO and MANUAL. Press the **[UP]** key to display preselection value which may be varied using the MAIN DIAL or SUB DIAL, the **[DOWN]** key reverts back to the MANUAL menu.

6-2 Changing VFO - *page 17*

Delete all reference to the VFO search options menu accessed by **[FUNC] [VFO]**.

6-6 Selecting tuning increment - *page 19*

Not all steps sizes for the MAIN DIAL and SUB DIAL shown in the manual are available from the menu, this is largely unimportant as the operator may define alternative step sizes.

6-7 Step-adjust - *page 20/21/22*

During the STEP SIZE ENTRY, press **[PASS]** to select step adjust before keying in the desired tuning step size.

After selecting step size, the tracking of the SUB DIAL may also be selected.

If after completing the sequence, step adjust does not appear to operate (or if the receive frequency is incorrect after data entry), key in the desired receive frequency again.

6-9 Changing receive mode (AUTOMODE) - *page 22/23*

Automode (automatic selection of receive mode, I.F. filter bandwidth etc.) is activated by a MOMENTARY PRESS of the **[MODE]** key and not by a prolonged press as suggested in the manual. Substitute all references to this key stroke sequence.

6-14 RF Attenuator & preamplifier - *page 28*

Selection of the attenuator / preamplifier are available in separate sub menus called by pressing the **[ATT]** key. The **[UP] [DOWN]** keys are used to step between the menus and the SUB DIAL is used to make selection ON/OFF.

6-19 Config menu - Computer BPS *(DELI CR+LF)* - *page 29/30*

The RS232 transfer rates are 2400, 4800 & 9600 bps (19200 is not available).

An extra item has been included following selection of BPS, "DELIMETER".

The "LF" (LINE FEED) can be selected ON/OFF using the SUB DIAL.

6-20 CONFIG - Advanced aerial switching - *page 30/31/32*

The LCD displayed method of data entry is different from that shown in the manual. Five aerials are mentioned (ignore the 5th!), just make sure the data for the 5th is deleted using the **[PASS]** key. Instead of selecting aerials as "ANT1" etc. followed by "channel 0", "channel 1" etc., all input is shown on the right of the LCD as a two-digit number. "10" is aerial 1 channel 0, 23 is aerial 2 channel 3 etc... otherwise little has changed.

Page 30 section 2: 5 not 4 presses of the **[UP]** key.

Page 30 section 3: Use the SUB DIAL (not MAIN DIAL).

Page 31 section 1: 5 not 4 presses of the **[UP]** key.

Page 31 section 2: Use the SUB DIAL (not MAIN DIAL) to select "20" in the top right of the LCD, aerial 2 channel 0.

Page 31 section 3: The display will return to the CONFIG MENU.

The same applies to the COMPLEX AERIAL SWITCHING example.

7-4 Changing and deleting memory data - *page 35/36*

It is also possible to COPY, SWAP and EDIT memory data as detailed earlier in this addendum

12-1 Manual SEARCH - *page 46/47*

Page 47 section 3: The legend "SR" is NOT displayed, instead a STEADY "SCAN" legend is displayed and the VFO legend "VA" is displayed on the right of the LCD. As no memory channel location is displayed, it is clear that SEARCH is in operation as opposed to SCAN. This is applicable to all search types.

12-3 Optimizing VFO search parameters - *page 48*

Delete the whole section, not applicable.

12-18 Cyber search - *page 57*

When in CYBER SEARCH mode, the legend "CYBER SCAN" is displayed along with the flashing legend "SCAN". As a two-digit BANK location is displayed on the right of the LCD with no channel number, it is clear that SEARCH (rather than SCAN) is in progress.

15-1 & 15-2 Descrambler installation - *page 65/66*

The option menu is accessed by the key sequence **[FUNC] [VFO]**

15-1 section 4 - *page 66*

To toggle the current selection ON/OFF press **[FUNC] [VFO] [PASS] [ENTER]**

16-1, 16-3 & 16-4 CTCSS installation - *page 67/68*

The option menu is accessed by the key sequence **[FUNC] [VFO]**

16-3 section 4 - *page 66*

To toggle the current selection ON/OFF press **[FUNC] [VFO] [PASS] [ENTER]**

16-4 section 6 - *page 68*

To toggle the current selection ON/OFF press **[FUNC] [VFO] [PASS] [ENTER]**