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Client: Alinco, Inc.  
Model: DJ-X30T/DJ-X30K  
Standards: FCC 15.121  
& IC RSS-215  
Report: 2006207

## **Appendix J: Manual**

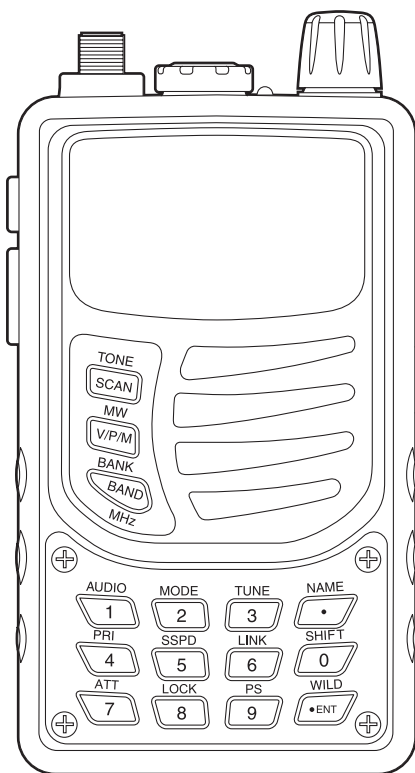
Please see the following pages.

# ALINCO

WIDE BAND COMMUNICATION RECEIVER

# DJ-X30T/E/K

## Instruction Manual



Thank you for purchasing your new Alinco receiver. 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 installation. 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.



**Tested to Comply  
With FCC Standards  
FOR HOME OR OFFICE USE**

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.

## Wide Band Communication Receiver DJ-X30T

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.

Manufacturer:

ALINCO, INC.

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**Conformity Information**

Alinco, Inc. Electronics Division hereby declare on our sole responsibility that the product(s) listed below comply the essential requirements of the Directive 1999/5/EC, The council of 3/9/99 on Radio Equipment and Telecommunication Terminal Equipment and the mutual recognition of their conformity and with the provisions of Annex, after having performed the required measurements at Notified Bodies per Standards, and relative certificate(s) or document(s) can be reviewed at <http://www.alinco.com/Ce/>

DJ-X30E: Wide Band Communication Receiver 0.1 - 1299.995MHz









This device is authorized for use in all EU and EFTA member states.

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# 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



It is recommended that you check local traffic regulations regarding the use of radio equipment while driving. Some countries prohibit or apply restrictions for the operation of radios and mobile-phones while driving.



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.
-  Do 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.
-  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, electronic 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 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.

**■ 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**

Adhering to the requirement of the following warning ensures compliance of the receiver with the safety standard for information technology equipment, EN 60950-1. 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 receiver. 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.

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# 1. Features

The DJ-X30 is a multifunctional receiver which receives a wide range of radio signals from low-frequency (LF) signals to ultra-high-frequency (UHF) signals. It provides the following features:

- 1** Receives a wide range of frequencies - between 0.100 and 1299.995 MHz - including aviation radio and business communication frequencies.
- 2** Built-in bar-antenna receives AM radio and shortwave broadcasts, eliminating the need to attach an external antenna.
- 3** Earphone cord can be used as an antenna to receive signals without using an external antenna.
- 4** Use the key pad for advanced operation, or replace it with the key pad cover for simple operation.
- 5** Automatic input switching. By connecting the optional remote controller to the earphone jack and connecting an MP3 player or other portable audio device to the controller, you can listen to music under normal conditions and hear receiver messages when the DJ-X30 receives any signals.
- 6** Cable-clone function allows you to copy settings and various data between receiver units. PC Connection function allows you to edit settings and data via a PC.
- 7** Squelch function even supports reverse tones which are commonly used in business communications. Select and listen to only the audio signals you want.
- 8** Scan speed is selectable from 5 levels. Select a fast scan speed to detect strong signals, and select a slower scan speed to detect weak signals.
- 9** Wild Key function allows you to quickly jump to frequently used Set mode functions.

## 2. Accessory List

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The package of the DJ-X30 contains the following items. Check that all items are included in your package before using the receiver.

- Instruction Manual (this manual)
- Warranty card (T/K)
- Whip antenna (SMA)
- Key cover
- Rubber sheet
- Belt clip
- Hand strap
- Screws (One for the belt clip, and two as spares for the key cover)

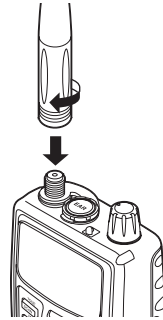
# 3. Using Accessories

## 3-1 Attaching/Detaching the External Antenna

- 1** Hold the antenna at its base and slowly rotate it clockwise (to the right).

