5. Advanced Operations

5.1 Scanning

You can automatically search for signals to receive by using the scan function.
You can select Timed Scan or Busy Channel Scan.

Timed Scan
Scanning stops on a busy channel, and resumes five seconds later even if the frequency remains busy.

Busy Channel Scan
Scanning resumes only after a received signal ceases.

- The decimal point blinks during scanning.
- If the MONI key is pressed during scanning, scanning stops temporarily and the squelch unmutes. When the MONI key is released, scanning restarts.
- Scanning direction can be changed by rotating the dial during the scanning operation.
  Scan starts in the last selected direction the next time the feature is activated.
- The Scan mode is cancelled by pressing a key other than the MONI key.

Reference Timed scan or busy channel scan can be selected in the Setting mode.(Page 30)

■ VFO Scan

1. Press the A/M MW key to activate the VFO mode.
2. Press the SCAN KL key.
   Scan starts in the last operated direction by tuning steps.
3. Scanning direction goes upwards by rotating the dial clockwise, and goes downwards by rotating the dial counterclockwise.
4. To stop scanning, press a key other than the MONI key.

■ Memory Scan

1. Press the A/M MW key to activate the Memory mode.
2. Press the SCAN KL key to start scanning.
3. Scanning direction goes upward by rotating the dial clockwise, and goes downward by rotating the dial counterclockwise.
4. To stop scanning, press a key other than the MONI key.

■ Skip Channel Setting

Memory channels that have a "memory skip" programmed are not monitored during memory scanning.

- Press the FUNC SET key in the Memory mode, and press the CALL SKIP key while F appears.
  The selected memory channel is now set as a skip channel. The skip channel setting is cancelled by the same operation.
- The 10MHz decimal point appears in a memory channel where a memory skip is programmed.

5.2 Keylock

To switch the keylock function ON/OFF, press the FUNC SET key and then the SCAN RV key while F appears.

- O-n appears when the key lock is ON.
- Operations of the PTT / LAMP / MONI keys, and the VOL / SQL controls are available even when the key lock is ON.

5.3 Tone Calls

The Tone Call function is used to call another station or activate a repeater by adding a tone signal to the transmitted radio wave.

- The tone signal is output while the MONI key is pressed down while the PTT key is also pressed and held. The initial frequency of the tone signal is 1750Hz, and it can be changed it in the Setting mode.(Page 30)
- CTCSS Tone frequency or DCS code is added and transmitted automatically when the Tone / DCS is set. You must select a tone or code that matches the tone or code monitored by the receiving station, if that station is using a tone or code squelch.(Page 24)

5.4 Channel Names

Channel names can be set and displayed instead of the frequency indication in the Memory mode.
You can assign names to the memory and call channels.
There are 67 characters available such as A ~ Z and 0 ~ 9 for programmed memory channel names.

■Setting

1. Select a channel you wish to name in the Memory mode.
2. Press the FUNC SET key and the BAND NAME key while F appears. "A" appears and blinks on the display.
3. Select a character by rotating the dial.
4. Press the BAND NAME key to set. The selected character stops blinking.
   The same character blinks on the right side of the completed character to indicate it can now be selected.
5. Set characters one by one, up to a total of six.
6. If the CALL SKIP key is pressed during the name setting procedure, all the selected characters are cleared.
7. Press a key other than the MONI, BAND NAME and the CALL SKIP keys to complete the setting and to return to the usual display.

■Channel Name Display

- In the Memory mode, programmed channel names are displayed instead of the frequency display. (Channel numbers are displayed whether or not the channel names are programmed.)
- Frequency display appears for 5 seconds by pressing the FUNC SET key.
  If a key is pressed during the 5-second frequency display, the display returns to the channel name indication or moves to a function setting mode depending on the pressed key.

5.1 Lamp

DJ-596 has lamps to light its display and keyboard. Press the FUNC SET key and then the MONI key while F appears to light the lamps.

- The lamps turn off automatically if no key is pressed for 5 seconds.
- If a key other than the LAMP key is pressed while the lamps light, the lamps remain on for another 5 seconds.
- To light the lamps continuously, press and hold the MONI key and turn the power ON.
- To cancel continuous lighting, turn the power OFF, press and hold the MONI key and turn the power ON again.
- To turn off continuous lighting, press the FUNC SET key and the MONI key while F appears.
  To light the lamps again, press the FUNC SET key and the MONI key while F appears.

