



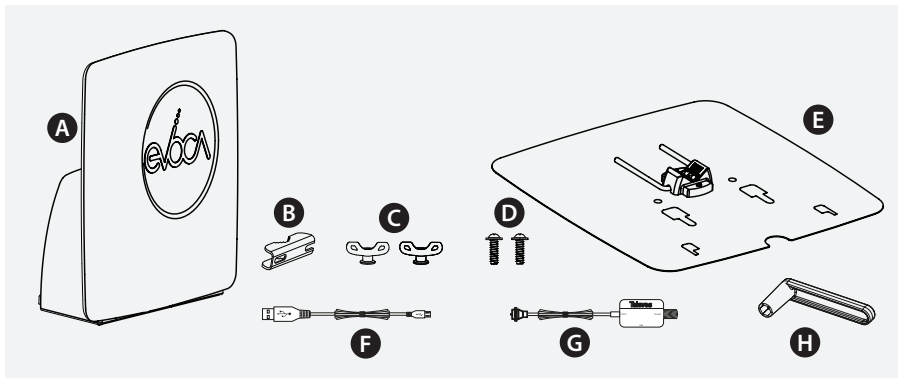
By Televes



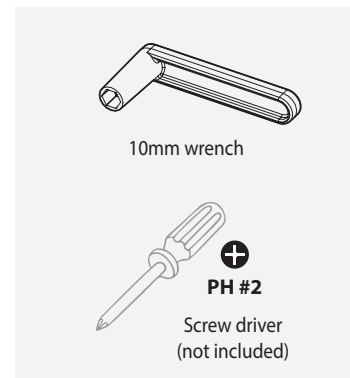
MIMO Antenna TV-130990

Assembly, operation, and maintenance instructions

Contents of the box

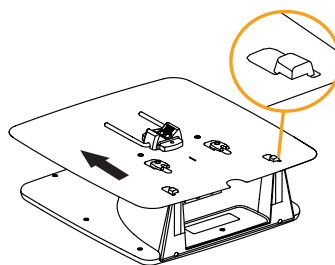
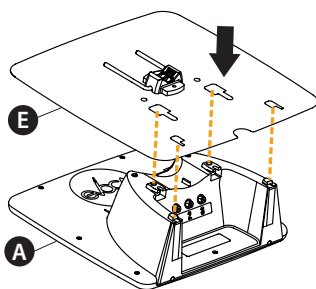


NEEDED TOOLS



Installation

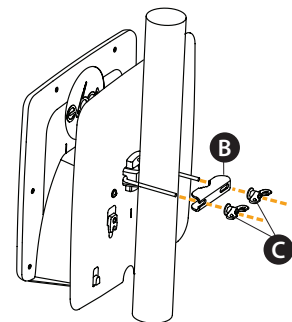
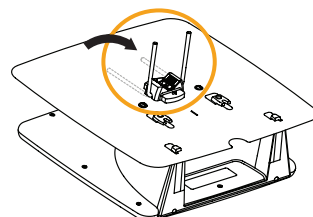
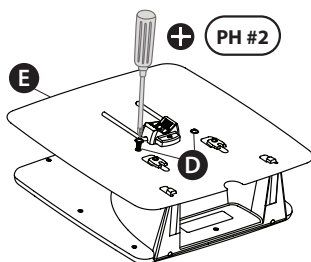
1 Mast mount



