

1 Start Here



Quickstart Guide - AyrMesh® IndoorHub

Turn over for one-page "Ultra QuickStart" Instructions.

Please visit <http://support.ayrstone.com> for detailed instructions, videos, slide shows, and a troubleshooting guide .

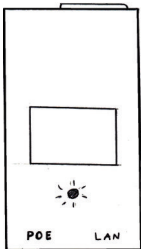
Check Contents of the box:

1. IndoorHub
2. Power Supply
3. Power Cord
- 4.(2) Ethernet Cables (one short, one longer)
5. (3) Screws with drywall inserts (not shown)

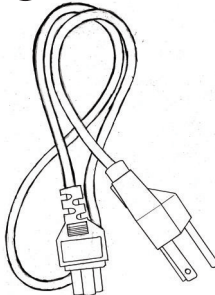
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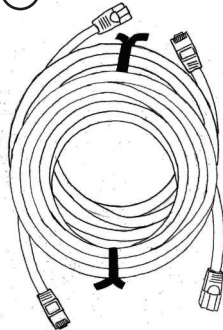
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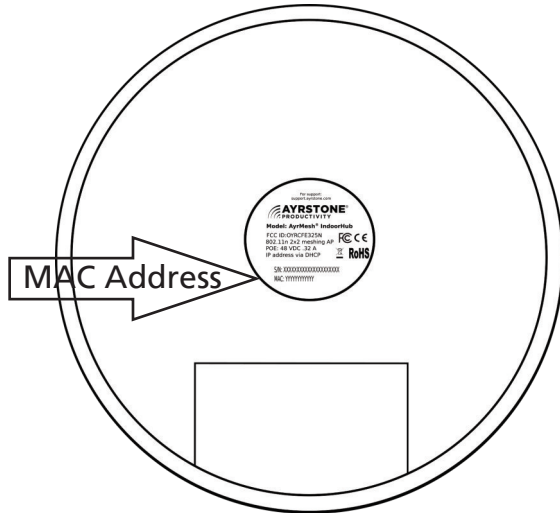
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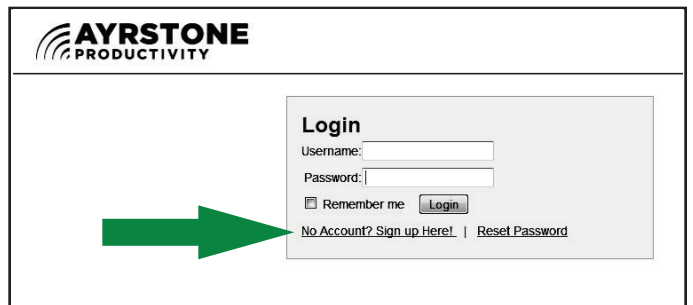
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Turn the IndoorHub over and write down the MAC address of your Hub. Keep it with these directions in a safe place:



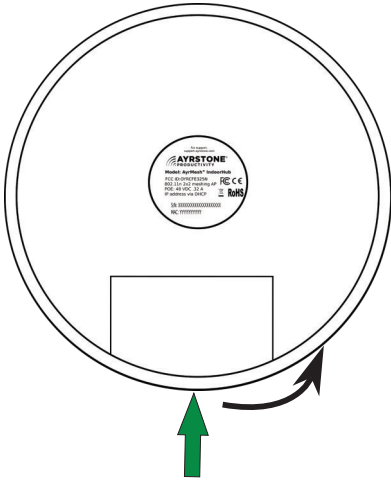
If you don't have an account on AyrMesh.com, create one now using a device connected to your network (not a cellphone unless it's connected to your router via WiFi):



