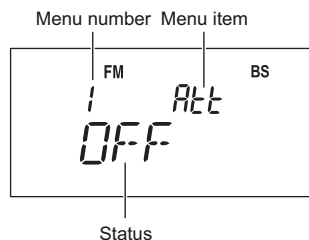


# 8. Set Mode Configurations

The Set mode allows you to change the DJ-X30's functions and default settings as desired.

## 8-1 Configuring Values/Parameters of Set Mode Menu Items

- 1** Press the [FUNC] key to display the **F** icon on the LCD.
- 2** Press the dial once to switch to Set mode.
- 3** Every time you press the dial, the setting item (Set menu item) is changed.
  - When you press the [MONI] key, the items are displayed in reverse order.
  - You can also select items by entering the menu number with the ten-key pad. For the list of the menu numbers, see page **P. 22**.
- 4** Rotate the dial to change the value or parameter of the item.
- 5** To exit the Set mode, press the [FUNC] key.  
The changed value/parameter is saved.



## 8-2 Set Mode Configurations

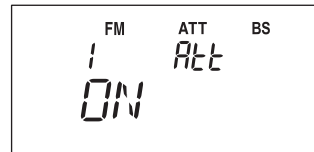
Details of each item of the Set mode menu are as follows.

### 8-2-1 Attenuator (ATT) function setting

Use this function when the receiving signal is interfered with by strong signals from nearby channels. When activated, this function weakens the reception level of the target signal. However, it also makes unnecessary signals difficult to receive, so that the target signal may become distinctly audible. The attenuation level is about 20 dB.

**1** Select the Set menu No. 1, "Att".

**2** Rotate the dial to display "ON".  
"ATT" appears at the top of the LCD.



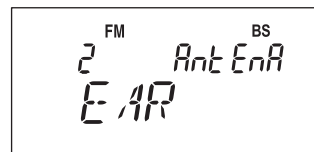
- This function is effective only when an antenna (i.e. the included antenna or an external antenna) is connected to the SMA antenna connector. Set this function to OFF when such an antenna is not connected.

### 8-2-2 Earphone Antenna setting

Use this function to switch between an earphone antenna and an external antenna. When you select an earphone antenna, the earphone cord works as an antenna. Signals can be received even when an external antenna is not connected.

**1** Select Set menu No. 2, "Ant EnA".

**2** Rotate the dial to change the display from "SMA" to "EAR".  
You can now use an earphone as an antenna.



- When an earphone antenna is used, the received signals may be unstable depending on the condition of the earphone cord.
- Like the earphone antenna on a card-type transistor radio, the earphone antenna is not tuned for specific frequencies. As a result, it may only be able to properly receive strong signals such as those of FM broadcasts or from near sources.

### 8-2-3 AM Radio Bar-antenna setting

You can choose either the built-in bar-antenna or an external antenna to receive AM radio signals. The bar-antenna covers the range of 100 kHz to 3 MHz including the AM radio band.

**1 Select Set menu No. 3, "AbAr".**

The LCD should look like the figure on the right.



**2 To use an external antenna, rotate the dial to change the display from "ON" to "OFF".**

The default is set to use the built-in bar-antenna. If you are using an external antenna, connect it to the SMA antenna connector.

### 8-2-4 Shortwave Bar-antenna setting

You can choose either the built-in bar-antenna or an external antenna to receive shortwave signals. The bar-antenna covers the range of 3 MHz to 30 MHz including the shortwave band.

**1 Select Set menu No. 4, "SbAr".**

The LCD should look like the figure on the right.



**2 To use an external antenna, rotate the dial to change the display from "ON" to "OFF".**

If the sensitivity is insufficient, refer to "Shortwave Tuning Function" (P. 58).

## 8-2-5 Lamp Operation setting

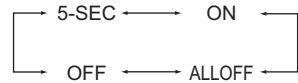
You can set the operation of the backlight of the LCD. Using the backlight frequently increases the drain on the battery.

### 1 Select Set menu No. 5, "LAMP".

The LCD should look like the figure on the right.



