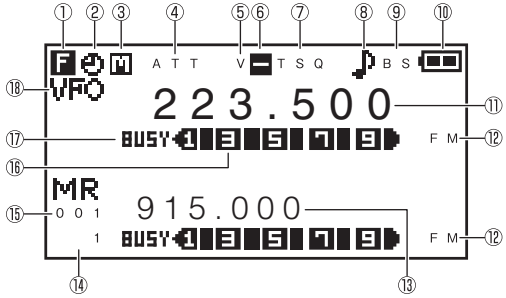
4-2 Display (LCD)



No.	Name	Function
①	F / Om / Om	Appears when the FUNC key is pressed and when the Key lock is activated.
②		Appears when the Auto Power Off function is activated.
③	M / S	Displays the operation band
④	ATT	Appears when the Attenuator function is activated.
⑤	V / D	Appears when the VOX function is operating and the Auto Dialer is transmitting.
⑥	− / +	Displays the shift direction for repeater operations.
⑦	T / TSQ / DCS	Appears when the Tone Squelch and DCS functions are activated.
⑧		Displays when the bell function is set.
⑨	BS	Displays when the Battery Save function is activated.
⑩		Displays the battery charge level.
⑪	223.500	Displays the main band frequency.
⑫	FM	Displays the mode (FM and NFM).
⑬	915.000	Displays the sub band frequency.
⑭	1	Displays the Memory Bank number.
⑮	001	Displays the Memory Channel number.
⑯	S 1 3 5 7 9	Displays received signal strength and transmitted power output.
⑰	BUSY / MUTE	Appears when the squelch is not muted.
⑱	VFO	Displays the operation mode.

5. Basic Operation

5-1 Turning On the Transceiver

1.The power turns on when the ⏻ key is pressed and held approximately one second.
Use the same operation to turn the power off.
*The ⏻ key is designed hard enough to press on purposes so it doesn't turn off while in use.

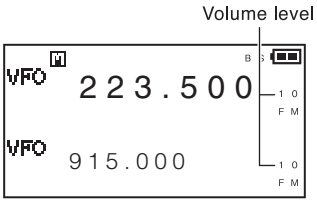
5-2 Selecting Frequencies

●To select a Main Band frequency
Rotate the upper main dial.

●To select a frequency on the Sub Band
Rotate the upper sub dial.
Frequencies increase when rotated clockwise and decrease when rotated counterclockwise.

5-3 Adjusting the Audio Output (Volume)

There are 21 audio output levels (from 0 to 20)
The default setting is level 10.



●Adjusting the Main Band Volume
Rotate the lower main dial.

●Adjusting the Sub Band Volume
Rotate the lower sub dial.
The audio increases when the dial is rotated clockwise and decreases when rotated counterclockwise.

CAUTION

•Be careful when using earphones. Confirm the volume level at a low and then increase it gradually.

MEMO

When nothing can be heard

•When the squelch is closed or the mute function is activated, received signals can't be heard even when the volume is increased. Please read “Adjusting the Squelch (P.31)” and “Mute Function (P.32)” for details.

5-4 Adjusting the Squelch

●About the Squelch Function

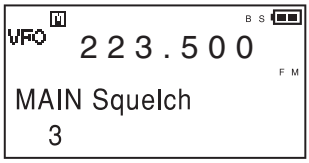
Squelch is a function that allows audio from the speaker only when receiving a signal greater than a certain level. It eliminates unwanted noise heard from the speaker when there are no received signals to monitor. Increasing the squelch level allows the reception of strong signals but weak signals will not be received.
When the squelch is active and audio is received, it is described as “opening the squelch” and the opposite is described as “closing the squelch”. When the squelch opens depends on how strong the received signal is and is determined by the squelch setting.
The squelch level may need occasional adjustment as conditions warrant, such as the need to monitor a weak signal.

There are 10 squelch levels that can be adjusted in a range from 0 to 9.

5-4-1 Operation

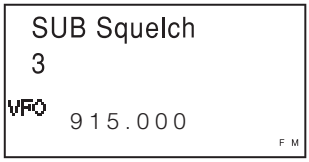
●Adjusting the Main Band Squelch

Press the main dial once and rotate the upper main dial.



●Adjusting the Sub Band Squelch

Press the sub dial once and rotate the upper sub dial.



The squelch level increases when rotating the dial clockwise and decreases when rotating the dial counterclockwise.

•When you want to open the squelch as a permanent setting, set the squelch level at 0.

•When the squelch is open, the scan functions don't operate. When you want to operate the scan functions, adjust the squelch level until no noise can be heard.