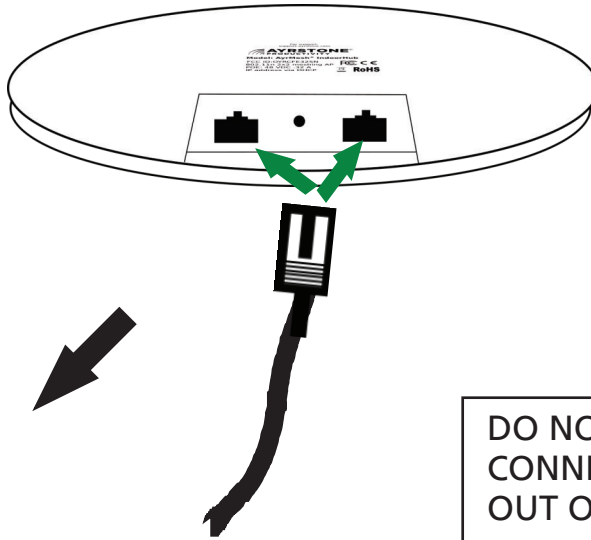
IndoorHubs can use meshing to cover large indoor areas. You'll use a Gateway IndoorHub connected to the network via Ethernet and Remote IndoorHub(s), which only require power. Meshing is disabled by default; see <https://support.ayrstone.com> for details on setting it up.

2 Assemble the IndoorHub and connect to network

A. Remove the mounting ring from the Hub. Grasp the ring where the Ethernet cable enters and "unscrew" it off the Hub:

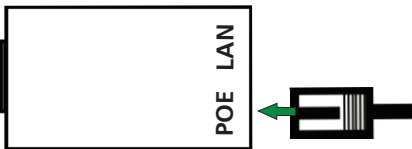


B. Plug an Ethernet cable into either port on the IndoorHub - slide in until it clicks in place:



DO NOT FORCE CONNECTORS IN OR OUT OF PORTS!

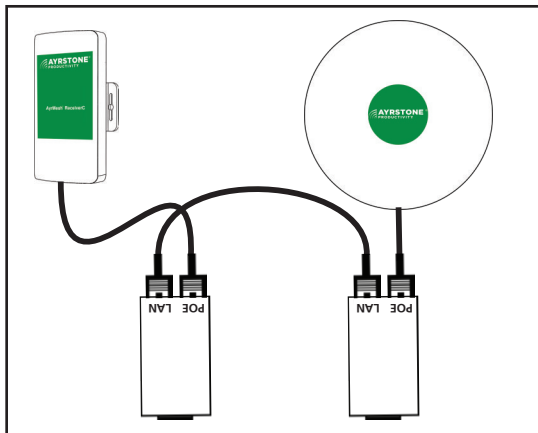
C. Click the other end of the Ethernet cable into the port on the power supply marked "POE":



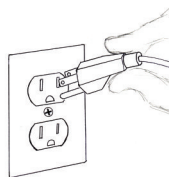
D. Use another Ethernet cable to connect the LAN port of the power supply to the LAN port of your Receiver, Hub, Bridge, or switch:



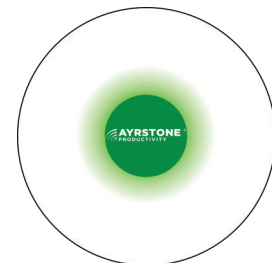
This is how the setup should look:



E. Plug the power supply into the wall:



F. The top light will shine purple, then flash blue quickly, then flash blue slowly, then should finally show steady green:

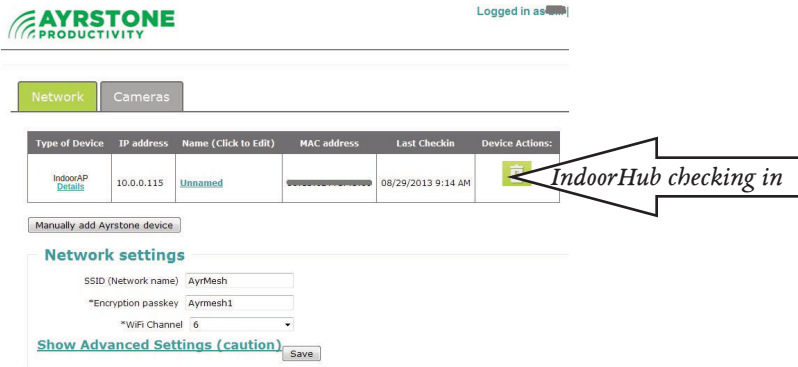


Remote IndoorHubs (not connected to the network via Ethernet) must be Initialized this way, then can be unplugged and moved to their final destination. YOU MUST TURN MESHING ON FOR ALL UNITS!

