



# ALBRECHT®



## AE 82 H / AE 82 H BT Scanning Receiver



ALBRECHT®

## CONTENTS

1. CAUTIONS.....	4
2. ABOUT AE 82 H/BT MODELS .....	4
3. SUPPLIED EQUIPMENT .....	5
4. INSTALLING THE BATTERIES .....	5
5. INSTALLING THE ANTENNA .....	5
6. CONTROLS .....	6
Power On/Off Lock Button.....	7
Antenna.....	7
Squelch Up/Down Keys .....	7
Function Key .....	7
Enter/VFO Keys .....	7
Menu/MW Keys .....	7
Step/MR Keys .....	7
Bank/Band&Skip Key .....	7
Scan / Search&DW Key .....	7
Up / Down Keys .....	7
Charger Jack .....	7
LCD Display .....	7
Earphone and Programming Jack .....	7
Control Knob .....	7
Lanyard Slot .....	7
7. EXTENDED KEYPAD CONTROLS .....	8
8. LCD DISPLAY .....	8
9. GENERAL OPERATION .....	9
Turning the unit On or Off.....	9
KEY Lock.....	9
Volume.....	9
Squelch.....	9
Func Key.....	9
Menu Key .....	9
E/VFO Key [Enter/VFO].....	9
Control Knob .....	10

10. SELECTING FREQUENCIES .....	10
Mode Selection .....	10
Frequency Step Selection.....	10
11. FREQUENCY BANDS.....	11
12. FREQUENCY SEARCH.....	12
Selected Band Search .....	12
Full Band Search .....	12
Dual Watch .....	13
13. MEMORY BANKS .....	14
14. STORING FREQUENCIES INTO THE MEMORIES .....	14
15. RECALLING FREQUENCIES FROM THE MEMORIES .....	15
16. CHANNEL SCAN .....	15
Selected Bank Scan .....	15
Full Band Scan .....	15
Dual Watch .....	16
17. MENU SETTINGS .....	16
VFOMode.....	17
Memory Read Mode .....	17
18. BLUETOOTH COMPATIBLE OPERATION .....	18
19. TROUBLE SHOOTING .....	18
20. SPECIFICATIONS .....	19
General.....	19
Receiver .....	19

## CAUTIONS

- Please read these instructions carefully before operating your receiver. Your scanner is a complex and powerful unit with many functions. Please retain this manual for future reference. Any illegal use offending the national law is not allowed.
- Never connect the receiver to the power source other than the specified battery. Otherwise the damage to your receiver may occur.
- Never use the receiver in or near the mining area, near explosives or where signs indicate 'Blasting Area'. Never use or charge the receiver in a potentially explosive atmosphere.
- Do Not place the receiver in front of the vehicle air bag.
- Do Not operate the receiver on board the aircraft.
- Always charge the receiver at normal room temperature.
- Always replace the accessory jack cover when the jack is not in use.
- Use only manufacturer-supplied rechargeable battery in your receiver.
- Do Not expose the receiver to water. It is not waterproof.
- Avoid storing or charging the receiver in direct sunlight.
- Avoid storing the receiver in temperatures below -10°C to +60°C
- Never try to charge Alkaline batteries or any dry cells.

## ABOUT AE 82 H/BT MODELS

We offer two models of your scanner receivers.

AE 82 H is the basic version and AE 82 H-BT additionally includes the Bluetooth compatible operation.

Except for this Bluetooth compatible operation, all other features, functions and specifications are same.

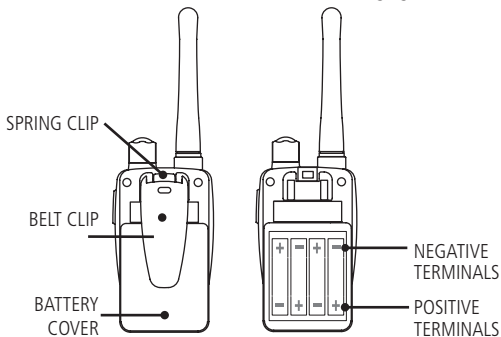
Please carefully check whether your receiver is the Bluetooth compatible model or not before starting your use.

