

# WD-7800 Antenna Distributor Instruction Manual



# **Table of Contents**

- 1. Safety Precautions
- 2. General Description
- 3. Handling Precautions
- 4. Items and Functions
- 5. Connection
- 6. Operation
- 7. Rack Mounting
- 8. Specifications
- 9. Accessories Included

The Trantec WD-7800 Antenna Distributor Unit represents our commitment to our customers by providing high quality, reliable wireless audio links, using our considerable design expertise gained over many years as a leading edge manufacturer.

Thank you for purchasing this product and please study this manual, especially the safety instructions before installing and using this equipment.

#### 1. SAFETY PRECAUTIONS

- Keep the system away from direct sources of heat, e.g. Central heating radiators, heaters, and direct sunlight.
- Do not expose the unit to an environment where it could be splashed with liquids as this may result in fire or electric shocks.
- Keep the system clean by using a slightly damp cloth. Never use household cleaning agents or solvents.
- Avoid using or storing the system in damp or dusty conditions.
- Always disconnect from the AC outlet when not in use.
- The unit is designed for indoor use, do not install it outdoors. If the unit should get wet, there is a danger of electric shock.
- Never remove the external covers of the unit, exposing the electronics, or modify the unit in any way.
- Do not handle the mains lead with wet hands.
- Never pull the cord of the AC lead when disconnecting from an AC outlet. Always hold the plug.
- Ensure that the mains plug is securely inserted in the wall outlet.
- Route the AC power lead in such a way that it is not likely to be stepped on or tripped over.
- Do not use if the AC lead becomes damaged. This may result in fire or electric shock.
- Never touch any part of the equipment during a thunderstorm as this may result in severe electric shock.
- Use the unit only with the voltage specified on it. Using a voltage higher than that specified may result in fire or electric shock.
- Do not cut, kink, otherwise damage or modify the power supply cord. In addition, never
  place heavy objects (including the unit itself) on the power cord. Doing so may result in
  fire or electric shock.
- Always mount the unit on a stable surface or install in a stable location. The unit may otherwise fall causing personal injury and/or property damage.
- When moving the unit, be sure to remove its power supply cord from the wall outlet first.
   Moving the unit with the power cord connected to the outlet may cause damage to the power cord, resulting in fire or electric shock.
- Do not place heavy objects on the unit as this may cause the unit to fall resulting in personal injury and/or property damage. In addition, the object itself may fall off and cause injury and/or damage.
- Do not place containers of liquid or metallic objects on top of the unit. If they accidentally spill into the unit, this may cause a fire or electric shock.

Should the covers be removed or there is any other breach of the above instructions, the warranty becomes null and void, in addition to personal risk from burns and/or electric shock. If any of the following conditions occur when using the unit, switch off and remove the AC lead from the outlet immediately and contact your nearest dealer.

- Smoke or unusual smell
- Water or foreign object inside the unit
- Physically damaged housings



## CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN



ATTENTION RISQUE DE DECHARGE ELECTRIQUE - NE PAS OUVRIR

WARNING TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

DO NOT REMOVE COVER. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead within a triangle is intended to tell the user that parts inside the product are a risk of electric shock to persons.

The exclamation point within a triangle is intended to tell the user that important operating and servicing instructions are in the manual provided with the equipment.

WARNING - Indicates a potentially hazardous situation that could result in death or serious personal injury.

CAUTION - Indicates a potentially hazardous situation that could result in moderate or minor personal injury, and/or property damage.

#### 2. GENERAL DESCRIPTION

The TRANTEC Wireless Antenna Distributor WD-7800 allows a single antenna signal to be distributed to a number of attached receivers.

#### 3. HANDLING PRECAUTIONS

- When installing, keep the unit, receiving antennas, and antenna cables as far as
  possible from fluorescent lamps, digital equipment, personal computers, and other
  possible sources of RF interference.
- Avoid installing the receiving antennas in close proximity to metal objects, such as iron girders and lockers. Keep the antennas at least 30 cm away from the wall surface. Pairs of antennas should be at least 3 M away from each other to obtain the optimum diversity effect, although this distance differs depending on the construction and size of the room where they are installed. When cleaning the case, use a dry cloth. Never use benzene, thinners or other volatile liquids.

#### 4. ITEMS AND FUNCTIONS



#### 1. Power switch

Press this to switch on the power. Press this switch again to switch off the power.

#### 2. Power LED

Lights when the power is switched on.

#### 3. RF cascade indicator LEDs

Light when the RF cascade output is connected to the antenna input of another distributor or another receiver.

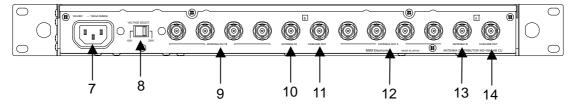
#### 4. Band switch

Use to select one of 2 bands.

#### 5. Antenna attenuator switches

Select one of 3 attenuation values for each antenna distribution.

