



COMPANY NAME: ALINCO, INC.
EUT: DJ-X2R
WORK ORDER NUMBER: 2000253
FCC ID: EUG DJ-X2R

APPENDIX H:

MANUAL



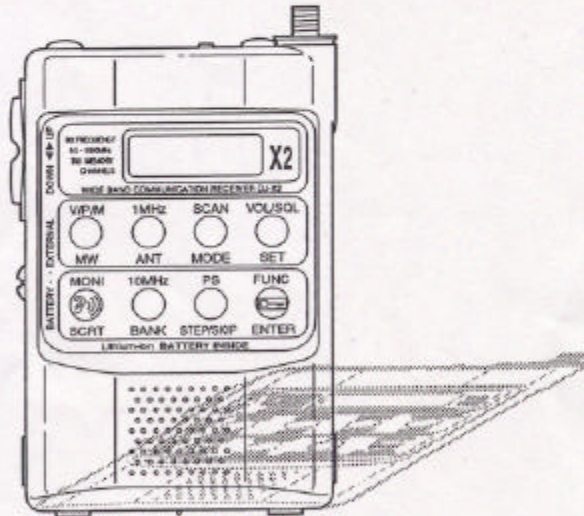
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ALINCO

WIDE BAND COMMUNICATION RECEIVER

DJ-X2

Instruction Manual



Thank you for buying this ALINCO receiver.
This instruction manual contains important safety and operating instructions. Please read it carefully before using the receiver.



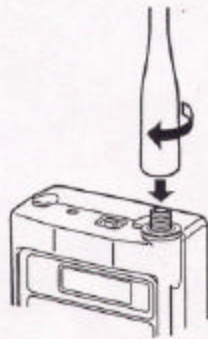
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Accessories

Open the box and check that the following accessories are included.

- Antenna
- Battery case with recharger (EDH-27)
- AC adapter (EDC-75)⁷⁷
- Earphone
- Simple operation sticker
- Connector cap

■ Connecting the Antenna



Connect the antenna to the SMA antenna connector.

Hold the antenna by its base, and turn it clockwise until it stops.

To disconnect the antenna, turn it counter-clockwise.

■ Recharging the internal lithium-ion battery

Use the Battery case with recharger (EDH-27) and the AC adapter (EDC-75)⁷⁷.

1 Attach the EDH-27 to the DJ-X2.



Hook the upper catches of EDH-27 on the concaves at the top of the DJ-X2, and then attach the bottom as shown in the illustration on the left.



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2 Connect the AC adapter's plug to the external power supply jack on the EDH-27.

3 Connect to the AC outlet.

Recharging lamp on the EDH-27 lights, and recharging starts.



Tip

- It takes about 2 hours to fully charge the battery. (The required time depends on the condition of the lithium-ion battery.)
- Irrespective of the position of the battery selection switch, charging can be executed.
- Normally, the lithium-ion battery can be charged up to 500 times.



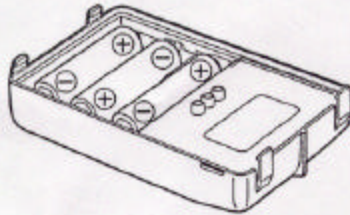
Caution!

- Turn the DJ-X2's power OFF before recharging the lithium-ion battery.
- Disconnect the AC adapter from the outlet while not using it.
- Never charge the battery of other manufacturers with this AC adapter.
- Never short-circuit the recharging terminals with metal objects. The recharger can be damaged.
- The recharger does not work when the voltage from the outlet is extremely low.
- Charging should be conducted in a temperature range of 0 to 40°C. (32 to 104°F)



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■ Loading the Batteries



AA batteries are also available instead of the internal lithium-ion battery.

Load three AA batteries into the battery case with recharger (EDH-27) as shown on the left.



Caution!

- Do not reverse the polarity of the batteries.
- Use new batteries of the same type and brand.



