10-8 MEMORY

Memory function settings will be explained in this section.

1.Select "MEMORY" from the Set mode menu.

2.By pressing the dial, the sub menu will appear.

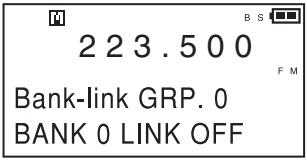
10-8-1 Bank-Link Setting Function

When scanning the memories, you can combine the banks that you want to scan into scanning groups. 10 pairs of groups can be set, and the 10 pairs correspond to keys from PRIO 0 to CALL 9 WXYZ.

●How to set the bank link function.

1.Rotate the upper dial and select "Bank link".

2.Press the keys from PRIO 0 to CALL 9 WXYZ and select the group number you want to edit.



3.Rotate the lower dial and select the bank you want; the group will be registered by pressing the #RPT ENT key and by indicating "Yes" on the display.

By pressing the #RPT ENT key again, "No" will be displayed, and the operation is cancelled.

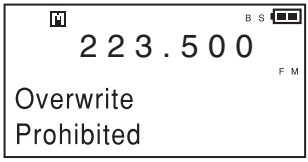
- When confirming the details of a specific group, select the group and rotate the lower dial. The links of respective banks will be indicated.
- The used of the free - utility program makes it much easier to manage Bank - Link memories.

10-8-2 Over Write Function

This function allows editing (overwriting and deleting) channels registered in the Memory mode. Default setting is “Prohibited”.

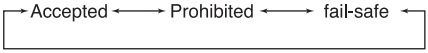
1.Rotate the upper dial and select “Overwrite”.

“Overwrite” will be indicated on the display as shown on the right.



2.Rotate the lower dial and select one of the overwrite settings.

When rotating the dial, the settings will switch as shown in the illustration.



Accepted	This setting will make the Overwrite function valid. Memories registered can be edited.
Prohibited	This setting will make the Overwrite function invalid. Memories registered cannot be edited.
fail-safe	Memories registered can be edited. When turning the transceiver on again, the setting will return to “prohibited” automatically.

Please read “Deleting Memory Channels (P.43)” to learn how to delete memory channels.

10

10-9 SCANNING

Various scanning functions are explained in this section.

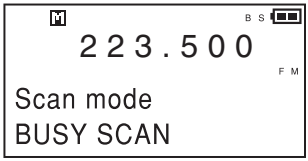
1.Select “SCANNING” from the menu of the Set mode.

2.By pressing the dial, the sub menu will appear.

10-9-1 Scan Mode Settings

You can set the conditions under which scanning will resume after stopping for a monitored signal.

1.Rotate the upper dial and select "Scan mode".
"Scan mode" will be displayed as shown on the right.



2.Rotate the lower dial and select from "BUSY SCAN"↔ "1 second timer" to "25 seconds timer"↔"1 second elapse" to "5 minutes elapse".
Set the scan mode according to the table below.

Busy scan mode	Scanning will resume if there is no signal after stopping the scan.
Timer scan mode	Scanning will resume when the selected time is up even when receiving a transmission.
Elapsed Time setting scan mode	This function will resume scanning when the selected time is up regardless of whether or not there is a signal. This function will operate even when the squelch is open. The time to stop scanning can be set from 5 seconds to 5 minutes.

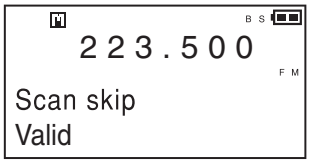
MEMO

- The time setting scan mode automatically moves to the next channel when the set time is up regardless of whether or not there is a signal. As this mode operates even when the squelch is open, it is a useful function when scanning data communications.
- This function can be used in the VFO mode, the Program scan mode and the Memory mode.

