

## **THANK YOU**

**We are grateful you decided to purchase this SPENDER VX-245M FM transceiver. This series of handhelds was developed to satisfy the requirement for a compact and simple to operate yet contains multiple new features.**

**SPENDER VX-245M believes that the compact size, coupled with reasonable cost, will meet your satisfaction.**

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## Product Investigation

Thank you for using our SPENDER VX-245M. You should investigate your product carefully before using it. If you are still have any problem about product. You should contact with the distributor immediately. Confirm your product again in order to have a certainty and accuracy.

## Product Instrument

| <b>Tool</b>            | <b>Amount</b> |
|------------------------|---------------|
| SPENDER VX-245M        | 1             |
| Adapter                | 1             |
| Charger (with Adaptor) | 1             |
| Battery Pack           | 1             |
| Belt Clip              | 1             |
| Tie                    | 1             |
| Earphone               | 1             |
| User's Manual          | 1             |

## Charging the Battery

### Using the Battery Charger

SPENDER VX-245M needs power from 3 pieces of battery AA size (electromotive force 3.6 Volt/1300 Mill ampere).

1. Battery Charger together with SPENDER VX-245M. Bring SPENDER VX-245M and battery attached SPENDER VX-245M lay down on the charger base in vertical to charge.

2. Battery Pack Charger in piece. Bring 3 pieces of battery pack or charger. Lay it down on the charger base to charge.

PIC

### Remaining Battery Capacity

-  High battery power
-  Medium battery power
-  Low battery power
-  Recharge or replace the batteries.

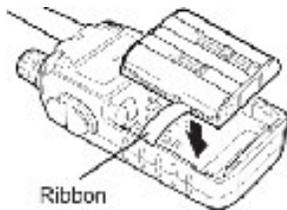
## Insert Battery

### Installing/Removing Battery Pack

Battery pack not electrified when it's produce. Please electrify it before using it (Please read the instructions of the fast charger).



Slip the battery cover backward at the back of the interphone, and then get it from the body of the interphone.



According to the picture, install the battery, when you want to take out the battery, draw the silk band which



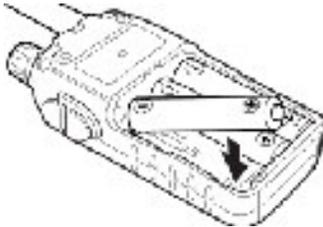
The lock tongue of the battery cover aims at the lock groove, and then Make it tight at the right position.

### Installing/Removing the battery pack

You can use 3 sections AA type batteries to replace the usage of battery pack. Please use the high quality alkaline battery, and you'll acquire longer usage usage time.



Slip the battery cover backward at the back of the interphone, and then get it from the body of the interphone.

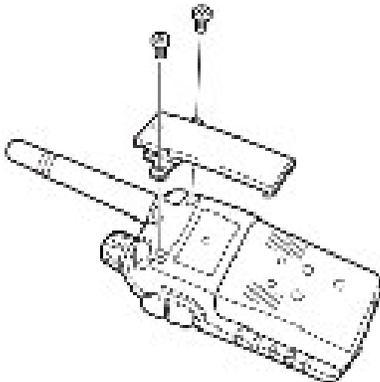


Install or get out 3 section AA style battery Make sure that they aim at the mark of polarity on the interphone.



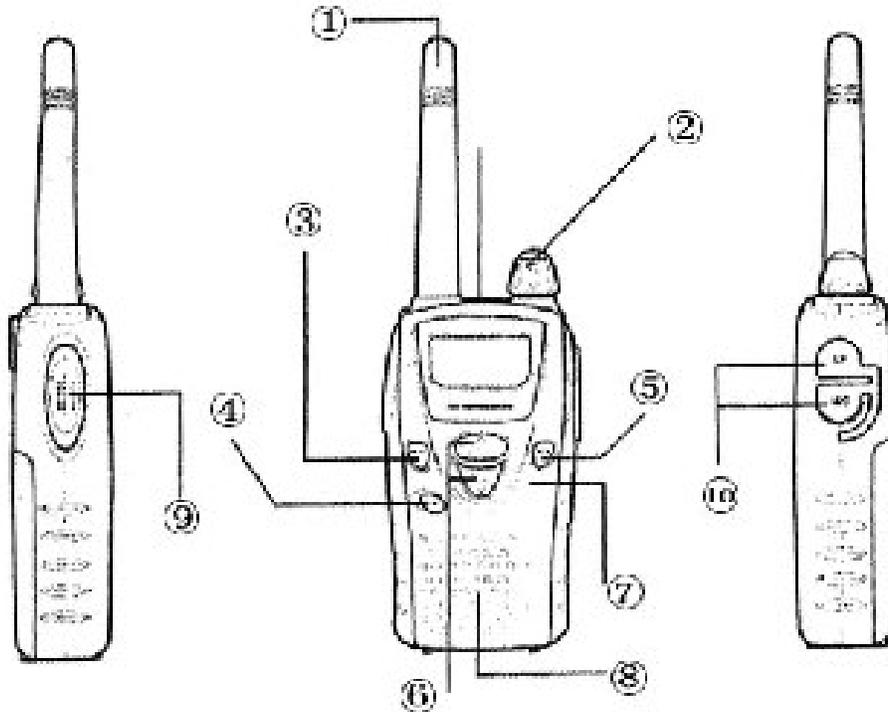
The lock tongue of the battery cover aims at the lock canal of the interphone, and then makes it tight at right position