## SUPPLIED EQUIPMENT

- Scanner Receiver
- Antenna
- Belt Clip

## INSTALLING THE BATTERIES

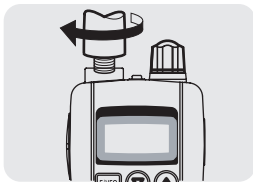
Battery installation is made more convenient when the belt clip is removed. To do this, release the spring clip securing the belt clip to radio and slide the belt clip downward and away from the radio body. Next, press down with the thumb at the arrow, slide the battery cover down and lift off the battery cover. Insert four AAA batteries (alternate positive ends (+) toward the bottom of the transceiver (starting right to left).



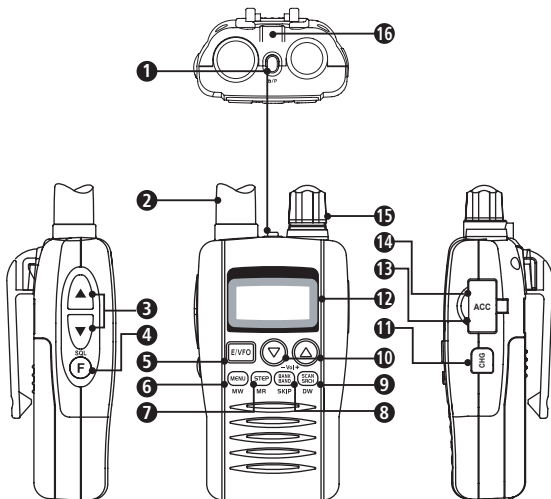
1. Using thumb, press down on battery cover at arrow and slide cover down to open.
2. Slide the cover down and then lift cover at bottom to open. Remove cover.
3. Insert four AAA batteries (positive(+)) end toward the bottom beginning at right side

## INSTALLING THE ANTENNA

- 1) Place the antenna onto the antenna socket on top of the radio.
- 2) Rotate the antenna clockwise to screw into place.
- 3) Do not over tighten.



## CONTROLS



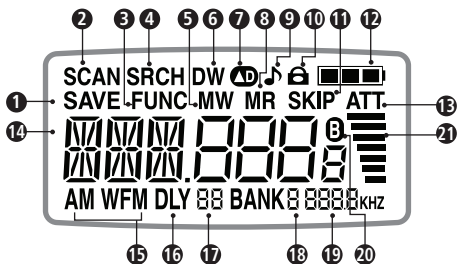
- |                            |                         |
|----------------------------|-------------------------|
| 1 Power On/Off Lock Button | 9 Scan / Search&DW Keys |
| 2 Antenna                  | 10 Up / Down Keys       |
| 3 Squelch Up/Down Keys     | 11 Charger Jack         |
| 4 Function Key             | 12 LCD Display          |
| 5 Enter/VFO Keys           | 13 Earphone Jack        |
| 6 Menu/MW Keys             | 14 Programming Jack     |
| 7 Step/MR Keys             | 15 Control Knob         |
| 8 Bank/Band&Skip Keys      | 16 Lanyard Slot         |

- 1 Power On/Off Lock Button**  
Turns the receiver on and off. Also locks the keypad.
- 2 Antenna**  
Provides reception of signals.
- 3 Squelch Up/Down Keys**  
Opens and closes the squelch.
- 4 Function Key**  
Enables extended keypad control functions.
- 5 Enter/VFO Keys**  
Confirms selections and selects the VFO mode.
- 6 Menu/MW Key**  
Provides access to setup menus and also access to write memories.
- 7 Step/MR Key**  
Provides access to setup frequency steps and also access to read memories.
- 8 Bank/Band&Skip Key**  
Used to change Memory Banks or Frequency Bands, and also used to skip channels or frequencies.
- 9 Scan/Search&DW Key**  
Used to activate or deactivate the Scan function in memory read mode or the Search function in VFO mode. Also used to activate or deactivate Dual Watch function.
- 10 Up/Down Keys**  
Adjust the Volume and selects Menu items and frequency steps.
- 11 Charger Jack**  
Provides Charging connection. (Optional accessories are required.)
- 12 LCD Display**  
Shows frequencies and selected functions.
- 13 Programming Jack**  
Provides connection for programming kit. (Optional accessories are required.)
- 14 Earphone Jack**  
Provides earphone connection.
- 15 Control Knob**  
Selects frequencies and channels and selects values from menus.
- 16 Lanyard Slot**  
Allows connection of the Lanyard to protect the receiver from being accidentally dropped.(Optional accessory required.)

