

VHF UHF FM TRANSCEIVER

# **DJ-V57T**

## **Instruction Manual**

Thank you for purchasing your new Alinco transceiver. This instruction manual contains important safety and operating instructions. Please read this manual carefully before using the product and keep it for future reference.

**ALINCO, INC**

# NOTICE / Compliance Information Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular modulation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Information in this document is subject to change without notice or obligation. All brand names and trademarks are the property of their respective owners. Alinco cannot be liable for pictorial or typographical inaccuracies. Some parts, options and/or accessories are unavailable in certain areas. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

VHF UHF FM Transceiver

FCC Statement:







This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IC Statement:

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.







# Warning

To prevent any hazard during operation of Alinco's radio product, in this manual and on the product you may find symbols shown below. Please read and understand the meanings of these symbols before starting to use the product.

 <b>Danger</b>	This symbol is intended to alert the user to an immediate danger that may cause loss of life and property if the user disregards the warning.
 <b>Alert</b>	This symbol is intended to alert the user to a possible hazard that may cause loss of life and property if the user disregards the warning.
 <b>Caution</b>	This symbol is intended to alert the user to a possible hazard that may cause loss of property or injure the user if the warning is disregarded.
	Alert symbol. An explanation is given.
	Warning symbol. An explanation is given.
	Instruction symbol. An explanation is given.

## **Alert**

### ■ Environment and condition of use

-  Do not use this product in close proximity to other electronic devices, especially medical ones. It may cause interference to those devices.
-  Keep the radio out of the reach of children.
-  In case a liquid leaks from the product, do not touch it. It may damage your skin. Rinse with plenty of cold water if the liquid contacted your skin.
-  Never operate this product in facilities where radio products are prohibited for use such as aboard aircraft, in airports, in ports, within or near the operating area of business wireless stations or their relay stations.
-  Use of this product may be prohibited or illegal outside of your country. Be informed in advance when you travel.
-  The manufacturer declines any responsibilities against loss of life and/or property due to a failure of this product when used to perform important tasks like life-guarding, surveillance, and rescue.



Risk of explosion if battery is replaced with an incorrect type.  
Dispose of, or recycle used batteries according to your local regulations.



The manufacturer declines any responsibilities against loss of life and property due to a failure of this product when used with or as a part of a device made by third parties.



Use of third party accessory may result in damage to this product. It will void our warranty for repair.

#### ■ Handling this product



Be sure to reduce the audio output level to minimum before using an earphone or a headset. Excessive audio may damage hearing.



Do not open the unit without permission or instruction from the manufacturer. Unauthorized modification or repair may result in electric shock, fire and/or malfunction.



Do not operate this product in a wet place such as shower room. It may result in electric shock, fire and/or malfunction.



Do not place the product in a container carrying conductive materials, such as water or metal in close proximity to the product. A short-circuit to the product may result in electric shock, fire and/or malfunction.

#### ■ About chargers



Do not use adapters other than having the specified voltage. It may result in electric shock, fire and/or malfunction.



Do not plug multiple devices using an adapter into a single wall outlet. It may result in overheating and/or fire.



Do not handle adapter with a wet hand. It may result in electric shock.



Securely plug the adapter into the wall outlet. Insecure installation may result in short-circuit, electronic shock and/or fire.



Do not use the adapter if the plug or socket contacts are dirty. Overheating and/or short-circuiting may result in fire, electric shock and/or damage to the product.

#### ■ About power supply



Use only appropriate, reliable power supply of correct voltage and capacity.



Do not connect cables in reverse polarity. It may result in electric shock, fire and/or malfunction.



Do not plug multiple devices including the power supply into a single wall outlet. It may result in overheating and/or fire.



Do not handle a power supply with a wet hand. It may result in electric shock.



Securely plug the power supply to the wall outlet. Insecure installation may result in short-circuiting, electric shock and/or fire.



Do not plug the power supply into the wall socket if the contacts are dirty. Short-circuit and/or overheating may result in fire, electric shock and/or damage to the product.



