

# AVATAR Audio/Video Receiver



## User Manual











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# Safety Information

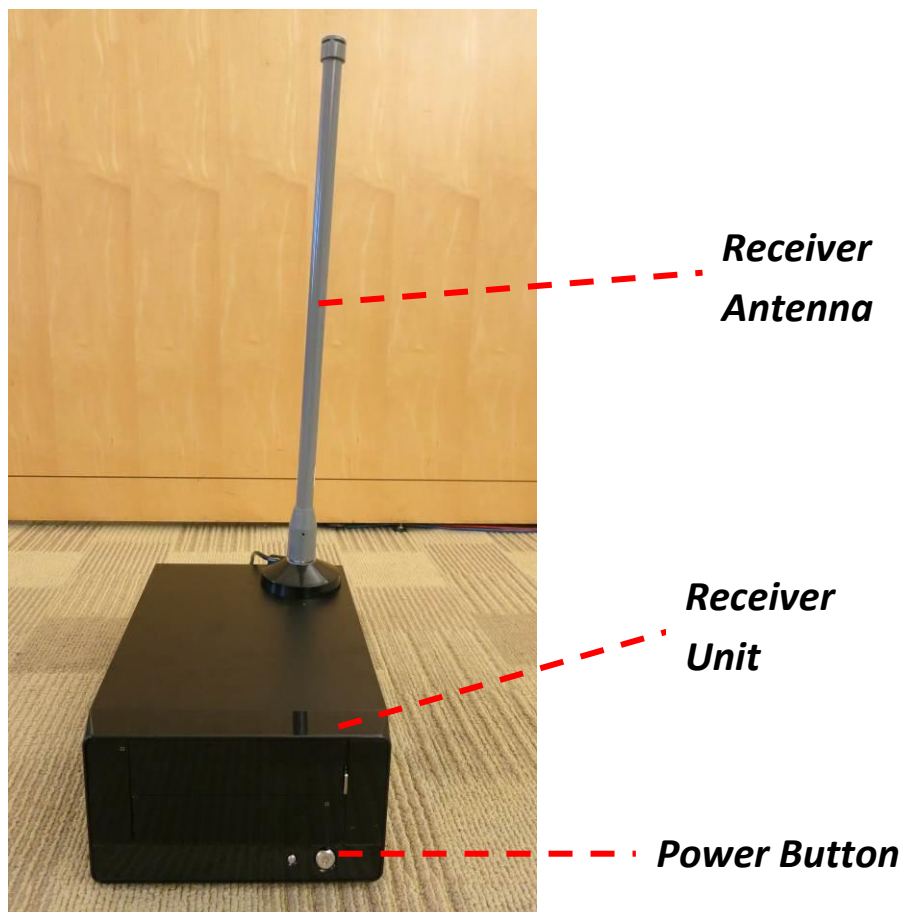
 Read this manual carefully before operating the Avatar or any related accessories. 

-  Carefully inspect the Avatar before each use.
-  Ensure that all parts are secured in place and properly installed. Do not try to make repairs yourself. Parts may not work properly if they have been repaired by a party other than RoboteX, Inc.
-  Do not modify any components on the robot or any robot accessories yourself. Doing so may cause permanent damage not covered by your warranty.
-  Do not place fingers in between the tracks or flippers when the unit is powered on. Keep fingers and other body parts away from moving parts at all times.
-  Care should be taken when running the Avatar near pedestrians, small children, or objects that can be harmed. Be aware of your and the robot's surroundings at all times.
-  AC Adapter Handling:
  - Use **only** the supplied AC adapter. Do **not** use any other unauthorized AC adapters. Damage to robot and battery may occur from use of alternate AC adapters.
-  FCC Caution: This equipment generates and uses radio frequency energy and may cause interference to external reception if not installed and used properly in strict accordance with the manufacturer's instructions.
-  Before switching payloads/accessories on the robot, make sure the battery is unplugged and the unit is powered down.

# Introduction to the Avatar Audio/Video Receiver

The Avatar Audio/Video (or A/V) Receiver allows the user to remotely view the robot's audio/video feed on an external monitor or screen. This setup is easily adapted and integrated into existing equipment, and is compatible with the Avatar Robot and PTZ Camera, as well as other Robotex payloads.

**NOTE:** You must supply your own monitor to view video with the A/V Receiver.



**NOTE:** The antenna must be attached to the antenna port on the back of the A/V Receiver in order for the unit to function properly (see page 7 for more information). The antenna itself can be magnetically mounted to many metal surfaces (including the top of the A/V receiver unit).