## EXTENDED KEYPAD CONTROLS

KEY	FUNCTION	DESCRIPTION
<b>F</b> + <b>MENU</b> MW	Manual Write	Allows storage of frequencies into the Memory storage.
<b>F</b> + <b>STEP</b> MR	Memory Read	Allows reading of the frequencies from the stored memories.
<b>F</b> + <b>BANK BAND</b> SKIP	Skip	Used to Skip channels when Scanning or Skip frequencies when Searching.
<b>F</b> + <b>SCAN SRCH</b> DW	Dual Watch	Activates or Deactivates the Dual Watch function.

## LCD DISPLAY



- |                       |                                 |                                |
|-----------------------|---------------------------------|--------------------------------|
| <b>1</b> Power Save   | <b>8</b> Memory Read            | <b>15</b> AM/FM WFM Mode       |
| <b>2</b> Scan         | <b>9</b> Key Tone               | <b>16</b> Scan Delay Timer     |
| <b>3</b> Function     | <b>10</b> Keypad Lock           | <b>17</b> Channel Indicator    |
| <b>4</b> Search       | <b>11</b> Skip                  | <b>18</b> Bank Number          |
| <b>5</b> Memory Write | <b>12</b> Battery Balance Level | <b>19</b> Frequency Step       |
| <b>6</b> Dual Watch   | <b>13</b> Attenuator            | <b>20</b> Bluetooth compatible |
| <b>7</b> Delta        | <b>14</b> Frequency Display     | <b>21</b> Signal Meter         |

**Turning the unit On or Off**

Press and hold the RED Button on the top of the unit to turn the unit ON.

Press and hold the RED Button again to turn the unit OFF.

**Key Lock**

Briefly press the RED Button on the top of the unit to turn the Key Lock ON.

Briefly press the RED Button again to turn the Key Lock OFF again.

**Volume**

Press the ▲ key to increase the volume.

Press the ▼ key to decrease the volume.

The volume level will be displayed from 00 to 32.

**Squelch**

Press the ▲ key on the side of the radio to increase the Squelch setting and the ▼ key on to decrease the Squelch setting. The Squelch level will be displayed from 00 to 09. 00 is open status and 09 is near the closed squelch. At maximum Squelch setting, 'AT' is selected which represents an automatic (preset) level setting.

**Func Key**

The **Function** key provides access to secondary (extended) keypad-functions associated with the front panel keys. The secondary function labels are printed below respective keys.

**Menu Key**

The **Menu** key provides access to the radio settings.

**E/VFO Key[Enter/VFO]**

Press the **E/VFO** key to select the VFO mode or confirm any selections.

**Note:** The receiver always selects the VFO mode each time it is turned on.

## Control Knob

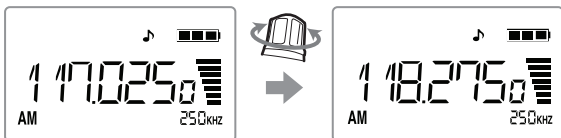


The **Control** knob is used to change the current display option. In VFO mode, rotate the **Control** knob to change the displayed frequency at the selected frequency steps. Rotate clockwise to increase the frequency and counter clockwise to decrease the frequency. In Menu mode, rotate the **Control** knob to change the selected setting. In Channel memory mode, rotate the **Control** knob to step up or down through the memories.

## SELECTING FREQUENCIES

The receiver always selects the VFO mode when it is turned on. You can select frequencies using the Control Knob.

Rotate the Control knob to step up or down in frequency from the starting point. The frequency will change in the selected frequency step.



- To change frequency in 1 MHz step, press the **Func** key, then use the Control knob to change the frequency. **Func** is displayed while the Function mode is activate).



**Note :** The **Func** mode clears a few seconds after the last key press or control knob change.

### ■ Mode (AM,FM,WFM) Selection

By default, the receiver automatically selects the suitable modulation Mode used for each band(see the Frequency Band chart for the default modes for each band).

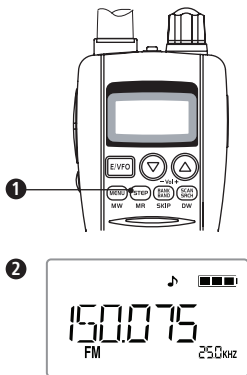
## ■ Frequency Step Selection

By default, the receiver automatically selects the frequency Steps most commonly used for each band (see the Frequency Band chart for the default Steps for each band).

