

Wireless 5.8GHz AV Sender With Built in Remote Control Extender



AR-1913 User Manual

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BOX CONTENTS





2

Transmitter & Receiver (Rear view)



Accessory



Adaptor

Infrared Extender

• 1 x Transmitter and 1 x Receiver

- 1. Channel Selector
- 2. 5.8 GHz Antenna
- 3. ON / OFF Switch
- 4. Infrared Remote Output
- 5. IR frequency selection

• Rear view of Transmitter & Receiver

- 6. Audio L
- 7. Audio R
- 8. Video
- 9. S-Video
- 10. AC Adaptor Port

Accessories

- 1. 1 x DC 12V 250mA, AC 230V (For Transmitter)
- 2. 1 x DC 12V 250mA, AC 230V (For Receiver)
- 3. 1 x Infrared Extender Mouse
- 4. 2 x A/V Cables

USER GUIDE

- 1. Make sure your input AC voltage conforms to the adaptor specifications.
- 2. Only use the power adapter provided with the AR-1913.
- 3. With direct line-of-sight, the maximum range of A/V signal transmission can reach up to 60m and this distance would be shortened by obstacles or walls placed between the transmitter and receiver. (The optimum indoor range is under 25m)
- 4. To ensure good infrared remote control operation, aim your remote control at the I/R sensor window on the AR-1913 and press the buttons firmly. (With some remote controls it may be necessary to press and hold each button for about a second). The working angle of the I/R Sensor Window is +/- 15 degrees. (see Pictures 7,8)
- 5. The remote controller has to be used within the distance of (from remote control to receiver) no less than 0.3m and no more than 5m (working angle +/- 15 degrees). **(see Picture 9)**
- 6. Be sure the ON / OFF switch on both the transmitter and receiver is in the OFF position before making any connections.

INSTALLATION

NOTE: S-Video and Composite Video can be interchangeable. But in normal cases, S-Video is the dominant input, if your video device is only with composite video. You cannot connect the S-Video cable to the transmitter. Otherwise, there will no picture output at the receiver.

TRANSMITTER (AR-1913)

a. By Composite Video (RCA)

- 1. Take a RCA to RCA cable (included), take one end and connect to the AV In socket of the transmitter (see Picture 1)
- 2. Connect the other end to the Audio / Video Out port of VCR, DVD, VCD, Satellite receiver ..Etc. (see Picture 1)

b. By S-Video

- 1. Take a RCA to RCA cable (included), take Audio RL and connect to the Audio RL in the socket of the transmitter. Take a S-Video to S-Video cable and connect one end to the S-Video input socket of the transmitter. (see Picture 1)
- Connect the other end of Audio RL to the Audio RL Output Port of VCR, DVD, VCD, Satellite receiver etc. and also connect the other end of the S-video to S-Video Output of the device. (see Picture 1)
- 3. Connect the power adaptor to the power outlet. Turn power ON.
 - ** DC 12V 250mA, AC 230V (see Picture 1)
- 4. Stick the IR mouse in front of the sensor receiving window of the device i.e. VCR, DVD, VCD, Satellite receiver etc. under effective range and working angles. (see Picture 2)
- 5. Choose one of the 4 channels by sliding the selection button (must be set to the same channel on both the transmitter & receiver) (see Picture 4)

RECEIVER (AR-1913)

a. By Composite Video (RCA)

- 1. Take a suitable RCA to RCA (included) cable and connect one end to the A/V socket of the receiver. **(see Picture 3)**
- 2. Connect the other end to the Audio / Video In port of the TV. (see Picture 3)

b. By S-Video

- 1. Take a RCA to RCA cable (included), take Audio RL and connect to the Audio RL in the socket of the receiver. Take a S-Video to S-Video cable and connect one end to the S-Video input socket of the receiver. (see Picture 3)
- 2. Connect the other end of the Audio RL to the Audio RL Input Port of the TV and also connect the other end of the S-video to S-Video Input Port of the TV (see Picture 3)
- Connect the power adaptor to the power outlet. Turn power ON.
 **DC 12V 250mA, AC 230V (see Picture 3)
- Choose one of the 4 channels by sliding the selection button (must be set to the same channel on both the transmitter & receiver) (see Picture 4)
- 5. Please make sure this unit is set a little forward to the top of the TV in order to have the best IR performance. (see Picture 7)

