

# ALINCO

SWITCHING MODE  
DC REGULATED POWER SUPPLY

DM-30E

## INSTRUCTION MANUAL

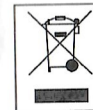
Thank you for purchasing the Alinco switching mode DC regulated power supply, DM-30E. The DM-30E instruction manual contains important safety and operating instructions. Please read this manual carefully before using this product and keep the manual for future reference.

**ALINCO, INC.**



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**RoHS**



Relative certificate can be reviewed at <http://www.alinco.com/ce/>.

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Although Alinco has designed this manual to be as comprehensive and accurate as possible, we reserve right to make changes at any time to the contents or our specifications.

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## INTRODUCTION

Alinco's **DM-30E** is a high efficiency, compact, lightweight high performance switching mode power supply. It is also engineered to minimize the switching noise specifically for communication use. Even when noise occurs, it may be eliminated with the Noise-Offset function. Also convenient functions like output voltage fix, and a highly visible back lit digital meter are standard in this power supply.

## CAUTION

1. Even though the chassis of the unit is negatively grounded, use the correct terminals to connect cables.
2. When plugging the unit into a wall outlet, it must be turned off.
3. Place the unit in a dry and well-ventilated area.
4. Never touch the unit while in use. Even though it is designed for high efficiency, the unit will still get hot. If the unit reaches a certain temperature, the "extreme temperature protection" function will protect the unit by automatically dropping the current down to a safe level.
5. The unit has overloading and short-circuit protection circuits.  
Overloading protection automatically checks and controls level of output current at a safe level (or cuts off when extremely overloaded).  
Short-circuit protection detects short-circuit and turns the unit off immediately.

- At any case when the unit is protected, remove the cause of trouble, await about a minute then turn it back on.
6. Do not use the unit for devices that require high current input at the start, such as motorized equipment. Never use the unit to charge a car battery.
  7. Before replacing a fuse make sure the unit is turned off. Be sure to use the specified type of fuse (see below).
  8. Make sure the product is always suitably grounded to prevent electric shock and to avoid damage to the product and will void the warranty.

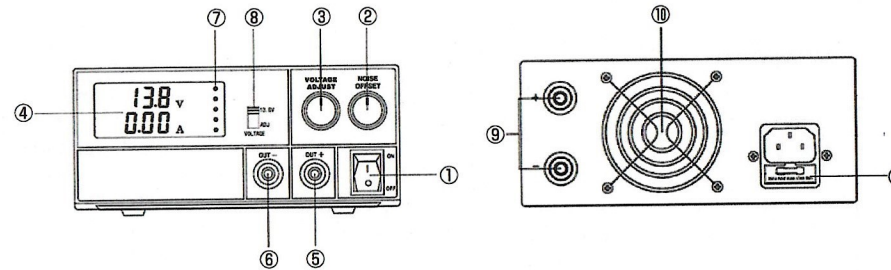
## SPECIFICATIONS

<b>Input voltage:</b>	230VAC
<b>Output voltage:</b>	9-15VDC
<b>Output voltage regulation:</b>	less than 2%
<b>Protection:</b>	short-circuit, Automatic current limiting over 30A over-temperature
<b>Output current:</b>	30A (max), 20A (continuous)
<b>Ripple:</b>	less than 80mVp-p at rated load
<b>Fuse:</b>	5A
<b>Meter:</b>	Digital volt / current meter with back-lit
<b>Dimensions:</b>	155(W) × 70(H) × 205(D) mm (Projections not included)
<b>Weight:</b>	approx. 1.6kg with AC cord

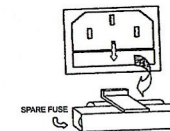
## PART NAMES AND FUNCTIONS

Front View

Rear View









- ① Power switch: Turns the unit on and off.
- ② Noise offset volume control: adjust to eliminate the pulse noise of the switching circuit. This patent pending function is specially designed for communication use. (It's effectiveness may vary depending on the frequency and mode.)
- ③ Voltage adjustment: Adjusts voltage between 9.0 and 15.0 volts. Turn clockwise to increase and counter clockwise to decrease the voltage.
- ④ 3 Digital Meter: Displays the output voltage and current.
- ⑤ Output terminal Red : Positive (+) 5A max
- ⑥ Output terminal Black : Negative (-) 5A max
- ⑦ Current indication: Indicates current load in 5 levels by dots.
- ⑧ Voltage fixing switch: The output voltage can be fixed at 13.8V or adjustable by ③.
- ⑨ Output terminal: 30A max, Red positive, black negative.
- ⑩ Cooling fan: Fan turns on with power switch. regardless of the temperature or loads.
- ⑪ Fuse : 5A, Pull out the fuse box to change the fuse as below.