3

Make Sure IndoorHub is Working

It usually takes about 1-2 minutes for the IndoorHub to check in and show up on AyrMesh.com, but sometimes it takes a bit longer. If it hasn't shown up after 5 minutes, try adding it manually with the MAC address:



You can use the IndoorHub as a "Remote" (connected via the mesh signal) from another IndoorHub. The mesh signal is off by default, it must be enabled on both the "Gateway" (connected to the network with an Ethernet cable) IndoorHub and the "Remote" (connected only via the mesh) IndoorHub for meshing to work.

Note, however, that enabling meshing on two IndoorHubs connected to the network as Gateways will cause a network loop and at least one of the IndoorHubs will stop working.

For directions on turning on meshing for the IndoorHubs, please see the support pages at <https://support.ayrstone.com>.

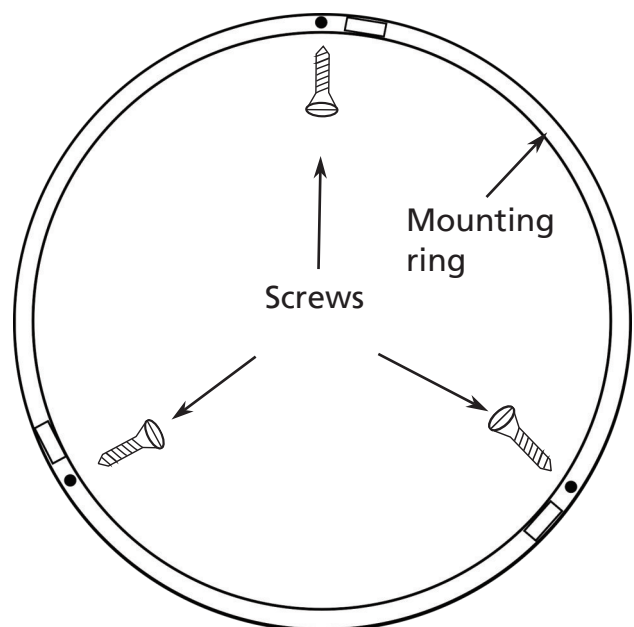
4

Finish the installation

The IndoorHub can be placed on a shelf (preferably up high) or mounted on a wall or ceiling.

Maximum range and bandwidth depends on having clear line-of-sight - try to put it out in the open and up high. Don't hide it under a desk, in a closet, etc.

The IndoorHub can be mounted to a flat surface with three screws. Simply screw the mounting ring to a wall or ceiling - inserts are included for drywall. Then attach the IndoorHub to the mounting ring by placing it on top of the mounting ring with the indentations on the Hub matching the protruding tabs on the mounting ring, and twist to the right to engage the mounting ring.



5 Lights on the IndoorHub

Flashing Blue



IndoorHub is booting

Green



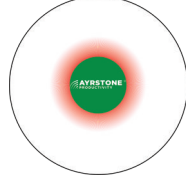
Normal operation
Solid Green- IndoorHub is a Gateway.
Blinking Green- IndoorHub is a Remote.

Flashing Yellow



IndoorHub is a Remote, weak signal from Gateway.

Flashing Red



IndoorHub is not connected to network

The Light blinks on a Remote IndoorHub to indicate the signal strength from the nearest IndoorHub. The signal is indicated as follows:

- Yellow light - weak
- Green every 3 seconds - fair
- Green every 2 seconds - good
- Green every second - very strong (may be too close)
- Red - no signal

6 Using the IndoorHub

The AyrMesh IndoorHub provides normal 802.11n WiFi, just like any other WiFi access point.