Tip

Following functions extend the battery life.
Auto power OFF (P.xx), Battery save (P.xx)



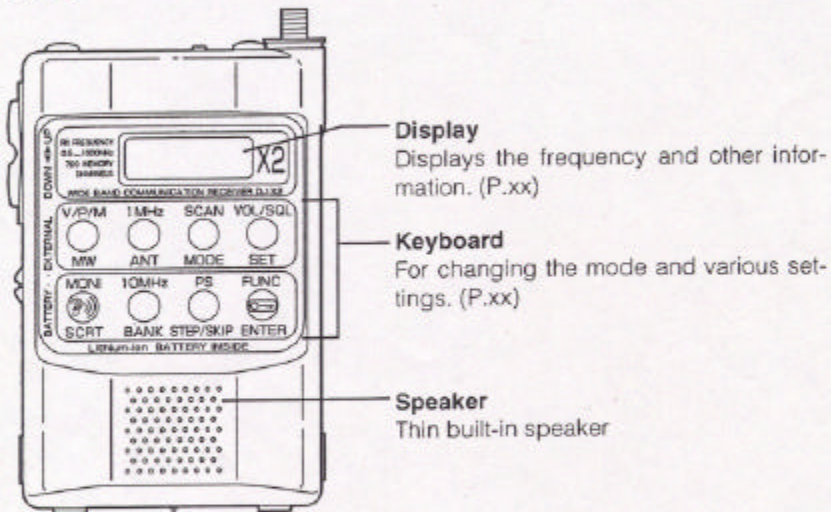
Chapter 1 Names and Functions of Parts

External View

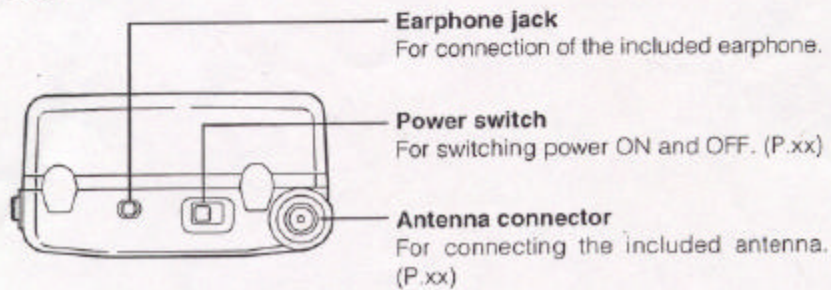
The illustrations below are the DJ-X2 with the Battery case with recharger (EDH-27) attached.

1
Names and Functions of Parts

■ Front



■ Top

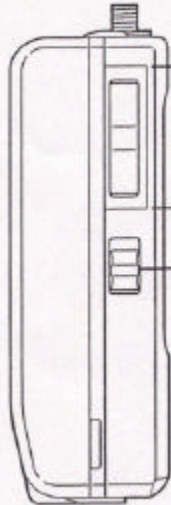




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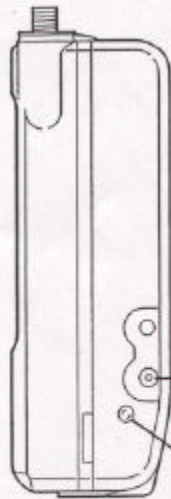
Names and Functions of Parts

■ Side



[▲ / ▼] keys
For increasing/decreasing the frequency, and various settings.

Battery selection switch
For switching between internal and external (EDH-27) batteries.

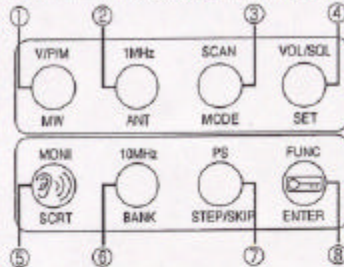


DC-IN
Terminal for connecting the AC adapter when recharging the internal battery.

Recharging Lamp
Lights when recharging the internal lithium-ion battery.



Keyboard



1

Names and Functions of Parts

Key	Function
① [V/P/M (MW)] key	Switches the operating mode. (P.xx) When "F" is displayed, programs and clears the memory channels. (P.xx)
② [1MHz (ANT)] key	In VFO mode, pressing the [▲/▼] while this key is held down increases/decreases the frequency by 1 MHz-step. (P.xx) When "F" is displayed, switches the type of antenna. (P.xx)
③ [SCAN (MODE)] key	Executes the scan. (P.xx) When "F" is displayed, switches the wave type. (P.xx)
④ [VOL/SQL(SET)] key	Adjusts the audio volume and squelch level. (P.xx) When "F" is displayed, switches the item of the setting mode. (P.xx)
⑤ [MONI (SCRT)] key	Squelch unmutes while this key is held down. (P.xx) When "F" is displayed, used for descrambling the voice. (P.xx)
⑥ [10MHz (BANK)] key	In VFO mode, pressing the [▲/▼] while this key is held down increases/decreases the frequency by 10 MHz-step. (P.xx) Switches the preset and memory bank.
⑦ [PS (STEP/SKIP)] key	Used for selecting the channel of the program scan, and starting it. (P.xx) When "F" is displayed, sets the tuning step and memory skip. (P.xx)
⑧ [FUNC/ENTER] key	Used for starting and fixing various kinds of setting. Locks the key operation. (P.xx)