6. Communicating

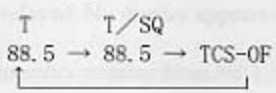
Select Communicating

- When communicating with a specific station, the tone squelch function or DCS function may be used.
  Tone squelch is a function that unmutes the squelch and enables you to receive a partner's signal when the tone frequency matches a tone you selected from one of your station's 39 tone frequencies.
- DCS is a function that unmutes the squelch and enables reception of the partner's signal when the digital code matches a code you selected from one of your station's 104 digital codes.
- Tone squelch and DCS cannot be used at the same time.

6.1 Tone Squelch

■ Tone Squelch Setting

1. Press the FUNC SET key and the 4 TSQ key while F appears. Present mode and tone frequency are displayed, and the setting rotates as below each time the 4 TSQ key is pressed.



- F indicates that only the encoder function is set.
- T SQ indicate that the encoder /decoder functions (tone squelch) are set.
- Monitoring can be performed when the tone frequency is being displayed.

2. Rotate the dial to select a tone frequency from the 39 kinds of frequencies below.

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

3. Press a key other than the MONI key to complete the setting.

■ Canceling Tone Squelch

Select "TCS-OF" in the tone squelch setting mode by pressing the 4 TSQ key.
Press a key other than the MONI key to complete the tone squelch cancellation.

■ Changing Tone Squelch Frequency

Tone encoder frequency and tone decoder frequency can be set independently.

- If the encoder frequency is changed when T is displayed, the decoder frequency is automatically changed to the same frequency.
- If the frequency is changed when T SQ is displayed, only the decoder frequency is changed. (Different frequencies are set respectively to encoder /decoder.)

6.2 DCS (Digital Code Squelch)

■ DCS Setting

Press the FUNC/SET key and the 7 DCS key while F appears.
DCS and the DCS code are displayed.
Initial setting is "023".

DCS
023 → DCS-OF
↑——————↓

Press a key other than the MONI key to complete the setting.

■ Changing DCS Code

1. Set the DCS code in the DCS code setting mode. (The status where **DCS** appears.)

2. Change the DCS code by rotating the dial, and press a key other than the MONI key to complete the setting.
The same DCS code is set to both encoder / decoder.

The following 104 DCS codes can be selected.

023	025	026	031	032	036	043	047	051	053
054	065	071	072	073	074	114	115	116	122
125	131	132	134	143	145	152	155	156	162
165	172	174	205	212	223	225	226	243	244
245	246	251	252	255	261	263	265	266	271
274	306	311	315	325	331	332	343	346	351
356	364	365	371	411	412	413	423	431	432
445	446	452	454	455	462	464	465	466	503
506	513	523	526	532	546	565	606	612	624
627	631	632	654	662	664	703	712	723	731
732	734	743	754						

■ Canceling DCS

To cancel DCS, select "DCS-OF" by pressing the 7 DCS key, and press a key other than the MONI key to complete the setting.

■ DCS Operation

Squelch unmutes when the receiving code matches the programmed DCS code.

Reference · Changing DET Operation of DCS
The Squelch may accidentally close in the DCS setting depending on the level of modulation received from the transmitting side. In this case, it may be necessary to select "DCS-OF" and rotate the dial to change the display to "DCS OF", and then set DCS. (This setting is written to memories.)

6.3 DTMF Manual Transmitting

When one of the 16 keys (0 ~ 9, A ~ D, *, #) is pressed during transmission, a DTMF code corresponding to the pressed key is transmitted. DTMF codes that are transmitted manually are automatically recorded, up to 16 entries, and can be redialed in the same fashion as the auto dialer.

1. Press and hold the PTT key and press one of the 16 keys.

2. A DTMF code corresponding to the pressed key is transmitted.

6.4 Auto Dialer

This function is to set DTMF codes to the DTMF memory.

■ Auto Dialer Memory Setting

Program DTMF codes you want to transmit using the auto dialer function.

