

### 5-Channel Antenna Divider Wideband Direcional Antenna with Booster User Guide



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Thank you for purchasing a professional Antenna System. Please carefully follow the instructions in this manual to ensure long, trouble-free use of your equipment.

## Important Safety Instructions



THE TRIANGLE WITH THE LIGHTNING BOLT IS USED TO ALERT THE USER TO THE RISK OF ELECTRIC SHOCK.



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THE TRIANGLE WITH THE EXCLAMATION POINT IS USED TO ALERT THE USER TO IMPORTANT OPERATING OR MAINTENANCE INSTRUCTIONS.





SYMBOL FOR EARTH/GROUND CONNECTION.

SYMBOL INDICATING THAT THE EQUIPMENT IS FOR INDOOR USE ONLY.

SYMBOL FOR CONFORMITY WITH DIRECTIVE 2012/19/EC OF THE EUROPEAN PARLIAMENT ON WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE).

(▲) ≤2000m DO NOT USE THE UNIT AT ALTITUDES ABOVE 2000 M.



DO NOT USE THE UNIT IN TROPICAL ENVIRONMENT.



WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT ATTEMPT TO OPEN ANY PART OF THE UNIT. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



CONNECTION TO THE MAINS SHALL BE DONE ONLY BY A ELECTROTECHNICAL SKILLED PERSON ACCORDING THE NATIONAL REQUIREMENTS OF THE COUNTRIES WHERE THE UNIT IS SOLD.



DO NOT USE THIS DEVICE IF THE ELECTRICAL POWER CORD 🗥 IS FRAYED OR BROKEN.



DO NOT SPILL WATER OR OTHER LIQUIDS INTO OR ON THIS DEVICE.



NO NAKED FLAME SOURCES SUCH AS LIGHTED CANDLES SHOULD BE PLACED ON THIS DEVICE.



WARNING TO PREVENT INJURY. THIS APPARATUS MUST BE SECURELY ATTACHED TO THE FLOOR/WALL IN ACCORDANCE WITH THE INSTALLATION INSTRUCTIONS.



THIS DEVICE MUST BE POWERED EXCLUSIVELY BY EARTH CONNECTED MAINS SOCKETS IN ELECTRICAL NETWORKS COMPLIANT TO THE IEC 364 OR SIMILAR RULES



DISCONNECT THE AC MAINS SOURCE BEFORE ATTEMPTING TO CLEAN ANY PART OF THIS DEVICE.



IT IS HIGHLY RECOMMENDED TO UNPLUG THE OUTPUT CONNECTORS BEFORE PROCEEDING WITH THE SELF CHECK PROCEDURE

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CLASS3 WIRING	

OUTPUT TERMINALS ARE HAZARDOUS: WIRING CONNECTION TO THESE TERMINALS REQUIRES INSTALLATION BY AN INSTRUCTED PERSON AND THE USE OF READY MADE LEADS.



PROPERLY FIT THE AC MAINS PLUG TO THIS DEVICE INLET. BEFORE POWERING THIS DEVICE, VERIFY THAT THE CORRECT VOLTAGE RATING IS BEING USED.

VERIFY THAT YOUR MAINS CONNECTION IS CAPABLE OF SATISFYING THE POWER RATINGS OF THE DEVICE.

TAKE CARE TO LOCK THE OUTPUT TERMINAL BEFORE SWITCHING THE DEVICE ON.



This unit has been engineered and manufactured to ensure your personal safety. But IMPROPER USE CAN RESULT IN POTENTIAL ELECTRICAL SHOCK OR FIRE HAZARD.

In order not to defeat the safeguards incorporated into this product, observe the following basic rules for its installation, use and service. Please read these "Important Safeguards" carefully before use.

- Read these instructions. .
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this equipment near water.
- Clean only with a dry cloth. .
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, ٠ or other apparatus that produce heat.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A groundingtype plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs. . convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Use only with the cart, stand, tripod, bracket, or table specified by the ٠ manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- Unplug this apparatus during lightning storms or when unused for • long periods of time.



Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

- The apparatus shall be connected to a MAINS socket outlet with a protective ٠ earthing connection
- Where the MAINS plug or an appropriate coupler is used as the disconnect device, the disconnect device shall remain readily operable.

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THE MANUFACTURER CANNOT BE HELD RESPONSIBLE FOR DAMAGES CAUSED TO PERSONS, THINGS OR DATA DUE TO AN IMPROPER OR MISSING GROUND CONNECTION.

CONTACT THE AUTHORIZED SERVICE CENTER FOR ORDINARY AND EXTRAORDINARY MAINTENANCE.