5-5 Monitor Function

The monitor function is a function that enforces to open the squelch. When the received signal is weak or when the audio is broken, it temporarily opens the squelch regardless of the squelch level setting. This function is useful when the “Moni Key Mode Setting (P.94)” is set as the monitor function.

There are two types of monitor functions, PUSH and HOLD. By pressing the MONI key, BUSY appears on the display and the squelch opens in either case.

5

•In the PUSH setting, the squelch opens only while the MONI key is pressed.
•In the HOLD setting, the squelch stays open when pressing the MONI key. By pressing the MONI key again, the monitor function is released and the squelch function returns to normal.
•Please read “Moni Operation Settings (P.94)” in the setting mode for the steps needed to select the PUSH or HOLD setting and vice-versa.

MEMO

•When using the monitor function, the tone squelch and the DCS are also temporarily deactivated.

5-6 Mute Function

This function doesn't allow audio output even when a signal is received and the squelch is open. This function is usable when the “Moni Key Mode Setting (P.94)” is set to the mute function.

The mute function also has two settings, PUSH and HOLD. By pressing the MONI key, MUTE appears on the display and the mute function operates in either case.

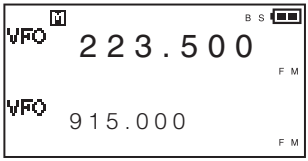
MEMO

•Either the monitor function or the mute function can be chosen (not both).

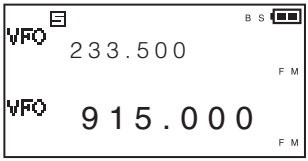
5-7 Choosing the Operation Band

The operation band may be chosen from either the main band or the sub band.

1.Choose the operation band by pressing the MAIN key or the SUB key.
The frequency of the chosen band is indicated in large characters in dual band displays.
In mono band display, only one frequency is shown.



2.By pressing the MAIN key or the SUB key successively, the band changes.



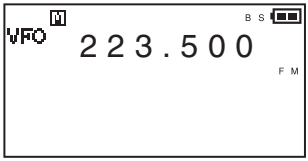
MEMO

- Another way to switch 222 and 902MHz band is to rotate the upper dial while pressing and holding the MAIN or the SUB key.
- M indicates that the main band is the operation band and the S indicates that the sub band is the operation band.

5-7-1 Operating in Mono Band

●To operate the main band as mono band.

1.Press and hold the MAIN key continuously for approximately one second.
The main band is displayed as the mono band. In order to return the main band to dual band, repeat the same step.



●To operate the sub band in mono band.

1.Press and hold the SUB key continuously for approximately one second.
The sub band is displayed as the mono band. In order to return the sub band to dual band, repeat the same step.

5-7-2 Switching the Sub Band and Main Band Frequencies

When setting both the main band and the sub band to the amateur transmitting and receiving bands, this transceiver allows exchanging frequencies of the sub band and main band.

1.Press the FUNC key.

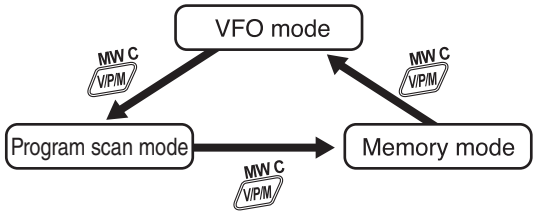
2.Press the SUB key.
By following these steps, the frequencies of the sub band and the main band are exchanged.

6. Operation Mode

The DJ-G29T has 3 operation modes: the VFO, Program scan and Memory mode.

VFO mode	VFO is the abbreviation of Variable Frequency Oscillator. This mode allows choosing the frequency by rotating the dial.
Program scan mode	This mode is for tuning in selected channels within a set scan range. You must first register date in the program scan bank in order to perform the following operations. (P.40)
Memory mode	The Memory mode recalls frequencies registered previously. Please read “Memory Mode (P.39)” to practice memory registration.

•Switching the operation mode
Every time the MW C V/P/M key is pressed, the modes switch in the order shown in the illustration.



6-1 Operating the Transceiver in the VFO Mode

This is the mode that is active when the transceiver is turned on after being shipped from the factory. Frequencies can be selected by rotating the dials.

●Switching Bands
A band can be chosen by pressing the A MAIN key or the B SUB key.

6-2 Setting Channel Step Intervals

Channel steps can be defined as intervals or steps between frequencies. Although this product is programmed with standard steps, it allows changing the steps if necessary. Please refer to “Changing the Channel Steps (P.59)” for adjusting channel steps.