1. Press the FUNC SET key and the 0 key while F appears. The auto dialer programming mode is activated.
   6 figures are displayed. No display appears in the initial status.

2. Select a dialer memory number from No.1 ~ 9 by rotating the dial.
   Input the codes by pressing the 16 keys. The display indication will be as follows.

3. For example, if you input 123456789, the display will be:
   「1」→「12」→「123」→「1234」→
   「12345」→「123456」→「234567」→
   「345678」→「456789」
   You can input up to 16 entries.

   - A pause can be set instead of codes by pressing the FUNC SET key and the 0 key while F appears. A pause is displayed as "—", and no signal is sent for approx. 1 second.

   - The display can be scrolled within the entered range by pressing the FUNC SET key and rotating the dial.

   - To clear the entered codes, press the FUNC SET key and the CALL MUP key while F appears.

4. Press the PTT key to complete the setting.

■ Auto Dialer Output

1. In the receive mode, press the FUNC SET key and press the 8 DIAL key while F appears.
   "DIAL" is displayed.

2. By pressing one of the 1 STEP ~ 9 CHANNEL keys, DTMF codes that are programmed into the autodial memory number of the pressed key are automatically played back through the speaker.
   - The DTMF tones are not transmitted in this operation.
   - If DTMF codes are not programmed into the memory number of the pressed key, no DTMF codes are heard.

● Transmitting DTMF codes from the Auto Dialer

1. Press the PTT key to transmit, and press the FUNC SET key while the PTT key is being held.
   "DIAL" appears on the display.

2. Press one of the 1 STEP ~ 9 CHANNEL key to transmit the programmed DTMF codes.
   If DTMF codes are not programmed into the memory number of the pressed key, no DTMF codes are transmitted.

■ Redialing

This function is to retrieve the last outputted DTMF codes.

1. In the receiving mode, press the FUNC SET key and the 8 DIAL key while F appears.
   "DIAL" appears on the display.

2. The most recently used DTMF codes (either one of the auto dialer codes or manually transmitted DTMF codes) are automatically heard from the speaker by pressing the 3 NAR/WFM key. The signals are not transmitted in this operation.

3. To transmit the most recently used DTMF codes, press and hold the PTT key, and then press the FUNC SET key and the 3 NAR/WFM key. While they are being transmitted, the DTMF codes are also heard from the speaker during this operation.

Note The redial function is not active in the default factory settings or after resetting. It is also not available when no DTMF output has been done.

6.5 TOT (Timeout Timer)

This function automatically stops transmission when a specified period of time has been exceeded.

■Setting

1. Press the FUNC SET key and the 3 TOT key while F appears. "TP-OFF" is displayed.

2. Rotate the dial to adjust the TOT setting time. The maximum setting time is 450 seconds.

OFF → 30 → 60 → 90 →·····→450

■TOT Operation

When transmitting continues up to the TOT setting time, a beep is heard 5 seconds before the time-out. When the transmission exceeds the set TOT value, the transceiver automatically stops transmitting and shifts to receive status. In order to transmit again, release the PTT key once and then press it again.
If a TOT penalty is set, transmitting is not available within the penalty period even if the PTT key is pressed again.

Note: A warning beep will not be heard if the Beep setting is set to OFF.

6.6 APO (Auto Power Off)

This function prevents wasting battery power when you forget to turn off the transceiver.

■Setting

Press the FUNC SET key and the 6 APO key while F appears. **APO** is displayed.

■APO Operation

If there is no operation for 30 minutes when **APO** is on, a beep is heard and the power goes off automatically.
To turn on the power again, press the power switch.

Note APO time is not extended, even if a signal is received. It is extended only when a key operation is performed.

6.7 BELL

The bell informs you that a signal is being received.

■Setting

1. Press the FUNC SET key and the * VOL BELL key while F appears. "BEL-OF" is displayed.

2. Select "BEL-ON" by rotating the dial, and Press the FUNC SET key or the PTT key to complete the setting.

■BELL Operation

When a signal is received, the "BELL" blinks and a bell sound is heard. The Bell function turns off when a key is pressed.
To cancel the bell function, repeat select "BEL-OF" in the above procedure 1, 2, and press the FUNC key or the PTT key to complete the setting.