# System Components

The Avatar A/V Receiver includes the following components:

1. A/V Receiver Unit
2. A/V Receiver Antenna
3. A/V Unit Power Cable
4. Speaker (with USB Cable)
5. Monitor (includes Audio and VGA Cables)
6. Headset

Please check to ensure that you have all of the components.



**A/V Unit Power Cable**



**Speaker (Back) with USB  
and Audio Cable**



**Speaker**




**VGA Cable**



**Headset**

# Setup Instructions



Please read the main Avatar User Manual **BEFORE** proceeding with use of the A/V Receiver. The manual was included with your robot purchase. 

**A)** Make sure the following components and cables are plugged in and accounted for according to the diagram on the following page:

**1) Power Cables:** Make sure the power cords for both the Receiver Unit AND your external monitor are plugged into an external power outlet.

**2) VGA Cable:** Make sure you connect the VGA Cable, plugging one end into the back of the A/V Receiver and the other end into the VGA port on your monitor.

**3) USB Drive (Optional):** If you wish to record video from the receiver, make sure you have a USB drive handy (**but DO NOT plug it in before powering on the unit. Only plug the USB drive in after powering the unit on. See page 8 for more details on video recording**). The USB Port is also used for plugging in the speaker.

**4) Speaker + Cables (Optional):** If you wish to hear incoming audio through a pair of external speaker, make sure you connect the included speaker to Receiver Unit to BOTH the speaker port and the USB port (see next page for pictures).

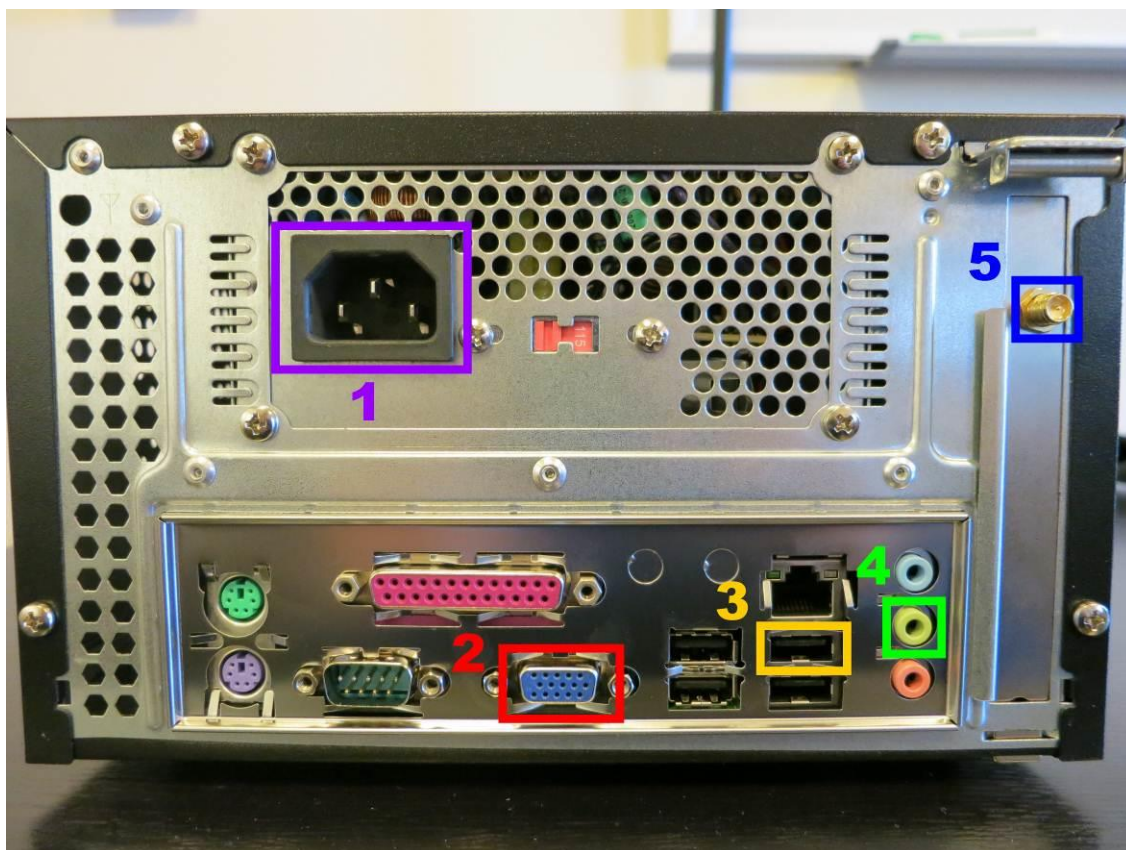
**5) Antenna:** Make sure the tall grey antenna is plugged into the back of the A/V Receiver.

