# **UHF FM TRANSCEIVER**

# DJ-FX45





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.

# Introduction

Please be informed that this manual has been edited with dealer-use in mind. The product is delivered toconsumersafter being programmed by dealers. The product is blocked and not functional in ex-factory statedue to regulations.

Please read this manual completely from the first page to the last, to learn all the functions the product offers. It is important to note that some of the operations may be explained in relationto information in previous chapters. By reading just one part of the manual, you may risk notunderstanding the complete explanation of the function. In addition, please understand that your radio may be programmed by the dealer according to the local regulation, masking some offeatures mentioned in this manual. Please consult your dealer for details of programming.

# **Before transmitting**

There are many radio stations operating in proximity to the frequency ranges this product covers. Becareful not to cause interference when transmitting around such radio stations

#### ■ Lightning

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

### ■ Covering ranges

You may expect a range of approx.3km/2 miles or more at high-power when located on a flat, noise-freeplace like on a beach. However, it may vary drastically depending on how to wear and carry the radios,surrounding locations/conditions and static noise levels (below or near power transmission lines), etc. Inurban areas with many buildings or inside a building, such covering range will become drastically shorteven to several tens of meters.

# **NOTICE/Compliance Information Statement**

For your safe and efficient use of the transceiver, please read the following safety information.

- 1.The maintenance work can be carried out only by professional and technical personnel, please do not disassemble or reassemble by yourself.
- 2.Can use only the specified battery and charger, rechargeable 5 to 40 ℃ range.
- 3.To avoid electromagnetic interference and other problems caused by electromagnetic incompatibility, please close the transceiver in the place where there is a sign showing "No transceiver", as

well as on the plane where transceivers are required to be shut down by crew.

- 4.In the car with an airbag, do not put the transceiver within the reach of expansion of the airbag.
- 5.When entering into a flammable and explosive environment, please close the transceiver.
- 6.You should not get close to blasting areas and areas where deployed some detonators until the transceiver is turned off.
- 7.Do not use the transceiver with a damaged antenna, for the damaged antenna may cause light burn of your skin.
- 8.Do not expose transceivers under direct sunlight for a long time, or place it near some heating equipment.

### Safety Training Information

Your FRS radio generates RF electromagnetic energy during transmitmode. This radio is intended for use by "General Population" in uncontrolled environment. This radio has been tested and complies with the FCC RF exposure

"General population." In addition, your ALINCO radio complies with the following

### **NOTICE/Compliance Information Statement**

Standards and Guidelines with regard to RF energyand electromagnetic energy levels and evaluation of such levels for exposure to humans:

- FCC OET Bulletin 65 Edition 01-01 Supplement C, Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields
- American National Standards Institute (C95.1-1992), IEEE Standardfor Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.
- •American National Standards Institute (C95.3-1992), IEEE Recommended Practice for the Measurement of Potentially HazardousElectromagnetic Fields-RF and Microwave
- The following accessories are authorized for use with this product. Use of accessories other than those specified may result in RF exposure levels exceeding the FCC requirements for wireless RF exposure.; Belt Clip(EBC-40), Rechargeable Li-ion Battery Pack (EBP-90), Earphone microphone (EME-24/EME-61)and Speaker microphone (EMS-60).

To ensure that your expose to RF electromagnetic energy is withinthe FCC allowable limits for general population/uncontrolled use,always adhere to the following guidelines:

•DO NOT transmit for more than 50% of total radio use time ("50% duty cycle"). Transmitting more than 50% of the time can causeFCC RF exposure compliance requirements to be exceeded. Theradio is transmitting when the "TX indicator" lights red. You cancause the radio to transmit by pressing the "PTT" switch.

The information listed above provides the user with the informationneeded to make user aware of RF exposure, and what to do to assurethat this radio operates with the FCC RF exposure limits of this radio.

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## **Features**

This transceiver has the following main features:

- Computer-programmable with free software downloadable from Alinco website (with optional ERW-8 interface cable)
- Works with 3.7V 1000mAh li-ion cell yet powerful legal-limit TX output and clear, crisp 300mW Audio output
- Compact size 50W x 157H x 19D mm (with antenna)
- Weight less than 90g inclusive of 3.7V 1000mAh li-ion cell and antenna
- Scan functions
- 50 CTCSS tones and 105 DCS Tones
- Simple, easy-to-use interface and Back-lit, large LCD screen with Channeldisplay mode, suitable for commercial-applications.
- Includes VOX function, Call tone melody 5songs, APO, Low Battery indication, Key lock function, Tone Call and more!
- · Ultra-compact antenna for better portability

# 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.

<u> </u>	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.
Alert Alert	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.
Caution	This symbol is intended to alert the user a possible hazard that may cause loss of property or injure the user if the warning is disregarded.
<u> </u>	Alert symbol. An explanation is given.
<b>1</b>	Alert symbol. An explanation is given.  Warning symbol. An explanation is given.

