

# MWRCVR UHF 2-Way Sync Wireless Receiver





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# Description

The AtlasIED MWRCVR wireless receiver is the ideal choice for a variety of applications ranging from classrooms and conference rooms to lecture halls and live presentations. Designed to work in conjunction with either the MWHHM wireless handheld microphone or the MWBTP wireless belt pack microphone, the MWRCVR allows for great flexibility in sound reinforcement applications. With the ability to connect to a variety of devices via the included balanced XLR or unbalanced line output the MWRCVR can be used with a variety of amplifiers or mixers to address the needs of any installation. Multiple units can be used in a single installation since the unit receives transmission via the UHF frequency band and pairs to individual MWHHM or MWBTP on available channels. The unit can be used as a standalone piece on a shelf or desk or it can be rack mounted by itself or with a second MWRCVR using the rack mount kit, model MWRMK (sold separately).

#### Features

- Multi-function LCD display for channel / frequency, volume level, and signal strength
- Patented technology for 2-way data transfer between transmitter and receiver
- 100 frequencies available through the 25MHz signal band
- Dual antennas reduce distortion
- IR sensor for connection to wireless microphone
- Selectable mic or line output

# Applications

- Classrooms
- Conference Rooms
- Lecture Halls
- Live Presentation

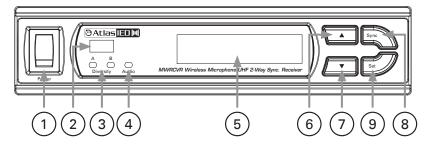


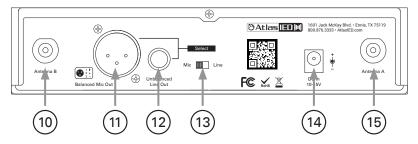
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#### **Parts and Functions**





- 1. Power Switch
- 2. IR Sensor Area
- 3. Diversity Indicator
- 4. Audio Signal Indicator
- 5. LCD Display
- 6. Up Button
- 7. Down Button
- 8. Synchronizing Button
- 9. Set Button
- 10. Antenna B Socket (BNC Type)
- 11. Balanced Audio Output
- 12. Unbalanced Audio Output
- 13. Mic/Line Output Level Switch
- 14. DC In
- 15. Antenna A Socket (BNC Type)



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# **Changing Channel / Frequency**

- 1. Press and release SET button until the CHANNEL | FREQUENCY page appears (Fig 1).
- Press UP or DOWN button to select a new channel. As the channel changes, the frequency changes accordingly (Fig 2).
- 3. After a channel is chosen, wait 5 seconds to store the setting.



# Synchronizing Channels on the Receiver and Transmitter

Align infrared areas of the receiver and microphone within 12" (30cm).

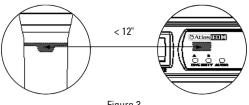
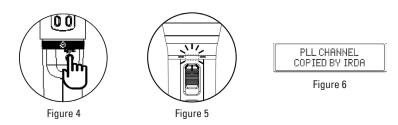


Figure 3

- A. Changing the receiver's channel
- 1. Press the synchronizing button on the microphone (Fig 4).
- The microphone's LED will illuminate, indicating the frequency is being transmitted to the receiver and that the receiver is synchronizing channels with the microphone (Fig 5).
- "COPIED BY IRDA" will appear on the receiver's LCD, indicating that the receiver has been successfully synchronized (Fig 6).



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- B. Changing the microphone's channel
- 1. Press the synchronizing button on the receiver (Fig 7).
- 2. "IRDA DATA SEND" will appear on the receiver's display (Fig 8).
- 3. "IRDA TX FINISH" will appear to denote data transferred (Fig 9).



If this does not synchronize the channels, ensure the IR sensor panels are properly aligned and are located within 12" (30cm) of each other and try synchronizing again.

#### **Channel Scanning**

For an interference-free operation, a cleaner channel might be necessary if the current one receives too much interference. Before scanning, the transmitter must be switched off.

- 1. Press and release SET button until the AUTO SCAN page appears (Fig 10).
- 2. Press UP or DOWN button to find and locate a clear, interference-free channel (Fig 11).
- 3. After a channel is chosen, wait 5 seconds to store the setting.





