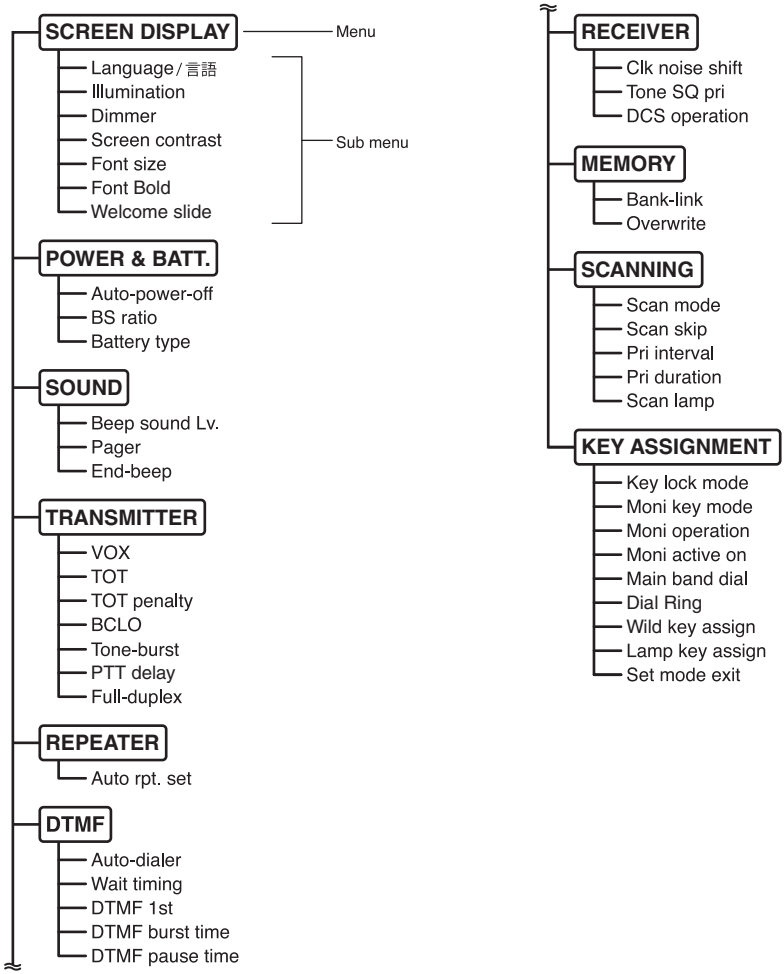
10.Set Mode

You can customize many settings of the DJ-G29T by changing various functions to suit your needs or personal preferences. You may change settings for the following items in the Set mode. The contents of these items are called “menus” and the setting items under the menus are called “sub menus”.



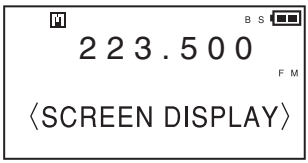
●How to enter the Set mode

1.Press the FUNC key to show F on the display.

2.By pressing the dial, the transceiver enters the Set mode.

3.Rotate the upper dial and select the desired menu of the set mode.

4.When you press the dial, the sub menu will be displayed.



5.Rotate the upper dial and select the sub menu; then rotate the lower dial to change the setting.

6.By pressing the [MONI] key, the display will return to the set mode menu .

7.By pressing the [PTT] key, the settings of the set mode will be in place and the procedure will be completed.

10-1 SCREEN DISPLAY

10

Display parameters and the illumination setting are included in this menu item.

1.Select "SCREEN DISPLAY" from the menu of the Set mode.

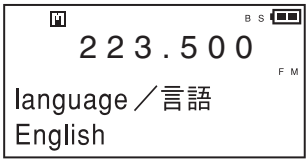
2.By pressing the dial, the sub menu will appear.

10-1-1 Language

The language can be set to either Japanese or English.

1.Rotate the dial and select "language/言語"
"language/言語" will be displayed as shown on the right.