To select a different step :

- 1) In VFO mode press STEP.
- 2) The following frequency steps are available for your selection.

5 kHz
6.25 kHz (6.2 displayed)
8.33 kHz (8.3 displayed)
10 kHz
12.5 kHz
15 kHz
20 kHz
25 kHz
30 kHz
50 kHz
100 kHz
500 kHz
Auto



If Auto is selected the receiver will automatically select the appropriate default frequency Step for each band.

**Note :** 8.33 KHz step is available only within the air band. (108 - 135.99 MHz)

## FREQUENCY BANDS

The Scanner supports the following Frequency Bands.

To select a band, repeat momentarily pressing the BANK BAND key until the preferred band is selected.

Frequency Band	Start up Frequency	Default Mode	Default Step
66 MHz to 87.5 MHz	66 MHz	FM	25kHz
87.5 MHz to 108 MHz	87.5 MHz	WFM	100kHz
108 MHz to 135.975 MHz	118 MHz	AM	25kHz
136 MHz to 174.000 MHz	150 MHz	FM	25kHz

## FREQUENCY SEARCH

### ■ Selected Band Search

Use the Search function to locate active frequencies in one or more bands

1) Press the E/VFO key to select VFO Mode.  
(Note: the receiver automatically selects the VFO mode when it is turned on).

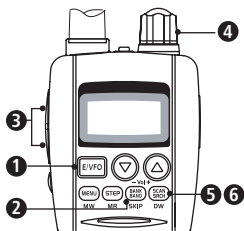
2) Press the BAND key to select the required Band. There are 4 factory preset Bands to choose from (see Frequency Band Table).

3) Set the Squelch level using the Squelch ▲ or ▼ keys so that the noise just disappears.

4) Select a start frequency to Search from.

5) Press the **SCAN SRCH** key briefly. The 'SRCH' icon will be displayed and the receiver will search the selected Band starting from the start frequency. Once the end of the band is reached the Search continues at the beginning of the selected Band.

6) To stop the Search, press the **SCAN SRCH** key again.



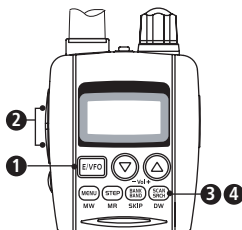
#### Note:

- 1) During the Search, press the **BANK BAND** key to move to the next Band.
- 2) To change the Search direction rotate the Control knob clockwise or counter clockwise.
- 3) The receiver will stay on an active channel according to the Busy Timer settings in the VFO Menu. If the Busy Timer is set to '5 Seconds', the receiver will continue searching after 5 seconds even if the channel is still busy. If the Busy Timer is set to 'Busy', the receiver will remain on the busy frequency for as long as it stays busy, then resume searching when the signal disappears.

## ■ Full Band Search

The Full Search function searches the entire scanner frequency range for signals.

- 1) Press the **E/VFO** key to select VFO Mode.  
(Note: the receiver automatically selects the VFO mode when it is turned on).
- 2) Set the Squelch level using the Squelch ▲ or ▼ keys so that the noise just disappears.
- 3) Press and hold the **SCAN SRCH** key for 2 seconds. The 'SRCH' icon will be displayed and the receiver will Search the entire frequency range of the receiver.
- 4) To stop the Search, press the **SCAN SRCH** key again.



### Note:

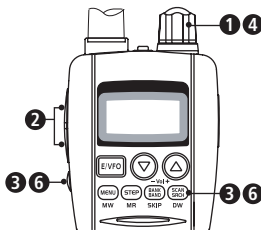
- 1) During the Search, press the **BANK BAND** key to move to the next Band.
- 2) To change the Search direction rotate the Control knob clockwise or counter clockwise.
- 3) The receiver will stay on an active channel according to the Busy Timer settings in the VFO Menu. If the Busy Timer is set to '5 seconds', the receiver will continue searching after 5 seconds even if the channel is still busy. If the Busy Timer is set to 'Busy', the receiver remain on the busy frequency for as long as it stays busy, then resume searching when the signal disappears.

## ■ Dual Watch

The Dual Watch function lets you constantly monitor two frequencies for activity.

To set the Dual Watch function:

- 1) Enter one of the required frequencies using the Control knob,
- 2) Adjust the squelch so that the receiver is muted.
- 3) Press **Func DW**.