Do not modify or remove fuse-assembly from the DC cable. It may result in fire, electric shock and/or damage to the product.

#### ■ Cigar-lighter cable



Do not use the cable at any other than the specified voltage. It may result in electric shock, fire and/or malfunction.



Do not handle cigar cable with a wet hand. It may result in electric shock.

#### ■ In case of emergency

In case of the following situation(s), please turn off the product, switch off the source of power, then remove or unplug the power-cord. Please contact your local dealer of this product for service and assistance. Do not use the product until the trouble is resolved. Do not try to troubleshoot the problem by yourself.

- When a strange sound, smoke and/or strange odor comes out of the product.
- When the product is dropped or the case is broken or cracked.
- When a liquid penetrated inside.
- When a power cord (including DC cables, AC cables and adapters) is damaged.



For your safety, turn off then remove all related AC lines to the product and its accessories from the wall outlet if a thunderstorm is likely.

#### ■ Maintenance



Do not open the unit and its accessories. Please consult with your local dealer of this product for service and assistance.



## Caution

#### ■ Environment and condition of use



Do not use the product in proximity to a TV or a radio. It may cause interference or receive interference.



Do not install in a humid, dusty or insufficiently ventilated place. It may result in electric shock, fire and/or malfunction.



Do not install in an unstable or vibrating position. It may result in electric shock, fire and/or malfunction when/if the product falls to the ground.



Do not install the product in proximity to a source of heat and humidity such as a heater or a stove. Avoid placing the unit in direct sunlight.



Be cautious of a dew formation. Please completely dry the product before use when it

happens.

### ■ About Transceiver



Be cautious of the whip antenna when carried in your shirt-pocket etc. It may make contact with your eye and cause injury.



Do not connect devices other than specified ones to the jacks and ports on the product. It may result in damage to the devices.



Turn off and remove the power source (AC cable, DC cable, battery, cigar cable, charger adapter etc.) from the product when the product is not in use for extended period of time or in case of maintenance.



Never pull the cord alone when you unplug AC cable from the wall outlet.



Use a clean, dry cloth to wipe off dirt and condensation from the surface of the product. Never use thinner or benzene for cleaning.

### ■ About power supply



Use only reliable power supply of specific DC output range and be mindful of the polarity of the cable and DC-jack.



Always turn off the power supply when connecting or disconnecting the cables.



When using an external antenna, make sure that the antenna ground is not common with the ground of the power supply.



European users: When a unit is powered from an external DC power source (adapter, power supply, cigar-plug etc.), make sure that this power supply has approval to the level of IEC/EN 60950-1.

### ■ Lightning

Any person is not safe outdoor during thunderstorm and lightning. This condition is getting worse if somebody keeps a hand-held radio; chances of being hit by lightning are doubled since lightning may hit a radio antenna as well. At this time, there is no hand-held radio having any kind of protection against lightning current (which is higher than 10 kA.). Note also that no car provides adequate protection of its passengers or drivers against lightning as well. Therefore, Alinco will not take responsibility for any danger associated with using its hand-held radios outdoor or inside the car during lightning.

### ■ Notice to California resident users

The Safe Drinking Water and Toxic Enforcement Act of 1986 of the State of California determines that lead and cadmium are considered carcinogens and reproductive toxicants. The product that comes with this manual is free from dangerous materials such as lead and cadmium as per RoHS order of EU.

### ■ Limited Power Source

Please note that the receiver enclosure only provides mechanical protection of its internal parts; it will not contain a fire within the device if the fire starts under certain fault conditions. Alinco will not take responsibility for any fire hazard associated with powering the receiver or charging its batteries using a power source which does not belong to the limited power sources in the meaning of EN 60950-1. Excluded from possible use with the receiver are most car cigarette lighters and some DC (AC/DC) power supplies. Make sure that the power supply used with the receiver is a limited power source.