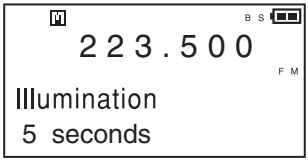
2.Rotate the lower dial and select "日本語"↔"English".



10-1-2 Illumination

The illumination settings for the display and keys can be set on or off, and the length of time the lights are on can be set. The default is five seconds.

1.Rotate the upper dial and select "Illumination".
"Illumination" and "5 seconds" will be displayed as shown on the right.



2.Rotate the lower dial and select the length of duration time .
By rotating the dial, the illumination time will switch as shown.

Always lit ↔ Disable all ↔ Turn off ↔ 5 seconds ↔ 10 seconds ↔ 15 seconds ↔ 20 seconds ↔ 25 seconds ↔ 30 seconds

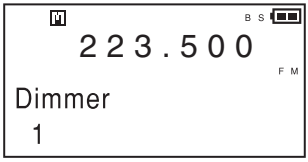
Always lit	Illumination will be permanently on.
Disable all	Illumination and the TX/RX lamps will be off.
Turn off	Illumination will remain turned off.
From 5 to 30 Seconds	Turns off the illumination after preset time has elapsed.

10-1-3 Dimmer

The brightness of the illuminated display and the keys can be adjusted in 5 steps. The default is 1.

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

2.Rotate the lower dial and select the brightness in a range from 1 to 5.

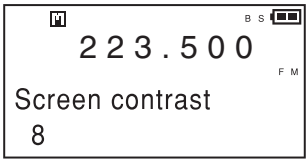


10-1-4 Screen contrast

The display's contrast can be adjusted. The default is 8.

1.Rotate the upper dial and select "Screen contrast".
"Screen contrast" will be shown on the display as shown on the right.

2.Rotate the lower dial and select the depth of the color of the display in a range from 1 to 10.



10-1-5 Font Size

You can switch the font size of the band that is not operated in dual indication.

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

2.Rotate the lower dial and select "Small"↔"Large".

10-1-6 Font Bold

You can change boldness of the fonts used to display numbers if desired.

1.Rotate the upper dial and select "Font bold".

2.Rotate the lower dial and select the font boldness of displayed numbers.
When rotating the dial, the fonts change as shown in the illustration.

Bold all ↔ Op. band bold ↔ OP. band thin ↔ Thin all

Bold all	All numbers will be displayed in boldface.
Op. band bold	Numbers on the operated band will be displayed in boldface and numbers on the non-operated band will be displayed in thin type.
OP. band thin	Numbers will be displayed in thin type on the operated band and the numbers will be displayed in boldface on the non-operated band.
Thin all	All numbers will be indicated in thin type.

10-1-7 Welcome Message Display

You may display up to any 16 alphanumeric characters on the DJ-G29T's screen when it is powered-on as a "welcome" message.

1.Rotate the upper dial to select "Welcome/slide".

2.Press down the upper dial to enter to the edit mode.

3.Rotate the lower left dial to select how you prefer to show the message, "Slide" or "Still".

4.Rotate lower right dial to move cursor.

5.Prease refer P.47 [Memory Name Function] for how to edit the characters.

Note: Leave it blank to display the original DJ-G29T welcome image. You may use either the original or customized message but can't skip the welcome message display.

10-2 POWER & BATT.

Power supply settings are explained in this section.

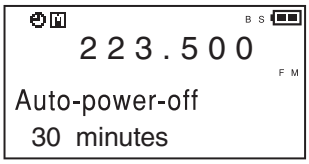
1.Select "POWER & BATT" from the Set mode menu.

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

10-2-1 Auto-Power-Off

When active, if the transceiver has not been operated during the set-time, a beep will sound and the transceiver will automatically turns off.

1.Rotate the upper dial and select "Auto-power-off".
"Auto-power-off" will be displayed as shown on the right.



2.Rotate the lower dial and select the amount of time before the transceiver shuts down.
When rotating the dial, the Auto-power-off setting changes as shown in the illustration.