7. Parameter Setting mode

In the setting mode, you can adjust various operating parameters of the DJ-596.

7.1 Mode Setting Items

The following items can be addressed in the Setting mode.

- Battery Save function
- Scan Type
- BEEP Sound
- Tone Call Frequency
- Busy Channel Lockout
- TOT Penalty
- DTMF Wait Time
- DTMF Burst/Pause (DP) Time
- DTMF First Digit Burst Time
- Theft Alarm Function
- External Terminal Control Function
- Mosquito Repelling Signal
- End Peep

7.2 Selecting the Setting Mode

1. Hold FUNC SET key down for a few seconds and the Setting mode is activated.
   The initial menu displays "BS-ON".

2. You can review the menu by pressing the MONI key (upward) or FUNC SET (downward).
   Monitoring will not occur in this mode.

3. Rotate the dial and change the appropriate settings.

4. Press a key other than the FUNC SET and MONI keys to complete the setting and to return to the transceiver's normal status.
   The last menu item operated appears the next time the setting mode is activated.

7.3 Setting the Parameters

In the Setting mode, you can set the following functions: (Each function is described below.)

■Battery Save

The battery save function extends battery life. If there is no key operation and no signal reception for five seconds, the internal power of the transceiver cycles on and off in a fixed ratio to reduce battery power consumption.

1. "BS-ON" is displayed in the Battery Save setting menu.
2. Rotate the dial to turn ON/OFF the battery save function.

BS－ON → BS－OFF

- It is "On" in the initial factory settings.
- This operation is cancelled temporarily if a signal is received or another operation is performed.

■Scan Type

Timed scan and busy channel scan can be selected in the Setting mode.

1. "TIMER" is displayed in the Scan Type switching menu.
2. Rotate the dial to change the scan type. The display rotates as follows.

TIMER → BUSY

■Beep

It is the function to make a beep sound when operating.

1. "BEP-ON" is displayed in the Beep function setting menu.
2. Rotate the dial to turn ON/OFF the beep function. The display rotates as follows.

BEP－ON → BEP－OF

■Tone Call Frequency

1. "1750" is displayed in the Tone Call Frequency setting menu.
2. Rotate the dial to change the frequency. The display rotates as follows.

1750 → 2100 → CALL→ 1000 → 1450

3. The CALL tone transmits a ringing sound similar to that of a telephone.

■ BCLO (Busy Channel Lock Out)

When active, the ability to transmit is restricted if signals are being received.

1. "BCL-OF" is displayed in the BCLO setting menu.
2. Rotate the dial to turn ON/OFF the BCLO function. The display rotates as follows.

BCL−OF → BCL−ON

When BCLO is on, transmitting is available only if a signal is not being received.
If you press the PTT key when transmitting is not available, an alarm goes off to indicate that you cannot transmit. The alarm will not be heard if the BEEP parameter is set to OFF.

■ TOT Penalty

When the TOT penalty is set, transmission is not allowed within the programmed TOT penalty time after a transmission is automatically stopped by TOT.

1. " TP-OFF" is displayed in the TOT Penalty setting menu.
2. Rotate the dial to change the TOT penalty time (seconds). The display rotates as follows.

TP−OFF → TP−1 →·····→ TP−4 →·····→ TP−15

- When PTT key is pressed during TOT penalty time, an alarm goes off.
  The alarm will not be heard if the BEEP parameter is set to OFF.
- When PTT key is pressed after the TOT penalty time finishes, the penalty operation is cancelled and you can transmit again.

■DTMF Wait Time

When the auto dialer outputs programmed DTMF codes, the codes are sent after the programmed DTMF wait time. The default setting is 100mS.

1. "DWT-01" is displayed in the DTMF Wait Time setting menu.
2. Rotate the dial to change the DTMF Wait Time. The display rotates as follows.

DWT−01 → DWT−04 → DWT−07 → DWT−10

■DTMF Burst/Pause Time

When the auto dialer outputs programmed DTMF codes, the codes are sent according to the programmed burst/pause time. The default setting is 60mS.

1. "P-60" is displayed in the DTMF Burst/Pause Time setting menu.
2. Rotate the dial to change the Burst/Pause Time. The display rotates as follows.