10-9-2 Scan Skip Settings

You can select whether to skip the frequencies registered in the search pass memory channels or those memory channels designated for skipping.
The frequencies registered in the search pass memory channels will be skipped during VFO scans and Program scans, and the memory channels designated for skipping will be skipped when scanning memories.
When scanning memories, the frequencies registered in search pass memory channels won't be skipped.

1.Rotate the upper dial and select "Scan skip".
"Scan skip" will be displayed as shown on the right.

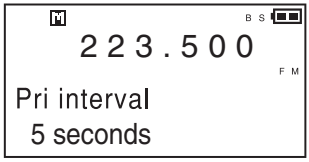


2.Rotate the lower dial and select between "Valid"↔"Suspend".

10-9-3 Priority Interval Setting

This section explains how to set priority intervals in the Priority function.

1.Rotate the upper dial and select "Pri interval".
"Pri interval" will be displayed as shown on the right.

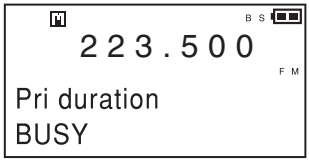


2.Rotate the lower dial and select an interval in a range from 5 to 60 seconds.

10-9-4 Priority Duration Setting

This section explains how to set the time allowed to receive priority channels in the Priority function.

1.Rotate the upper dial and select "Pri duration".
"Pri duration" will be displayed as shown on the right.



2.Rotate the lower dial and select between "BUSY"↔or from "1 second" to "25 seconds".

10-9-5 Backlight Setting While Scanning

The display and keys can be illuminated when scan stops in the scan mode. This is useful for scan operation in the dark.

1.Rotate the upper dial to select [Scan lamp].

2.Rotate the lower dial to select [ON] or [OFF] of the function. When [ON] is set, the display and key illumination will be lit at each squelch-opening during scan operations.

Note: The [Always lit] parameter in illumination setting mode (P.71) will be disregarded and illumination turns off when [ON] is selected in this menu. The illumination stays lit until the scan resumes in accordance with the scan mode setting. Stop scanning to turn off the backlight.

10-10 KEY ASSIGNMENT

The settings of the key assignments for this transceiver are explained in the following:

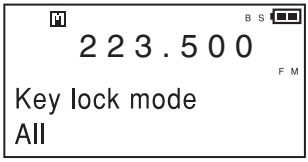
1.Select "KEY ASSIGNMENT" from the Set mode menu.

2.By pressing the dial, the sub menu will appear.

10-10-1 Key Lock Mode Settings

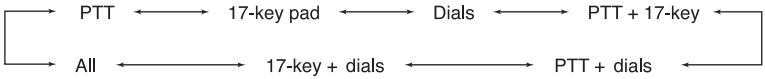
This section explains the allocation of the keys and dials that are to be locked.

1.Rotate the upper dial and select "Key lock mode".



2.Rotate the lower dial and select the type of key lock mode.

Every time the dial is rotated, the modes switch as follows;



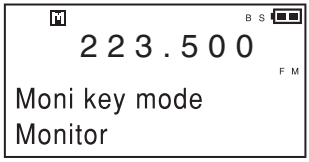
PTT	The [PTT] key will be locked.
17-key pad	Keypad operations will be locked.
Dials	Dial operations will be locked. *
PTT + 17-key	The [PTT] key and keypad operations will be locked.
PTT + Dials	The [PTT] key and dial operations will be locked.
17-key + Dials	Keypad and dial operations will be locked.
All	All operations will be locked.

* The "volume", "squelch" and the [MONI] key can be operated.

10-10-2 Moni Key Mode Setting

When pressed, the [MONI] key can be set to either monitor mode or mute mode.

1.Rotate the upper dial and select "Moni key mode".
"Moni key mode" will be displayed as shown on the right.



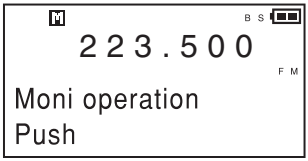
2.Rotate the lower dial and select between "monitor"↔"mute".