Off ⟷ 30 minutes ⟷ 1 hour ⟷ 2 hours ⟷ 3 hours ⟷ 5 hours ⟷ 8 hours

To turn the transceiver back on, press the power switch again.

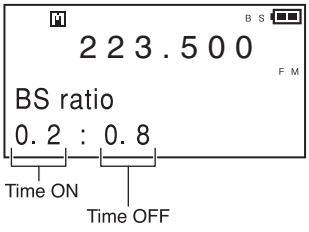
MEMO

•The APO (auto-power-off) time counter will not be extended by simply receiving signals, but will reset after key operations have been performed.

10-2-2 BS (Battery Save) ratio

This function controls battery power consumption and extends battery life between charges by turning the transceiver's internal power on and off for brief periods.

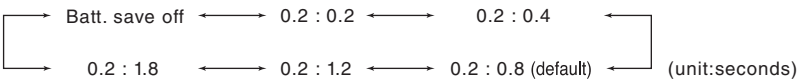
1.Rotate the upper dial and select "BS ratio".
"BS ratio" will be displayed as shown on the right.



2.Rotate the lower dial and select the time the transceiver is on and the time it is off for battery saving.

When the BS ratio is on, **BS** will blink on the display.

By rotating the dial, the BS ratio will switch as shown in the illustration.



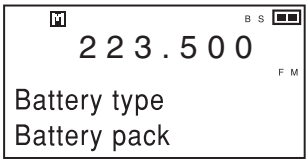
- When shipped from the factory, the BS ratio is set to 0.2 seconds : 0.8 seconds. It is not necessary to turn this function off in normal situations, but turn the BS function off when using the transceiver for packet radio communications.
- The BS doesn't operate while receiving signals or when scanning.
- If you set the battery save time ratio longer, the beginning of received audio may be lost.

10-2-3 Battery Type

This setting is used to indicate the proper battery-level on the displayed icon.

1.Rotate the upper dial and select "Battery type".

"Battery type" will be displayed as shown on the right.



2.Rotate the lower dial and select "Battery Pack"↔"Dry Cells".


CAUTION

- If this setting is not appropriate, the battery-level (the remaining charge) will not be properly shown on the display. However, an incorrect setting of this parameter will not interfere with the normal operation of the transceiver.

10-3 SOUND

Settings concerning sounds are explained in this section.

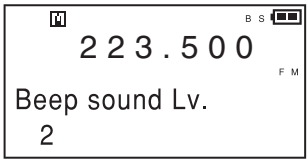
1.Select "SOUND" from the Set mode menu.

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

10-3-1 Beep Sound LV (Level).

The sound heard when operating keys is called a "beep." You may select the beep volume as explained in this section. The default is 2.

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



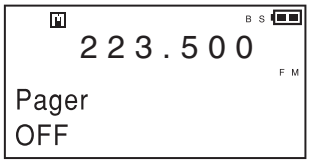
2.Rotate the lower dial and select the volume in a range from "OFF" or "1" to "4".
When "OFF" is selected, the beep will not sound.

MEMO

•An end-beep (see 10-3-3 below) sounds at the minimum audio level even the beep sound setting is OFF.

10-3-2 Pager

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



2.Rotate the lower dial and select from either "OFF", "Main band only" "Sub band only" or "Either band".
When the pager is set, appears on the display.
When the transceiver receives a signal, blinks and a bell sounds. blinks until the next operation occurs. This function can be used as confirmation of an incoming signal if you are not in proximity to the transceiver at the time it is received.

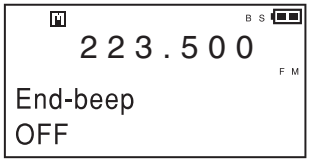
OFF	The bell will not sound.
When received on the main band	The bell will sound when a signal is received on the main band.
When received on the sub band	The bell will sound when a signal is received on the sub band.
When received on either band	The bell will sound when a signal is received on either band.