### 2 Rotate the dial and the backlight operation changes as shown in the figure.



OFF	The backlight does not turn ON.
5-SEC	When you operate the DJ-X30, the backlight turns ON for 5 seconds.
ON	The backlight continues illuminating.
ALLOFF	The backlight and RX lamp do not turn ON.

## 8-2-6 Scan Type Switching setting

You can set the scan-resume condition.

### 1 Select Set menu No. 6, "SCAN".

The LCD should look like the figure on the right.



### 2 When you rotate the dial, the display changes from "BUSY" to a value between 1 and 25 seconds ("1-SEC" through "25-SEC").

"BUSY" indicates busy scan mode, and "1-SEC" through "25-SEC" indicates the timer scan mode. Refer to the table below and select a desired setting.

Busy scan mode	After scanning stops, the DJ-X30 resumes scanning when it receives no signal.
Timer scan mode	After scanning stops, the DJ-X30 resumes scanning after the specified time even though it is still receiving signals. This time can be set to any value from 1 to 25 seconds. (Indicated on the LCD as "1-SEC" through "25-SEC")

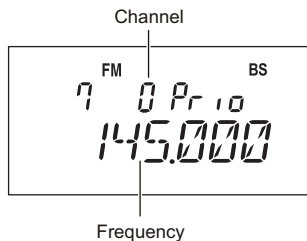
### 8-2-7 Priority Channel selection

Use this function to select a priority channel. This setting is effective when priority channels have been programmed in Memory mode (P.P. ●●).

**1 Select Set menu No. 7, "Prio".**

**2 Rotate the dial to select a priority channel.**

The LCD should look like the figure on the right.



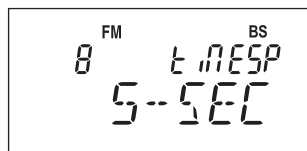
### 8-2-8 Priority Monitoring interval setting

You can select the interval for which signals from the main channel are received when the Priority Monitoring function is ON.

**1 Select Set menu No. 8, "tiMESP".**

**2 Rotate the dial to select the monitoring interval.**

The LCD should look like the figure on the right.



**3 By rotating the dial, you can set the interval within the range of 5 to 60 seconds.**

### 8-2-9 Priority Monitoring duration setting

You can select the time for which reception of signals from the priority channel is stopped when the Priority Monitoring function is ON.

**1 Select Set menu No. 9, "tiMEPr".**

**2 Rotate the dial to select the monitoring duration.**

The LCD should look like the figure on the right.



**3 This setting also provides busy mode and 1- to 25-second timer mode options.**

Select the option according to the table in "Scan Type Switching setting" described above.

### 8-2-10 Band Transition setting

When the setting frequency reaches the upper or lower end of the current band during scanning or dial operation in the VFO mode, you can select whether to return to the other end of the same band, or to move to the next band.

**1 Select Set menu No. 10, "bAnd".**

The LCD should look like the figure on the right.



**2 Rotate the dial to select either "ROTATE" or "ACROSS".**

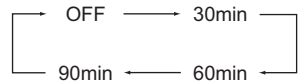
ROTATE	Remain in the same band.
ACROSS	Move to the next band.

### 8-2-11 APO function setting

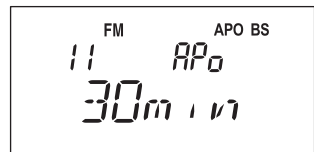
APO stands for "Auto Power Off". When no operation is performed for the specified time, a beep sounds and the DJ-X30 is automatically turned OFF.

**1 Select Set menu No. 11, "APo".**

**2 Rotate the dial to switch OFF the APO function, or to select the setting time. You can select from 30, 60, or 90 minutes, and OFF.**



The LCD should look like the figure on the right.



To turn ON the power again after it has been turned OFF by the APO function, hold down the [PWR] key again.



MEMO

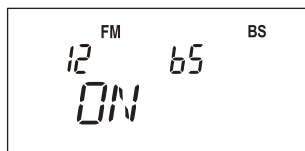
- Any key operation can reset the countdown for the APO function and extend the APO time. However, the APO time is not extended only by signal reception.

## 8-2-12 Battery-save function setting

This function automatically turns ON/OFF the DJ-X30 frequently in order to save power consumption during standby and extend battery operation time.