DP−60 → DP−80 → DP−160 → DP−200

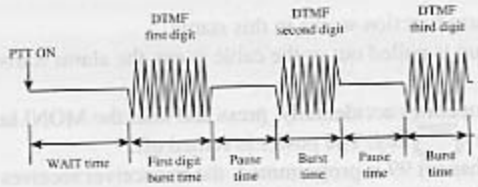
■DTMF First Digit Burst Time

When the auto dialer sends programmed DTMF codes, the first code is sent according to the programmed DTMF First Digit Burst Time. The default setting is 60mS.

1. "DB-60" is displayed in the DTMF First Digit Burst Time setting menu.
2. Rotate the dial to change the DTMF First Digit Burst Time. The display rotates as follows.

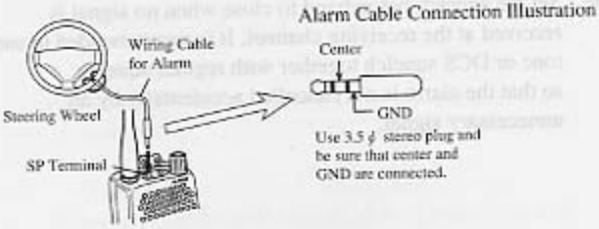
DB−60 → DB−80 → DB−160 → DB−200

Reference DTMF times are as follows.



■Theft Alarm

DJ-596 has a theft alarm function that generates an alarm sound from the speaker if the alarm cable is removed improperly. When the plug of the 3.5 ϕ alarm cable connected to the SP terminal of the transceiver (as shown in the illustration) is pulled out, an alarm sounds from the speaker.



1. Turn off the power of the transceiver and insert the alarm cable plug in the SP terminal.
2. Turn on the power of the transceiver and select "SCR-OF" in the Setting mode.
3. Rotate the dial to turn ON/OFF the Theft Alarm function. The display rotates as follows.

SCR−OF → SCR−ON (* appears)

4. Complete the setting and press the POWER key to turn off the power.
   The theft alarm function works in this status.
5. When the plug is pulled out or the cable is cut, the alarm starts sounding.
   If the alarm operates accidentally, press and hold the MONI key and press the POWER key. The power is turned off.
6. If memory channel 99 is programmed, the transceiver receives the programmed frequency while in the alarm mode.
   If the memory channel 99 is blank, the transceiver receives the previous frequency that was selected before turning off the power.
   When the squelch is unmuted, the alarm stops and the transceiver receives the signal as usual.

Note Set the squelch beforehand to close when no signal is received at the receiving channel. It is recommended to use tone or DCS squelch together with regular squelch so that the alarm is not cancelled accidentally by an unnecessary signal.

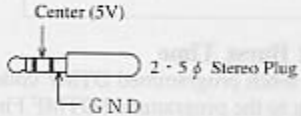
■ External Terminal Control

5V is output from the MIC jack when the speaker is on.

1. Select "EXP-ON" in the setting mode.
   100MHz decimal point " · " appears on the display.

2. When a signal is received (when tone/code matches if TSQ/DCS is set),
   DC5V(5mA MAX) is output from the central terminal of the MIC stereo jack.

3. To cancel the External Terminal Control, select "EXP-OF" in the setting mode.
   When "EXP-ON" is selected, options which use MIC jack can not be used.



Note Be sure to use a 2 · 5 φ stereo plug or an internal short could occur, depleting the battery and possibly damaging the transceiver.

■ Mosquito Repelling Signal

An ultrasonic tone, which is disliked by some mosquitoes, is output from the speaker.

1. Select "MRS-ON" in the setting mode.
   An ultrasonic tone is sent from the speaker.

- The transceiver operates normally even when MRS is on.
- Since the ultrasonic tone is always present if MRS is on, the usable time of the battery is reduced.
- To cancel the MRS setting, select "MRS-OF" in the setting mode.

Note There are thousands of kinds of mosquitoes in the world. Since some of them may not dislike the ultrasonic wave output from this transceiver, it may be ineffective against them. No warranty is made as to the effectiveness of this experimental feature.

■ End Peep

You can add a "peep" sound at the end of the transmission to inform your partner that you have released the PTT.