10

10-3-3 End-Beep

This function informs you, and those listening to your transmitted signal, that you have ended your transmission by sounding a short beep that is heard when you release the PTT.

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



2.Rotate the lower dial and select "OFF" ↔ "ON".

10-4 TRANSMITTER

The operation settings concerning transmissions of this radio are explained in this section.

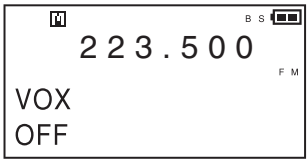
1.Select "TRANSMITTER" from the Set mode menu.

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

10-4-1 VOX

This function allows transmitting without using the PTT by simply speaking into the microphone. When you stop speaking, the unit will return to receive. At this state, the PTT key operation is suspended.

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



2.Rotate the lower dial and select from the VOX options.
Choose a microphone to be used, or OFF to stop operating the VOX.

OFF ⟷ Internal mic ⟷ Option mic

3.Press FUNC to start operating the VOX. RX Disabled will appear on the display.
While operating, press down the dial twice. VOX level appears. Rotate the dial to adjust the level between 1 (low gain) and 7 (sensitive).Select level 0 to temporally suspend the VOX operation. Press the dial once to resume VOX operation. Enter to the set-mode, repeat sequence, and set the VOX OFF to quit VOX operation.

CAUTION

- VOX can't be properly operated in noisy place by picking up the noise.
- While operating VOX, the tone-calls, DTMF, auto-dialer and Sub-band receive are not functional.

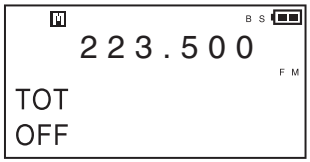
10-4-2 TOT (Time Out Timer)

This function automatically stops transmission if it continues beyond a specified time.

●TOT Setting

1.Rotate the upper dial and select "TOT."

"TOT" will be displayed as shown on the right.



2.Rotate the lower dial and select the desired TOT from a range of "OFF" ↔ from "30 seconds" to "450 seconds".

When the dial is rotated, TOT will switch in the increments shown in the illustration.

(time shown in seconds)

OFF ↔ 30 ↔ 60 ↔ 90 ↔ 120 ↔ 150 ↔ 180 ↔ 210 ↔ 240 ↔ 270 ↔ 300 ↔ 330 ↔ 360 ↔ 390 ↔ 420 ↔ 450

MEMO

- Just before the time exceeds the specified limit, a beep will sound and the transceiver will switch to the receive mode. When this occurs, you must release the [PTT] and press it again to resume transmitting.
- When a TOT penalty time is set, you can't transmit by pressing the [PTT] key until the specified penalty time has elapsed. Please refer to "TOT Penalty (P.78)" to set the TOT penalty time.

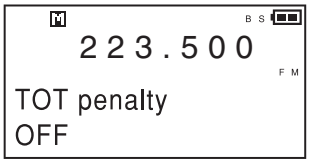
10

10-4-3 TOT Penalty

This function sets the TOT penalty time that prevents transmitting for a specified period of time after transmitting has been stopped by the TOT. The default is OFF.

1.Rotate the upper dial and select "TOT penalty".

"TOT penalty" will be displayed as shown on the right.



2.Rotate the lower dial and select the TOT penalty time from a range of "OFF"↔from "1 second" to "15 seconds".

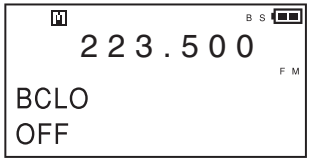
Transmission will not occur during the time period designated in the TOT penalty. If the [PTT] key is pressed during the TOT penalty period, a beep will sound.

10-4-4 BCLO (Busy Channel Lock Out)

This function is used on the main band and restricts transmission when another signal is present on the same frequency.

1.Rotate the upper dial and select "BCLO".

"BCLO" will be displayed as shown on the right.



2.Rotate the dial and select "on"↔"off".