### **Installing/Removing belt clip**



According to the necessary, makescrews,which are attached To install belt pinch fix eat the pinch fixed at back of interphone.

## Getting Acquainted



### Key Controls The Working of VX-245M

#### 1. Antenna

#### 2. On/Off key and true the volume level. (Power Switch/Volume)

Turn this key in turn the volume level is “Click” sound to switch on.

Turn this key in a counter clockwise direction to switch off while it is working. We can turn this key to increase or decrease the volume.

#### 3. Menu [ Menu Key]

Pressing the key can carry out every kind of function. Press the key

for another 3 seconds it will close the keyboard just for another

3 seconds it will open the keyboard

#### 4. CALL [Call Key]

Press call key to send signal.

#### 5. MON Key [Monitoring Key]

Press Mon key you receive the signal directly when using Tone Scale (CTCSS/DCS)

#### 6. UP [ ▲ ] DOWN [ ▼ ]

Use for selecting signal or turn menu style.

#### 7. Microphone

For speaking by holding VX-245M away from mouth for few inches.

Then speak messages slowly and accurately.

#### 8. Speaker/Mic Jack

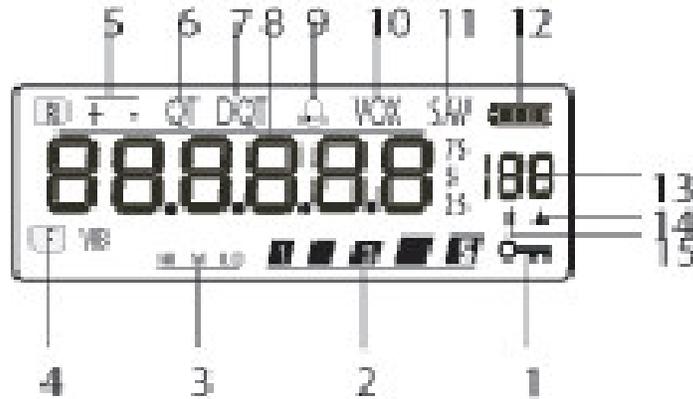
For speaking by holding VX-245M away from mouth for few inches inches then speak slowly accurately.

#### 9. PTT Key [Push-to-talk]

Press this key for a while to send signal toward receiver and release it to wait for the answering signal. You need to speak message slowly and accurately when the conversation finished. You have to release to listen the answering message. When pressing PTT key, do not speak immediately because you may miss the message at the beginning.

#### 10. SP/MIC Plug

## LCD Symbol & Meaning



1. This symbol appears when we set the keys lock of the working system.
2. This symbol appears when VX-245M received the signal. LCD shows the symbol of receiving signal (S-Meter) and press PTT key to connect. LCD shows sending symbol.
3. This symbol appears when selecting the capacity of sending in 3 levels.
4. This symbol appears when pressing the Menu key.
5. This symbol appears when getting into Duplex working condition.
6. This symbol appears when using Analog Tone command.
7. This symbol appears when setting the prompt level for receiving.
8. Number “88.8.8.8.8” indicates the frequency and tone scale frequency and major signal channels.
9. This symbol appears when there is a Call sound.
10. This symbol appears when sending broadcast signal without press PTT key.
11. This symbol appears when using Save command.
12. Low battery indicator. You will know the battery level.
13. Number “88” indicates major signal and minor signal (CTTSS).
14. This symbol appears when pressing MON key to receive signal directly.
15. This symbol appears when using scan Memory scanner command.