- 4) Enter the second frequency using the Control knob.
- 5) The Dual watch begins automatically. If a signal is received, the receiver will remain on the active frequency for the duration of the 'Busy Timer' setting in the Menu setup. If the 'Busy Timer' is set to Busy the receiver will stay on the active frequency.
- 6) To stay on an active frequency indefinitely or to stop the Dual Watch function press **Func DW** again. The receiver will exit the Dual Watch function.

## MEMORY BANKS

The scanner memory storage has a capacity of 00 locations. These are split and stored into 10 banks. Each bank has 20 channel storage capability.

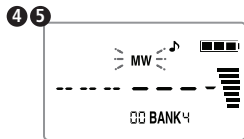
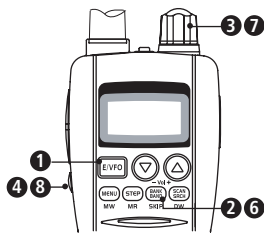
### ■ How to Memorize Frequencies

The Memory area allows the user to manually store up to 200 individual frequencies. The default memory banks are labelled 0 to 9.

## STORING FREQUENCIES INTO THE MEMORIES

To store a frequency into one of the memories:

- 1) Press the **E/VFO** key to select VFO Mode.
- 2) Press the **BANK BAND** key to select the required Band.
- 3) Select the frequency that you want to store using the control knob.
- 4) Press **Func MW** to enter the Memory Write mode.
- 5) The receiver will find and display an empty memory bank and memory location automatically.
- 6) If required, use the **BANK BAND** key to select a new memory bank.
- 7) To change the memory location, rotate the control knob.
- 8) Press **Func MW** again to store the frequency.



## RECALLING FREQUENCIES FROM THE MEMORIES

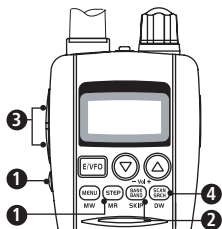
- 1) Press the **E/VFO** key to select VFO Mode.
- 2) Press **Func MR**. The receiver will enter the Memory Read mode.
- 3) To step through the memory banks press the **BANK BAND** key.  
Memory banks are numbered 0 to 9.
- 4) Select the required channel using the control knob.

## CHANNEL SCAN

### ■ Selected Bank Scan

Use the Scan function to locate active channels among the memorized channels in one bank.

- 1) Press **Func MR** to select the Memory Read mode.
- 2) Press **Bank/Band** to select the preferred memory bank.
- 3) Set the squelch level to a point where the receiver is just quiet.
- 4) Press **SCAN/SRCH**. The receiver will begin scanning the selected Band.



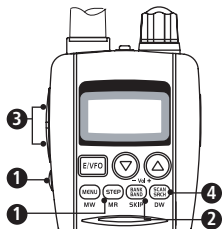
### Note:

- 1) If a signal is received, the receiver will remain on the active channel for the duration of the 'Busy Timer' setting in the Menu setup. If the 'Busy timer' is set to Busy the receiver will stay on the active channel for as long as the signal is present.
- 2) To change the bank while scanning, briefly press BANK/BAND key.
- 3) To change the scan direction while scanning, rotate the control knob clockwise or counter clockwise.

### ■ Full Bank Scan

The Full Bank Scan function scans the entire memorized channel range for signals.

- 1) Press **Func MR** to select the Memory Read mode.
- 2) Press **Bank/Band** to select the preferred memory bank.
- 3) Set the squelch level to a point where the receiver is just quiet.
- 4) Press and hold **Scan/Srch** for 2 seconds.  
The receiver will begin scanning the entire full Bands.



**Note:**

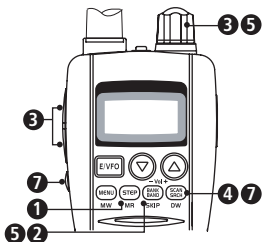
- 1) If a signal is received, the receiver will remain on the active channel for the duration of the 'Busy Timer' setting in the Menu setup. If the 'Busy timer' is set to Busy the receiver will stay on the active channel for as long as the signal is present.
- 2) To change the bank while scanning, briefly press **BANK/BAND** key.
- 3) To change the scan direction while scanning, rotate the control knob clockwise or counter clockwise.