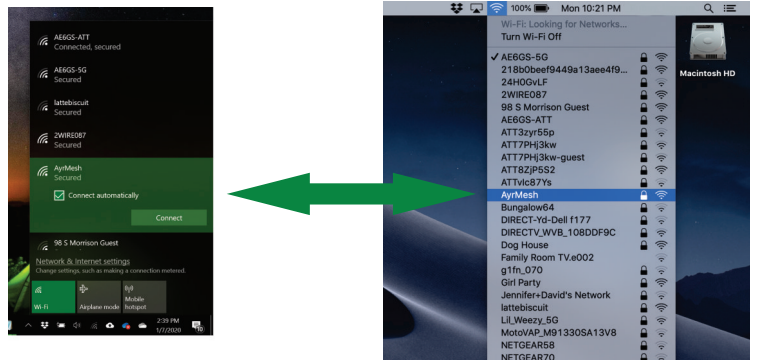
The IndoorHub will have the same encryption passkey as your AyrMesh Hubs (as set on AyrMesh.com), and the SSID will be the same but with "_IndoorAP" appended on the end. This is to keep AyrMesh Receivers from connecting to the IndoorHub.

Note that devices can be plugged into either Ethernet port of the IndoorHub to connect them to the network.

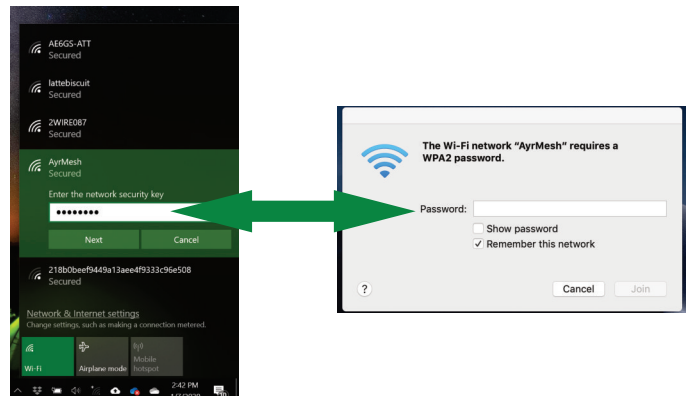
Changes on AyrMesh.com may take up to half an hour to take effect on your network - the AyrMesh devices wait before changing to make sure all the devices in the network receive the new configuration.

The AyrMesh network extends the IP network of your router, so, from a networking perspective, everything connected to the AyrMesh network appears as if connected directly to your router.

Select AyrMesh network (default: AyrMesh)



Enter the paskey (default: Ayrmesh1)



7

Troubleshooting

• NO LIGHTS ON

- make sure power supply light is on steady (not pulsing or blinking); if not, make sure power cable is fully plugged into power supply and into the wall plug. Make sure the wall plug has power. If power supply won't light up, contact Ayrstone support.

- check cables: make sure all cables are fully clicked into place; use a known-good short Ethernet cable (available at most hardware stores).

• Light flashes RED AND/OR INDOORHUB DOES NOT CHECK IN TO AYRMESH.COM

- If IndoorHub does not appear in your account, enter the MAC address into your account on AyrMesh.com by hand.

- Gateway IndoorHub

- check the cables between the IndoorHub and the power supply and the power supply and the router - replace with known-good short Ethernet cables.

- check to see if the IndoorHub appears in the DHCP list (sometimes called "connected devices") on your router. If it does, check your router configuration to see if there is some sort of web blocking enabled or some other problem. Try a "factory reset" on your router.

- Remote IndoorHub

- Ensure that meshing is enabled on both the Gateway IndoorHub and the Remote IndoorHub

- Make sure the IndoorHub is getting good signal from the nearest "upstream" IndoorHub

• DIFFICULT TO CONNECT TO THE WIFI SIGNAL

- Don't use special characters (especially "%", "#", "&", and "\$") or spaces in the SSID or encryption passkey.

- Make sure you are spelling the passkey correctly - for example, the capital "A" in "Ayrmeshr"

- Solid objects will significantly weaken the strength of the WiFi signal - walls may weaken or block the signal and anything metallic will almost certainly block the signal completely.