6-3 Increasing or Decreasing the Frequency in 1MHz Steps

●Changing Frequencies on the Main Band

In the VFO mode, to change frequencies on the main band in steps of 1 MHz, rotate the upper main dial while pressing the FUNC key. The displayed frequency will increase or decrease in 1MHz steps.

●Changing Frequencies on the Sub Band

In the VFO mode, when changing frequencies on the sub band, rotate the upper sub dial while pressing the FUNC key. The displayed frequency will increase or decrease in 1MHz steps.

MEMO

- When increasing or decreasing sub band frequencies in 1MHz steps, the frequency will change without regard to the range of specific bands.
- If the dial isn't rotated when the FUNC key is pressed, the Key lock activates. Press and hold FUNC to unlock.

6-4 Directly Inputting Frequencies

Frequencies can be directly entered using the numerical keypad.

Example 1: To enter 232.000MHz,
press the PO 2ABC , ATT 3DEF and PO 2ABC keys and press the #RPT ENT key.

Example 2: To enter 915.000MHz,
press the CALL 9WX Y2Z , WILD 1 and TONE 5JKL keys and press the #RPT ENT key.

Example 3: To enter 232.100MHz,
press the PO 2ABC , ATT 3DEF , PO 2ABC , * CLR and WILD 1 keys and press the #RPT ENT key.

Example 4: To enter 915.0125MHz,
press the CALL 9WX Y2Z , WILD 1 , TONE 5JKL , * CLR , PRIO 0 , WILD 1 , PO 2ABC and TONE 5JKL keys and press the #RPT ENT key.

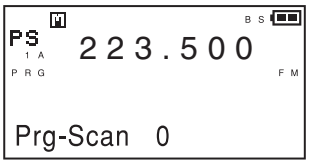
If there is an error in selecting a frequency, press the [PTT] key or the FUNC key and the process can be redone from the start.

6-5 Program Scan Mode

This function is used to scan a range between two (high and low) frequencies you have selected. The selected high and the low frequencies are referred to as “program channels”. This transceiver allows registering 50 pairs of program channels. You must first register data in the Program Scan bank in order to perform the following operations.

1.Press the MW C V/P/M key and select the Program scan mode.

2.Rotate the upper dial and select the Program scan bank.



3.When the M→V D SCAN key is released, scanning will start.
The decimal indicator of the displayed frequency will blink when scanning.

4.By pressing the [PTT], FUNC , MW C V/P/M or the M→V D SCAN key, scanning will stop.

6-6 Reception

1.Select a frequency in any of the operation modes. When a frequency you want to monitor is received, BUSY and the signal strength level is indicated on the display and you can listen to the received audio. At the same time, the RX light is green.

●The frequency range is as follows:
The receiver frequencies on the main band are:
222MHz band: from 216.000MHz to 249.995MHz
902MHz band: from 902.000MHz to 927.995MHz

The receiver frequencies on the sub band are:
222MHz band: from 216.000MHz to 249.995MHz
902MHz band: from 902.000MHz to 927.995MHz

6-7 Transmitting

Transmitting can only be done on the main band.

1.Tune a frequency in the selected band.

2.When the [PTT] key is pressed, the red light illuminates to indicate the transceiver is transmitting.

3.Speak in a normal volume approximately 5 centimeters away from the built-in microphone on the front of the transceiver while pressing the [PTT] key.

4.Upon releasing the [PTT] key, transmitting will stop and the transceiver will return to the receive mode.

CAUTION

- When transmitting with the operating frequencies set in 222MHz - 222MHz or 902MHz - 902MHz bands, [RX disabled] will appear on the display and reception will stop on the sub band temporarily.
- When the [MONI] key is pressed while the [PTT] key is pressed, a Call Tone signal can be transmitted.
- When talking into the microphone, if your voice is too loud or you're talking too close to the microphone, the modulation may be distorted.
- Because the transceiver is manufactured to be water resistant, a special cloth material covers the built-in microphone. For this reason, the receiving station may hear transmitted voices slightly differently using the built-in microphone in comparison to using an optional external microphone. This is not a product malfunction.
- When the [PTT] key is pressed outside the transmission frequency range, [TX disabled] will appear on the display and a beep will be heard. Transmission cannot occur when this message is displayed.
- When transmitting while scanning on the sub band, scanning will stop temporarily. After the transmission is finished, scanning will start again.
- Operating the full-duplex without using an optioned earphone microphone or an earphone may cause howling. Please refer P.80 “Full-Duplex” setting in the set-mode and select “prohibited” parameter to avoid this.

MEMO

- Please refer to P.107 “Specifications” for the details of frequency range.