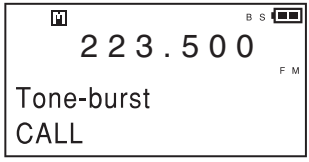
When the Busy Channel Lock Out function is on, transmission will be allowed in the following cases (1), (2) and (3), and you can only transmit under these conditions:

(1)When a signal is not present
(2)When the tone squelch is active.
(3)When the DCS squelch function is active.

10-4-5 Tone-Burst

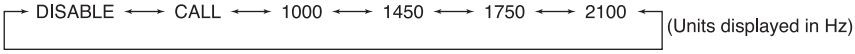
1.Rotate the upper dial and select "Tone-burst".

"Tone-burst" will be displayed as shown on the right.



2.Rotate the lower dial and select the tone frequency.

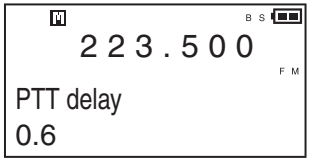
By rotating the dial, the tone frequencies change as shown in the illustration.



10-4-6 PTT delay

This is to cut the squelch tail noise that the repeater retransmits at the end of receiving tone-encoded CTCSS signals.

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



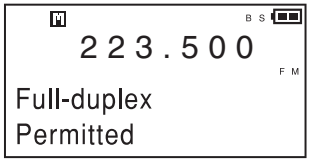
2.Rotate the lower dial and select the desired PTT delay time.
By rotating the dial, the PTT delay time changes as shown in the illustration.

OFF ⟷ 0.3 ⟷ 0.6 ⟷ 1 (unit: seconds)

10-4-7 Full-Duplex Setting

In order to avoid entering receiving sound of sub-band that may cause an interference to the main-band transmission, the sub-band receive can be muted while transmitting on the main side.

1.Rotate the upper main dial to select "Full-duplex" as shown.



2.Rotate the lower main dial to select "Permitted"↔ "Prohibited".

10-5 REPEATER

The repeater access settings are explained in this section.

10-5-1 Auto Repeater Set

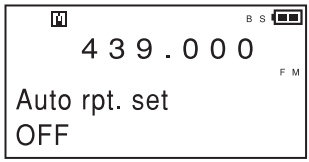
You can select whether or not the automatic repeater access setting operates. There are two modes in this transceiver:

•On: The transceiver will automatically apply the shift direction and frequency offset according to the standard repeater band-plans.

•Off: No offset occurs

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

2.Rotate the dial and select "ON"↔"OFF".



CAUTION

•Before operating while using the Auto repeater settings, please be aware of local band plans.

The standard Auto-repeater band plans

		Shift
222MHz	223.910 ~ 225.000MHz	-1.6MHz
902MHz	927.000 ~ 927.995MHz	-25MHz

●Shift direction and offset frequencies

A repeater normally retransmits a signal received on a certain frequency to another frequency. The difference between these two frequencies is called the offset frequency.

The range of the offset frequency may be set from 0 to 999.995MHz.

When using a repeater, when the [PTT] key is pressed, the transceiver shifts from the received frequency, up or down, to the transmitted frequency monitored by the repeater.

This change in frequency (up or down) is called the shift direction.

MEMO

•Please refer P.53/Tone encode or DCS to add tones. Manual change of offset/shift is suspended within the standard repeater frequencies when the auto repeater is activated.

10-6 DTMF (Dual Tone Multi Frequency)

This setting applies to transmitting DTMF tones (the same sounds that can be heard from the push buttons of an ordinary telephone). This function is used in accessing certain repeater functions.

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

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

10-6-1 Auto-Dialer

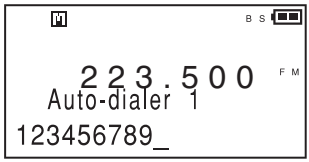
This section explains how to register, transmit and record DTMF tones in the memories.
Up to 16 characters can be input in one DTMF memory and 9 memory codes can be registered.

●Setting the auto-dialer memory

1.Rotate the upper dial and select "DTMF", and press down the main dial.
"DTMF" will be displayed as shown on the right.

