Digital Indoor TV Antenna User's Manual



Thanks for choosing the product from our company. This indoor antenna is specially designed for reception of digital territorial TV signal. It has adopted high quality, extremely low noise PHEMT semi-conductor component, suitable for weak digital RF signal surrounding. Meanwhile its high OIP3 characteristics makes it applicable for strong signal surrounding, thus it can increase signal reception of digital set-top box or digital TV set. It's one antenna compatible for different format of RF signal reception like DVB-T/H, DMB-T/H, ISDB-T, ATSC-T and ADTB-T.

We suggest you read this user's manual before assembling and adjusting TV antenna, as will help you achieve the best reception function of the antenna.

1. Product picture:





2. Technical Data:

- Frequency Range: 460-900MHz
- Gain: ≥23dB
- Output Impedance: 75
 Output Imped
- Noise Figure: ≤0.9dB Standing Wave Ratio: ≤ 1.5
- · Polarization: Vertical or Horizontal
- Power Supply:

DC 5V/50mA supplied by digital set-top box or digital TV set after RF output is wired. DC 9V/100mA transferred by AC 220V or AC 110V adaptor

3. Functions & Characteristics

- flat compact design, mini size to achieve little volume
- ●90° dual support design, suitable for signal reception in horizontal and vertical polarization
- Adopting the extremely low noise semi-conductor as amplifier components, it can achieve the high sensitivity in weak signal surrounding.
- Adopting strengthened PHEMT semi-conductor component, it can achieve
- good reception quality in strong signal surrounding.
- · Adopting dual power supply ways like adaptor and coaxial cable feeder. it can achieve good reception quality even when the antenna is put in a remote place from the digital TV signal transmission.
- Compatible with digital TV like DVB-T/H, DMB-T/H, ISDB-T, ATSC-T, ADTB-T
- Supporting digital set-top box or digital TV set as power supply, it can omit power supply adaptor or feeder.
- Signal Output Connector: F female & IEC 9.5.

4. Product Connecting Diagram:

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This product can use different connecting way according to your digital set-top box or TV set.

As long as proper way is adopted, all these connecting ways can achieve aimed function.

In strong signal surroundings, please adopt connecting way 4.1.

In weak signal surroundings, please adopt connecting way 4.2.

Connecting way 4.3 and 4.4 can be used in strong or weak signal surroundings by changing the connecting wire length.

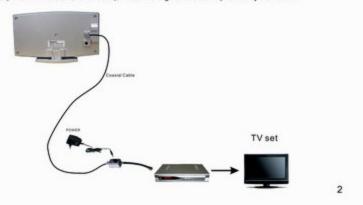
4.1 Connecting diagram for adaptor power supply way :



- Connect one end F connector of the TV cable with the RF output F connector of the antenna, and connect the other end F connector of the TV cable with ANT IN or RF IN of digital set-top box.
 Connect the digital set-top box with the TV set.
 Make sure the polarization of the antenna is same as signal transmission polarization from the TV station. (You may consult with the distributor or local TV station for the polarization issue.)
 Insert the DC plug of the adaptor into the DC socket of the converter kit. Insert the power plug of the adaptor into the power socket. (Please make sure the power supply is compatible.)

4.2 Connecting diagram for remote power supply way:

When the application site is very far from the signal transmission station, or in a place where it's surrounded by the building made up with well shielded reinforced concrete, the signal is very weak. Under such condition, the TV antenna is recommended to put nearby the window to achieve good effect(meanwhile beware of rain), thus the signal can be improved by 10-15dB.



- Prepare one proper length of good quality coaxial cable and two F connectors. And then connect F connector properly onto the coaxial cable.

 Connect one end F connector on the coaxial cable with RF output F connector on the antenna. And connect another end of the coaxial cable with the F connector on the converter.

 Join another connector on the converter with ANT IN or RF IN on the digital set-top box.

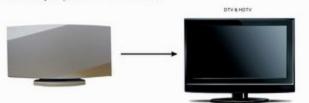
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 Make sure the polarization of the antenna is same as signal transmission polarization from the TV station. (You may consult with the distributor or local TV station for the polarization issue.)

 Insert the DC plug of the adaptor into the DC socket of the converter kit. Insert the power plug of the adaptor into the power socket. (Please make sure the power supply is compatible.)

Note: The converter is an optional accessory.