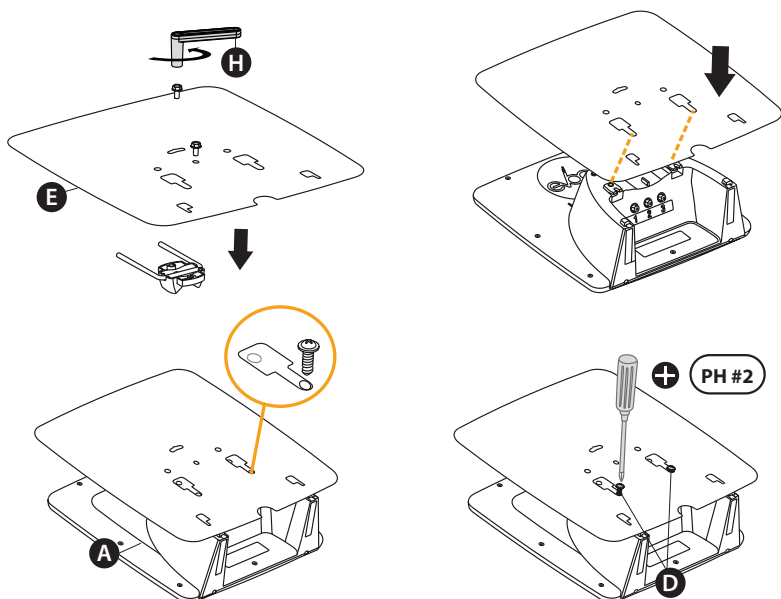
WITH A SUPPORT

Attach the plate **E** in the right position as shown in the pictures. Screw it to the antenna **A** using both screws **D**.

Place the antenna in a vertical position and attach it to the mast using the clamp **B** and the nuts **C**.



2 TABLE MOUNT

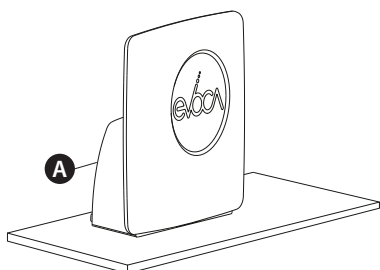
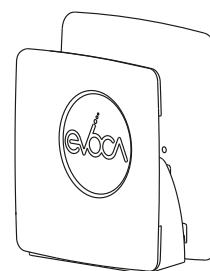


WITH A REFLECTOR

Remove the clamp and the screws from the plate **E** using a 10mm wrench.

Put the plate in the right position as shown by the arrow. Screw it ↓ to the antenna using both screws **E**.

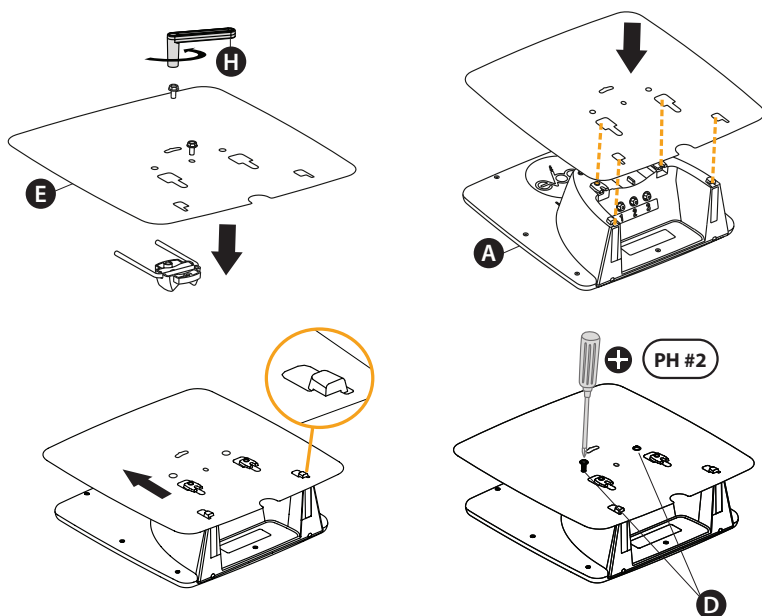
Rest the antenna on the table in a vertical position as shown in the picture below.



WITHOUT A REFLECTOR

Place the antenna on the table in a vertical position as shown in the picture.

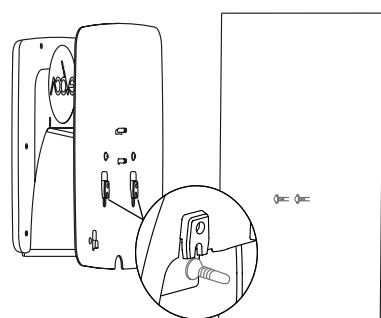
3 WALL MOUNT



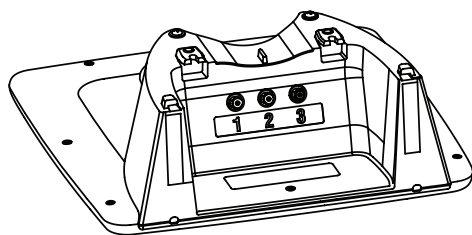
Remove the clamp and the screws from the plate **E** using a 10mm wrench (not included).

Place the reflector as shown in the pictures and screw the reflector using both screws **D**.

