



JPL Agora

User Guide

PROPELLER
BY JPL

4K Ultra HD All-In-One Video Sound Bar with Intelligent Zoom



Unpacking

Remove your camera from its packaging and ensure you have the correct specified accessories. Retain the camera box for storage, and also in the unlikely event that it needs to be returned for servicing or repair.

Warning

Ensure that all electrical connections (including extension leads and interconnections between pieces of equipment) are properly made and in accordance with the relevant manufacturer's instructions.

- Do not continue to operate the equipment if you are in any doubt about it working normally, or if it is damaged in any way. If this is the case, disconnect from your PC equipment and consult your dealer.
- Do not allow electrical equipment to be exposed to rain or moisture.
- Never push anything into holes, slots or any other opening on your camera as this could result in a fatal electrical shock.
- Do not open the camera housing as doing so will void the warranty.
- Never guess or take chances with electrical equipment.

General Limitation of Liability

The device is not designed, manufactured, or intended for use or resale, in environments that require fail-safe performance, such as in the operation of life-support systems and/or nuclear facilities. The device may only be used for these purposes with prior written permission from the manufacturer in each individual case.

Declaration of Conformity

This device complies with the basic health, safety and environmental requirements in all relevant directives. You will find the Declaration of Conformity on our website. www.jpltele.com

Safety

For your own safety, this product should only be used with UKCA, CE, FCC, and RoHS approved equipment. Using this camera with non-approved equipment can void this products warranty.

Unplug this product from the power outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

Do not overload outlets and extension cords as this can result in risk of fire or electric shock.

Environmental Notice

This camera has been made to UKCA, CE, FCC, RoHS, and WEEE standards. In the interest of recycling raw materials, please do not dispose of this camera in the household waste at the end of its useful life. Disposal can take place at approved recycling or disposing locations in accordance with local regulations.

Consult your responsible authority for information about the professional and environment-friendly disposal of your device. If you want that we handle the disposal for you, you can send the device at your costs to JPL Telecom Limited.





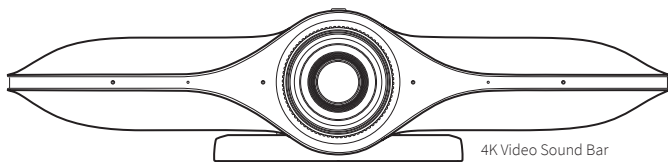
Contents

What's Included	4
Video Sound Bar - Overview	5
Setting up your Video Sound Bar	6
Video Enhancement	7
External Bluetooth Device Connection	7
Technical Information	8
- Camera Parameters	
- Microphone Parameters	
- Speaker Parameters	
Technical Information	9
- Bluetooth Parameters	
- Other Parameters	
Bluetooth Remote Control	10
Bluetooth Remote Control	11
Camera Settings - Remote Control - Button Combination	12
Re-pairing Settings - Remote Control - Button Combination	12
Camera Status Indicator	13
Mode Status Indicator	13
Trouble Shooting	14
Conditions of Warranty	15

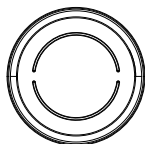


What's Included

Thank you for choosing the JPL Agora Bluetooth Conference Room Video Sound Bar.



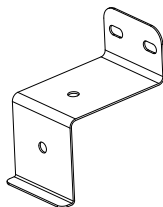
Bluetooth Remote Control
- Requires 2 x AAA batteries
(Batteries not included)



Magnetic
Privacy Cover



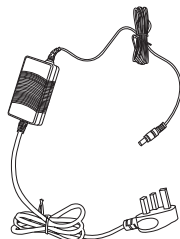
USB-A to USB-A or USB-C
Connection Cable