1. "EDP-OF" is displayed in the End Peep setting menu.
2. Rotate the dial to turn ON/OFF the end peep. The display rotates as follows.

EDP−OFF→EDP−ON

"OFF" is set in the initial factory setting.

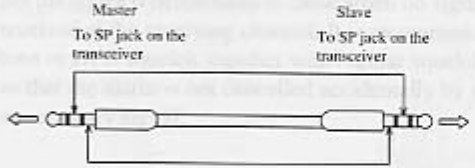
8. Cloning and Packet Operation

8.1 Cloning

In using the cloning function, all of the information (including settings and memory data) of one DJ-596 (master) can be transferred and copied to another DJ-596 (slave) by connecting them with a cable.

■Connecting the Transceivers

- Connect the external speaker jacks on both the master and slave transceivers with a commercially available 3.5 ϕ stereo mini plug cord.
- Turn off the power when connecting the cable.



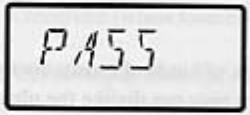
- Turn on the power of both transceivers after making the connections.

■Transmitting Data from the Master Transceiver

1. Press and hold the MONI key and press the PTT key 3 times. "CLONE" appears on the display to indicate the Clone mode is activated.

2. Press the PTT key. "SD ＊＊＊" is displayed. Information is now being transferred to the other transceiver.

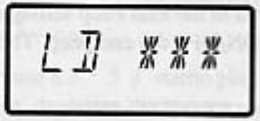
3. "PASS" appears when the cloning function is completed.



4. If the power is turned off, the cloning mode is cancelled. If the data is not transmitted correctly, "PASS" is not displayed. Repeat the process described in steps 1 and 2.

■Receiving the Master Data

1. When the master data is transmitted, "LD ＊＊＊" appears on the slave transceiver's display.



Note The cloning cable is not available as an optional accessory. Please make it by yourself

2. "PASS" appears when the cloning is completed.

3. Turn off the power.
If the data is not transmitted correctly, "PASS" is not displayed.
In this case, try to transmit the master data again or reset the slave transceiver.
If "PASS" did not appear after cloning, incorrect operation may occur if you attempt to use the slave transceiver.

Note
- Use a direct connection type cable without internal resistance.
- If any key is pressed while data is being transmitted during the cloning operation, the cloning transmission stops. Press the PTT key to start transmitting again.
- Do not disconnect the cable while cloning. If the cable is pulled out, "COMERR" appears on the master transceiver's display, and the data transmission stops.
- All data in the slave transceiver will be updated to the master transceiver's data by the cloning operation. Be sure you want to change everything before cloning.

8.2 Packet Operation

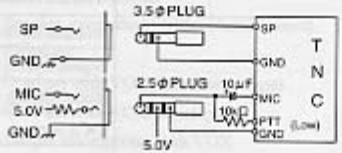
Packet operation is one of the data communication methods, which enables data transmission and reception with a personal computer and TNC.

■ Packet Operation Connections

Packet operation connections for this unit are shown below. Connect the packet communication TNC (Accessory: Terminal Node Controller) terminals to the SP (ϕ 3.5 mm plug) and MIC (ϕ 2.5 mm plug) connectors at the top of the transceiver.

- Input level adjustment :The transceiver has no MIC level adjustment circuit. Adjust the output level of the TNC.
- Output level adjustment : Use the volume dial of the transceiver.

● Connection method for packet operation



Power can be supplied from an internal 5V source through a 100 Ω resistor.

Note
- Refer to the TNC'S instruction manual when connecting the TNC unit to other devices (personal computer, etc.). If the transceiver, TNC and connected personal computer are too close together, noise between them may cause interference.
- Turn the battery save function off during packet operation.
- Confirm your frequency and your communicating partner's frequency. If the frequencies are not exactly the same, the number of retries will be high, or communications may not be possible at all.
- Operate up to 1200 bps.

9. Maintenance and Reference

9.1 Troubleshooting

Please check the list below before concluding that the transceiver is faulty.
If a problem persists, reset the transceiver. This may correct erroneous operation.