**■ Dual Watch**

The Dual Watch function lets you constantly monitor two channels.

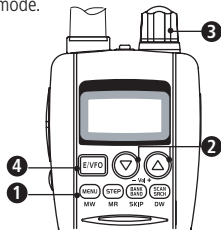
To set the Dual Watch function:

- 1) Press **Func MR** to enter the Memory Read Mode.
- 2) Press Bank/Band to select the preferred memory bank.
- 3) Select one of the required channels using the control knob, and adjust the squelch level.
- 4) Press **Func DW**.
- 5) Enter the second frequency using the BANK/BAND and Control knob.
- 6) The Dual watch begins automatically. If a signal is received, the receiver will remain on the active channel for the duration of the 'Busy Timer' setting in the Menu setup. If the 'Busy Timer' is set to Busy the receiver will stay on the active channel.
- 7) To stay on an active frequency indefinitely or to stop the Dual Watch function press **Func DW** again. The receiver will exit the Dual Watch function.

**MENU SETTINGS**

The Menu settings will vary depending on the selected mode.

- 1) Press the **MENU** Key to access the Menu settings
- 2) Press the volume **▲▼** keys to step through the Menu items.
- 3) Rotate the Control knob to change the values of each Menu item.
- 4) Press the E/VFO key to confirm the change.



## ■ VFO Mode

FUNCTION	DESCRIPTION	VALUES
Busy Timer BUSY	Determines how long the receiver will wait on a busy channel while Scanning or Searching. When 'Busy' is selected, the receiver will stay on the busy channel as long as it remains busy.	Busy, 5 Seconds
Beep BEEP	Activates or deactivates the key-press beeps.	ON, OFF
Delay DELAY	Determines how long the radio will wait on a frequency after a signal has disappeared while scanning or Searching.	1-10 Seconds
Attenuation ATT	Reduces the receive sensitivity by -10dB.	ON, OFF
Delta DELTA	Offsets frequencies.	-5kHz, -10kHz, -15kHz, OFF
Bluetooth Compatible Operation BT	Activates or deactivates the Bluetooth compatible operation.	ON, OFF

**NOTE:** Bluetooth compatible function works with AE 82 H-BT model only.

## ■ Memory Read Mode

FUNCTION	MEANING	DESCRIPTION
CH CLR	Channel Clear	Erases the selected channel.
BK CLR	Bank Clear	Erases all the channels in the selected Bank.
MEM CLR	All Memory Clear	Erases all memories in the receiver.

### NOTES for MEM CLEAR :

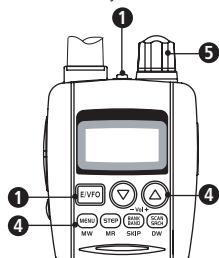
To erase ALL data from the memories

- 1) Press Menu, then use the Control Knob or the volume ▲▼ keys to select 'MEM CLR.'
- 2) Press **E/VFO**. 'dEF yES' will be displayed.
- 3) To continue with the MEM Clear, press **E/VFO** again.
- 4) To cancel the MEM Clear, use the **Control** knob to select 'dEF NO' then press **E/VFO**.

## BLUETOOTH COMPATIBLE OPERATION (ONLY FOR AE 82 H-BT MODEL)

To activate the pairing between your receiver and your headset or any other external Bluetooth equipment ;

- 1) Pressing **E/VFO**, turn on your receiver. On the LCD, pairing (PAIRING) is displayed.
- 2) Make your headset or any other Bluetooth equipment enter the pairing mode too.
- 3) Make sure that your receiver automatically confirms "OK".
- 4) Press MENU and step down to Bluetooth compatible (BT) Mode.
- 5) Select Bluetooth compatible "ON" to start the Bluetooth compatible operation.



## TROUBLESHOOTING

If you experience problems with your AE 82 H or AE 82 H-BT, first check the battery power level as low battery can cause problems such as weak reception and reduced sound quality.

Then check the manual and receiver display to ensure that a function such as Lock or Scan has not been activated by accident.

If these steps do not solve the problem, reset your unit as follows.

### 1. Partial Reset

- 1) Turn off your unit.
- 2) Press and hold the **MENU** and the **STEP** keys together.
- 3) Turn on your unit.
- 4) Memory Clear(MEM CLR) appears.

This will erase all the memory data from the channel memory banks.



If you find problems not solved by this partial reset, try all reset as follows.