When you cannot rotate the antenna further, check that it is securely attached to the receiver.

- 2** To remove the antenna, slowly rotate it counterclockwise (to the left).



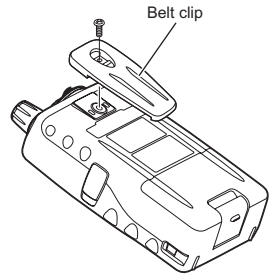
## 3-2 Attaching the Belt Clip

- 1** Align the belt clip with the groove at the rear of the receiver.
- 2** Insert the screw into the hole on the clip and rotate it clockwise (to the right).

When you cannot rotate the screw further, check that the clip is securely attached to the receiver.

- 3** To remove the clip, rotate the screw counterclockwise (to the left).

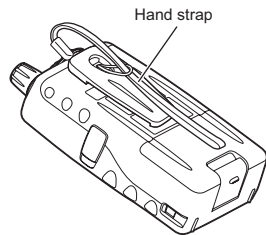
\* The screw may become loose during use. Check the tightness of the screw from time to time.





### 3-3 Attaching the Hand Strap

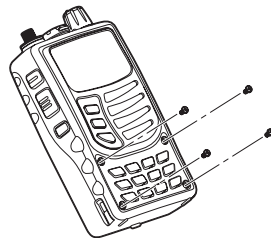
- 1 Attach the hand strap by drawing it through the hole on the belt clip as shown in the figure.



### 3-4 Changing the Key Cover and Related Precautions

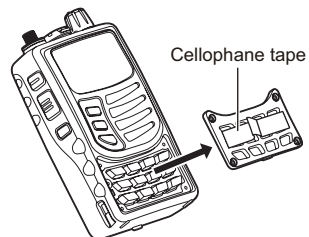
- 1 Be sure to turn OFF the receiver before starting the following steps.
- 2 View the receiver from the front, and remove the four screws shown in the figure.

Be careful not to lose the screws. (The package of the DJ-X30 includes spare screws as insurance against the loss of the screws. These should be stored separately.)

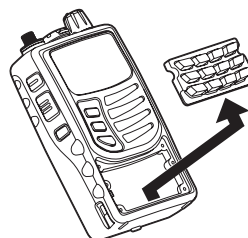


- 3 Remove the key pad cover.

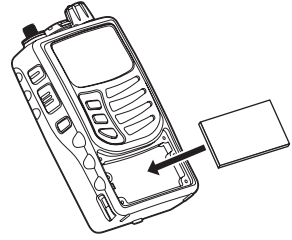
When it is difficult to remove the cover, apply a strip of cellophane tape to the cover and it will lift off easily.



- 4 Remove the key pad.



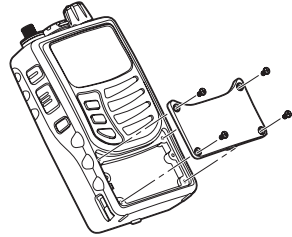
- 5** Place the rubber sheet.



- 6** Place the key cover.

- 7** Secure the cover with the four screws you removed previously.

Be careful not to overtighten the screws as this may damage the cover.

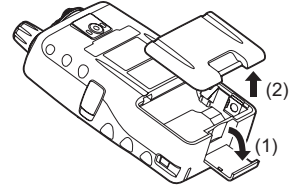


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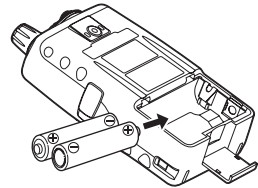
### 3-5 Installing Batteries and Related Precautions

- 1** Release the lock of the battery compartment cover and open it.

Be careful not to lose the cover.



- 2** Insert two batteries (included), checking that they are orientated correctly with the + and - indicators inside the compartment.

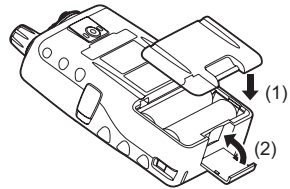


- Be careful not to insert the batteries incorrectly as this may damage the receiver, or cause overheating or leakage.



### 3 Close the cover and lock it.

Check that the cover has closed securely.

Other than the included Ni-MH battery pack, the DJ-X30 can also be used with AA-size alkaline dry cell batteries or similar commercially-available batteries.