2.Rotate the lower sub dial and select the number of a dialer memory from 1 to 9.

3.Press the keypad and input the DTMF codes.
When you input the numbers, they will be displayed as follows:
The numbers will be indicated as [1]→ [12]→[123]→[1234]→[12345]→ [123456]. Up to 16 numbers can be input.



You can set the transceiver to pause instead of sending tones by pressing the FUNC key while inputting the code and then pressing the PRIO 0 key while F is displayed.
When the transceiver is in the pause position, "-" will be displayed.
When the transceiver is set to pause, it will not transmit a signal for approximately one second, corresponding with the pause position.
Press the FUNC key and press the * CLR key while F is displayed in order to delete all of the DTMF codes that were input.

4.The input codes will be automatically recorded. The transceiver will return to the Operation mode by pressing the [PTT] key.

●Auto Dialer output

The DTMF codes will be heard from the speaker, but will not be transmitted.

1.Repeat the previously described steps in the Set mode and select the code you want to sound.

2.Press the #RPT ENT key after pressing the FUNC key.

3.The DTMF code that is indicated on the display will be output from the speaker.

If the DTMF code is not memorized, it will not be output from the speaker.

●Auto dialer transmission

1.Press the [PTT] key and begin transmitting.

2.Press the FUNC key and "D" will appear on the display.

3.By pressing any key from WILD 1 to CALL 9WXYZ, the DTMF codes registered in the correlating DTMF memory will be automatically transmitted.

When a numerical key is pressed that has no DTMF codes registered, DTMF codes will not be transmitted.

●Redial function

1.Press the [PTT] key, and begin transmitting.

2.Press the FUNC key.

"D" will be indicated at the top of the display.

3.Press the PRIO 0 key.

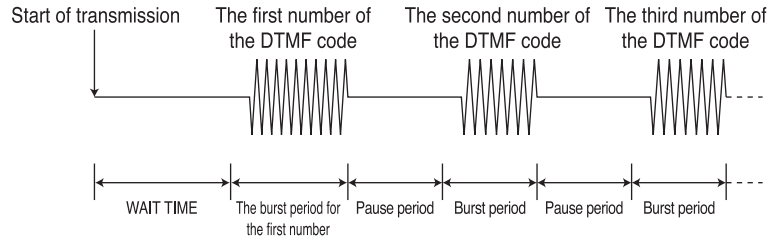
The last DTMF code sequence (the DTMF code transmitted manually) will be transmitted automatically. DTMF tones will be heard from the speaker.

CAUTION

•If there has been no DTMF output after shipping or resetting the transceiver, the redial function will not operate.

MEMO

•The timing relative to DTMF functions is set from "10-6-2" to "10-6-4" is shown as follows;

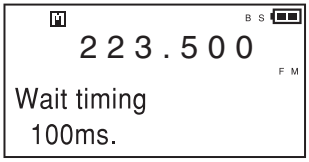


10

10-6-2 DTMF WAIT Time

When the auto dialer is sending DTMF tones, a tone will be sent after the WAIT time setting. The default is 100 milliseconds.

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



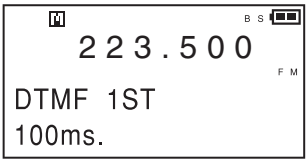
2.Rotate the lower dial and select the DTMF WAIT time in increments of 100 milliseconds ranging from 50 to 1,000 milliseconds.
When rotating the dial, the DTMF WAIT time will switch as follows;

50 ⟷ 100 ⟷ 200 ⟷ ··· ⟷ 1000 (measurement value: milliseconds)

10-6-3 DTMF Burst Period for the First Number

When DTMF code is output by the auto dialer, the code output will start from the burst period for the first number set.

1.Rotate the upper dial and select "DTMF 1 ST".
"DTMF 1 ST" will switch through a range of values from 20 ms to 2 seconds.