### 1 Select Set menu No. 12, "bS".

The LCD should look like the figure on the right.



### 2 Rotate the dial to switch between "ON" and "OFF".

When this function is set to ON, "BS" appears on the LCD.

- The default is set to ON. It is not necessary to turn the function OFF in normal operation. The conditions where you need to turn it OFF are when you receive signals of packet communication used for amateur radio, or of data communication for aviation radio (ACARS) and so on.
- This function becomes invalid temporarily while the DJ-X30 is scanning or receiving signals.
- The LCD illuminates even when the DJ-X30 is in standby mode. (The display is the same regardless of whether or not the function is activated.)

## 8-2-13 Beep deactivation setting

You can turn off the beep that you hear every time you push a key.

### 1 Select Set menu No. 13, "bEEP".

The LCD should look like the figure on the right.



### 2 Rotate the dial to switch between "ON" and "OFF".

When OFF is selected, the beep does not sound.



- Setting the beep to OFF also disables the alarm for the timeout of the APO function and the Bell function sound.

### 8-2-14 Bell function setting




The Bell function informs you with a bell sound when a signal is received.

**1 Select Set menu No. 14, "bELL".**

The LCD should look like the figure on the right.



**2 Rotate the dial to switch between "OFF" and "ON".**

When this function is set to ON, the  icon appears on the LCD. When a signal is received, the  icon blinks and a bell sounds. Since the  icon continues blinking until the next key operation, this function can also be used as a "signal reception notification" when you leave the DJ-X30 momentarily.

### 8-2-15 Monitor Key Operation setting

You can set the operation performed when the [MONI] key is pressed.

**1 Select Set menu No. 15, "Moni".**

The LCD should look like the figure on the right.



**2 Rotate the dial to select either "PUSH" or "HOLD".**

PUSH	The Monitor/Mute function is valid only while the [MONI] key is pressed.
HOLD	The Monitor/Mute function is valid from the instant the [MONI] key is pressed until the key is pressed again.

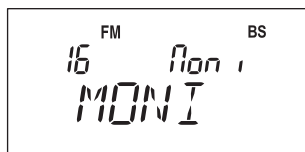


## 8-2-16 Monitor/Mute function setting

You can set the role of the [MONI] key, to either activate the Monitor function or the Mute function.

### 1 Select Set menu No. 16, "Moni".

The LCD should look like the figure on the right.



### 2 Rotate the dial to select either "MONI" or "MUTE".

MONI	When the [MONI] key is pressed, the squelch opens temporarily.
MUTE	When the [MONI] key is pressed, sound is muted temporarily.

## 8-2-17 Charging function setting

### 1 Select Set menu No. 20, "CHArGE".

The LCD should look like the figure on the right.



### 2 Rotate the dial to switch between "ON" and "OFF".

The default is OFF.



This setting is very important. Be sure to read this information carefully.

- You must set the Charging function to OFF when dry cell batteries are used. When this function is ON, the dry cell batteries will be charged, which is extremely dangerous.
- Charging is automatically turned OFF after a specified time to prevent overcharging. The charging time can be changed with the "Charging time setting" in Set mode.
- Stop charging immediately if any abnormality is found such as heat produced from the battery.

## 8-2-18 Charging time setting

This function sets the charging time according to the battery capacity when the optional Ni-MH battery pack or commercially-available rechargeable AA-size batteries are used.

The time can be set within the range of 1 to 24 hours.

### 1 Select Set menu No. 21, "CHGtiM".

The LCD should look like the figure on the right.



### 2 Rotate the dial to set a charging time.



MEMO

- The optional Ni-MH battery pack (1.2 V - 1800 mAh) requires about 10 hours to be fully charged.

Batteries with larger capacity than the EBP-57N require a longer charging time.

Relationship between major commercially-available Ni-MH batteries and typical charging time

1800 mA: 12 hours

2200 mA: 14 hours

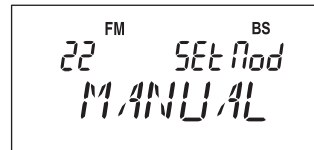
- After charging is complete, turning OFF the DJ-X30 and turning it ON again will start charging again.