#### • Battery indicator

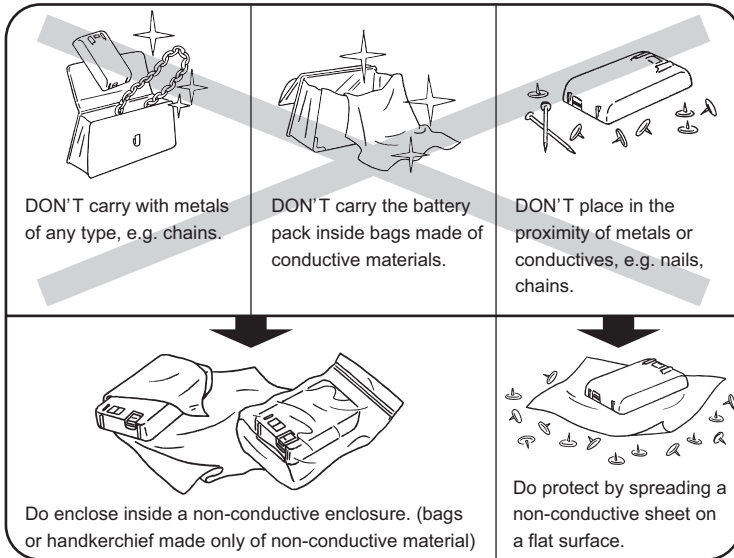
When the remaining battery power becomes low, the  icon appears on the LCD. When the power decreases further, the icon changes to . When this icon appears, the Ni-MH battery pack should be charged, or if alkaline dry cell batteries are being used, they should be replaced with new ones.

#### • Cautions when using the Ni-MH battery pack

- The optional Ni-MH battery pack is not fully charged when shipped. You will need to charge it before use.
- The battery pack must be charged within the temperature range of 0 to 40°C (32 to 104°F).
- Do not modify or dismantle the battery pack. Do not throw it into fire or water. These actions are dangerous.
- Do not short-circuit the battery pack. This may damage the receiver, and may cause burns by the heat generated from the battery pack.
- Do not charge the battery pack for an unnecessarily long time (i.e. avoid overcharging). This may deteriorate battery performance.
- The battery pack should be stored in a dry place where the temperature range is between -20 and +45°C (-4 and 113°F). Storing the battery pack in locations with high humidity or temperatures outside the proper range may cause the battery pack to leak or rust.
- When the battery pack exhausts extremely fast even when it has been charged for the specified time, it may have reached its end of life. Replace the battery pack with a new one.
- To protect the environment, do not dispose of the exhausted battery pack but take it to a battery recycle center in your area.
- Due to its characteristics, the Ni-MH battery pack may deteriorate and may not be able to be charged after it is left for about six months without charging. If you intend not to use the receiver for a long time, fully charge the battery pack, remove it from the receiver, and store it separately. Be sure to charge it at least once every six months.
- The Ni-MH battery pack is a consumable article and is not covered by the warranty of the receiver.

### • Prevent Short Circuiting the Battery Pack

Be extra cautious when carrying the rechargeable battery pack; short circuiting will produce surge current possibly resulting in fire.



## 3-6 Using the AC Adapter

- 1** Open the DC jack cover on the right side of the receiver.
- 2** Insert the plug of the included AC adapter into the DC jack on the receiver.
- 3** Plug the AC adapter into a wall outlet.

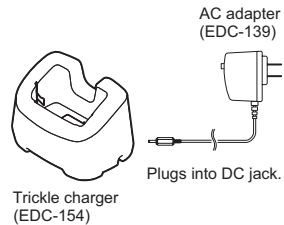


- When not connecting the AC adapter to the receiver, close the DC jack cover to prevent the entry of dust.

## 3-7 Using the Optional Trickle Charger and Related Precautions

### 3-7-1 Connecting the trickle charger

- 1** Insert the plug of the AC adapter into the DC jack on the rear of the trickle charger.
- 2** Plug the AC adapter into a wall outlet.



### 3-7-2 Charging the battery pack

- 1** Install the Ni-MH battery pack in the receiver.

For the procedure of installing the battery pack, refer to "Installing Batteries and Related Precautions" (P. 22).

- 2** Turn ON the receiver.
- 3** Set the Charging function of the Set mode to ON.

The default is OFF.

- 4** Turn OFF the receiver.
- 5** Place the receiver on the trickle charger.

- 6** When charging starts, the RX lamp illuminates in red.

The low battery indicator on the LCD blinks, and the remaining charging time is displayed.