# Introduction

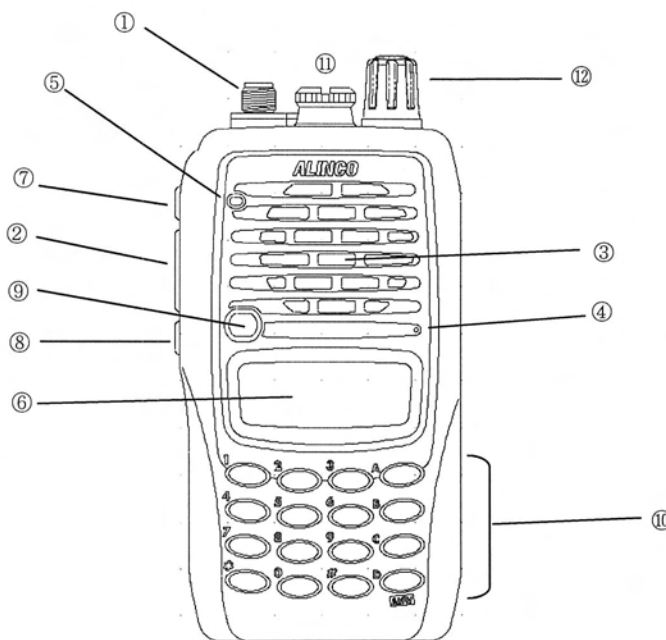
Thank you very much for purchasing this excellent Alinco Transceiver. Our products are ranked among the finest in the world. This radio has been manufactured with state of the art technology and it has been tested carefully at our factory. It is designed to operate to your satisfaction for many years under normal use.

PLEASE READ THIS MANUAL COMPLETELY TO LEARN ALL THE FUNCTIONS THE PRODUCT OFFERS. WE MADE EVERY ATTEMPT TO WRITE THIS MANUAL TO BE AS COMPREHENSIVE AND EASY TO UNDERSTAND AS POSSIBLE. IT IS IMPORTANT TO NOTE THAT SOME OF THE OPERATIONS MAY BE EXPLAINED IN RELATION TO INFORMATION IN PREVIOUS CHAPTERS. BY READING JUST ONE PART OF THE MANUAL, YOU RISK NOT UNDERSTANDING THE COMPLETE EXPLANATION OF THE FUNCTION.

“TV” as used in this manual refers to analog television.

# Names and Operations of Parts

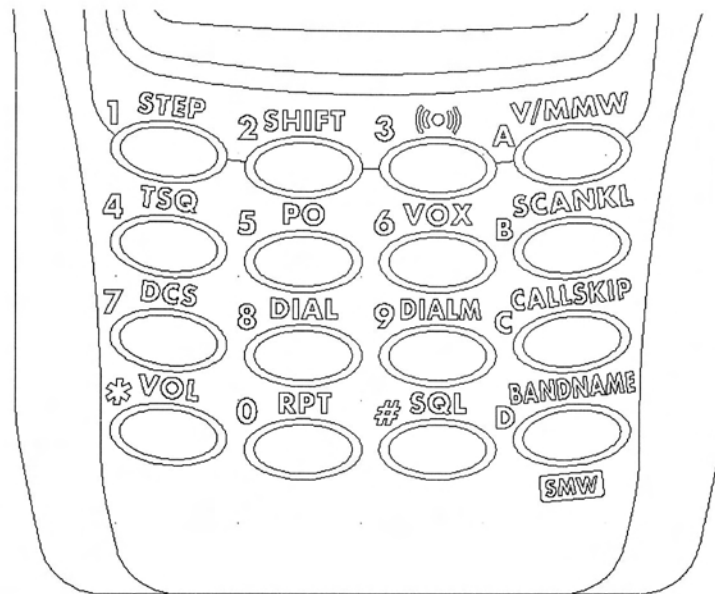
## < Names and Operations of Keys and Ports >