Monitor	When the [MONI] key is pressed, the squelch will open temporarily.
Mute	When the [MONI] key is pressed , the sound will mute temporarily.

10-10-3 Moni Operation Settings

The operational settings when the [MONI] key is pressed are explained in this section.

1.Rotate the upper dial and select "Moni operation".
"Moni operation" will be displayed as shown on the right.



2.Rotate the lower dial and select between "Push"↔"Hold".

Push	The monitor function or the mute function will operate while the [MONI] key is being pressed.
Hold	Press the [MONI] to activate, repeat to cancel the operation.

10-10-4 Setting the Bands Subject to MONI Key Operations

The bands subject to the operation of the [MONI] key can be set.

1.Rotate the upper dial and select "Moni active on".

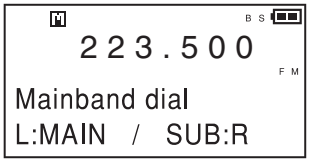
2.Rotate the lower dial and select the bands subject to {MONI} key operations.

Both bands	The [MONI] key will operate on both bands.
Main-band only	The [MONI] key will only operate on the main band.
Sub-band only	The [MONI] key will only operate on the sub band.
Operating band	The [MONI] key will function on the selected operating band.

10-10-5 Mainband Dial Setting

This setting switches the functions of the dials on the left and the right sides.

1.Rotate the upper dial and select "Mainband dial".
"Mainband dial" will be displayed as shown on the right.

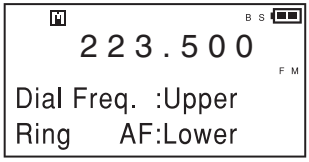


2.Rotate the lower dial and select between "Left: Main Sub: Right"↔"Left: Sub Main: Right".

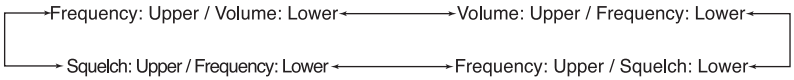
10-10-6 Dial Function Setting

This setting switches the functions of the dials on the upper and the lower sides.

1.Rotate the upper dial and select "Dial Ring".
"Dial Ring" will be displayed as shown on the right.



2.Rotate the lower dial and select the functions of the upper and lower dials.
When rotating the dials, the functions will switch as follows:



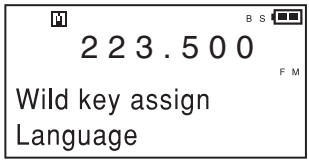
MEMO

•The functions of volume and squelch that are not assigned by rotating the dials can be adjusted by pressing them.

10-10-7 Short-cut (Wild) key Setting

●Optional menus in the Set mode can be assigned to the WILD 1 key. If you set the menus frequently used in the WILD 1 key, you can change the settings quickly.

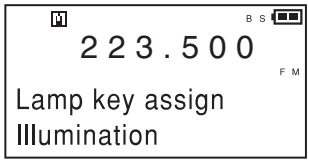
1.Rotate the upper dial and select "Wild key".
"Wild key" will be displayed as shown on the right.



2.Rotate the lower dial and select the function you want to assign to the WILD 1 key.

●Optional menus in the Set mode can be assigned to the [LAMP] (MONI) key. If you set the menus frequently used in the [LAMP] key, you can change the settings quickly.

1.Rotate the upper dial and select "Lamp key assign".
"Lamp key assign" will be displayed as shown on the right.



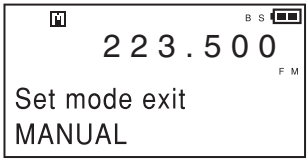
2.Rotate the lower dial and select the function you want to assign to the [LAMP] key.

10

10-10-8 Set Mode Exit Setting

This function allows the Set mode to turn off automatically when there have been no operations for a given period of time. You can select from manual and automatic (from 5 seconds to 5 minutes).