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#### Adjusting Volume Level

- 1. Volume adjustment can be made from the home screen (Fig 12).
- 2. Press UP or DOWN button to choose a new level (Fig 13).
- 3. After the level is adjusted, wait 5 seconds to store the setting.



# Adjusting Squelch Level

When interference is encountered try reducing the sensitivity of the receiver, thus less susceptible to interference.

- 1. Press and release SET button until the SQUELCH SETUP page appears (Fig 14).
- 2. Press UP or DOWN button to choose a new level between 1 and 10 (Fig 15).
- 3. After the level is adjusted, wait 5 seconds to store the setting.



Since increasing the squelch level will also reduce the reception distance, it's recommended to choose the lowest level that can eliminate the interference. If this still does not solve the problem it means this frequency is not suitable. Adjust the squelch back to its preset level and use the scan function to locate a clear, interference-free channel.



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# **Audio Output Connection**

**Balanced Output:** XLR connector provides balanced audio output signal from this jack to the mixer/amplifier. Use an audio output cable with "XLR" or "Cannon" connector, connect one end to the balanced output jack of the receiver, and the other end to the "LINE IN" or "MIC IN" jack of the mixer/amplifier.

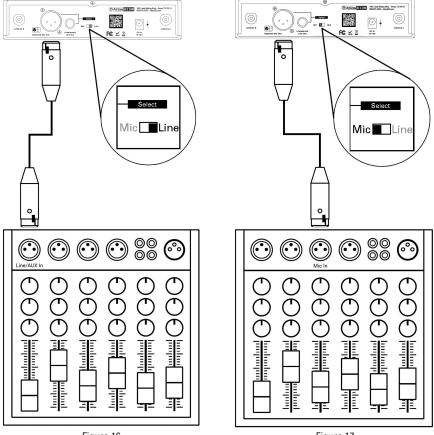


Figure 16

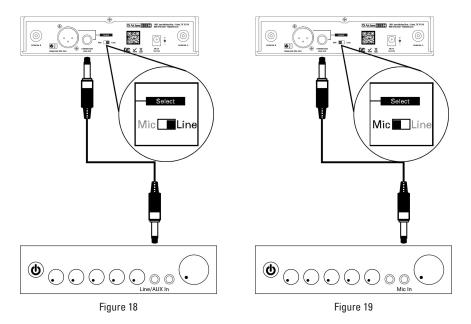
Figure 17

**Level Switch Setting:** When connecting to the LINE/AUX IN of a mixer/amplifier, switch to "LINE" position (Fig 16). DO NOT use the "MIC" position as they may not deliver a sufficient output level. When connecting to the "MIC IN" jack of a mixer/amplifier, switch to "MIC" position (Fig 17). Distortion may occur at the wrong level position.



## **Audio Output Connection**

**Unbalanced Output:** <sup>1</sup>/<sub>4</sub>" line output connector provides unbalanced audio output signal from this jack to the mixer/amplifier. Use an audio output cable with <sup>1</sup>/<sub>4</sub>" PHONE PLUG connector. Connect one end from the unbalanced output jack of the receiver, and the other end to the "LINE IN" or "MIC IN" jack of the mixer/amplifier.



Level Switch Setting: When connecting to the LINE/AUX IN of a mixer/amplifier, switch to "LINE" position (Fig 18). DO NOT use the "MIC" position as they may not deliver a sufficient output level. When connecting to the "MIC IN" jack of a mixer/amplifier, switch to "MIC" position (Fig 19). Distortion may occur at the wrong level position.



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# **Owner's Manual**

#### **Receiver Installation**

- For best operation, the receiver should be at least 1m above the ground and 1m away from a wall
  or metal surface to minimize reflections.
- 2. The transmitter should also be at least 1m away from a wall or metal surface to minimize reflections. The microphone should also be at least 1m away from the receiver.
- 3. Keep antennas away from noise source such as motors, automobiles, neon light as well as large metal objects.