## FOR YOUR SAFETY


To ensure safe operation of Alinco's products, please read the "Warning" section before using this product. To ensure safe operation and prevent any danger to life and/or property, you may find the symbols shown below in this manual. Please read and understand the meaning of these symbols before using this product.

Symbols	Explanation
 <b>Danger</b>	This symbol is intended to alert the user to an immediate danger that may cause loss of life and/or 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/or 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 injury or the loss of property if the warning is disregarded.


Symbols	Explanation
	The $\triangle$ symbols contain information on what the user should be aware of in terms of dangers, alerts and cautions.
	The $\circ$ symbol informs the user of prohibited acts. Specific information of what is prohibited is drawn inside or near the symbol.
	The $\bullet$ symbols contains information on what the user is instructed to do. Specific information on the instruction is inside the symbol (in this case the symbol instructs the user to unplug the adapter from the wall outlet).

The manufacturer declines any responsibilities against economic loss due to loss of communication opportunities caused by external factors such as malfunctions, mistakes, failures and/or blackouts.


## Warning

 Compulsory


This unit should only be used with a standard wall outlet 230VAC for DM-30E. If it is used in any other manner electric shock and fire could occur.

 Compulsory


Wash skin and or clothes immediately with water if any liquid leaks from inside the unit and comes in contact with. It may irritate the skin and could stain clothing. If any liquid gets into the eye, wash immediately and contact a doctor. It may cause injury to the eye.

 Compulsory


Never touch the chassis of the unit during use. The surface of the product may become very hot, especially the heat sink. A burn to the skin may occur.

 Prohibited

Do not short-circuit the cables. Make sure the cables are connected to the correct terminal. (Positive to positive and negative to negative)

 Prohibited

Do not use two or more units in series or parallel operation. This may cause damage to the unit, and risk shocks and fire.

 Prohibited

The output terminal must be screwed tightly when use it, and periodically check the connections.

This power supply is designed for amateur radio. Please do not use it for other purposes.

 **Danger**



Do not disassemble, modify or repair the unit unless otherwise specified in the manual. Only an authorized technician may do this. Never modify the cable to extend or shorten it. This may cause fire and or electric shock, and will void the warranty.



Always hold the plug when plugging and unplugging the unit. Never unplug the unit by pulling the cable. It may cause fire, shock and damage to the unit



Do not plug/unplug the unit with wet hands. It may easily cause electric shock.



Do not use the unit where there may be flammable gas. This may cause fire and explosion.



Unplug the cable when replacing the fuse. Use the specified fuse only. Using the wrong fuse could cause heat and fire.



Never use the unit outside, in a bathroom, or any other place where the unit could become wet. Do not rest anything that contains liquid on the product. If liquid gets inside the unit it could cause fire, shock and damage to the unit. If this happens, unplug the unit immediately. Do not use the unit in a humid environment. If dew condenses on the unit, dry it completely before use.



Unplug the unit during maintenance. Otherwise it may cause shock and damage to the product.



Unplug immediately if anything noticeably unusual happens, such as smoke and or strange odors coming from the unit. Contact our authorized service centers immediately for service.

 **Caution**



Use this unit only in room temperatures. (10 to 35 degrees centigrade or 50 to 95 degrees Fahrenheit) Keep the unit in a dry and well-ventilated place. Do not use the unit in direct sun-light, or where it may come in contact with water or in a poorly ventilated area. It may cause heat, fire and damage to the unit.



Never leave the unit within a child's reach. This may injure them or burn their skin.



Make sure that the devices that are to be connected meet the specifications of this unit, otherwise it may cause damage to the product.



Never insert any metal or flammable objects inside the unit. It may cause damage, shock and fire. If any foreign objects get into the unit, turn it off and unplug it and contact an authorized service center.



Place the unit on a secure and horizontal surface. If it is placed on an unstable surface, the unit may drop and cause damage and injury. This will also be helpful in getting accurate meter readings.



Do not cover the air vent on the chassis or the fan. This may cause extreme heat, fire and damage



Do not use the unit for devices that require high current input at the start, such as motorized equipment. Do not use the unit to charge a car battery. This may cause damage to the unit.