1.Rotate the upper dial and select "Set mode exit".
"Set mode exit" will be displayed as shown on the right.



2.Rotate the lower dial and select between "MANUAL" ↔ from "5 seconds" to "5 minutes".

Manual (default)	The transceiver will wait until the FUNC or the [PTT] key is pressed.
From 5 seconds to 5 minutes	The Set mode will turn off if keys are not operated within the selected time. The changed settings will be saved.

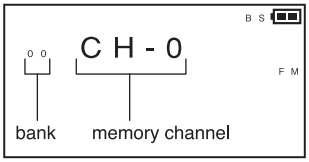
11.Channel Indication Mode

This mode displays just the bank and channel number of a memory channel, instead of frequencies, and limits other functions in the memory mode.

1.Memories must have been registered previously.

2.Set the transceiver to the memory mode and turn it off.

3.Turn the transceiver on while pressing the M→V D SCAN and the [PTT] keys.
The display will be shown as on the right.



To exit the channel indication mode, turn the transceiver off, and turn it on while pressing the M→V D SCAN and the [PTT] keys.

MEMO

- When the transceiver is in the channel indication mode, operations are limited to changing the banks and channels, adjusting the volume, adjusting the squelch, MONI/MUTE function operations, memory scan operations and keylock operations.
- When a channel name is registered, the channel name will be displayed.
- Even when the transceiver is reset, the channel indication mode can't be released unless the procedure described above is performed again.

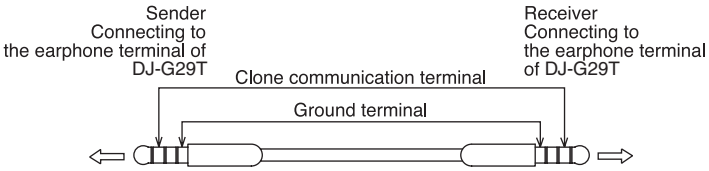
12.Cloning / PC Connection Functions

The cloning function copies data from one DJ-G29T transceiver to another DJ-G29T transceiver. Two DJ-G29T transceivers are connected by a cable and information (including memory data) from the sending unit will be copied to the receiving unit when using this function.
The DJ-G29T can also be connected to a PC and memory channels and/or the Set mode settings can be edited using specialized software downloadable from Alinco's web-site for free.

12-1 How to Connect

- When using the cloning function, an optional clone cable (EDS-11) will be connected from the sender's earphone/microphone terminal to the receiver's earphone/microphone terminal.
- When connecting this transceiver to a PC, an optional microphone/speaker plug conversion cable (EDS-10/14) is connected to the earphone/microphone terminal of this transceiver and the plug of a PC connecting cable (ERW-7/ERW-4C) and connected to the PC. See page 106 for details.

●Clone cable (EDS-11)



12-2 How to enter clone mode

When sending and receiving clone data between DJ-G29T transceivers, or when transferring data with a PC, follow these procedures:

1.Connect a clone cable (EDS-11) to the earphone/microphone terminal while the transceiver is turned off, and then turn the transceiver on.

2.Press and hold the [MONI] key then press the [PTT] key 3 times. The transceiver will be in the clone mode and is ready to transfer data.

When the transfer of data to another DJ-G29T transceiver is complete, the power automatically turns off and then turns on again.

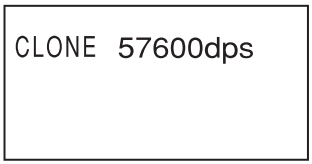
CAUTION

- When transferring data, do not press any keys.
- When transferring data, do not disconnect the cables. If a cable disconnects, [ERROR] will be shown on the display of the sending transceiver and data transfer will stop.
- When using the cloning function, data in the receiving unit will be completely replaced with data of the sender. Please be careful when there is already data stored in the receiving radio.