# **⚠** Alert

#### Environment and condition of use

- Use of this product may be prohibited or illegal outside of your country. Be informed in advance when you travel.
- It is recommended that you check local traffic regulations regarding the use of a radio equipment while driving. Some countries prohibit or apply restrictions for the operation of radios and mobile-phones while driving.
- O 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.

### Warning

$\Diamond$	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.
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- 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.
- The manufacturer declines any responsibilities against loss of life and/or a property due to a failure of this product when used to perform important tasks like life-quarding, surveillance, and rescue.
- O not use multiple radios in very close proximity. It may cause interference and/or damage to the product(s).
- 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 and voids warranty.
- Do not operate this product in a wet place such as in a shower room. It may result in electric shock, fire and/or malfunction, This product is splash-proof but not a complete water-proof.
  - Do not place the product in a container carrying conductive materials, such as water or metal in close proximity. A short-circuit to the product may result in electric shock, fire and/or malfunction.

#### About chargers

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Do not use adapters other than having the specified voltage. It may result in electric shock, fire and/or malfunction, Never turn on the radio while charging.

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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.

#### 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.

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### Warning



### ✓ 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 form 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.



Check with your local waste officials for details on recycling or proper disposal of the electronics product, battery-packs and accessories in your area.



Tested to comply MIL-STD-810G Shock: Method 514.6/I, IV -Vibration: Method 516.6/I

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# **Accessories**



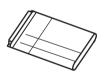
Mainframes(1PC)



Belt clips(1PC)



Adapter(1PC)



Batteries (1PC)



Straps(1PC)



Instructions (1PC)

# **Accessories**

#### **Battery Information**

Disassembly and Reassembly of the battery

Hold down below the battery cover, and push it, then the battery cover will open.

The Plus-n-Minus of the battery zeroed in on the Plus-n-Minus of the transceiver, then lood

Cover the battery cover.

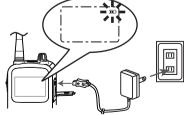


### **Charging Operation**

Please recharge it when used for the first time.

the assmbled battery transceiver insert power adapter's USB interface, then recharge it.

It will take 3.5H for a full charge, please unplug the power supply after a full charge.



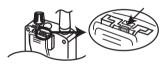
# **Accessories**

### Disassembly and Reassembly

1.Installation of the belt clip
The belt clip insert the card buckle
of the back of the transceiver,
push down to the end.



2.Removal of the belt clip According to the back button in the direction of the transceiver upper lock, hold down the upward pull back button at the same time.

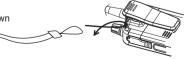


3.Installation of External Earphone or Microphone Open the earphone cap, Insert the earphone or microphone to the headphone jack.
Earphone microphone (EME-24/EME-61)
and Speaker microphone (EMS-60).

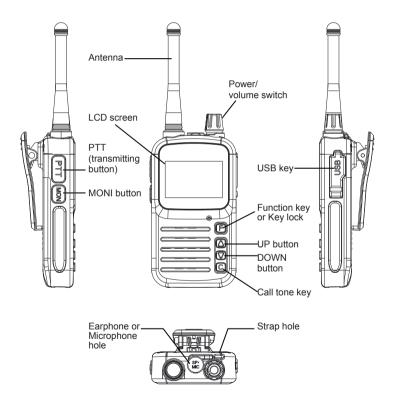


4. Hand Strap

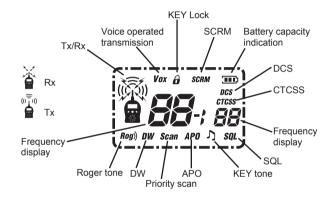
Attach the hand strap as shown



# **Names and Operations of Parts**



# **Names and Operations of Parts**



# **Basic Operation**

#### **Function introduction**

#### 1 Method of call

Install the battery first, then turn the power switch/volume knob.(clockwise rotation)

Press " \( \bigcap \)" and " \( \bigcap \)" key, choose the required channel.

Press " (PTT) " key, then speak.

Note: Please use the same channel with your partner's.



#### 2.Channel selection

In the channel mode, press " ( and " ( wey select channel can be determined directly.



#### 3 Scan function

Can scan call channel automatically.

Long press " ( and " ( key, scan to start. " ( key means upward scan;

" ( kev means scan down.

Scan to can talk channel, scan can stop automatically.

When the call completes, it will begins scanning other channels.







(PTT) (F) (C) (MON), any key can stop scanning.