TROUBLE SHOOTING

No picture or sound

- a) Check the power on/off switches on the Transmitter, Receiver and TV
- b) Make sure the power plug and signal cables are pushed all the way in.
- c) Check if the channel of the transmitter & receiver are set to the same channel.
- d) Make sure that all cables are connected as per the user guide
- e) Check if there is any discontinuity inside the cable.
- f) If you use S-Video connection, your TV set must be set to "S-Video" mode

Interference & noise

- a) Adjust the receiver antenna direction for optimal performance. (see Pictures 5, 6)
- b) Adjust the transmitter antenna direction for optimal performance. (see Pictures 5, 6)
- c) Check if the supplied voltage matches the adapter specification
- d) Select a different microwave channel by sliding the channel button on both the transmitter and receiver. (see Picture 4)
- e) You can also vary the transmitter / receiver position for optimal performance.
- f) If the distance between the receiver and transmitter is less than 10m, do not open the round antenna as the signal could be too strong to obtain a sharp picture.

1. Not Synchronized

- 2. Screen unlocked
- 3. Noisy line across the screen
 - a) Adjust the receiver antenna direction for optimal performance. (see Pictures 5, 6)
 - b) Adjust the transmitter antenna direction for optimal performance. (see Pictures 5, 6)

Note: Antenna does not rotate freely 360°. Rotating past the point where resistance is felt will result in permanent damage to the device.

- c) Check if the supplied voltage matches the adapter specification.
- d) Select a different microwave channel by sliding the channel button on both the transmitter and receiver. (see Picture 4)
- g) Move the transmitter and receiver closer. If the problems remain, please contact your reseller for help.

Remote control extender does not work

 To ensure good infrared remote control operation, aim your remote control at the I/R Sensor Window on the receiver and press the buttons firmly. (With some remote controls it may be necessary to press and hold each button for about a second). The working angle of the I/R Sensor Window is +/- 15 degrees. (see Pictures 7,8,9)

- 2) Check the path between the transmitter & receiver and clear any unnecessary obstructions.
- 3) Make sure the IR extender mouse is pointing toward the sensor of the device precisely.
- Check if the batteries on the remote control are fully charged. Replace with new batteries if necessary.
- 5) The optimum indoor operating range is within 15m.
- 6) Change the IR carrier frequency on the transmitter.

Transmitter

Picture 1





Receiver

Picture 3



Picture 4





Picture6





OPERATING REMOTE CONTROL Receiver





FURTHER APPLICATIONS WITH VCR

Connect the Transmitter to a VCR, which is connected to a TV.

a. By composite Video (RCA)

- 1. Make sure the ON / OFF switch on both the transmitter and receiver is in the OFF position before making any connections.
- 2. Take a RCA to RCA cable and connect one end to the A/V in of the transmitter and the other to A/V out of VCR. Get another cable and connect one end to one of the A/V out ports of VCR and the A/V in port of the TV.

If your TV does not have any A/V in port, then you can use 75Ω RF coaxial cable from TV's antenna IN (or VHF/UHF) to your VCR's modulator output.

- 3. Plug one end of the power cord of the adaptor into the DC jack on the transmitter and the other end into any standard 230V AC outlet. Use only the adaptor provided.
- 4. Locate and orientate the transmitter according to pictures 5 and 6 of this manual.

b. By S-Video

Please note: S-Video connectors have a special orientation, when you want to use S-Video connection you need to carefully handle the connector and make sure the orientation is correct. Push it gently to avoid breaking the connector and connector socket of the device

- 1.Make sure the ON / OFF switch on both the transmitter and receiver is in the OFF position before making any connections.
- 2.Take a RCA to RCA cable (included), connect Audio RL to the Audio RL input socket of the transmitter, then take the S-Video to S-Video cable and connect to the S-Video input of the transmitter.