## Control Working System Command

### ON/OFF VX-245M

Turn Power to on/off VX-245M and turn to increase or decrease volume level.

On : Turn key to open VX-245M / Volume in a clockwise direction.

Off : Turn key to open VX-245M / Volume in a counter clockwise direction.

### Select Channel

Press [▲] or [▼] key and turn to select the frequency as need (245.0000-245.9875 MHz).

### Channel Scan

Frequency Scan is a frequency scan of major signal channel that are 245.0000-245.9875 MHz. Steps of Scan

1. Press [MENU] key. The screen will show [SCAN ? 01].
2. Press [PTT] key. VX-245M will automatically scan by itself.
3. Press [PTT] key. Stop scanning.

### Voice Control

1. Press [MENU]+[▲ or ▼] key to select command [VOX ? 02].
2. Press [PTT] key. VX-245M will select speed level to instruct by voice. OFF 1-9 levels
  - [VOX OFF ] → Close the instruction by voice.
  - [VOX 1 ] → Lowest speed.
  - [VOX 5 ] → Middle speed.
  - [VOX 9 ] → Highest speed.
3. Press [PTT] key to confirm.
4. Press [MON] key 1 time to do next step press 2 times to quit the menu.

### Setting Power Output

1. Press [MENU]+[▲or▼] key to select [POW ? 03] command.
2. Press [PTT]+[▲or▼] key to select power output level 3 levels that are Low Mid Hi.
3. Press [PTT] key to confirm.
4. Press [MON] key 1 time to do next step press 2 times to quit the menu.

### Squelch Control

1. Press [MENU]+[▲or▼] key to select [SQL ? 04] command.
2. Press [PTT]+[▲or▼] key to select speed level of receiving signal.  
There are 0-9 level  
0 The best level of receiving signal.  
5 The middle level of receiving signal.  
9 The lowest level of receiving signal.
3. Press [PTT] key to confirm.
4. Press [MON] key 1 time to do next step press 2 times to quit the menu.

### Setting Background Light

1. Press [MENU]+[▲or▼] key to select [LED ? 05] command.
2. Press [PTT]+[▲or▼] key to select background light level.  
There are 3 levels  
AUTO On/Off automatically.  
ON Open.  
OFF Close.
3. Press [PTT] key to confirm.
4. Press [MON] key 1 time to do next step press 2 times to quit the menu

### Setting ON/OFF Beep Sound

1. Press [MENU]+[▲or▼] key to select [BEEP ? 06] command.
2. Press [PTT]+[▲or▼] key to select [ON] or [OFF].
3. Press [PTT] key to confirm.
4. Press [MON] key 1 time to do next step press 2 times to quit the menu.

### **Setting Lock of Working System**

1. Press [MENU]+[ ▲or▼ ] key to select [KEYBO ? 07] command.
2. Press [PTT]+[ ▲or▼ ] key to select [AUTO] or [OFF].
3. Press [PTT] key to confirm.
4. Press [MON] key 1 time to do next step press 2 times to quit the menu.

### **Setting Time Out Time**

1. Press [MENU]+[ ▲or▼ ] key to select [TOT ? 08] command.
2. Press [PTT]+[ ▲or▼ ] key to prevent the stuck key. There are 9 levels.  
OT? OFF,30,60,90,120,150,180,210,240,270 seconds.
3. Press [PTT] key to confirm.
4. Press [MON] key 1 time to do next step press 2 times to quit the menu.

### **To change the scan resume method.**

1. Press [MENU] key
2. Press[▲or▼]key to select Menu [09? SCN].
3. Press [PTT] switch to enter scanning resume method setting  
Display appears currently scanning mode
4. Press [▲or▼] key to change scanning resume method.
5. Press [PTT] switch to store new setting, otherwise, press [PTT]  
key to cancel.
6. Press [MON] key to return to MENU mode.
7. Press [▲or▼] key to set other Menu continuously.
8. Press [MON] key to exit MENU mode.

## Duplex Control

1. Press [MENU]+[ ▲or▼ ] key to select [dIFFR ? 10] command.
2. Press [PTT]+[ ▲or▼ ] key to select Duplex [00.0000] – [99.9875].
3. Press [PTT] key to confirm.
4. Press [MENU]+[ ▲or▼ ] key to select [S-d ? 12] command.  
\*\*Running Duplex Press [CAL] to confirm + [PTT].  
\*\*Working Duplex Press [CAL] to confirm + [PTT].

