# zapperbox

# A1 Indoor/Outdoor Antenna by Televes

# **QUICK START GUIDE**





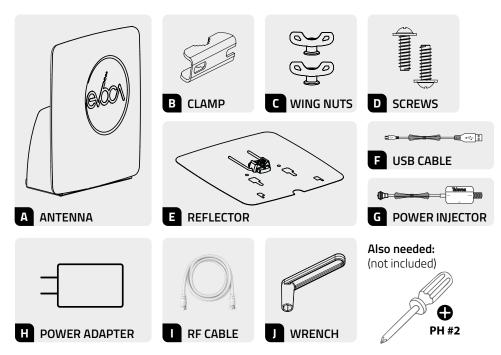
# QUICK START GUIDE A1 Indoor/Outdoor Antenna by Televes

MODEL: ZXA1

## **FEATURES**

- Built-in amplifier
- Integrated LTE filter
- Removable reflector
- Integrated 5G antenna

# IN THE BOX



## **NOTE: SHOULD I USE THE REFLECTOR?**

Using the reflector can greatly enhance the forward gain of an antenna, particularly indoors where multipath reflections from bouncing signals cause reception issues. With a reflector, interference from the rear is minimized and gain in the forward direction is increased, resulting in better performance. However, antennas with reflectors need to be aimed towards the direction of the towers. If the signal is very strong, going without a reflector may be an option to increase omnidirectionality.

Nevertheless, it is generally recommended to use a reflector and aim the antenna towards the transmitters for optimal performance, as broadcast television relies on line-of-sight signal delivery.

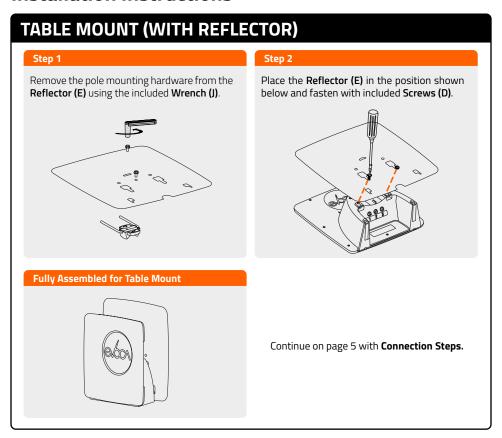
Does a reflector improve reception for both ATSC 1.0 and ATSC 3.0 signals?

VFS.

Should the reflector be used outdoors too?

YFS.

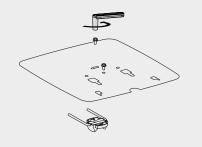
## Installation Instructions



# **WALL MOUNT (WITH REFLECTOR)**

#### Step 1

Remove the pole mounting hardware from the **Reflector (E)** using the included **Wrench (J)**.



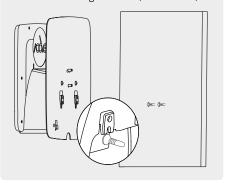
#### Sten

Place the **Reflector (E)** in the position shown below and fasten with included **Screws (D)**.



#### Step 3

Attach to wall using 2 screws (not included).

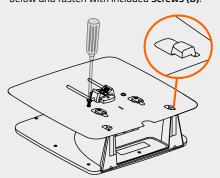


Continue on page 5 with Connection Steps.

# **POLE MOUNT (WITH REFLECTOR)**

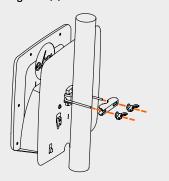
#### Step 1

Place the **Reflector (E)** in the position shown below and fasten with included **Screws (D)**.

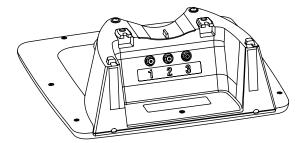


#### Step 2

Attach the antenna to a pole with the Clamp (B) and Wing Nuts (C).

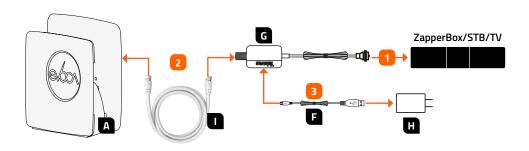


### **Antenna Connections**



- 1 5G Cellular Out\*
- 2 For future use (MIMO)\*
- 3 TV Connection

\*Input 1 and 2 are capped and terminated to reduce noise interference.



- Connect the **Power Injector (G)** to your ZapperBox/Set-top Box/TV.
- Use the RF Cable (I) to connect the Power Injector (G) to Output 3 on the Antenna (A).
- 3 Use the USB Cable (F) to connect the Power Injector (G) to the Power Adapter (H).
- Plug the **Power Adapter (H)** into a wall receptacle.

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.

Manufactured and Imported by: Televes USA LLC, Norfolk Tech Center 16596 E. 2nd Ave, Aurora, CO 80011 televes.usa@televes.com Distributed by: ZapperBox 1776 22nd Street, Suite 200 West Des Moines, IA 50266 info@zapperbox.com

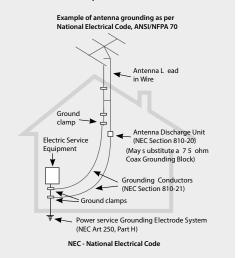
# Safety Instructions

#### 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 nd supporting structure, grounding of the antenna lead-in wire to an antenna discharge unit, size of grounding conductors, location of antennadischarge unit, connection to grounding electrodes, and requirements for the grounding electrode (see figure and instructions).
- Mount the lightning arrestor 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 arrestor 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.



#### **TECHNICAL SPECIFICATIONS**

Outputs	5G	VERTICAL	HORIZONTAL		
Frequency	630 - 960 MHz 1.7 - 2.7 GHz	UHF (Ch.14 - Ch.36) 470 - 608MHz	High VHF / UHF (Ch.7 - Ch.13) / (Ch.14 - Ch.36) 174-216 MHz / 470-608 MHz		
Gain	OdBi	32dBi*	23dBi*/dBi32*		
Crosspolar rejection	>13dB				
Power	150mA @ 5V DC				
Dimensions	14" x 14" x 4" (w/o pole mount)				
Temp. Range	-5°C - 45°C				
IP Rating	IP53				

Notes		