Connect the other Audio RL to the Audio RL output of the VCR, S-Video to the output S-Video of the VCR and get another RCA to RCA cable and S-Video to S-Video cable to connect to the other output of the VCR and the input of the Television. If your TV does not have any A/V in port, then you can use 75 Ω RF coaxial cable from the TV's antenna IN (or VHF/UHF) to your VCR's modulator output.

- 3. Plug one end of the power cord of the adaptor into the DC jack on the transmitter and the other end into any standard 230V AC outlet. Use only the adaptor provided
- 4.Locate and orientate the transmitter according to pictures 5 and 6 of this manual

FURTHER APPLICATIONS WITH DVD, DSS OR OTHER SATELLITE RECEIVER, OR LASER DISC PLAYER

Connect the Transmitter to a DVD,LD, Satellite receiver, which is connected to a TV

a. By composite Video (RCA)

- 1. Make sure the ON / OFF switch on both the transmitter and receiver is in the OFF position before making any connections.
- 2. Take a RCA to RCA cable (included) and connect one end to the A/V out port of DVD, DSS or LD and the other end to the A/V in of the transmitter. Get another cable and connect to one of the A/V out of the device and the other end to the A/V input of the TV. If your TV does not have any A/V in port, then you can use 75Ω RF coaxial cable from the TV's antenna IN (or VHF/UHF) to your devices modulator output.
- 3. Plug one end of the power cord of the adaptor into the DC jack on the transmitter and the other end into any standard 230V AC outlet. Use only the adaptor provided.
- 4. Locate and orientate the transmitter according to pictures 5 and 6 of this manual.

b. By S-Video

Please note: S-Video connectors have a special orientation. When you want to use S-Video connection you need to be careful to handle the connector and ensure the orientation is correct. Push it gently to avoid breaking the connector and connector socket of the device

- 1. Make sure the ON / OFF switch on both the transmitter and receiver is in the OFF position before making any connections.
- 2. RCA to RCA Cable (included), connect Audio RL to the Audio RL input socket of the transmitter, then take the S-Video to S-Video cable and connect to the S-Video Input of the transmitter. Connect the other Audio RL to the Audio RL output, S-Video to the output S-Video of your device and another RCA to RCA cable, S-Video to S-Video cable to connect to the other output of your device and the input of the TV. If your TV does not have any A/V in port then, you can use 75Ω RF coaxial cable from the TV's antenna IN (or VHF/UHF) to your device's modulator output.
- 3. Plug one end of the power cord of the adaptor into the DC jack on the transmitter and the other end into any standard 230V AC outlet. Use only the adaptor provided.
- 4. Locate and orientate the transmitter according to pictures 5 and 6 of this manual



FURTHER APPLICATIONS WITH RECEIVER

Connect the Receiver to a VCR, which is connected to a TV.

This set up enables you to record transmitted audio and video on your remote VCR and also enjoy the picture and sound on a remote TV at the same time.

a. By composite Video (RCA)

- 1. Make sure the ON / OFF switch on both the transmitter and receiver is in the OFF position before making any connections.
- 2. Take a RCA to RCA cable (included) and connect one end to the A/V out of the receiver and the other end to the A/V in port of the VCR. Take another RCA cable and connect one end to the A/V out of the VCR and then the other end to the A/V in port of the TV. If your TV does not have any A/V in port, then you can use 75Ω RF coaxial cable from the TV's antenna IN (or VHF/UHF) to your VCR's modulator output.
- 3. Plug one end of the power cord of the adaptor into the DC jack on the receiver and the other end into any standard 230V AC outlet. Use only the adaptor provided.
- 4.Locate and orientate the receiver according to pictures 5 and 6 of this manual.