## Setting ON/OFF Tone Scale As a Receiving

### (CTCSS + DCS Setup)

1. Press [MENU]+[ ▲or▼ ] key to select [R+CdC ? 11] command.
  2. Press [PTT]+[ ▲or▼ ] key to select tone scale frequency (Analog).  
OFF → Close, [67.0 1] to [254.1 50] → open tone scale
  3. Press [CAL] key to confirm.
  4. Press [MENU]+[ ▲or▼ ] key to select [T-CdC ? 11] command.
  5. Press [MENU]+[PTT] key to select tone scale frequency (Digital)  
OFF → Close, [67.0 1] to [254.1 50] → open tone scale
  6. Press [CALL] key to confirm
- \*\* Subject 1 to 3 function control with CTCSS 50 channel (Transmitters)  
Subject 1 to 3 function control with DCS 105 channel (Transmitters)

## Setting ON/OFF Tone Scale As a Transmitters

### (CTCSS + DCS Setup)

1. Press [MENU]+[ ▲or▼ ] key to select [T+CdC ? 12] command.
2. Press [PTT]+[ ▲or▼ ] key to select tone scale frequency (Analog).  
OFF → Close, [67.0 1] to [254.1 50] → open tone scale
3. Press [CAL] key to confirm.
4. Press [MENU]+[ ▲or▼ ] key to select [T-CdC ? 12] command.
5. Press [MENU]+[PTT] key to select tone scale frequency (Digital)  
OFF → Close, [67.0 1] to [254.1 50] → open tone scale

6. Press [CALL] key to confirm

\*\* Subject 1 to 3 function control with CTCSS 50 channel (Receiver)

Subject 1 to 3 function control with DCS 105 channel (Receiver)

### **ON/OFF Duplex Control**

1. Press [MENU]+[ ▲/▼ ] key to select [S-d ? 13] command.

2. Press [PTT] 1st time to open Duplex +

3. Press [MENU]+[ ▲/▼ ] key to select [S-d ? 13] command.

4. Press [PTT] 2nd time to open Duplex -

5. Press [MENU]+[ ▲/▼ ] key to select [S-d ? 13] command.

6. Press [PTT] 3rd time to close Duplex (There is not +,- sign)

\*\*Every step needs to do continuously.

### **Setting Memory 118 Channel**

1. Press [PTT]+[MENU] key promptly. Power ON VX-245M for 3 seconds. The screen will show [SELF]. There are 8 steps of memory.

Step 1. Press [MENU] key. The screen will show [CH-01 1].

Press [ ▲/▼ ] key to select memory channel.

Step 2. Setting receiving frequency and press [PTT] key. The screen will show [----- 2].

Press [MON] or [ ▲/▼ ] key to select the frequency as needed.

\*\*\*Press [CAL] key to select Step 6.25 KHz or 12.5 KHz.

Step 3. Setting ON/OFF Tone Scale As a Receiving

(CTCSS + DCS Setup)

Press [PTT] key. The screen will show [OFF 3].

Press [MENU] key 1st time+[ ▲/▼ ] key to select digital tone frequency (DCS).

Press [MENU] key 2nd time+[ ▲/▼ ] key to select analog tone frequency (CTCSS).

Press [CAL] key to cancel frequency control [OFF 3].

Step 4. Setting Sending Frequency. Press [PTT] key. The screen

will show [----- 4].

Press [MON] or [p or q] key to select the frequency as needed.

\*\*\*Press [CAL] key to select Step 6.25 KHz or 12.5 KHz.

Step 5. Setting ON/OFF Tone Scale As a Sending (CTCSS + DCS Setup)

Press [PTT] key. The screen will show [OFF 5].

Press [MENU] key 1st time+[▲/▼] key to select digital tone frequency (DCS).

Press [MENU] key 2nd time+[▲/▼] key to select analog tone frequency (CTCSS).

Press [CAL] key to cancel frequency control [OFF 5].

Step 6. Setting prohibit pressing the sending key cross the receiving signal (BLC)

Press [PTT] key. The screen will show [OFF 6].

Press [▲/▼] key to change 1 or 2 command.

**\*\*Notes :** 1. Use while there is a signal in normal channel.

2. Use while there is a signal in small channel (CTCSS/DCS).

Step 7. Setting Scan Command. Scan ADD/Del

(Add-scan, Del-scan skip)

Press [PTT] key. The screen will show [dEL 7].

Press [▲/▼] key to select (Add-scan, Del-scan skip)

**\*\*\*Notes :** Select Add Use scanning to search signal channel.

DEL Use scanning command to ignore the unwanted channel.