①	SMA Antenna Connector	Attach the whip antenna. If you plan to use an optional antenna, select one that is tuned to the operating frequency.
②	PTT key	Press the PTT key to transmit, release to receive.
③	Speaker	A speaker is built in.
④	Microphone	Speak into the microphone from a distance of about 5cm (2").
⑤	TX/RX lamp	Lights green when the squelch is unmuted. Lights red during transmission.
⑥	Display (LCD)	Refer to "Display".
⑦	FUNC key	The FUNC key is used in combination with the other keys to access the various functions of the unit. To enter the Set mode to set operating parameters, press the FUNC key continuously for about 2 seconds.
⑧	MONI key	When the MONI key is pressed, the squelch unmutes regardless of the TSQ/DCS setting. Pressing the MONI key after pressing the FUNC key illuminates display for about 5 seconds. Pressing the MONI key while pressing the PTT key transmits a tone-burst signal.
⑨	Power key	Press the power key down for approximately one second to turn on/off the unit.
⑩	Keypad	Refer to "Keypad".
⑪	Microphone/Speaker jack	For an optional speaker/Mic connection.
⑫	Dial	Rotate the dial to select the frequency of operation, memory channel, offset frequency, tone frequency, DCS code, Set mode settings, and the characters for nametags. Rotating the dial while pressing the FUNC key increases or decreases the frequency in 1MHz order.

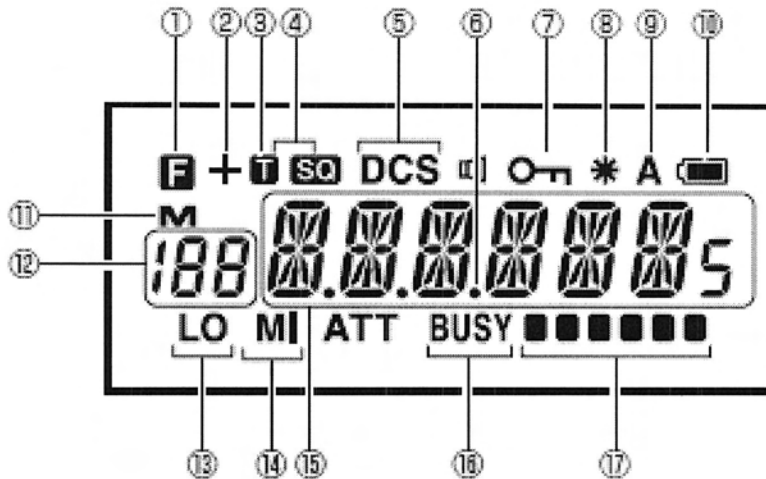


< Keypad >



Key	Without pressing the FUNC key.	While " F " appears after the FUNC key is pressed.
1	Inputs 1.	Channel step setting.
2	Inputs 2.	Offset frequency setting.
3	Inputs 3.	
4	Inputs 4.	Tone Encode / Tone Squelch setting.
5	Inputs 5.	Hi / Mid / Low power setting.
6	Inputs 6.	VOX setting.
7	Inputs 7.	DCS (digital code squelch) setting.
8	Inputs 8.	Auto dialer operation.
9	Inputs 9.	Auto dialer memory setting.
0	Inputs 0.	Repeater-Access function setting.
A	Switches between the VFO and Memory mode.	Memory programming.
B	Start/Stop scanning.	Key / Frequency lock setting.
C	Access the Call channel.	Memory channel skip setting.
D	Switches between the VHF and UHF.	Naming memory channels setting.
#	SQL adjustment.	
*	Audio level adjustment.	

< Display (LCD) >



①	Appears when the FUNC key is pressed.
②	Indicates the shift (+/-) direction.
③	Appears when setting the CTCSS tone encoder.
④	Appears when setting the tone squelch.
⑤	Appears when setting the DCS.
⑥	Displays the frequency and scan operation.
⑦	Displayed when the frequency or the keypad is locked.
⑧	Appears when the Repeater-Access function is activated.
⑨	Appears when Auto-Power-Off function is activated.
⑩	Indicates battery-level. The black icon flashes when the battery charge function is on.
⑪	Displayed when in the Memory mode.
⑫	Displays the memory channel No.
⑬	Displayed when the transmission output is in LOW setting.
⑭	Displayed when the transmission output is in MID setting.
⑮	Frequencies, parameters
⑯	Appears when the squelch is unmuted.
⑰	Indicates the receiving signal (S-meter) and transmission output levels (Power-meter).