IT IS ABSOLUTELY NECESSARY TO VERIFY THESE FUNDAMENTAL REQUIREMENTS OF SAFETY AND, IN CASE OF DOUBT, REQUIRE AN ACCURATE CHECK BY QUALIFIED PERSONNEL.

### **WEEE Directive**

If the time arises to throw away your product, please recycle all possible component.



This symbol indicates that when the end-user wishes to discard this product, it must be sent to separate collection facilities for recovery and recycling. By separating this product from other household-type waste, the volume of waste sent to incinerators or land-fills will be reduced and natural resources will thus be conserved.

The Waste Electrical and Electronic Equipment Directive (WEEE Directive) aims to minimise the impact of electrical and electronic goods on the environment. This product complys with the Directive 2012/19/EU of the European Parliament on waste electrical finance the cost of treatment and recovery of electronic equipment (WEEE) in order to reduce the amount of WEEE that is being disposed of in land-fill site.

All of our products are marked with the WEEE symbol; this indicates that this product must NOT be disposed of with other waste. Instead it is the user's responsibility to dispose of their waste electrical and electronic equipment by handing it over to an approved reprocessor.

### 1, Antenna Divider Controls and Functions

### 5-Channel Antenna Divider Features:

- ① Ultra-wide band 470-1000 MHZ .
- ② Compatible with up to 5 UHF wireless receivers to one set of antenna.
- ③ Adopts the latest wide dynamic range and low noise component.
- ④ Advanced circuit design featuring very low inter-modulation distortion and eliminates the spurious interference.
- ⑤ BNC antenna connecters.
- 6 Allows daisy-chain antenna dividers for more receivers.

### Figure 1: Front Panel



#### Figure 2: Rear Panel



- ① Power Output Jack: AC-110V—240V 50Hz/60Hz
- ② Antenna Input Jack B: with12V power supply.
- ③ Signal Output Jack B.
- DC power supply Output Jack, directly connect with wireless receiver (DC 12V/1000mA).
- ⑤ Signal Output Jack A.
- 6 Antenna Input Jack A: with 12V power supply.

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# 2, Active directional antenna with integrated booster amplifier

- ① A bi-functional log antenna design for UHF receiving and transmitting applications.
- ② With -9 ~ 16dBi gain is suitable for various application required specific directionality.
- ③ Ultra-wide band 470-1000 MHz, which is compatible with US and EU new telecom regulations.
- ④ High gain design which is ideal for any installation required specific directions.
- S Adjustable gain to enhance signal stability and increase reception range.
- **(6)** Ultra-low intermodulation distortion and low noise component.

### Figure 3:



- ① Antenna Input & Output BNC Jack
- ② Booster
- ③ Gain data LED display
- ④ Gain UP arrow buttons
- (5) Gain DOWN arrow buttons





### 3, System Connections and Setup

### **System Connections**

- If using with antenna booster, firstly, connected well with directional antenna, then using 50 ohm low loss coaxial cable to connect with the wireless receiver or antenna divider (only with the ones who get power supply for antenna). If the cable is shorter, should reduce the gain, or longer cable, has to set high gain. Please be noted that good signal is affected not only by the cable quality, but also by the cable length.
- ② If not using antenna booster, can directly using the 50 ohm low loss coaxial cable to connect the directional antenna with wireless receiver or antenna divider.
- ③ Directional antenna has to be faced to the covering area.
- ④ Directional antenna only can be used as transmitting signal.

### **Connection Diagram**



### System Setup

- ① Directional antenna and wireless receiver should be in the same frequency band.
- ② Directional antenna should be at least 3M away from the wireless receiver.
- ③ For better operation the antenna should be at least 3M away from a
- ④ Keep antennas away from noise sources such as computer, digital equipment, motors, automobiles and neon lights, as well as away from large metal objects.



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### 4,Specifications 5-Channel Antenna Divider

Main Frame Size	EIA-Standard 19" 1 U
Frequency Range	UHF 4701000 MHz
Output Gain	$1 \text{ dB} \pm 1 \text{ dB}$
IIP3	+38dBm
Noise Figure	<2 dB
Impedance	50Ω
Connector	BNC
Antenna Power Supply	12V / 150mA DC
Output Power Supply	Each Channel: 12V / 1000 mA DC
Power Supply	110-240V AC 50/60 Hz
Dimensions (mm)	483 (W) x 45 (H) x 213 (D)
Weight	2.03KG

## Active directional antenna with integrated booster amplifier

Frequency Range	UHF 4701000 MHZ
Antenna Gain	7.5 dBi
VSWR	< 2 : 1
3 dB Beam-width	Vertical: 90°, Horizontal: 120°
Impedance	50Ω
Connector	BNC
Dimensions (mm)	325 (W) x 280 (H) x 2.1 (D)
Weight	468g