## 8-2-19 Set Mode cancel time setting

This function sets whether or not to exit the Set mode automatically when no operation is performed for a specified time. You can select either manual canceling or automatic canceling (5 to 25 seconds).

### 1 Select Set menu No. 22, "SetMod".

The LCD should look like the figure on the right.



### 2 Rotate the dial to change the display between "MANUAL" and "5-SEC" through "25-SEC".

MANUAL (Default)	The Set mode continues until the [FUNC] key is pressed.
"5-SEC" to "25-SEC"	The Set mode is automatically terminated when no operation is performed for the specified time. The change in the setting will be saved.

## 8-2-20 Write-protect (memory protection) function setting

You can enable editing (overwriting or deleting) for the channel data programmed for the Memory mode.

### 1 Select Set menu No. 23, "ProtCt".

The LCD should look like the figure on the right.



### 2 Rotate the dial to switch between "ON" and "OFF".

ON	Write-protect is enabled. You cannot edit the programmed data in the memory.
OFF	Write-protect is disabled. You can edit the data in the memory.

To delete a memory channel, continue the procedure shown in "Deleting a memory channel" (P. 66).



- When you activate the Reset function while the write-protect function is disabled, all data in the memory will be deleted. After you edit the memory by disabling the write-protect function, be sure to activate the function again.

## 8-2-21 Skip-scan Operation setting

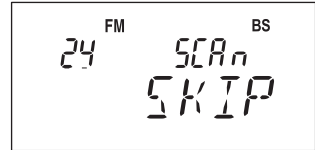
You can select whether to skip the frequency programmed to the skip-search memory channel and the memory channel specified for skip operation.

The frequencies programmed to the skip-search memory channel are skipped during the VFO scan, programmed scan, and preset scan (excluding TV frequencies). The memory channels specified for skip operation are skipped during the memory scan.

During the memory scan, the frequencies programmed to the skip-search memory channel are not skipped.

### 1 Select Set menu No. 24, "SCAN".

The LCD should look like the figure on the right.




### 2 Rotate the dial to select either "SKIP" or "NoSKIP".

SKIP..... The scan excludes the channels specified for skip operation.

NoSKIP..... The scan includes the channels specified for skip operation.

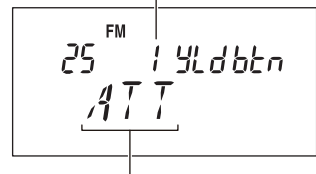
## 8-2-22 Wild Key assignment setting

You can assign a desired menu of the Set mode to the  key. By assigning a frequently used menu to the key, you can change its setting quickly.

### 1 Select Set menu No. 25, "YLdbtn".

The LCD should look like the figure on the right.

Menu number of the function assigned to the key



Menu item of the function assigned to the key

## 2 Rotate the dial to display the functions which can be assigned to the key one by one.

You can select a menu item from the following:

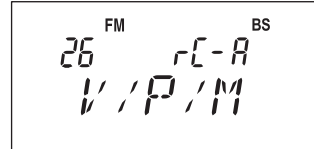
Menu No.	Menu name	Description
1	ATT	Attenuator (ATT) function setting
2	ANTENA	Earphone Antenna setting
3	ABAR	AM Radio Bar-antenna setting
4	SBAR	Shortwave Bar-antenna setting
5	LAMP	Lamp Operation setting
6	SCANTP	Scan Type Switching setting
7	PRIO	Priority Channel setting
8	TIMESP	Priority Monitoring interval setting
9	TIMEPR	Priority Monitoring duration setting
10	BAND	Band Transition setting
11	APO	APO function setting
12	BS	Battery-save function setting
13	BEEP	Beep deactivation setting
14	BELL	Bell function setting
15	MONTYP	Monitor Key Operation setting
16	MONFNC	Monitor/Mute function setting
17	CHARGE	Charging function setting
18	CHGTIM	Charging time setting
19	SETMOD	Set Mode cancel time setting
20	PROTCT	Write-protect (memory protection) function setting
21	SKIP	Skip-scan Operation setting
22	WILDKY	Wild Key assignment setting
23	RMCN-A	Function assignment for Remote Controller Button A
24	RMCN-B	Function assignment for Remote Controller Button B
25	RMCN-C	Function assignment for Remote Controller Button C
26	RMCN-D	Function assignment for Remote Controller Button D

## 8-2-23 Function assignment for remote controller buttons

This menu is available only when the optional remote controller EPS-12 is used.