• NETWORK CRASHES AFTER AYRMESH DEVICE ADDED

- Check for static addresses on your network - do not use static IP addresses on devices in your network; use DHCP reservations instead to avoid IP address conflicts.

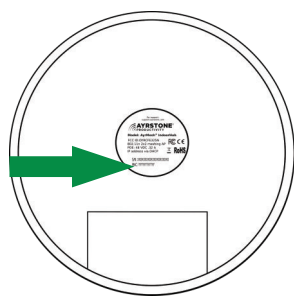
- Check for network loops - commonly caused by devices with multiple ways to connect to the network (e.g. laptops, printers, or cameras with both Ethernet and WiFi)

See <http://support.ayrstone.com> for additional information, hints, and troubleshooting tips.

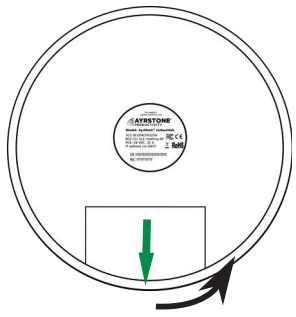
ULTRA-QUICKSTART GUIDE

These minimized directions are intended for more knowledgeable or experienced installers, or just for the impatient. Turn this booklet over for more in-depth instructions, and see <https://support.ayrstone.com> for additional information.

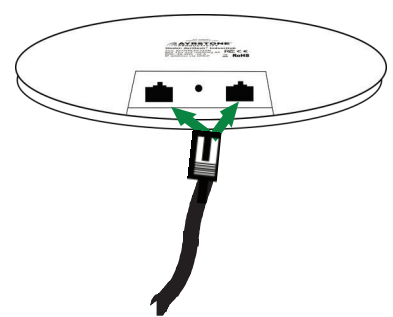
1 GET READY: Write down the MAC address of the Hub in the box below and put it someplace safe. If you haven't already, create an account on AyrMesh.com from a computer connected to the same router that the Hub will be connected to. This ensures you won't have to enter the Hub's MAC address manually.



2 DISASSEMBLE: Remove the mounting ring from the back of the Hub by grasping it at the hole for the Ethernet cable on the bottom and twisting it.

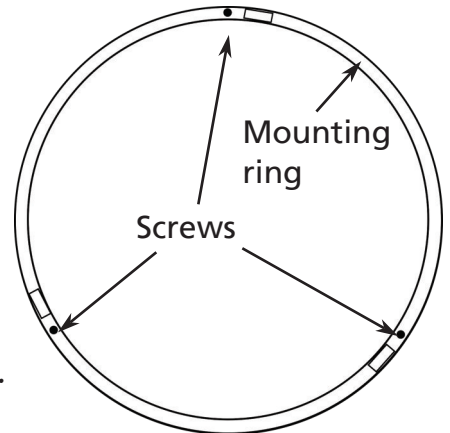


3 CONNECT: With an Ethernet cable, connect the LAN port of the Power Supply to your router, AyrMesh Receiver, Remote Hub, or Bridge. With another Ethernet cable, connect the PoE port of the Power Supply to either port on the IndoorHub. Plug in the power supply (light on the top of the IndoorHub will go on). Wait until the IndoorHub checks in to AyrMesh.com - the lights will flash purple, then blue, and finally stay on solid green. This should take about a minute.



4 INSTALL: The IndoorHub can be placed on a shelf (preferably up high) or mounted on a wall or ceiling.

The IndoorHub can be mounted to a flat surface with three screws. Simply screw the mounting ring to a wall or ceiling - inserts are included for drywall. Then attach the IndoorHub to the mounting ring by placing it on top of the mounting ring with the indentations on the Hub matching the protruding tabs on the mounting ring, and twist to the right to engage the mounting ring.



NOTE: THIS GUIDE DOES NOT COVER USE OF "REMOTE" INDOORHUBS.
See <http://support.ayrstone.com> for additional information, hints, and troubleshooting tips.