**B)** Turn on the robot controller and insert the battery into the robot, and wait until the unit powers on fully.

**C)** Turn on the Receiver Unit and monitor by pressing the power button on the front of each (⏻). **The handheld robot controller must be turned on and the battery must be installed in the robot beforehand in order for the A/V Receiver to detect a video signal.** It may take a few moments for the image to be brought up on the monitor screen once battery is inserted in the robot.

**D)** If the handheld robot controller takes too long to connect (or if there is a red “x” is over the signal icon), then reboot the controller by turning off and turning back on the controller. If the problem persists, try rebooting the controller again and removing and reinserting the robot battery.

## A/V Receiver Port Diagram







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1	Power Cord Plugin
2	VGA Cord Plugin
3	USB Port Plugin (for USB thumb drive video recording and speaker USB plugin, can use front OR back USB port)
4	Speaker Audio Plugin
5	A/V Antenna Plugin
6	Headset Audio Plugin
7	Headset Microphone Plugin
8	Unit Power Button




# Monitor Display

The Avatar on-screen display has been developed to provide users with useful status displays without obstructing the camera-view. The following will be displayed on the screen of your external monitor:


<u>Display</u>	<u>Description</u>
	<p>Location: Bottom right of the screen</p> <p>Purpose: Indicates status of the robot battery. When the battery display is shown as low or empty, this indicates that the robot has between 15-25 minutes of run time left. The battery indicators are a running estimate; do not be alarmed if they do not correspond with the display on the actual battery.</p>
	<p>Location: Bottom right of the screen</p> <p>Purpose: Indicates the signal strength between the controller and robot. An "X" will be displayed when there is no connection.</p>
	<p>Location: Bottom right of the screen</p> <p>Purpose: Replaces normal signal strength icon and indicates that the AV receiver is having radio problems. Cycle the power on and off to fix.</p>
	<p>Location: Bottom left of the screen</p> <p>Purpose: A flashing red dot indicates that the Robotex Avatar® II's audio/video is being recorded to an external USB flash drive.</p>

# Recording Audio/Video Files from Receiver Unit



## To start recording:

1. Insert a USB flash drive into any USB port on the Receiver Unit. The message “Recording Started” will automatically show on the screen.
2. The red dot on the icon  will start flashing, indicating recording is in progress.

## To end recording:

1. Quickly press the main power button on the Receiver (  ). The message on the screen will say “Finalizing the Recording. Please Wait...”. ***If held down too long, the power button will turn the A/V Receiver off, so make sure it is just a quick press of the button.***
2. When the message changes to “Recording Complete,” the USB device can be safely removed.

Note: If the USB flash drive becomes full, use the method described in “End Recording” to remove the full USB drive. Then, swap in an empty USB drive and recording will continue.

** DO NOT PULL USB FLASH DRIVE OUT OF PORT WITHOUT FOLLOWING THE PROPER “END RECORDING” PROCEDURE. FAILURE TO DO SO WILL RESULT IN CRITICAL VIDEO DATA DAMAGE. VIDEO WILL BE LOST AND IRRETRIVABLE **

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# Warranty and Maintenance

The Avatar and all accessories (including the A/V Receiver) are covered by a warranty on parts failures. Please see your terms and conditions for length of warranty. This does not cover damage caused by user error or mishandling of product. Contact your Account Manager for warranty claims and questions.

## Warranty Contact

Attention – Warranty Support  
RoboteX, Inc.  
433 Lakeside Dr.  
Sunnyvale, CA 94085  
650-251-4958  
[support@robotex.com](mailto:support@robotex.com)

## Maintenance Options

Complete maintenance service is available. Avatar-certified repair technicians perform module replacement and rebuilding at our maintenance facility in Silicon Valley. Labor is charged as a flat rate depending on the required service.

Contact the RoboteX Service Department for more information:

Attention – Service Department  
RoboteX, Inc.  
433 Lakeside Dr.  
Sunnyvale, CA 94085  
650-251-4958  
[service@robotex.com](mailto:service@robotex.com)