12-3 Transferring Date

1.With the transceiver turned off, connect a clone cable (EDS-11) to the earphone/microphone terminal of the unit that will receive data and then turn the transceiver on.

2.Press and hold the [MONI] key and press the [PTT] key 3 times on both radios.
"CLONE" will be displayed as shown in the right.



3.By pressing the dial on Master radio, data will be transferred to the slave radio.

4.When the transfer is finished, "FINISHED!" will be displayed.
If "ERROR" is displayed, redo from step 1.

5.Turn the power off to cancel the clone mode.
If the power supply is not turned off, the clone mode will not be released.

12-4 Packet Communications

Packet communication enables data transmission and reception through a TNC (modem) unit.

12-4-1 Packet Communication Connections

When using this transceiver for packet communications, refer to the illustration below and connect it to a TNC following these steps:

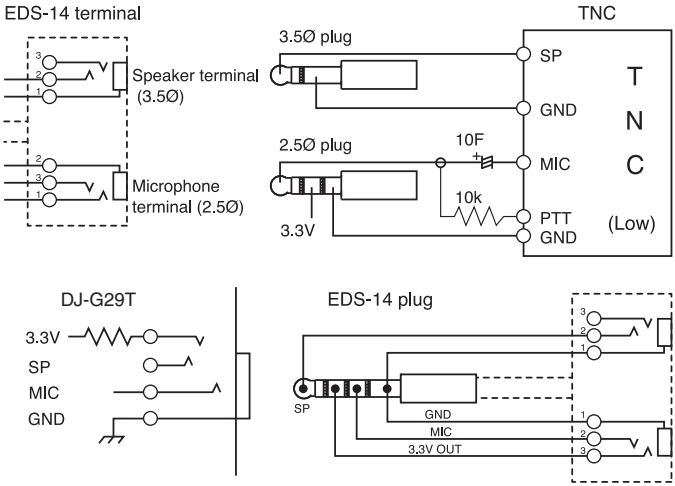
Connect an optional EDS 14 microphone/speaker plug conversion cable to the earphone/microphone terminal at the top of this transceiver, and connect a TNC (Terminal Node Controller) to the speaker terminal (using a 3.5ø plug) and to the microphone terminal (using a 2.5ø plug).

•Adjusting the input level:

This transceiver doesn't have a function to adjust the microphone input level. Adjust that level from the TNC, if necessary.

•Adjusting the output level:

Adjust the output level from the earphone/microphone terminals using the audio output dial on the transceiver.



*Voltage will be supplied through a 100 ohm resistor from the internal 3.3V line.

CAUTION

- •Please follow the TNC instruction manual for information on connecting the TNC to a PC.
- •If this transceiver, the TNC and the PC are in close proximity, noise may be present.
- •During packet communications, turn the Battery Save function off.
- •Do not exceed 1,200 bps during packet operations.

13.Reset Functions

There are two types of reset functions in this transceiver; a partial reset function that initializes only the function settings and the “all reset” function that deletes memory data also.

13-1 Partial Reset

This function doesn't initialize memory data but returns the transceiver to its factory settings.
This function is used when the transceiver is not operating properly or if the operator is confused about the transceiver's current condition.

1.Turn the transceiver off.

2.Turn the transceiver on while pressing the FUNC key.

3.When “Reset completed” is displayed, release the key.

13-2 All Reset

CAUTION

•Please be careful. Data deleted from the memory mode cannot be recovered!

This function is only for limited use such as resetting all memory data.

1.Press the STEP 7PQRS, M→V D SCAN and FUNC keys in order while turning the transceiver on.

2.When “All reset completed” is displayed, release the key.
The transceiver will return to the default VFO mode.

14. Maintenance and Reference

14-1 Troubleshooting

The following symptoms are not malfunctions, please check the possible causes and take proper actions. If a problem persists, please reset the unit. Problems with settings and CPU-related difficulties are often resolved by a reset.