## Basic Operation

### < Turning On the Power >

Hold the **POWER** key down for a second.

To turn off the power, hold the **POWER** key down until the display turns off.

### < Adjusting the Audio Output (Volume) >

- There are 21 audio output levels (00~30).
- The default setting is level 00. There is no audio output at this status.

1. Press the [**\*VOL**] key. The level is displayed on the LCD.
2. Rotate the dial to increase or decrease the level.

As the setting value increases, the audio becomes louder.

3. Press any key except for the **MONI** key or just leave it for 5 seconds to automatically complete the setting.

### < Adjusting the Squelch >

Squelch is a function that eliminates the noise when no signals are being received.

- There are 10 squelch levels (00~10).
- The default setting is Level 00.

1. Press the [**#SQL**] key. The squelch level is displayed on the LCD.
2. Rotate the dial to increase or decrease the squelch level. Set to the lowest level that the noise is cut.
3. Press any key except for the **MONI** key or just leave it for 5 seconds to automatically complete the setting.

### < Setting the Frequency in the VFO Mode >

The factory default of this unit is the VFO mode.

The VFO mode allows you to change the frequency and operating parameters by using the dial and key operations.

#### Setting the Frequency

##### ■ To Select the VFO Mode

The [**A MW V/M**] key switches between the VFO and Memory mode each time the key is pressed.

"**M**" is displayed on the LCD when the unit is in the Memory mode.

##### ■ Selecting the Operating Frequency

Rotate the dial clockwise to increase the frequency by one tuning step.

Rotate the dial counter-clockwise to decrease it by one tuning step.

##### ■ To Quickly Change the Frequency

Press the **FUNC** key, and while "**F**" is displayed on the screen, rotate the dial to

increase or decrease (depending on the direction of rotation) the frequency by 1MHz order.

**< Receiving >**

1. Turn on the unit.
2. Press the [**\*VOL**] key and rotate the dial to adjust the audio level as necessary.
3. Press the [**#SQL**] key and rotate the dial to adjust the squelch level.
4. Select the frequency that you wish to operate by using the dial or the keypad.

When a signal is received on the frequency that you selected, **BUSY** and S-meter are displayed on the LCD, then the received signal can be heard. The green RX indicator also lights at this time.

**< Transmitting >**

1. Select the frequency that you wish by using the dial or keypad.
2. Press the **PTT** key.  
The red TX indicator turns on while transmitting.
3. While holding down the **PTT** key, speak into the unit at normal voice from the distance of 5cm (2").
4. Release the **PTT** key to receive.

**Selecting the Output Level**

Press the **FUNC** key, and while " **F** " is displayed on the LCD, press the [**5 PO**] key to switch between high, middle and low transmission power output.

When the low power output is selected, " **LO** " is displayed on the LCD.

When the middle power output is selected, " **MI** " is displayed on the LCD.

Nothing is displayed when the high power is selected.

The initial setting is low power.

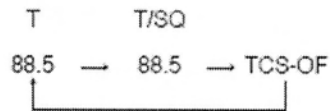
The Power-meter display ■■ is when transmitting at the low power, ■■■■ is when transmitting at the middle power and ■■■■■■ when transmitting at the high power.

## Selective Calling

### < Tone Squelch (TSQ) >

#### Setting the Tone Squelch

1. Press the FUNC key, and while " F " is displayed on the LCD, press the [4 TSQ] key to display the current TSQ settings. Each time the key is pressed, the display shows:

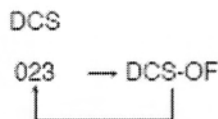


- When only " T " is displayed, the unit encodes the CTSS tone.
  - When " T SQ " is displayed, the unit encodes and decodes the CTCSS tone.
2. Rotate the dial while the tone frequency is displayed to select one of the 39 CTCSS tones.
  3. Press any key other than the MONI key to complete the setting. Observe that both " T " and " T SQ " are displayed.