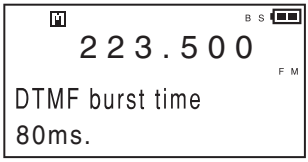
2.Rotate the lower dial and select the burst period for the first DTMF number.
When rotating the dial, the burst period will switch as follows

20ms ↔ 40ms ↔ 60ms ↔ 80ms ↔ 100ms ↔ 120ms ↔ 140ms ↔ 160ms ↔ 180ms ↔ 200ms ↔ · · · ↔ 2s

10-6-4 DTMF Burst Time

When the auto dialer is sending DTMF tones, they will be output by the burst time set. The default is 80 milliseconds.

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



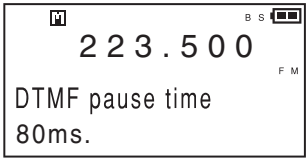
2.Rotate the lower dial and select the DTMF burst time in a range from 20 ms to 2 seconds.

20ms ↔ 40ms ↔ 60ms ↔ 80ms ↔ 100ms ↔ 120ms ↔ 140ms ↔ 160ms ↔ 180ms ↔ 200ms ↔ · · · ↔ 2s

10-6-5 DTMF Pause Time

When the auto dialer is sending DTMF tones, they will be output by the pause time set. The default is 80 milliseconds.

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



2.Rotate the lower dial and select the DTMF pause time in a range from 20 ms to 2 seconds.

20ms ↔ 40ms ↔ 60ms ↔ 80ms ↔ 100ms ↔ 120ms ↔ 140ms ↔ 160ms ↔ 180ms ↔ 200ms ↔ · · · ↔ 2s

10-7 RECEIVER

The settings of certain reception parameters are explained in this section.

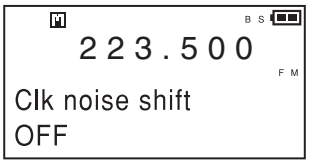
1.Select "RECEIVER" from the Set mode menu.

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

10-7-1 Clock Noise Shift Settings

If a faint noise is always heard in a particular frequency, there is a possibility that it is due to processor clock noise. Clock noise cannot be eliminated due to the design of circuits in the unit, but this transceiver allows to move the noise to a different frequency making reception of the desired signal possible.

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



2.Rotate the lower dial and select between "ON"↔"OFF".

MEMO

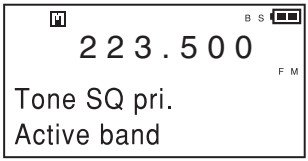
•This feature is different from the noise blanker function. Please be aware that not all noises are due to clock noise, and therefore using the clock noise shift function may not always be effective.

10-7-2 Tone SQ Priority Settings

When receiving in the dual band mode, tone squelch (TSQ) and DCS settings will be valid on only one band. This parameter will allow you to select how those features are applied.

1.Rotate the upper dial and select "Tone SQ pri".

"Tone SQ pri" will be displayed as shown on the right.



2.Rotate the lower dial and select the priority.

By rotating the dial, the priority will switch as shown.

Active band ⟷ Main band ⟷ Sub band

Active band	The transceiver will give tone and DCS priority to the band that is active.
Main band	The transceiver will give tone and DCS priority to the main band. (It will give priority to the band indicated at the top of the display)
Sub band	The transceiver will give tone and DCS priority to the sub band. (It will give priority to the band indicated at the bottom of the display)

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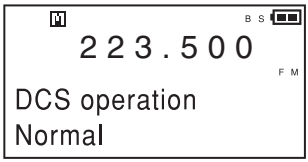
10-7-3 DCS Operation Settings

There are cases when the squelch closes due to DCS settings and/or receiving conditions.

In such conditions, you can change the DCS setting from normal to hold. This operation allows opening the squelch by using a DCS code and closes the squelch by normal squelch.

1.Rotate the upper dial and select "DCS operation".

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



CAUTION

•When set to the keep position, in a case where the squelch opens by acknowledging a DCS code, the squelch will remain open until all transmissions on that frequency have concluded.