Wall Bracket



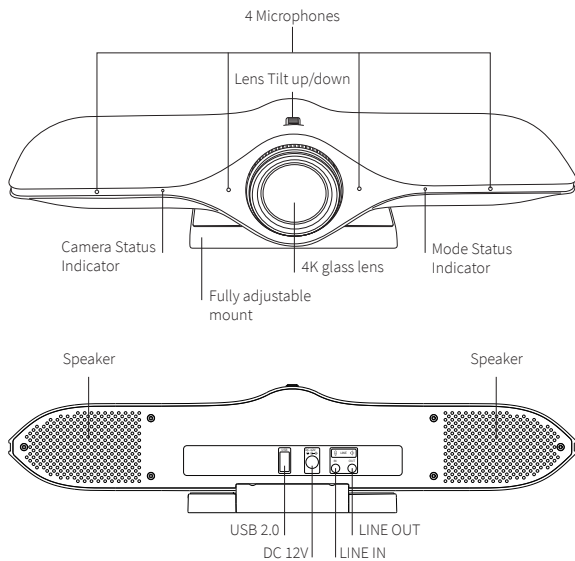
Wall Bracket Fixings



Multi Country DC 12V
Power Adapter



Video Sound Bar - Overview



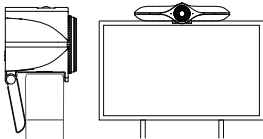


Setting up your conference room video sound bar

1. Placing your camera - Designed with a fully adjustable mount, the JPL Agora can be placed above a computer monitor, positioned on a desktop, or mounted on a wall or ceiling.

(a) Monitor Mount

Unfold the adjustable bracket and place the camera on top of your monitor, adjust the angle of the bracket so that it touches the back of the monitor.

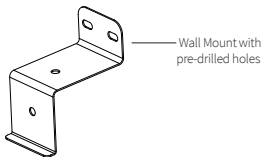


(b) Wall Mount

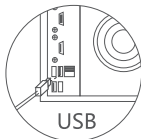
Drill holes in the wall that match the pre-drilled holes on the back of the mount.

 Make sure to check you are not drilling into any electrical wires hidden within the wall.

Put rawl plugs into the drilled holes and then attach the mount to the wall using the screws supplied.



2. Connecting your camera is a simple Plug & Play.
No additional software or downloads are required.
 - (a) Connect the 12V DC jack to the port at the back of the camera and connect the mains adapter to a wall socket.
 - (b) Connect the camera to the display screen using the USB cable supplied.





Video Enhancement

To achieve the best camera performance, there are a few things you can do:

1. **Do not** sit in front of a window or other bright light source.
2. Having an uncluttered background will have your viewers concentrating on you rather than looking at what you have in the background.
3. The mounting system allows for tilting and aiming the camera. Tilt and move the camera to frame up everyone around the conference table.
4. Visit your preferred video calling provider's website for exact information on system and requirements.
5. To get a smoother video, especially at high resolution, we recommend network speed above 2Mbps.

External Bluetooth Device Connection

If your PC does not support Bluetooth, then you can use the Bluetooth in the JPL Agora to connect an additional Bluetooth device, such as a speakerphone. Once paired to the PC, you can select to use the speakerphone as your preferred audio device.

To connect an external Bluetooth speaker/microphone, first make sure the external Bluetooth device is in pairing mode and at the same time, plug the JPL Agora camera into the PC.

- Turn on the Bluetooth connectivity on your PC and the device name should appear in the list, click on it to add the external speaker/microphone.



Technical Information

Camera parameters:

Total Pixels	8.3 million pixels - 4K
Focus Mode	Fixed Focus
Aperture	F/No. =2.5 ±5%
Image Colour	24 Bit
Maximum Effective Pixel	3840 x 2160 @30fps
Output Image Format	MJPEG and YUY2
Picture Adjustment	Brightness, Chroma, Saturation, Contrast, Sharpness
Field of view	D=116° H=107° V=74°
Pan	0°
Tilt	±15°
Intelligent Zoom	16 step, 3 x digital zoom
Minimum Illumination	0.5 Lux
Exposure	Automatic Exposure (AE)
AIC	Auto White Balance (AWB), Dynamic Black Level, Calibration (ABLC)
Resolution @ 30fps	3840 x 2160, 1920 x 1080, 1280 x 720, 640 x 480

Microphone parameters:

MIC Specification	4 x digital microphones
SNR	≥65.5dB
Sensitivity	-26dB Fs
Far-field voice pick-up	0-10 metres
Horizontal voice pickup	Horizontal 180°
Communication mode	Full duplex

Speaker parameters:

Speaker Specification	2 x ø40mm x H 28mm
Power	3W each
Impedance	4Ω
Frequency Range	20Hz~20KHz
Distortion	5% Max



Technical Information

Bluetooth parameters:

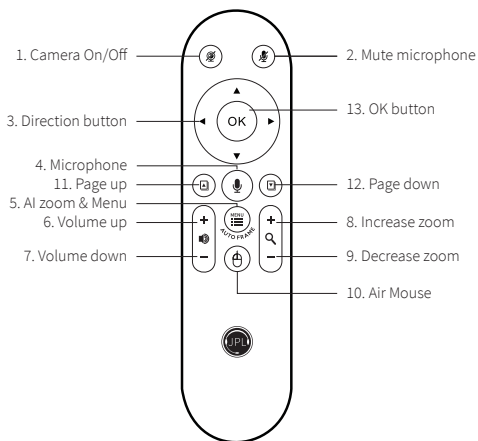
Bluetooth Standard	Bluetooth 4.2/EDR/BLE
Frequency	2400 ~ 2480MHz
TX Power	4±1.5dBm (typical)
RX Sensitivity	-85dBm (typical) $\pi/4$ DQPSK
Operating Systems	Windows; Linux; Android
Operating Distance	10 meters

Other parameters:

Interface type	USB 2.0 Type-A or USB Type-C, Line In, Line Out, Bluetooth
Voltage	DC 12V < 2000mA
OS Support	Win 2000/XP/Vista/Win 7/ Win 8/Win 10, Win CE with UVC, Linux with UVC (above Linux - 2.6.26) Mac OS X 10.4.8 or later, Android 4.0 with UVC
Size	L352 x W75 x H80mm
Weight	960g



Bluetooth Remote Control





Bluetooth Remote Control

Function	Operation
1. Camera On/Off []	Single press to turn the video picture on/off
2. Mute Microphone []	Single press to mute / unmute camera microphone
3. Direction button	Control direction movement of video picture [] Move up, [] Move down, [] Move left, [] Move right
4. Microphone []	Long press without release to switch to built-in microphone of remote controller, release to switch to camera microphone
5. AI zoom & Menu []	Single press to turn AI zoom on / AI zoom off
6. Volume up []	Single long press to increase volume (Synchronise volume control with PC)
7. Volume down []	Single long press to decrease volume (Synchronise volume control with PC)
8. Increase zoom []	Single long press to increase the zoom
9. Decrease zoom []	Single long press to decrease the zoom
10. Air Mouse []	Single click to open/close Air Mouse [] Move up, [] Move down, [] Left click, [] Right click
11. Page up []	For scrolling to next page when viewing multi-page documents
12. Page down []	For scrolling to previous page when viewing multi-page documents
13. OK button []	Long press (5s) [] button to confirm or reset to standard settings



Camera Settings - Remote Control - Button Combination (Step-by-Step)

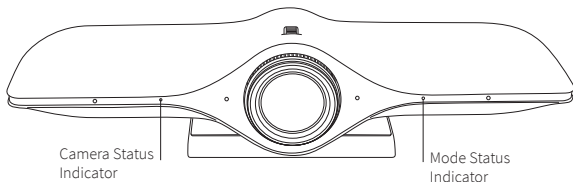
Function	Operation
Activate Settings Mode	Long press (5) AI zoom & Menu [] for 5s and release then press any button to set video picture effect. Press (13) [OK] to confirm and exit.

Adjustable Camera Settings - Remote Control - Button Combination (Step-by-Step)

Function	Operation
Camera Brightness	Press (6) Volume up [+] / (7) Volume down [-]
Camera Contrast	Press (8) Increase zoom [Q+] / (9) Decrease zoom [Q-]
Camera Colour Saturation	Press (11) Page up [] / (12) Page down []
Screen Mirror Effect	Press (3) Direction button [] Move up, [] Move down to mirror the screen horizontally [] Move left, [] Move right to mirror the screen vertically
Move the Image after Magnification	Press (12) Page down [] and then press (3) Direction button [] [] [] [] to move the image accordingly

Re-pairing Settings - Remote Control - Button Combination (Press at the same time)

