R-14D

UHF Antenna Divider System

Please be aware that when using multisystem, for each required signal, it is required that each transmitter must match a receiver (work together) and set to operate in a single and clear channel. For some wireless frequencies which are close to or in UHF TV frequencies, only specific frequencies are used in each place and only in some specific frequencies can the system work with other UHF equipments.

Operating Guide

It can work together with wireless systems under matching frequency band and it is able to be connected with multiple wireless systems under same frequency band.

For each frequency band, there are two independent division parts in the antenna divider and they are processed as a single antenna signal in the diversity wireless system. For each part, there is one antenna input channel and four output channels. All the RF connector has a standard BNC port, and 8 BNC-BNC RF connection cables are included already.

External antenna can be set at long distance position while some of the transmitting UHF frequency signals will loss. So shielded coaxial-cable should be used in such situation. If the distance is more than 8 meters, it is a must to use the lowest signal loss cable, such as standard RG-142 coaxial-cable. More over, the antennas can be set in the front panel.

It can be used to work with active antennas or passive antennas. Both antenna input connectors have DC +8v power supply (switchable, turn on or turn off), and it can provide power to active antennas or passive antennas. Each connector provides 150mA power.

In the rear panel, there are 4 sets of power supplies (controlled by antenna division) and each provides 12v/800mA DC. An R-14D is used as the power supply for 4 receivers and 4 power supply cables are included.
Short-circuit protecting design for each receiver and completely metal external case is able to resist external RF interference.

Power Supply Connection

Internal 100-240v, 50/60Hz switch type power supply can automatically adjust to proper voltage. No need to do special setup. A standard IEC-3200 cable is used.

Multisystem Setting

1.Use high performance alkaline battery and avoid using common carbon battery.
2.Keep minimum barrier between the transmitter and the receiver. It is the best to keep them can directly see each other.
3.Proper distance should be kept between the transmitter and the receiver. Not to far nor to close. 2 meter at the minimum
4.The antenna of the receiver should be kept away from any metal.
5.Computer and any device with possibility to create RF interference should be kept away from the receiver.
6.The output antenna of the handheld microphone is internally placed in the bottom part of the microphone. So please avoid holding the bottom part of the microphone when using the microphone, to avoid reducing the output performance,
7.One receiver can not receiver the two transmitters' signal at the same time.
8.Frequency should be changed under the following situations: 1) when receiving external frequency interference 2) when current frequency is restricted and can not be used 3) to prevent inter-interference when using multisystem.
9.The receiver's audio SQ level should not be set at a too high level, or it will cause distortion to mixer. On the other hand, if the SQ level is set at a too low level, it will reduce the S/N ration and increase noise.
The proper way to set SQ level is: firstly, set the mixer's SQ level to normal level, such as 0 dB, then input the highest sound pressure to the microphone, such as loudly speak to the microphone then adjust the SQ level to the point which provides the loudest sound with no distortion, and then this is the very level to provide the best performance.
10. After using the transmitter, please turn off the power. If it won't be used for a long time, the batteries should be removed.

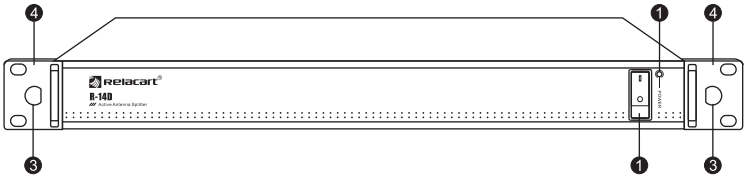
Technical Specifications

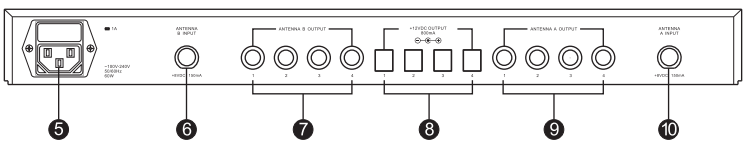
Frequency Range	500~950MHz
Gain of Output	0 dB±3dB
Input Impedance	50Ω
Output Impedance	50Ω
Power Supply of Antenna	+8V DC, centre point is positive
	The Maximum Current is 150mA
	for each Antenna input
Power Supply of Receiver	+12V DC, centre point is positive
Maximum Current for each group	800mA
Power Supply	100—240V, AC 50/60 Hz
Dimension (mm)	421(W) X 43(H) X 206 (D)
Weight	2.3KG
Accessories	4 pcs DC power cords, 8 pcs X 0.5 m
	BNC-BNC connection wires

Caution: It might cause electric shock when opening the case of the antenna divider. The reparation must be done under skillful reparation specialist with specific knowledge. The device must be kept away from rain and moist environment. The internal electric circuits have been precisely adjusted to reach the best using performance and strictly match the working regulations. Please do not try to open the case, or the warranty will be lost and might cause bad operations.

Front Panel Control and Functions (Picture 1)

1.Power Switch: press to turn on the power then press again to turn off the power.
2.Indicator Light: the power supply indicator light. The light would be on when the power is on.
3.Antenna Installation Connector: Can install the antenna to the round hole of the installation rack and can connect the antenna to the front panel.
Rack Installation Suit: Can install the receiver to 19"rack.



Rear Pane Control and Functions (Picture 2)

1.Power Input Socket : Standard IEC socket. It is able to automatically operate with AC current of 100~240V 50/60Hz.
2.The B Input Socket of The Antenna: the connector of the antenna divider and it can be used to directly connect antenna, or use an antenna extend cable to extend the length. The middle connector can provide DC 8 v power, can used in active antenna or antenna amplifier which power is no higher than 150mA.
3.The B Output Socket of the antenna divider: 4 sets of output connectors are directly connected to wireless receivers. Each set should be separately connected to antenna connector and if the connector is not used, there is no need to process.
4.4 Sets of Power Supplies: Each set can provide DC power of 12v/800mA. Supplies electricity to 4 receivers.
5.The A Input Socket of the antenna divider: 4 sets of output connectors are directly connected to wireless receiver. Each set should be separately connected to a antenna connector and if the connector is not used, there is no need to process.
The A Input Socket of the antenna: the connector of the antenna divider and it can be used to directly connect antenna, or use an antenna extend cable to extend the length. The middle connector can provide DC 8 v power, can used in active antenna or antenna amplifier which power is no higher than 150mA.