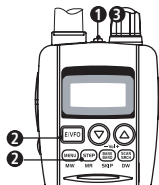
### 2. All Reset

- 1) Turn off your unit.
- 2) Press and hold the **E/VFO** and the **STEP** keys together.
- 3) Turn on your unit.
- 4) All clear (ALL CLR) appears.

This will not only erase all the memory data but also reset all the basic operation data to the original factory default settings. This should resolve most problems.

In case of further difficulties,

please consult your dealer or visit our website at [www.alan-albrecht.info](http://www.alan-albrecht.info)



## SPECIFICATIONS

### ■ General

- Frequency coverage: 66-174 MHz
  - Number of memory channels : 200 Units
  - Frequency resolution : 5, 6.25, 8.33 \*, 10, 12.5, 15, 20, 25, 30, 50, 100, 500KHz & Auto.  
\*8.33kHz step works in 108-135.99MHz range only.
  - Operation temperature range : -10°C to +60°C
  - Reference frequency stability : 6 ppm °C (-10°C to +60°C)
  - Power supply requirement : AAA x 4 Ni-MH or ALKALINE
  - Current drain
    - Standby (power saved) : 50mA typical
    - max. audio : 320mA typical
    - charging(at 9V DC) : 300mA typical
  - Antenna connector : SMA (50 $\Omega$ )
  - Dimensions (proj. not included) : 56(W) x 116.5(H) x 35.8(D)mm
  - Weight(w/o Battery) : 160g
- \*Specifications are subject to change without prior notice or obligation.*

### ■ Receiver

- Receive system : Double superheterodyne.
- Intermediate frequencies
  - 1st : 19.65 MHz, 2nd : 450 KHz
- Sensitivity and squelch sensitivity (except spurious points):
  - FM (1 kHz/3.5 kHz Dev. 12dB SINAD)
  - 66-87.5MHz: 0.25V
  - 136-173.995MHz: 0.25uV
  - WFM (1 kHz/52.5 kHz Dev. 12dB SINAD)
  - 87.5 - 108.000 MHz : 0.5uV
  - AM (1 kHz/30% MOD. 10dB SINAD)
  - 108-135.995MHz: 0.56uV
- Selectivity
  - AM/FM : More than 15 kHz/-9dB
  - Less than 150 kHz/-60dB
  - WFM : More than 150 kHz/-6dB
- AF output power : 500mW typical at 40% distortion with  
an 8 $\Omega$  load
- Ext. speaker connector : 3-conductor 3.5(d) mm (1/5") 8 $\Omega$

## DECLARATION OF CONFORMITY

Where to find our collection of service hints and documentation. Our technical documentation is updated regularly. You can download the latest versions of user manuals, technical documents and also the dual language original Declaration of Conformity, as well as service hints or FAQ's any time from our server under



<http://www.alan-albrecht.info>

### Service Address (for scanners sold in Germany)

**PST professional support technologies GmbH**

**Breitscheider Weg 117a**

**D 40885 Ratingen**

The service hotline can be reached from the German fixed telephone network (14 Cent per minute) or mobile network (55 Cent or less per minute) under 01805-012204

*E-mail: alan-service@ps-tech.de*

### Disposal of defective electronic items

The European WEEE Directive does not any more allow to dispose any used electronic items via household trash bins. The local communities provide containers for disposal of electronic waste. Please use these facilities, it will be your contribution to proper recycling of electronic material, and it is free of charge for you



### European 2 years warranty

The distributor, dealer or retail shop warrants to the original retail purchaser of this product that should this product or any part of it, under normal use and conditions, be proven defective in material or workmanship within 2 years from the date of original purchase, such defects will be repaired or replaced with new reconditioned product (at the companys option) without charge for parts and repair labor. To obtain repair or replacement within terms of European warranty rules, the product is to be delivered with proof of warranty coverage (e.g. a copy of your bill of sale), specification of defect(s), to the distributor, dealer or his authorized repair center. The warranty does not apply to any product or part there of which, in the opinion of the company, has suffered or been damaged through alteration, improper installation, mishandling, misuse, neglect or accident. Warranty does not apply to accessory parts or problems caused through not authorized or not recommended accessories like batteries, external power supplies and over voltage caused through external power supplies, broken antennas broken belt clips or damaged acrylic glass windows and cabinet parts.

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