4. 3 Connecting by feeder directly from digital TV set:
Application: digital TV set with feeder function.
Advantage: No need of power supply adaptor. Only one coaxial cable can connect this product to digital TV set. Very simple and convenient to use.



- Connect one end F connector on the coaxial cable with signal output F connector on the
 antenna. And connect another end of the coaxial cable with ANT IN or RF IN on the digital TV set.
 Turn on the digital TV set, and use remote control to enter menu of digit TV set. And then
 choose power supply of antenna. Enter it and set power supply antenna ON.

Attention: The default status of digital TV set is with feeder off. You need to follow the above instruction to turn on feeder function of the digital TV set. After that, the antenna can work normally.

If the digital TV signal is weak, it's recommended to use a long coaxial cable and put the antenna into

4.4 Connecting by feeder directly from set-top box:

Application: digital set-top box with feeder function.

Advantage: No need of power supply adaptor. Only one coaxial cable can connect this product to digital set-top box. Very simple and convenient to use.

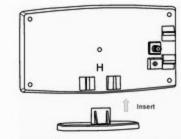


- Connect one end F connector on the coaxial cable with signal output F connector on the antenna. And connect another end of the coaxial cable with ANT IN or RF IN on the digital set-top box.
 ◆Turn on the digital set-top box and TV set. Use remote control to enter menu of digit set-top box. And then choose power supply of antenna Enter it and set power supply of antenna ON.
- Attention: The default status of digital set-top box is with feeder off, You need to follow the above instruction to turn on feeder function of the digital set-top box. After that, the antenna can work

If the digital TV signal is weak, it's recommended to use a long coaxial cable and put the antenna into a better signal site.

4.5 Horizontal Polarization:

Applicable in reception of digital TV signal transmitted in horizontal polarization.

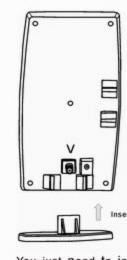


You just need to insert the stand into the horizontal slot.



4.6 Vertical Polarization:

Applicable in reception of digital TV signal transmitted in vertical polarization.



You just need to insert the Stand into the vertical Slot.



When the signal is horizontal but the antenna is vertically assembled, the signal output will be decreased by about 15dB. Also when the signal is vertical but the antenna is horizontally assembled, the signal output will be decreased by about 15dB. So you may check the signal reception effect by changing assembling polarization of antenna.

5. Adjustment and testing of Antenna:

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 After using any of the above connecting way and making sure of proper connection, turn on digital set-top box or digital TV set.

 Enter into the menu of digital set-top box or digital TV set, and search signal, and at the same time observe the signal quality indication volume or data.

 When you observe the signal quality variation, you may hand on the antenna and move around in your house to find the best signal reception site. Because the decompression of digital signal takes time, when you move or turn around the antenna, don't move or turn around it too fast.

 When you find the best signal reception site, put the antenna at this site. Before fixing the antenna, you'd better to check and adjust the angel and height of the antenna to the best fit.

 The signal nearby window should be comparatively strong. It's recommended to put the antenna nearby the window. Thus it can also decrease the multipath effect from human's movement.

6.Attention:

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 The antenna should be far away from disturbance from BCT. DECT or GSM.

 The antenna should avoid the surrounding with force electricity from air conditioner or electronic drill, or electric spark.

 Please don't put the antenna nearby warmer and other warming sources.

 The power supply and polarity of the adaptor must be same as what the product says.

 Please unplug the adaptor if the antenna is not used for quite a long time.

 Please don't use petrol and other organic solvent to clean the antenna.

7. Some tips about coaxial cable:

- The length of the coaxial cable should be reasonable. Too long cable will increase signal loss.
 Please choose good quality of 75ohm coaxial cable to ensure good transferring of signal, and to decrease reflection loss.
- and to decrease reflection loss.

 When fixing F connector, please make sure there's no short circuit. Otherwise, it will cause heating or even flame of adaptor. When you use digital set-top box or digital TV set as power supply, improper fixing of F connector might cause power supply of digital set-top box or digital TV set to be in locking status.

8. Accessories:

Picture	Part name	Q'ty	Parts & Accessories	Note
	Antenna	1	Standard	
	Stand	1	Standard	
Q	Coaxial cable	1	Standard	F to IEC
0			Optional	TV cable - F plug to plug
~	Converter	1	Optional	F type and IEC 9.5 type male connector are both available for TV cable on this connector
- 5	Adaptor	1	Standard	AC 110V AC 220V AC 240V two pin plug or British 3 pin flat plug

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