Finally, attach it to the wall with two screws (not included).



4 CONNECTION



- 1. 5G OUT
- 2. VERTICAL OUT + V_{DC}
- 3. HORIZONTAL OUT + V_{DC}

SAFETY INSTRUCTIONS

LIGHTNING PROTECTION

- ◆ If installed outdoors, be sure the antenna system is grounded so as to provide protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code ANSI/NFPA70, or CSA C22.1 sections 10, 16, and 54, of the Canadian Electrical Code, provide information with respect to proper grounding of the mast and supporting structure, grounding of the antenna lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode (see figure and instructions).
- ◆ Mount the lightning arrester or 75 ohm coaxial grounding block as close as possible to where the 75 ohm coaxial cable down lead enters the house.
- ◆ The ground wires for both the mast and the down lead should be copper or aluminium

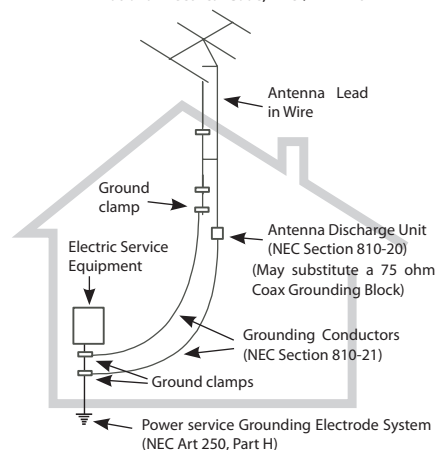
wire, number eight (8) or larger.

- ◆ The down lead wire from the antenna to the lightning arrester and the mast ground wire should be secured to the house, spaced from four (4) to six (6) feet apart.
- ◆ In the case of a "ground up" antenna installation it may not be necessary to ground the mast if the mast extends four or more feet in the earth. Consult a TV serviceman for the proper depth in your location.

WARNINGS

- ◆ To prevent fire or shock hazard, do not expose the included power supply to rain or moisture.
- ◆ Installation of off-air antennas near power lines is dangerous. For your safety, follow the installation instructions.
- ◆ Any alteration or modification to the product or usage not in accordance with product instructions voids the warranty.