You can assign the functions listed in the table below to the remote controller buttons as desired. The remote controller has four buttons for function assignment: A through D.

- 1 Use Set menu Nos. 26 through 29 to assign functions to remote controller buttons A through D respectively. The operation is common to all buttons.**



- 2 Select a button to assign a menu item by selecting from Set menu Nos. 26 through 29. "rC-A", "rC-b", "rC-C", or "rC-d" is displayed on the LCD.**

The letters "A", "b", "C", and "d" on the right end indicate the operation button of the remote controller.

- 3 Rotate the dial until the function you want to assign to the selected button appears.**


The following functions can be selected.

Default	Menu name	Description
	ATT	Attenuator (ATT) function setting
	ANTENA	Earphone Antenna setting
	ABAR	AM Radio Bar-antenna setting
	SBAR	Shortwave Bar-antenna setting
	BEEP	Beep deactivation setting
	BELL	Bell function setting
KEY C	UP	UP key
KEY D	DOWN	DOWN key
KEY A	V/P/M	VFO/Preset/Memory mode switching
	AUX IN*	External input switching
	TONE	Tone Squelch function setting
	REVTON	Reverse Tone Squelch function setting
	MONI	MONI (Monitor) key
KEY B	BAND	Band switching
	PRIO	Priority Monitoring function setting
	SPEED	Scan Speed switching function setting
	AFTONE	Audio quality of received signals setting

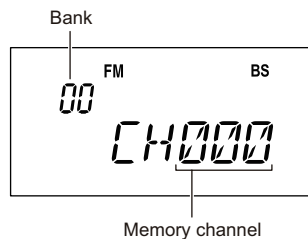
\* This function selects whether to switch to the DJ-X30 automatically when the squelch opens, or to fix the audio input from the portable audio player.

# 9. Channel Display Mode

This mode displays only a bank and a channel number instead of a frequency in the Memory mode. Some other functions are also disabled.

- 1** Program frequencies into the memory beforehand.
- 2** Set the Memory mode to ON and turn the power OFF.
- 3** Turn the power ON while holding down the [MONI] and  keys simultaneously.

The LCD should look something like the figure on the right.



To cancel the Channel Display mode:

Repeat the same operation as above.

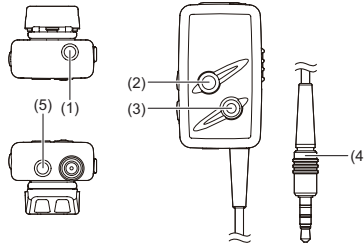


- In the Channel Display mode, all operations are disabled except for bank/channel selection, volume adjustment, squelch adjustment, Monitor/Mute function, Memory Scan, and Key-lock.

# 10. Using the Optional Remote Controller

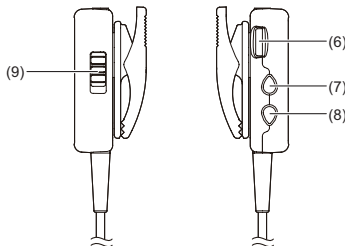
## 10-1 Using the Remote Controller

### 10-1-1 Top/Bottom/Front panels



No.	Item	Description
(1)	Earphone jack	Earphone output jack. Connect earphones or other output devices.
(2)	Operation button A	Used as the V/P/M key.
(3)	Operation button B	Used as the BAND key.
(4)	Earphone cord	Plug this cord into the earphone jack of the DJ-X30.
(5)	Audio input jack	Connect an MP3 player or other portable audio player.