Symptom	Possible Cause	Action
Nothing appears on the display when turning on the power.	Poor battery pack connection.	Remove dirt or corrosion from the battery pack terminals.
	Battery is exhausted.	Recharge or replace the batteries in the dry cell case.
	You are releasing the power key too quickly.	Hold the power key down until the display appears.
	The [PTT] key is pressed.	Release the [PTT] key.
No speaker audio.	Volume too low.	Adjust the audio level.
	Squelch level too high.	Adjust the squelch level.
	Tone squelch is on.	Turn off tone squelch.
	DCS is on.	Turn off DCS.
	You are pressing the PTT key and transmitting.	Release the [PTT] key.
	The mute function is on.	Release the mute function.
Frequency display is incorrect.	CPU error.	Remove the external power supply and the battery pack, wait for more than 10 seconds and attach them again. If the trouble isn't resolved by following these steps, reset the unit.
	A channel name is set.	Refer to “Memory Name Function”.
Won't scan.	Squelch is unmuted.	Set squelch so that noise mutes.
Frequency and memory channel number don't change.	Key lock is on.	Turn off Key lock.
Key entry not possible.	Key lock is on.	Turn off Key lock.

Symptom	Possible Cause	Action
Repeater-Access can't be used.	Incorrect setting of parameters.	Confirm the repeater settings.
Can't transmit.	Battery is exhausted.	Replace or charge the battery pack.
Display flashes or goes out when you transmit.	Not pressing the PTT key firmly enough.	Press the PTT key and confirm that the TX/RX lamp is lit red.
	The transceiver will not transmit out of the authorized band. (The shift setting is incorrect.)	Transmit within the range of authorized frequencies. Confirm the repeater settings.
	The frequency is incorrect.	Properly adjust the frequency at the other station.
The display flashes or disappears during reception.	Battery is exhausted.	Replace or charge the battery pack.

•Waterproof portions such as DC power supply jack caps are consumable items that must be replaced from time to time.

•If after-sales service or support is necessary, please contact the dealer you purchased this transceiver from. To locate your nearest dealer, please read the "US/CANADA DEALERS" in the "DISTRIBUTION" menu of our website (http://alinco.com/usa.html).

•An update of firmware maybe available for this product and the detail is posted on our website. For this reason, Your DJ-G29T may operate slighty different from the explanations given in this manual after such update is performed.

•In case of requesting technical assistances over the phone to your local Alinco dealer, we recommend you to indentify the version of firmware in advance as follows:

1:Press and hold FUNC key for 2 seconds to lock the keys.

2:Press WILD 7 key 10 times consecutive. Copy the numbers that appars on the display.

3:Press PTT to return to the operating mode.

14-2 Options

•Li-ion Battery Pack (EBP-73: 7.4V 1,200mAh)
•Dry Cell Case (EDH-35)
•Desk top charger (EDC-173)
•Desk top charging Set (EDC-173T: T-version)
•AC Adapter for Charging (EDC-170: T-version)
•Cigar Lighter Cable for Charging (EDC-43)
•Cigar Lighter Cable with Filter (EDC-36)
•DC Cable (EDC-37)
•Speaker Microphone (EMS-59)*
•Speaker Plug (EMS-62: Waterproof plug)
•Tie pin Type Microphone with VOX Function (EME-15A)*
•Headset with VOX Function (EME-12A)*
•Headset with VOX Function (EME-13A)*
•Earphone Microphone (EME-21A: heavy duty specification)*
•Earphone Microphone (EME-32A: heavy duty specification with waterproof plug)
•Earphone Microphone (EME-34A: tie pin-type)*
•Earphone Microphone (EME-36A: waterproof plug)
•Straight Code Earphone (EME-6)*
•Curled Code Earphone (EME-26)*
•Clone Cable (EDS-11: waterproof plug)
•Microphone/Speaker Conversion Cable (EDS-10/14: waterproof plug)
•PC Connection Cable (ERW-4C: serial port)* (ERW-7: USB port)*
•Soft Case (ESC-50)

CAUTION

•When using options marked with the *, please purchase the EDS-14 cable.
•When using external DC cables, connect the cables to the transceiver before turning it on.
•EME-32A/36A and EMS-62's microphone units are not waterproof (The plugs protect the radio from water to penetrate through the jack).