Example of antenna grounding as per National Electrical Code, ANSI/NFPA 70



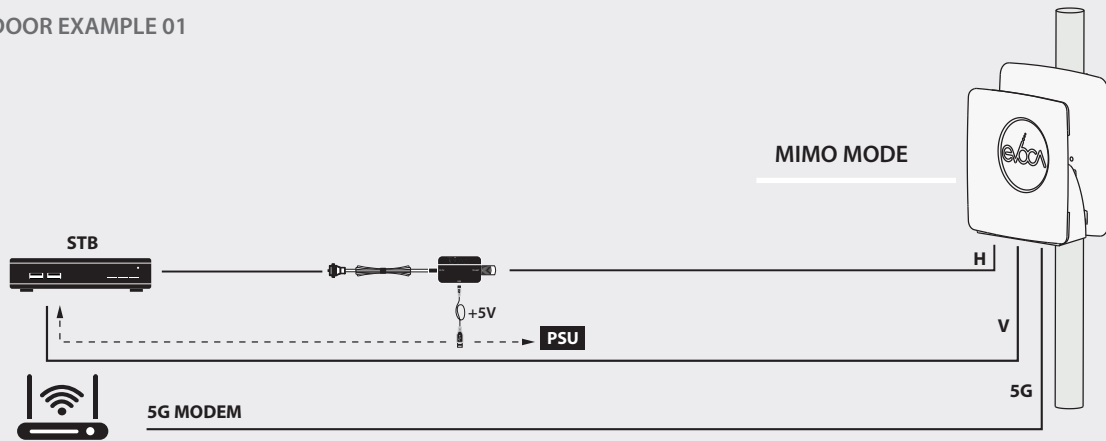
NEC - National Electrical Code

TECHNICAL SPECIFICATIONS

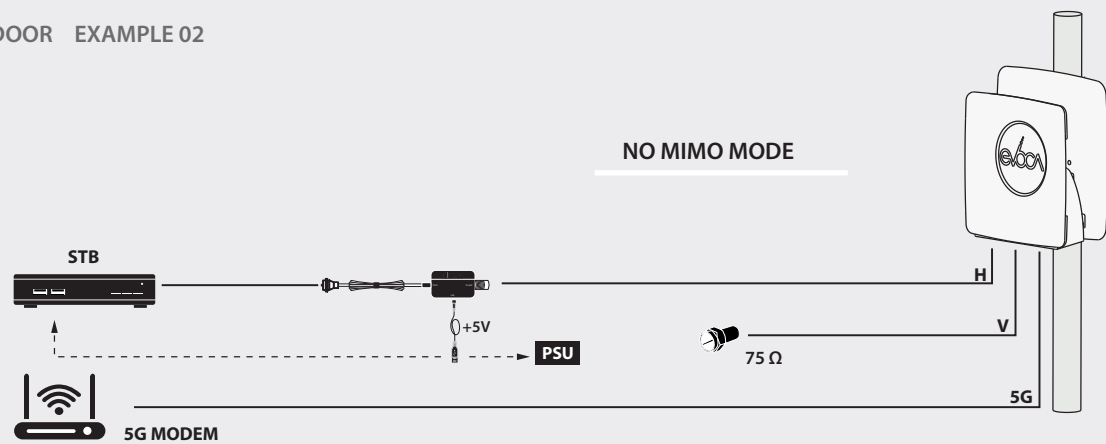
Ref.		130990		
Outputs		5G	VERTICAL	HORIZONTAL
FREQUENCY	MHz	630 - 960 / 1,7 - 2,7	UHF (CH14 - CH36) 470 - 608	High VHF / UHF (CH7 - CH13) / (CH14 - CH36) 174 - 216 / 470 - 608
GAIN	dBi	0	32 ⁽¹⁾	23 ⁽¹⁾ / 32 ⁽¹⁾
Crosspolar rejection	dB		> 13	
Powering	V _{DC}		5	
Consumption	mA		150	
Weight	lb		5.74	
Dimensions	in	13.98 x 13.98 x 4 (without clamp)		
Temperature	°C	-5... 45		
IP	IP	53		

⁽¹⁾ Self regulating gain.

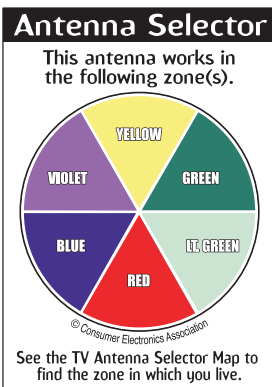
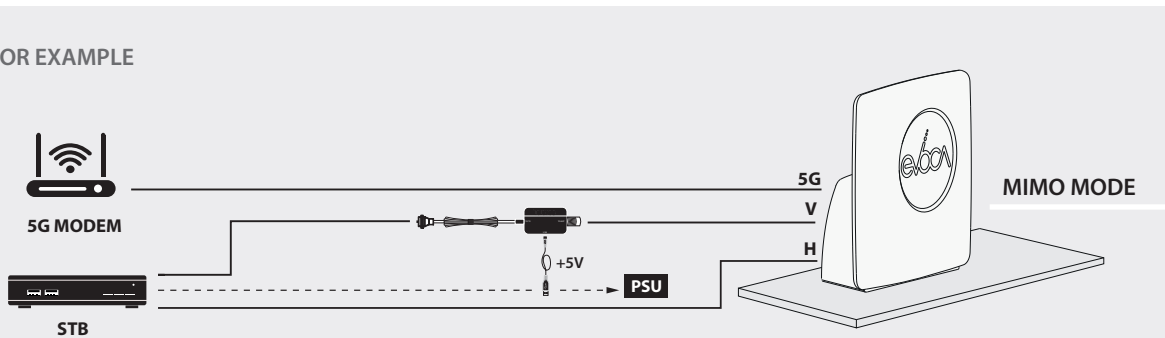
OUTDOOR EXAMPLE 01



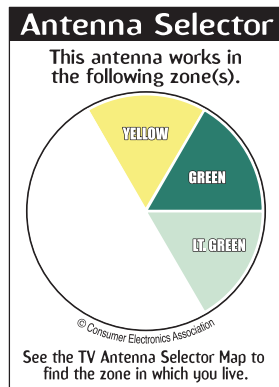
OUTDOOR EXAMPLE 02



INDOOR EXAMPLE



UHF



High-VHF

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. 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. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

NACE 800-688-9282 | sales@nace.tv | nace.tv