#### [Rear]



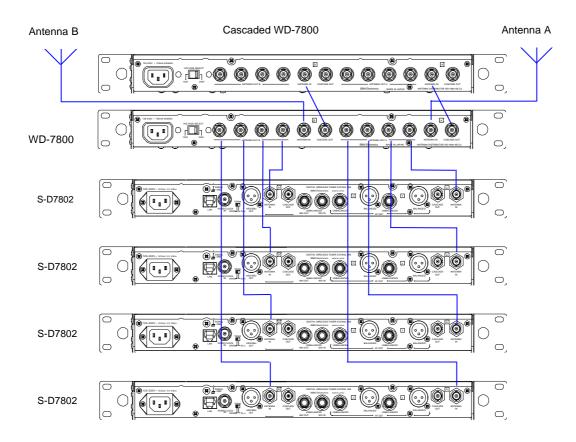
- 7. AC inlet
- 8. AC voltage selector

Selects the required voltage (100-120V or 220-240V). Make sure that this is set to the correct voltage for the mains supply of the region in which you are operating the unit.

- 9. Antenna distribution output B
  - 50  $\Omega$ , BNC, with RF band filtered.
- 10. Antenna input B
  - 50  $\Omega,$  BNC. Delivers 7 Vdc/100 mA (max) for supplying power to an external antenna.
- 11. Antenna cascade output B
  - 50  $\Omega$ , BNC, Turns on the cascade output automatically when detecting a connection with the antenna input of another distributor or receiver.
- 12. Antenna distribution output A
  - 50  $\Omega$ , BNC, with RF band filtered.
- 13. Antenna input A
  - 50  $\Omega,$  BNC. Delivers 7 Vdc/100 mA (max) for supplying power to an external antenna.
- 14. Antenna cascade output A
  - 50  $\,\Omega$ , BNC. Turns on the cascade output automatically when detecting a connection with the antenna input of another distributor or receiver.

#### 5. CONNECTION

- Up to four S-D7802 receivers can be connected to the antenna distribution outputs
  of the WD-7800 using one or two receiving antennas. One WD-7800 or one SD7802 can be connected to the antenna cascade outputs of the WD-7800.
- The length of the antenna cables between the WD-7800 and the dependent equipment (ex. S-D7802 or WD-7800) must not exceed 1 M.



When connecting the S-D7802 to the WD-7800's antenna distribution output, match the RF band on both units since the distribution output is RF filtered.

However, when connecting the WD-7800 or S-D7802 to the WD-7800's antenna cascade outputs, it is not necessary to match the RF band since the cascade output is not filtered.

#### 6. OPERATION

**Step 1.** Turn on the power of both the WD-7800 and connected receivers (the power LED lights).

**Step 2.** Turn on a transmitter.

• The RF cascade indicator LED lights when the RF cascade output is connected to the antenna input of another distributor or receiver.

#### 7. RACK MOUNTING

Use optional MB-15B brackets when mounting the unit in an equipment rack.

Step 1. Check to ensure that the rubber feet are not attached to the base of the unit.

Step 2. Using the 8 x screws supplied with the MB-15B, mount them to the unit's sides.

Step 3. Using the four M5x12 screws and M5 washers supplied with the MB-15B, mount the unit in the rack.

Step 4. The antenna holes in the MB-15B brackets may be used to mount front antennas or may be plugged using the supplied blanking plugs.

#### 8. SPECIFICATIONS

RF frequency range	690 to 750MHz, 790 to 870MHz
RF input	2 BNC sockets (diversity), actual 50 $\Omega$
RF output	4 BNC sockets per antenna, actual 50 $\Omega$
RF cascade output	available (-3dB), 2 BNC sockets (diversity),
	actual 50 $\Omega$
Selectable bands	2 bands, each 30MHz bandwidth
Power supply	120 / 230VAC 50/60Hz 100mA
Operating temperature	-10 to +40 °C
Dimensions	482 x 44 x 362.6 mm (1U)
Weight	approx. 4.1kg

#### 7. ACCESSORIES INCLUDED

AC Power Cord (UK use only)

- 2 x MB-15B brackets (fitted)
- 8 x M3x8 screws (fitted)
- 2 x BNC to BNC leads
- 4 x M5 screws and washers
- 4 x rubber feet
- 2 x blanking plugs

Instruction Manual

For more information on this and other products, go to www.trantec.co.uk

### **C** € Declaration of Conformity

This equipment is in compliance with the essential requirements and other relevant provisions of Directives 1999/5/EC, 89/336/EC or 73/23/EC.

#### IMPORTANT NOTICE

(!) Before using this wireless microphone system, please observe the requirements of each country with respect to frequency allocations and individual licensing requirements.



This symbol indicates that this piece of electrical/electronic equipment must be disposed of separately from normal waste at the end of its operational life. Please dispose of this product by taking it to your local recycling or collection point.

8 Rev 1.1