### 10-1-2 Side panel

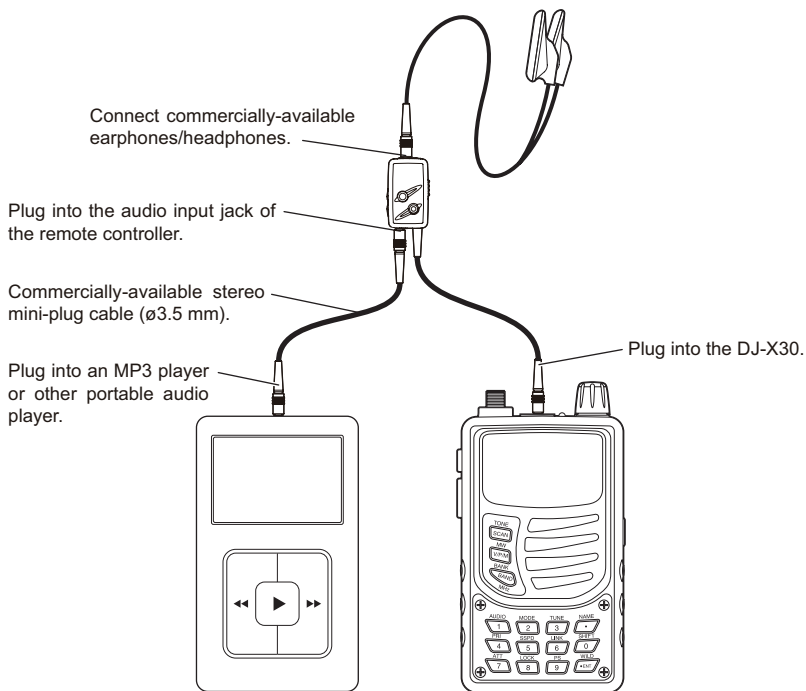


No.	Item	Description
(6)	Volume control	Used to adjust the volume. The volume of audio input from the audio input jack (5) cannot be changed.
(7)	Operation button C	Used as the UP key.
(8)	Operation button D	Used as the DOWN key.
(9)	Lock switch	Used to lock the keys of the remote controller.



## 10-2 Connecting the Remote Controller

The following figure shows the connection of the remote controller.



## 10-3 Remote Controller Functions

- Both monaural and stereo earphones/headphones can be used.
- You can connect an MP3 player or other portable audio player to the remote controller and listen to music under normal conditions. When the squelch opens, the input is automatically switched to the DJ-X30.
- You can assign functions you want to the operation buttons A, B, C and D. (See page P. ..)

# 11. Cable-clone and PC Connection Functions

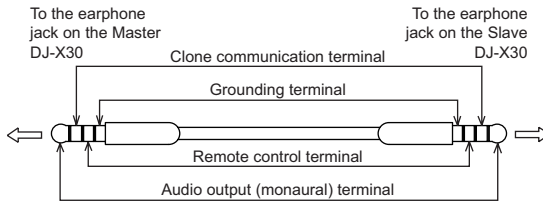
The Cable-clone function copies data from one DJ-X30 to another DJ-X30. By connecting two DJ-X30 units with a cable, you can copy the information (including memory data) specified in the sending unit (herein referred to as “Master”) to the receiving unit (herein referred to as “Slave”).

You can also edit memory channels and Set mode settings with free software downloadable from Alinco’s web site, by connecting the DJ-X30 to a PC using the PC Connection function.

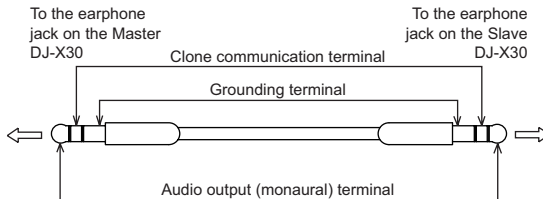
## 11-1 Cable Connection

Before connecting the cable, you must turn OFF the power of the DJ-X30. Connect the earphone jacks on the Master and Slave with a commercially available  $\varnothing 3.5\text{mm}$  stereo mini-plug cable. When you connect the DJ-X30 to a PC, use the PC interface cable (sold separately; ERW-4C or ERW-7). Plug the socket of the cable to the serial or USB port on the PC, and plug the other end into the earphone jack on the DJ-X30.

### • 4-pole stereo mini-plug cable



### • 3-pole stereo mini-plug cable



## 11-2 Receiving Data

Use the following procedure to copy data from another DJ-X30 or to receive data edited on a PC.