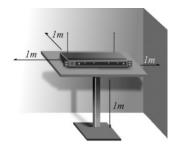
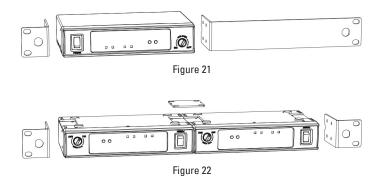


Figure 20

#### **Rack Mounting**

The receiver can be cabinet-mounted by either one or two units. If only one receiver is to be mounted, an optional kit is available (Fig 21). If two receivers are to be mounted, they can be assembled by another kit (Fig 22).





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Owner's Manual

System	
Frequency Range	UHF 566 - 585.8MHz
Switching Bandwidth	25MHz
Switchable Frequencies	100
Channels	1
Display Screen	LCD
Operating Range	100m Direct Sight
Output Impedance	Mic / Line
Oscillation Type	PLL Synthesized
Frequency Stability	±0.005%
Receiving Method	True Diversity
Sensitivity	-95dBm
Synchronization	2-Way
Image Rejection	> 85dB
S/N Ratio	> 110dB
Peak (Maximum) Deviation	±40KHz
T.H.D.	< 0.5%
Antenna Socket	BNC type
Audio Outputs	Line (Balanced) XLR Jack: +10dBm(2.4V) / 5KΩ Line (Unbalanced) 6.35mm Jack: +4dBm(1.2V) / 5KΩ Mic (Balanced) XLR Jack: -18dBm(100mV) / 600Ω Mic (Unbalanced) 6.35mm Jack: -24dBm(50mV) / 600Ω
Squelch	RF / Noise / Pilotone Squelch
Power Supply	100-240V AC, 12V DC/1.6A
Mechanicals	
Dimensions	7.87" x 5.91" x 1.73" (200mm x 150mm x 44mm)
Weight	1.39 lbs / 0.63 kg

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

THIS DEVICE COMPLIES WITH PART 15C OF THE FCC RULES. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.



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#### Notes



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#### **Limited Warranty**

All products manufactured by AtlasIED are warranted to the original dealer/installer, industrial or commercial purchaser to be free from defects in material and workmanship and to be in compliance with our published specifications, if any. This warranty shall extend from the date of purchase for a period of three years on all AtlasIED products, including SOUNDOLIER brand, INNOVATIVE ELECTRONIC DESIGNS brand, and AtlasIED brand products except as follows: one year on electronics and control systems; one year on replacement parts; and one year on Musician Series stands and related accessories. Additionally, fuses and lamps carry no warranty. AtlasIED will solely at its discretion, replace at no charge or repair free of charge defective parts or products when the product has been applied and used in accordance with our published operation and installation instructions. We will not be responsible for defects caused by improper storage, misuse (including failure to provide reasonable and necessary maintenance), accident, abnormal atmospheres, water immersion, lightning discharge, or malfunctions when products have been modified or operated in excess of rated power, altered, serviced or installed in other than a workman like manner. The original sales invoice should be retained as evidence of purchase under the terms of this warranty. All warranty returns must comply with our returns policy set forth below. When products returned to AtlasIED do not qualify for repair or replacement under our warranty, repairs may be performed at prevailing costs for material and labor unless there is included with the returned product(s) a written request for an estimate of repair costs before any nonwarranty work is performed. In the event of replacement or upon completion of repairs, return shipment will be made with the transportation charges collect.

EXCEPT TO THE EXTENT THAT APPLICABLE LAW PREVENTS THE LIMITATION OF CONSEQUENTIAL DAMAGES FOR PERSONAL INJURY, ATLASIED SHALL NOT BE LIABLE IN TORT OR CONTRACT FOR ANY DIRECT, CONSEQUENTIAL OR INCIDENTAL LOSS OR DAMAGE ARISING OUT OF THE INSTALLATION, USE OR INABILITY TO USE THE PRODUCTS. THE ABOVE WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

AtlasIED does not assume, or does it authorize any other person to assume or extend on its behalf, any other warranty, obligation, or liability. This warranty gives you specific legal rights and you may have other rights which vary from state to state.

#### Service

Should your MWRCVR require service, please contact the AtlasIED warranty department at 1-877-689-8055, ext. 277 or www.atlasied.com/support to obtain an RA number.

AtlasIED Tech Support can be reached at 1-800-876-3333 or www.atlasied.com/support

Visit our website at www.AtlasIED.com to see other AtlasIED products.

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