F appears on the display when you press the [FUNC/ENTER] key.
In Easy mode, the [FUNC/ENTER] key is not available except for Keylock.

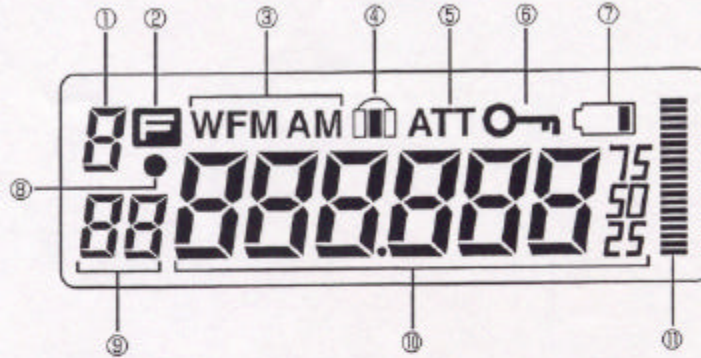


1

Names and Functions of Parts

Display

In the illustration below, all indications are displayed.



	Descriptions
①	Displays the bank No. of programmed memory.
②	Appears when you press the [FUNC/ENTER] key.
③	Displays the wave type.
④	Appears when executing the Memory skip.
⑤	Appears when the Attenuator is ON.
⑥	Appears when the keys are locked.
⑦	Appears when the battery is exhausted.
⑧	Appears when using the bugging detector. Flashes when descrambling the conversation.
⑨	Displays the channel No. of programmed memory.
⑩	Displays the frequency and value of various settings.
⑪	Displays the receiving level.

Some alphabets cannot be displayed correctly (for example, "M" or "K"), and capital letters and small letters may be mixed in a word. Refer to the following examples.

MEMOrYMEMOrY
 L InKLink



Chapter 2 Basic Operation

2
Basic Operation

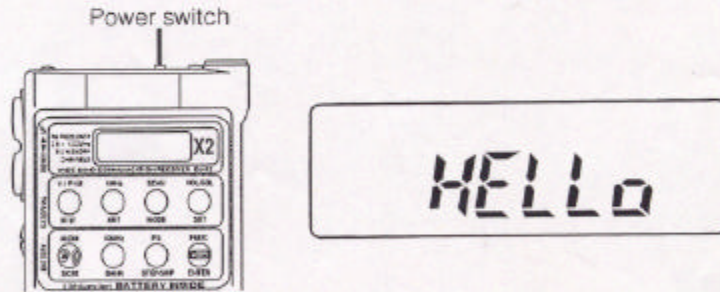
Easy Mode and Expert Mode

The DJ-X2 has two modes; Easy mode and Expert mode. In Easy mode, key operations are limited, and you can operate the DJ-X2 easily. On the other hand, you can operate many useful functions in Expert mode. If you are a beginner, operating in Easy mode is recommended. After understanding the basic operation in Easy mode, try to operate other functions in Expert mode.
 (The factory setting is Easy mode.)
 This chapter explains the basic operation of the DJ-X2.

Power Switch

Before turning the power ON, check the position of the Battery selection switch.
 EXTERNAL (upper)When using external batteries (EDH-27).
 BATTERY (lower).....When using internal lithium-ion battery.

To turn the power ON, slide the power switch to "PWR ON" (right). "HELLO" will appear on the display. (The indication may be different from the illustration below depending on the version: North America or Europe.)



Tip
 When the lithium-ion battery is charged, you can operate the DJ-X2 without the battery case (EDH-27).

Caution!
 Be sure to turn the power OFF when switching the the Battery selection switch.