b. By S-Video

Please note: S-Video connectors have a special orientation. When you want to use S-Video connection, you need to be careful to handle the connector and make sure the orientation is correct. Push it gently to avoid breaking the connector and the connector socket of the device

- 1. Make sure the ON / OFF switch on both the transmitter and receiver is in the OFF position before making any connections.
- 2. Take a RCA to RCA cable (included), connect Audio RL to the Audio RL output socket of the receiver, then take the S-Video to S-Video cable and connect to the S-Video output of the receiver. Connect the other Audio RL to the Audio RL input, S-Video to the S-Video input of your VCR and get another RCA to RCA cable, S-Video to S-Video cable and connect the output of your VCR and the input of TV. If your TV does not have any A/V in port then you can use 75 Ω RF coaxial cable from the TV's antenna IN (or VHF/UHF) to your VCR modulator output.
- 3. Plug one end of the power cord of the adaptor into the DC jack on the receiver and the other end into any standard 230V AC outlet. Use only the adaptor provided
- 4. Locate and orientate the transmitter according to pictures 5 and 6 of this manual



CAUTION

This equipment has been tested and found to comply with CE and FCC regulation. These regulations are designed to provide reasonable protection against interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with this manual, may cause interference to radio communications. However, there is no guarantee that interference will not occur in a particular situation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorientate or relocate the receiving antenna
- Increase the distance between the interfering equipment and the receiver
- Connect the interfering equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the reseller or an experienced radio/TV technician for help.

The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

To comply with the FCC RF exposure compliance requirements, this device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

IMPORTANT SAFETY PRECAUTIONS

- TO PREVENT FIRE OR SHOCK HAZARD, DO NOT SUBMERGE OR EXPOSE THESE PRODUCTS TO WATER
- TO AVOID ELECTRIC SHOCK, DO NOT OPEN THESE UNITS WHILE IN USE. THE AR-1913 CONTAINS NO USER SERVICEABLE PARTS. DOING SO WILL VOID THE WARRANTY
- USE ONLY THE POWER ADAPTORS PROVIDED WITH THE AR-1913
- DO NOT OVERLOAD WALL OUTLETS OR EXTENSION CORDS.
- IF YOU ARE EXPERIENCING DIFFICULTY WITH THESE PRODUCTS, DO NOT ATTEMPT TO SERVICE IT YOURSELF. PLEASE CALL YOUR RESELLER FOR ASSISTANCE.

SPECIFICATION

TRANSMITTER

| Output level | 13dBm (complies with CE) |
|---------------------------|--|
| Operating frequency | 5790,5828,5847,5866 MHz |
| Modulation | FM (Video and Audio) |
| Video input level | 1.0 V р-р |
| Audio input level | 1.0 V р-р |
| S-Video Input Level | Y:1Vpp, C:288mV |
| Video input impedance | 75 ohm |
| Audio input impedance | 2K ohm |
| Power Consumption | DC 12V@250mA |
| Unit dimensions | 12 x 10 x 4.3cm |
| Unit weight | 200g |
| Effective operating range | Approx. 200 feet (clear line of sight) |

RECEIVER

| Output level | 1.0V p-p +/- 0.2V p-p (Video) 1.0Vp-p +/- 0.2V p-p (Audio) |
|----------------------|---|
| S-Video Output Level | Y:1Vpp+/-0.2V p-p, C:288mV +/-20% |
| Power Consumption | 12V DC@250mA |
| Unit dimensions | 12 x 10 x 4.3cm |
| Unit weight | 200g |

IR TRANSMITTER

| Output level | 0~10dBm |
|---------------------------|---------------------------------------|
| Operating Frequency | 433.92MHz |
| Modulation Type | AM |
| IR Carrier Frequency | 38KHz /56KHz Switchable |
| Effective operating range | Approx. 100 feet(clear line of sight) |

IR RECEIVER

| Operating Frequency | 433.92MHz |
|----------------------|-------------------------|
| Sensitivity | <-80dBm |
| IR Carrier Frequency | 38KHz /56KHz Switchable |

Made in China