Function	Operation
Clear Bluetooth settings	Long press (3s), (13) [OK] and (11) Page up [] together
Enter Pair Bluetooth mode	Long press (3s), (7) Volume down [-] and (9) Decrease zoom [Q-] together



Camera Status Indicator

Visual Indicator	Operation
Blue light stays on/turns off	Camera opened/closed



Mode Status Indicator

Visual Indicator	Operation
Light flashes or stays on	Camera has Power and is Active
Blue light flashes	Camera & Remote Control Unpaired
Blue light stays on	Camera & Remote Control Paired
Red light stays on/turns off	Microphone mute turned on/off
Purple light stays on	External microphone connected
Red and blue lights flash alternately	Long press (5) AI zoom & Menu [] on the remote control to enter into setting mode, press (13) [OK] and the flashing light will disappear
Purple light flashes 3 times	Long press (13) [OK] for 3s to 5s to enter RESET







Trouble Shooting


1) No reaction when using the Bluetooth remote controller

- a) If you do not see a red LED light when pressing any button on the remote controller, check to see if the remote controller has batteries and that they are installed correctly.
- b) Repower the JPL Agora Camera and then press the **Volume down** [] and **Decrease zoom** [] at the same time for 3s.

2) Blue LED light flashes slowly on camera

- a) Turn off the power for 3s and then reconnect it.
- b) Press **OK button** [] and **Page up** [] buttons at the same time for 3s until red LED on remote controller turns off.
- c) Press **Volume down** [] and **Decrease zoom** [] at the same time for 3s.

3) Image displays abnormally

- a) Check that the lens is clean.
- b) Press **OK button** [] for 3-5s to enter RESET.

4) Microphone is not active

- a) Check to see if the JPL Agora is set as the default camera in the microphone settings on your PC.
- b) Check if the microphone has been muted by the remote controller.

5) PC fails to read this camera

Check all cables are correctly connected.

6) No image displayed / The image breaks frequently

Check all cables are correctly connected.

7) The video quality is not good after accessing software

Check your video quality settings on the PC.



Conditions of Warranty

1. JPL Telecom Limited, Head Office: Units 1 & 2, Church Close Business Park, Church Close, Todber, Sturminster Newton, Dorset DT10 1JH, England, grants 3 year limited manufacturer's warranty* from the date of purchase, as the manufacturer of this product.
2. For you, as a consumer, this means: We guarantee that our devices are error-free when supplied. If a manufacturing error is identified within 36 months* of the delivery date we will repair or replace the device free of charge without you, as the consumer, having to provide the usual legally required proof that this fault was present when you received the device. We either use new parts or parts in mint condition for the repair or replacement delivery. Any parts removed from the device become our property and can be destroyed by us.
3. In addition to this warranty, you have the unlimited legal right to claim against the supplier on the basis of the terms of the warranty for defects on the basis of the purchase contract. However, in contrast to our Manufacturer's Warranty, the legal warranty for defects only applies to the device's state when sold.
4. You can only claim against this warranty if you return the faulty device to JPL Telecom Limited or our local general importer or distributor, outside England, at your own cost, with a valid proof of purchase (invoice or till receipt). When you return it to us, please provide a detailed description of the fault that has occurred, and also tell us your telephone number, in case we need to contact you. To prevent shipping damage, provide suitable transport packaging (e.g. original packaging with a secondary shipping box).
5. The Manufacturer's Warranty excludes damage caused by mishandling, operating errors, misuse, external influences, lightning strikes/power surges, modifications to the product and extensions. Shipping damage, consequential damage, and costs arising from down times and travel times are also excluded.
6. Do not open the camera housing as doing so will void the warranty. The warranty is cancelled if repairs are carried out by unauthorised agents.

*3 years limited warranty (2 years standard repair or replacement warranty plus a 3rd year cover on the camera only)



REGISTERED ADDRESS

UK Office: JPL Telecom Limited

Units 1 & 2, Church Close Business Park, Church Close, Todber, Sturminster Newton, Dorset, DT10 1JH, England

USA Office: JPL Telecom Holdings LLC

445 W Merritt Ave, Merritt Island, FL 32953, USA