- 1 Turn OFF the Slave and connect the stereo mini-plug cable to its earphone jack.**

Commercially-available 3-pole stereo mini-plug cable can also be used.

- 2 While holding down the [MONI] key, press the [PWR] key to turn ON the Slave.**

"CLONE" appears on the LCD and the Slave enters Clone mode.



- 3 Wait until the Master DJ-X30 or PC sends data.**

- 4 When the data transfer finishes, "FINISH" is displayed on the LCD. Confirm the display and turn OFF the Slave.**



- The stereo mini-plug cable should be a direct-coupled type which avoids internal resistance.
- While the Master is transferring data, pressing any key on the Slave suspends the data transfer operation. To resume the operation, press the dial.
- Do not unplug the cable while data is being transferred. Doing so will suspend the data transfer operation, and "FAIL" will be displayed on the Master's LCD.
- Note that the cloning procedure overwrites all data stored in the Slave with the Master's data. Make sure that the Slave does not have any necessary data.

## 11-3 Transferring Data

The procedure below does not necessitate using the PC Connection function.

- 1 Turn OFF the Master and connect the stereo mini-plug cable to its earphone jack.**
- 2 While holding down the [MONI] key, press the [PWR] key to turn ON the Master.**

"CLONE" appears on the LCD and the Master enters Clone mode.

- 3 While "CLONE" is displayed on the LCD, press the dial. The LCD shows something like the figure on the right and the data on the Master is transferred to the Slave.**

The number decreases.



- 4 When the data transfer finishes, "FINISH" appears on the LCD.**

If "FAIL" appears on the LCD, repeat the procedure from step 1.

- 5 Turn OFF the Master.**

The Clone mode is not canceled unless you turn OFF the Master.

# 12. Reset Function



- Before resetting the DJ-X30, be sure to check the memory protection function settings. Resetting the receiver with the Write-protect (memory protection) function (P. ●●) in OFF state deletes all of the factory default data and user-programmed data.
- You cannot restore data after it is deleted.

The Reset function resets all values and parameters including the Set mode settings to the initial (factory default) settings.

## 12-1 Reset Procedure

- 1** While holding down the [FUNC] key, hold down the [PWR] key and turn the DJ-X30 ON.
- 2** When all icons and indicators are displayed on the LCD, release the [FUNC] and [PWR] keys.

The DJ-X30 returns to the initial VFO mode.

## 12-2 Default Settings

List of data after resetting (Factory default parameters)

Frequency	VFO mode, 145.000 MHz
Volume level	20
Squelch level	3
Preset mode	76.1MHz
Scan	VFO scan
Memory scan	SINGLE scan
Tuning step frequency	AUTO
CTCSS tone frequency	88.5
Set mode	
Attenuator (ATT) function setting	OFF
Earphone Antenna setting	External antenna
AM Radio Bar-antenna setting	ON
Shortwave Bar-antenna setting	ON
Lamp Operation setting	5-SEC
Scan Type Switching setting	Busy scan
Priority Channel selection	0 channel
Priority Monitoring interval setting	5-SEC
Priority Monitoring duration setting	BUSY
Band Transition setting	ROTATE (within the current band)
APO function setting	OFF
Battery-save function setting	ON
Beep deactivation setting	ON
Bell function setting	OFF
Monitor Key Operation setting	PUSH
Monitor/Mute function setting	MONI
Charging function setting	OFF
Charging time setting	12 hours
Set Mode cancel time setting	MANUAL
Write-protect (memory protection) function setting	ON
Skip-scan Operation setting	SKIP
Wild Key assignment setting	ATT
Function assignment for Remote Controller Button A	V/P/M
Function assignment for Remote Controller Button B	BAND
Function assignment for Remote Controller Button C	UP
Function assignment for Remote Controller Button D	DOWN

Key pad mode	
Reception mode	AT
Shortwave Tuning function	AUTO
Scan speed (V-SPD)	Speed 3
Scan speed (M-SPD)	Speed 3
Audio quality of received signals setting	LOW

# 13. Maintenance and Reference

## 13-1 Troubleshooting

Please check the list below before concluding that the receiver is faulty.