### < DCS >

#### Setting the DCS

1. Press the FUNC key, and while " F " is displayed on the LCD, press the [7 DCS] key. " DCS " is displayed on the LCD, and the DCS code is displayed. The initial setting is 023. Each time you press the [7 DCS] key, the display switches between:



2. Press any key other than the MONI key to complete the setting. Observe that " DCS " is displayed.

#### Changing the DCS Code

1. Rotate the dial in DCS Code Setting mode (while " DCS " is displayed).
2. Press any key other than the MONI key to complete the setting.

### < DTMF Tone Encoding >

Press the numeric, alphabetic or symbol keys while holding down the PTT key.

The tones sound as long as the key is pressed.

### < Tone-Burst >

This function is to generate an audible tone to access European repeaters.

- To output the tone-burst tone, press the MONI key while holding down the PTT key.

The tone is transmitted as long as the MONI key is pressed.

The initial setting for the tone-burst tone is 1750Hz, but this can be changed in the Set mode.

- While transmitting the tone-burst tone, the CTCSS/DCS tone is temporary suspended.

## Set Mode

### < Set Mode Operation >

Menu	Default setting	Function
01	BS-ON	Battery Save ON/OFF
02	TIMER	Timer/Busy scan setting
03	BEP-ON	Beep sound ON/OFF
04	ARP-ON	Repeater Function ON/OFF
05	APO-OF	Auto-Power-OFF setting
06	WIDE	WIDE/NARROW
07	ATT-OF	ATT setting
08	SFT-OF	CPU Clock Frequency shift ON/OFF
09	BCL-OF	Busy Channel Lock Out ON/OFF
10	1750	Tone-Burst Frequency setting
11	T-OFF	Time-Out-Timer setting
12	TP-OFF	TOT Penalty setting
13	DWT-01	DTMF Wait time setting
14	DF-100	DTMF First Digit Burst time setting
15	DB-100	DTMF Burst time setting
16	DP-100	DTMF Pause time setting
17	STB-OF	END-Beep setting
18	MID-05	MID Power setting

### < Entering the set Mode >

1. Press the FUNC key for at least 2 seconds.  
The unit enters the Set mode.  
"BS-ON" is displayed as a factory-default.
2. Press the MONI key or FUNC key to select a menu.  
The Monitor function can't be used in this status.
3. Rotate the dial to change the parameter.
4. Press any key other than the MONI key and FUNC key to complete the settings.

The last operated menu will be selected the next time you enter the Set mode.

## Reference

### < Resetting >

When you reset the unit, all settings are returned to the initial factory settings.

The reset deletes the programmed memory channels also.

1. Turn on the unit with the FUNC and [A MW V/M] keys pressed together.
2. All the icons appear on the display.

Release the keys. All display will disappear for 2 seconds, and then reappear. The initial mode is the VFO.

### < Accessories >

#### DJ-V57T

- EBP-65 : Ni-MH Battery Pack (DC 7.2V 700mAh)
- EDC-146 : Wall Charger
- EA-114 : Whip antenna
- Belt clip
- Hand strap

#### DJ-V57E

- EBP-63 : Li-ion Battery Pack (DC 7.4V 1100mAh)
- EDC-159 : Li-ion Rapid Battery Charger
- EA-114 : Whip antenna
- Belt clip
- Hand strap

### < Options >

#### Battery Packs

- EBP-63 : Li-ion Battery Pack (DC 7.4V 1100mAh)
- EBP-64 : Li-ion Battery Pack (DC 7.4V 1600mAh)
- EBP-65 : Ni-MH Battery Pack (DC 7.2V 700mAh)
- EBP-66 : Ni-MH Battery Pack (DC 7.2V 2000mAh)

#### Battery Chargers

- EDC-143 : Trickle Battery Charger
- EDC-144 : Rapid Battery Charger
- EDC-146/147/148 : Wall Charger
- EDC-159 : Li-ion Rapid Battery Charger
- EDC-160 : Ni-MH Rapid Battery Charger

#### Others

- EDH-34 : Dry Cell Case
- EDS-14 : Microphone / Speaker Cable