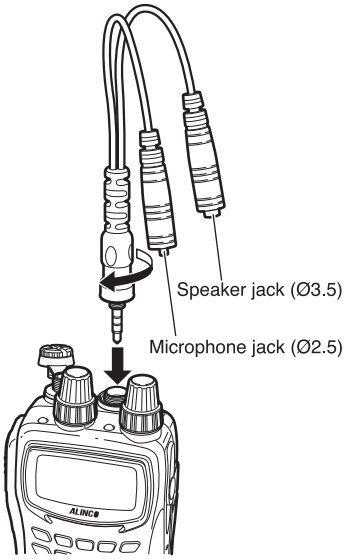
Note: Please be advised that some of the accessories listed above are not RoHS compliant at the moment this manual has been edited, and they are intended for the sales to where RoHS order is not effective. Please consult with your local dealer for any updates about RoHS compliance of our products before purchase. Use of exteral power source cables are your own risk per IEC/EN60950-1.

14-2-1 Microphone/Speaker Plug Conversion Cable (EDS-14)

1.Turn the transceiver off.

2.Rotate the plug clockwise (right). When it stops, confirm that the plug is securely connected.

3.Connect the microphone/speaker cables to their respective jacks.



CAUTION

•Never use tools like pliers to screw the plugs. It may cause a serious damage to the cable and/or the unit.

15.Specifications

■General

Frequency range: TX(Main band): 222.000 - 224.995MHz
902.000 - 927.995MHz
RX(Main/Sub band): 216.000 - 249.995MHz
902.000 - 927.995MHz

- ●Antenna impedance: 50 ohm (SMA)
- ●Supply voltage: DC 7.4V (EBP-73 Li-Ion battery pack)
  DC 9~16V (external regulated source)
- ●Ground: Negative ground
- ●Current consumption:
  - TX approx. 1.7A/222MHz, 1.7A/902MHz
  - RX approx. 200mA/Dual, 150mA/Mono
  - Battery save (1:4) approx. average : Dual 56mA/Mono 50mA
- ●Temperature range: -10°C~+45°C (+14~+113°F)
- ●Frequency stability: +2.5ppm (@-10 - +45°C)
- ●Dimensions (WxHxD Projections exclusive):
  61 x 106 x 38 mm
  or 2.40 x 4.17 x 1.50 in.
- ●Weight (Antenna/EBP-73 inclusive):
  Approx. 296 g /9.55 oz

■Transmitter

- ●Output power (approx):
  - DC13.8V:222MHz 5/1/0.4W, 902MHz 2.5/1/0.4W
  - EBP-73:222MHz 4/0.8/0.3W, 902MHz 1.7/0.8/0.3W
  - 4 x AA cells (Max): 222MHz 1.5W, 902MHz 0.7W,
- ●Modulation mode: F1D/F2D/F3E
- ●Spurious emission: -60dB or less
- ●Maximum frequency deviation: ±5KHz

■Receiver

- ●System: Double-conversion super heterodyne
- ●IF frequencies (1st/2nd):
  Main band: 51.65MHz / 450KHz
  Sub band: 50.75MHz / 450KHz
- ●Sensitivity: Main band: 222MHz ham-radio bands -14dBμ
  902MHz ham-radio bands -14dBμ
  Sub band: 222MHz ham-radio bands -14dBμ
  902MHz ham-radio bands -14dBμ
- ●Selectivity: -6dB 12KHz or more / -60dB 35KHz or less
- ●Audio output power: More than 400mW (8Ω / MAX)

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