If a problem persists even after performing the actions below, try resetting the receiver. This may correct erroneous operations.

Symptom	Possible Cause	Action
Nothing appears on the LCD when you turn the power ON.	Poor battery contact	Check that the battery terminals are clean.
	Flat batteries	Recharge the battery pack or replace dry-cell batteries with new ones.
	Releasing the [PWR] key too quickly	Press the [PWR] key for 1 second until the receiver turns on.
No speaker audio/ No reception	Volume level is too low.	Adjust the volume level.
	Squelch level is too high.	Adjust the squelch level.
	Tone Squelch is ON.	Deactivate the Tone Squelch.
	Mute function is ON.	Deactivate the Mute function.
Frequency display is incorrect.	CPU error	Uninstall the batteries or unplug the external power supply. Wait for at least 10 seconds, and reinstall the batteries or reconnect the power supply. If the problem persists, reset the receiver.
The receiver does not scan.	Squelch is open.	Adjust the squelch level until noise disappears.
Frequency and memory channel number do not change.	Key-lock is ON.	Release the Key-lock.
Keys do not operate.	Key-lock is ON.	Release the Key-lock.
Display blinks or goes out during reception.	Flat batteries	Recharge the battery pack or replace the dry-cell batteries with new ones.



## 13-2 Optional Accessories List

- Soft Case (ESC-44)
- Curl-Cable Earphone (EME-26)
- Cigar DC/DC Converter (EDH-33)
- Trickle Charger (EDC-154A)
- Ni-MH Battery Pack (EBP-57N: 1.2 V-1800 mAh x 2)
- Remote Controller (EDS-12)
- PC Programming Cable (ERW-4C: for serial port connection)
- PC Programming Cable (ERW-7: for USB connection)

## 13-3 Table of Available CTCSS Tones

The table below shows the CTCSS tones available for the Tone Squelch function.

Rotate the dial while a tone frequency is displayed on the LCD to select CTCSS tones from the following 39 standard tones.

67.0	94.8	131.8	186.2
69.3	97.4	136.5	192.8
71.9	100.0	141.3	203.5
74.4	103.5	146.2	210.7
77.0	107.2	151.4	218.1
79.7	110.9	156.7	225.7
82.5	114.8	162.2	233.6
85.4	118.8	167.9	241.8
88.5	123.0	173.8	250.3
91.5	127.3	179.9	

(Unit: Hz)

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# 15. Specifications

Receiver range		0.100~1299.995MHz continuous (USA T version: cellular frequencies [824.000~849.995MHz, 869.000~894.995MHz] are blocked.)
Modulation type	AM	A3E
	FM/WFM	F3E
Antenna impedance		50Ω unbalanced SMA port
Operating battery voltage	External DC port	DC5.4V~6.0V
Current consumption	Average	Approx. 140mA
	Stand-by	Approx. 65mA
	Battery-save ON	Approx. 26mA
Frequency stability		-7~+3ppm (-10°C~+60°C) (+14°F~+140°F)
Size		58W×99H×32D mm/2.28W×3.90H×1.26D inches (projection exclusive)
Weight		Approx. 165g/15.83oz (antenna and battery inclusive)
Receiver	NFM/AM	Triple-conversion Super-heterodyne
	WFM	Double-conversion Super-heterodyne
Intermediate frequency	1st	243.95MHz
	2nd	39.15MHz (NFM/AM), 10.7MHz (WFM)
	3rd	450kHz (NFM/AM)
Sensitivities (*)	FM	30~470MHz: -15dBμ (0.17μV) 470MHz or higher: -7dBμ (0.45μV) 12dB SINAD
	WFM	76~470MHz: -6dBμ (0.5μV) 470MHz or higher: -3dBμ (0.7μV) 12dB SINAD
	AM	0.1~50MHz: 1dBμ (0.89μV) 50MHz or higher: -6dBμ (0.5μV) 10dB S/N
Selectivity	NFM/AM	-6dB/12kHz or more -60dB/35kHz or less
	WFM	-6dB/130kHz or more -60dB/300kHz or more
Audio output power		More than 100mW (8Ω)

\* Typical values in the bands, not the minimum guaranteed values.

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