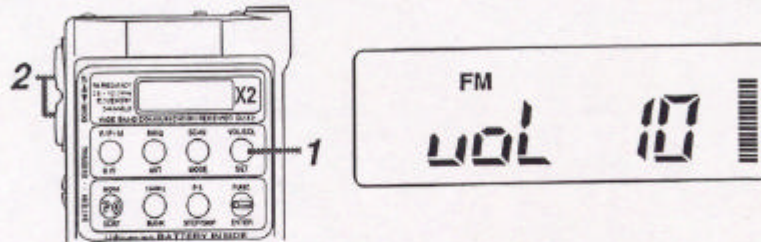


2

Basic Operation

Adjusting the Audio Volume

- 1 Press the [VOL/SQL (SET)] key.
"voL" will appear on the display.
- 2 Adjust the audio volume by pressing [▲ / ▼] keys.
There are 21 levels of audio volume. (00-20) The higher the value is, the larger the audio volume is.



- 3 Press the [FUNC/ENTER] key.

If the DJ-X2 does not sound...

When the squelch closes, the DJ-X2 does not sound even if you increase the value of audio volume. For more information, see the next section.

Squelch

The squelch silences the DJ-X2 except for signals above a certain level. Squelch eliminates the noise when the DJ-X2 receives less than a certain level. "To unmute the squelch" means that the DJ-X2 receives the signal and reproduce the sound.

Conversely, "to close the squelch" means that the DJ-X2 does not sound because of insufficient level of signal.

■ Adjusting the Squelch Level

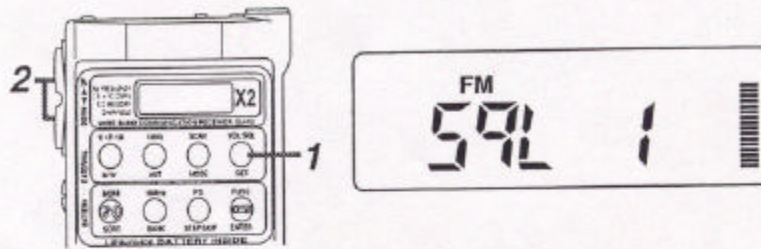
You can specify the signal level that the DJ-X2 unmutes the squelch by adjusting the squelch level.

- 1 Press the [VOL/SQL (SET)] key twice.
"Sql" will appear on the display.



2 Adjust the squelch level by pressing [▲ / ▼] keys.

There are 6 squelch levels. (0-5) A higher squelch level requires a stronger signal to unmute the squelch.



2
Basic Operation

3 Press the [FUNC/ENTER] or [VOL/SQL (SET)] key.



Tip

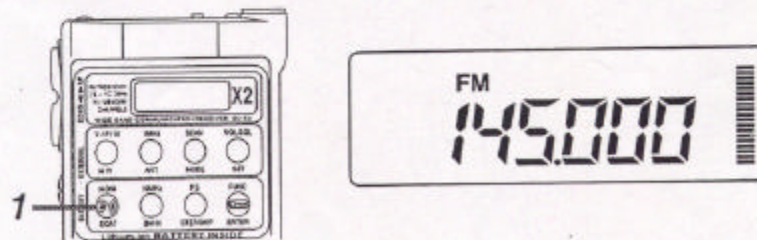
To keep unmuting the squelch, set the squelch level to 0.

■ Monitor Function

The monitor function temporarily unmutes the squelch. This is useful when the signal is weak or intermittent.

1 Press the [MONI (SCRT)] key.

The DJ-X2 unmutes the squelch while the key is held down.



2 To return to the set squelch level, release the [MONI (SCRT)] key.

The preparation for receiving the signal has been finished. Now, try to adjust the frequency and receive the signal.

Next section explains the three operating modes of the DJ-X2.



2
Basic Operation

Operating Mode

The DJ-X2 has three operating modes; VFO mode, Preset mode, and Memory (MR) mode.

- VFO mode.....VFO mode allows you to change the frequency by [▲ / ▼] keys.
- Preset mode.....The frequencies of AM radio, FM radio, and TV have been set. You can call them up.
- Memory mode.....You can call up and operate on a previously programmed frequency.