Symptom	Possible Cause	Action
Nothing appears on the display when you turn the power on.	Poor Ni-Cd battery pack or battery case connection.	Check if the battery pack terminals are clean.
	Dead battery.	Recharge or exchange batteries.
	You are releasing the key too quickly.	Hold the power switch down for 1 second.
No speaker audio. No reception.	Volume too low.	Adjust the volume.
	Squelch level too high.	Adjust the squelch.
	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.
Frequency display is incorrect.	CPU error.	Detach the battery pack or external power supply, wait 10 seconds and attach it again. If it is still not operational, reset the transceiver.
Won't scan.	Squelch is unmuted.	Set squelch so that noise is just muted.
Frequency and memory number do not change.	Keylock is on.	Turn off keylock.
	Transceiver is in the call mode.	Go to VFO mode.
Key entry not possible.	Keylock is on.	Turn off keylock.
One-touch repeater cannot be used.	Incorrect setting for one-touch repeater use.	Set the transceiver correctly for repeater use.
Cannot transmit. Display blinks or goes out when you transmit.	Battery power is insufficient.	Change or recharge batteries. Or connect transceiver to external power source.
Cannot transmit. No reply when you transmit.	Not pressing the PTT key firmly enough.	Press the PTT key firmly.
	You are outside of the band. (When shift is set.)	Transmit within transmission frequency range.
	Incorrect frequency.	Match your frequency to receiving station's frequency.
Display blinks or goes out when you receive.	Battery power is insufficient.	Change or recharge batteries.

9.2 Resetting

When you reset the transceiver, all settings are returned to the initial (default) factory settings.

1. Press and hold the FUNC SET key and press the POWER key to turn the power on.

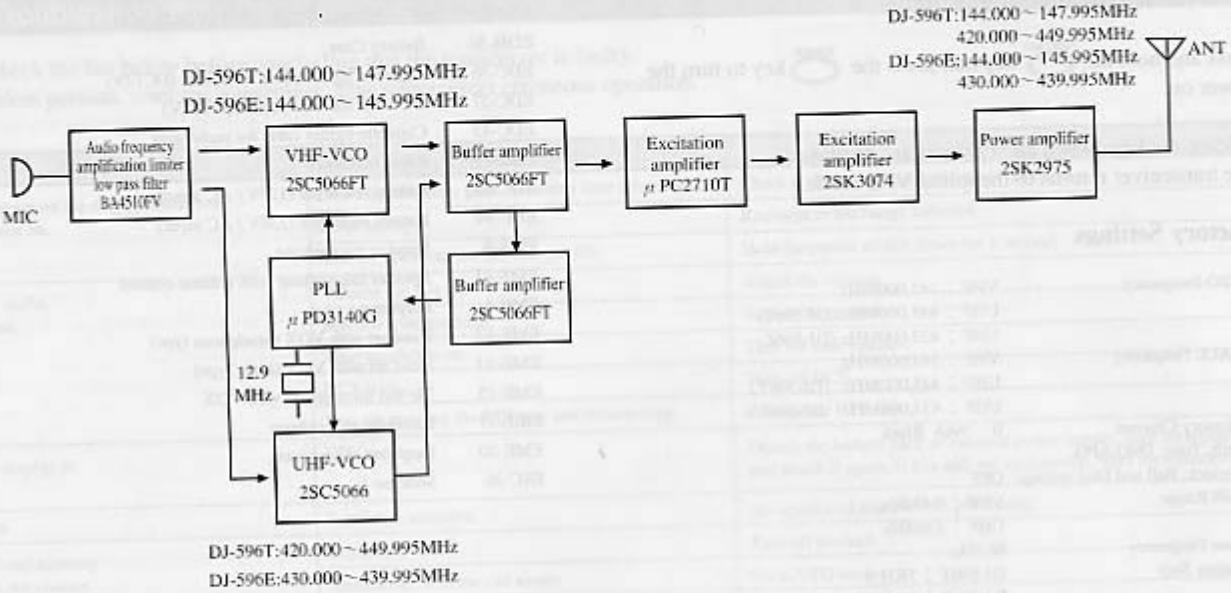
2. Release the keys when all segments are displayed.
The transceiver returns to the initial VFO mode.