Step 8. Setting Power Output [Hi/Low]

Press [PTT] key. The screen will show [L 8].

Press [▲/▼] key to select [Hi/Low].

Press [PTT] key to start new memory channel.

**Recalling Memory Channel**

1. Press [MENU] key for a while then power on VX-245M. The screen will show memory channel [CH-01].
2. If you need to change the frequency number. Press [MENU] for a while and then power on VX-245M.

**CTCSS TONE FREQUENCY CHART**

| <b>CH.</b> | <b>FRE.(Hz)</b> | <b>CH.</b> | <b>FRE.(Hz)</b> | <b>CH.</b> | <b>FRE.(Hz)</b> |
|------------|-----------------|------------|-----------------|------------|-----------------|
| 1          | 67.0            | 18         | 118.8           | 35         | 183.5           |
| 2          | 69.3            | 19         | 123.0           | 36         | 186.2           |
| 3          | 71.9            | 20         | 127.3           | 37         | 189.9           |
| 4          | 74.4            | 21         | 131.8           | 38         | 192.8           |
| 5          | 77.0            | 22         | 136.5           | 39         | 196.6           |
| 6          | 79.7            | 23         | 141.3           | 40         | 199.6           |
| 7          | 82.5            | 24         | 146.2           | 41         | 203.5           |
| 8          | 85.4            | 25         | 151.4           | 42         | 206.5           |
| 9          | 88.5            | 26         | 156.7           | 43         | 210.7           |
| 10         | 91.5            | 27         | 159.8           | 44         | 218.1           |
| 11         | 94.8            | 28         | 162.2           | 45         | 225.7           |
| 12         | 97.4            | 29         | 165.5           | 46         | 229.1           |
| 13         | 100.0           | 30         | 167.9           | 47         | 233.6           |
| 14         | 103.5           | 31         | 171.3           | 48         | 241.8           |
| 15         | 107.2           | 32         | 173.8           | 49         | 250.3           |
| 16         | 110.9           | 33         | 177.3           | 50         | 254.1           |
| 17         | 114.8           | 34         | 179.9           |            |                 |

**CODES DIGITAL (DCS)**

| ITEM | CODE | ITEM | CODE | ITEM | CODE | ITEM | CODE |
|------|------|------|------|------|------|------|------|
| 1    | 023  | 26   | 143  | 51   | 271  | 76   | 455  |
| 2    | 025  | 27   | 145  | 52   | 274  | 77   | 462  |
| 3    | 026  | 28   | 152  | 53   | 306  | 78   | 464  |
| 4    | 031  | 29   | 155  | 54   | 311  | 79   | 465  |
| 5    | 032  | 30   | 156  | 55   | 315  | 80   | 466  |
| 6    | 036  | 31   | 162  | 56   | 325  | 81   | 503  |
| 7    | 043  | 32   | 165  | 57   | 331  | 82   | 506  |
| 8    | 047  | 33   | 172  | 58   | 332  | 83   | 516  |
| 9    | 050  | 34   | 174  | 59   | 343  | 84   | 523  |
| 10   | 051  | 35   | 205  | 60   | 346  | 85   | 526  |
| 11   | 053  | 36   | 212  | 61   | 351  | 86   | 532  |
| 12   | 054  | 37   | 223  | 62   | 356  | 87   | 546  |
| 13   | 065  | 38   | 225  | 63   | 364  | 88   | 565  |
| 14   | 071  | 39   | 226  | 64   | 365  | 89   | 606  |
| 15   | 072  | 40   | 243  | 65   | 371  | 90   | 612  |
| 16   | 073  | 41   | 244  | 66   | 411  | 91   | 624  |
| 17   | 074  | 42   | 245  | 67   | 412  | 92   | 627  |
| 18   | 114  | 43   | 246  | 68   | 413  | 93   | 631  |
| 19   | 115  | 44   | 251  | 69   | 423  | 94   | 632  |
| 20   | 116  | 45   | 252  | 70   | 431  | 95   | 654  |
| 21   | 122  | 46   | 255  | 71   | 432  | 96   | 662  |
| 22   | 125  | 47   | 261  | 72   | 445  | 97   | 664  |
| 23   | 131  | 48   | 263  | 73   | 446  | 98   | 703  |
| 24   | 132  | 49   | 265  | 74   | 452  | 99   | 712  |
| 25   | 134  | 50   | 266  | 75   | 454  |      |      |