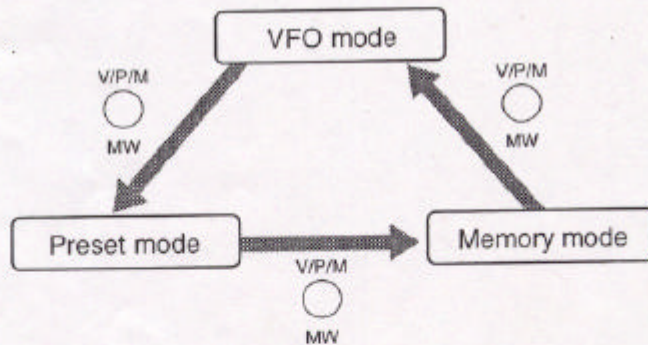


Tip

In Easy mode, you cannot program the frequency. To program the frequency, switch the DJ-X2 to Expert Mode. For more information, see "Switching to Expert Mode" (P.xx) and "Memory Function" (P.xx).

Switching Between Modes

Every press of the [V/P/M (MW)] key changes the operating mode as shown below.



Tip

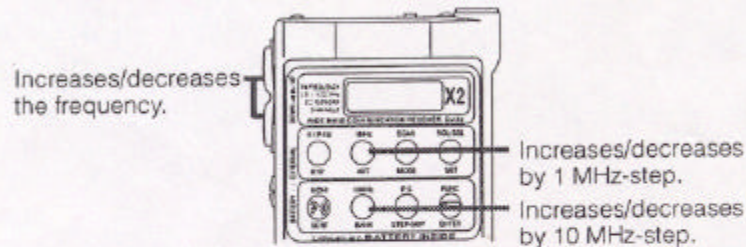
When nothing is programmed in Memory mode, Memory mode is skipped.



Setting the Frequency

In VFO mode

- Every press of the [▲ / ▼] keys increases and decreases the frequency by a tuning step.
- To increase/decrease the frequency by 1MHz-step, hold down the [1MHz (ANT)] key, and press the [▲ / ▼] keys.
- To increase/decrease the frequency by 10MHz-step, hold down the [10MHz (BANK)] key, and press the [▲ / ▼] keys.



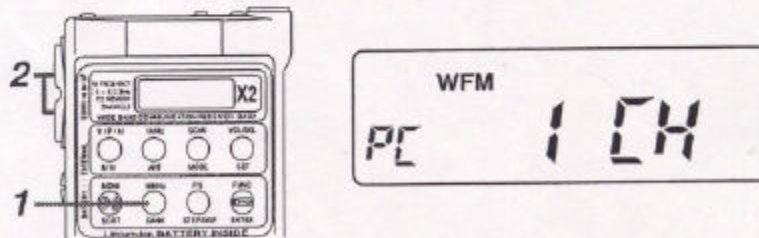
2

Basic Operation

In Preset mode

1 Select a band by pressing the [10MHz (BANK)] key.

Every press of the [10MHz (BANK)] key changes the band as shown below:
 AM radio → FM radio → TV → AM radio ...



2 Increase/ decrease the frequency by pressing the [▲ / ▼] keys.



Tip

- When selecting AM radio, "AM" appears on the upper part of the display.
- When selecting FM radio or TV, "WFM" appears on the upper part of the display, and the frequency of FM radio or channel of TV is displayed below.



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Specifications

General

Operating range	: 0.522 - 999.995 MHz	} 824.000~849.995MHz } 869.000~894.995MHz は受信出来ず。
Receiving range	: 0.522 - 999.995 MHz	
Wave type	: FM, WFM, AM	
Ant. impedance	: 50Ω	
Ant. terminal	: SMA	
Supply voltage	: DC 3.8V (internal lithium-ion battery) DC 4.5V (when using EDH-27)	
Ground	: Negative ground	
Current consumption	: Reception: approx. 80 mA Battery save (1 : 4): approx. 25 mA	
Temperature range	: -10 - +60°C (+14 - +140°F)	
Frequency stability	: ±5 ppm (-10 - +60°C) (+14 - +140°F)	
Dimension	: 58 (W)×90 (H)×15 (D) mm (without projections) (2.28 (W)×3.54 (H)×0.59 (D) in.)	
Weight	: Approx. 85 g (Lithium-ion battery inclusive) (Approx. 3 oz.)	

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Appendices

Receiver

System	: Triple-conversion superheterodyne
First I.F.	: 248.45 MHz
Second I.F.	: 38.85 MHz
Third I.F.	: 450 kHz
Selectivity	: AM/FM -6 dB/12 kHz or over, -60 dB/30 kHz or less WFM -6 dB/150 kHz or over