● Factory Settings

· VFO Frequency	VHF : 145,000MHz UHF : 445,000MHz (DJ-596T) UHF : 433,000MHz (DJ-596E)
· CALL Frequency	VHF : 145,000MHz UHF : 445,000MHz (DJ-596T) UHF : 433,000MHz (DJ-596E)
· Memory Channel	0 ~ 99ch Blank
· Shift, Tone, DSQ,APO, Keylock, Bell and Dial settings	OFF
· Shift Range	VHF : 0.6MHz UHF : 5.0MHz
· Tone Frequency	88.5Hz
· Tuning Step	DJ-596T : 5KH z DJ-596E : 12.5KH z
· Audio Volume	0
· Squelch Level	0
· Scan Resume Condition	Timed Scan
· Transmit Power	LOW
· Battery Save	ON
· Beep	ON
· DTMF-WAIT Time	100ms
· DTMF Burst/Pause Time	60ms
· DTMF 1st figure Burst Time	60ms

9.3 Options

EBP-50N	Ni-MH Battery Pack (DC9.6V700mAh)
EBP-51N	Ni-MH Battery Pack (DC9.6V1500mAh)
EDH-30	Battery Case
EDC-36	Cigarette lighter cable with filter (DC12V)
EDC-37	DC cable for base station (DC12V)
EDC-43	Cigarette lighter cable for recharging
EDC-97	Rapid recharger
EDC-93	Battery recharger (120V / AC input)
EDC-94	Battery recharger (230V / AC input)
EMS-9	Speaker microphone
EMS-47	Speaker microphone with volume-control
EME-6	Earphone
EME-12	Head set with VOX (headphone type)
EME-13	Head set with VOX (inner type)
EME-15	Tie-pin microphone with VOX
EME-17	Earphone microphone
EME-20	Earphone microphone
ESC-36	Softcase


DJ-596T:144.000～147.995MHz
420.000～449.995MHz
DJ-596E:144.000～145.995MHz
430.000～439.995MHz
ANT
DJ-596T:144.000～147.995MHz
DJ-596E:144.000～145.995MHz
MIC
Audio frequency amplification limiter low pass filter BA4510FV
VHF-VCO 2SC5066FT
Buffer amplifier 2SC5066FT
Excitation amplifier μ PC2710T
Excitation amplifier 2SK3074
Power amplifier 2SK2975
PLL μ PD3140G
Buffer amplifier 2SC5066FT
12.9 MHz
UHF-VCO 2SC5066
DJ-596T:420.000～449.995MHz
DJ-596E:430.000～439.995MHz

10. Specifications

● General

Frequency Range	VHF	144.000 ~ 147.995MHz (DJ-596T)
		144.000 ~ 145.995MHz (DJ-596E)
	UHF	420.000 ~ 449.995MHz (DJ-596T)
		430.000 ~ 439.995MHz (DJ-596E)
Modulation		F2, F3
Ant. Impedance		50Ω (BNC)
Supply Voltage	External Terminal	6.0 ~ 16.0VDC
	Battery Terminal	6.0 ~ 16.0VDC
Current	Transmit	DC13.8V : VHF Approx.1.2A, UHF Approx.1.4A 9.6V(EBP-50N) : VHF Approx.1.2A, UHF Approx.1.5A
	Receive	Approx. 75mA
	Battery Save	Approx. 25mA
Frequency Stability		±5ppm
Dimensions	(Projections exclusive)	56(W)×124(H)×40(D)mm
Weight		Approx. 280g (EBP50N inclusive)

● Transmitter

Power Output	External 13.8V	Approx. 5W
	EBP-50N equipped	VHF : 4.5W, UHF : 4W
Modulation		Variable Reactance
Max. Deviation		±5kHz
Spurious Emission		-60dB or less
Mic. Impedance		Approx. 2kΩ

● Receiver

System		Double-conversion super heterodyne
Intermediate Frequencies	1st	LF 39.15MHz
	2nd	IF 450kHz
Sensitivity	(12dB SINAD)	-15.0dBμ or less
Selectivity	-6dB	±6kHz or over
	-60dB	±15kHz or less
AF Output		300mW or over (MAX) 200mW or over (10% Distortion factor 8Ω)
Spurious response		60dB or over
Squelch Sensitivity		Approx. -10dBμ or less