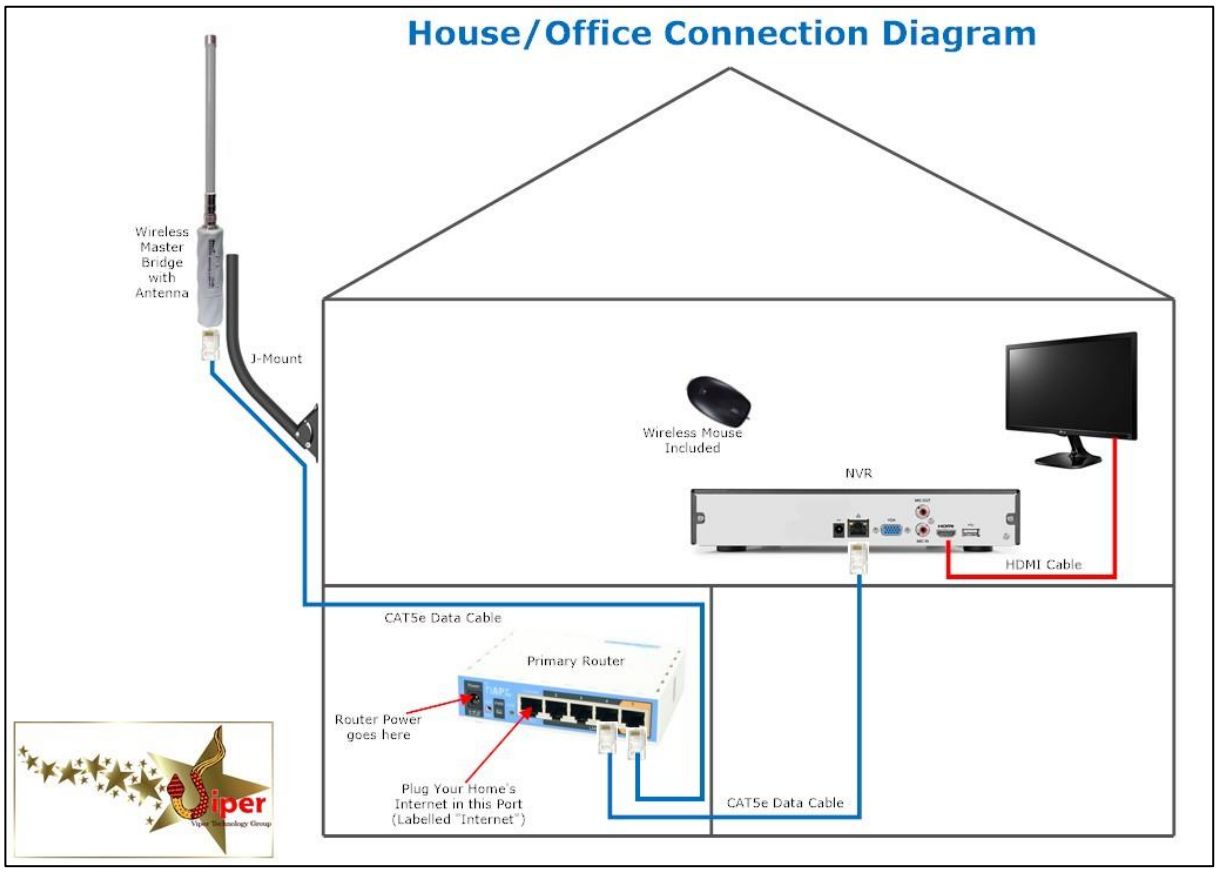
VIPER VCAM SERIES IP CAMERAS

Installing The House and Viewing Equipment

Installing the Wireless Master Bridge

You will need to install the Wireless Master Bridge at your house, or wherever you want your cameras' signal to be transmitted to for viewing on a TV or computer (or both). You will need to have a permanent internet service at this location, since your camera system will need to be connected to the internet for the phone app to operate. Refer to diagram below:



You will need several Ethernet data cables to complete this section:

- CATCBL-RJ-RJ outdoor-rated (available in lengths to 150 feet) – to connect Master Bridge to Primary Router. Usually labelled "**Cable 1**".
- CATCBL-RJ-RJ indoor-rated – to connect Primary Router to NVR. Usually labelled "**Cable 2**".
- HDMICBL (available in 3', 6', 10', and 15' lengths) – to connect NVR to monitor or TV

Use the included screw-on black cable clips to fasten cables to the house/buildings.

NEVER Use standard T50 staples (or similar) to fasten any network cable. Damage WILL occur, often rendering the cable useless. If you wish to staple, use a cable stapler with correct rounded top cable staples, and use extreme caution. We recommend plastic electrical straps or nail-in cable only.

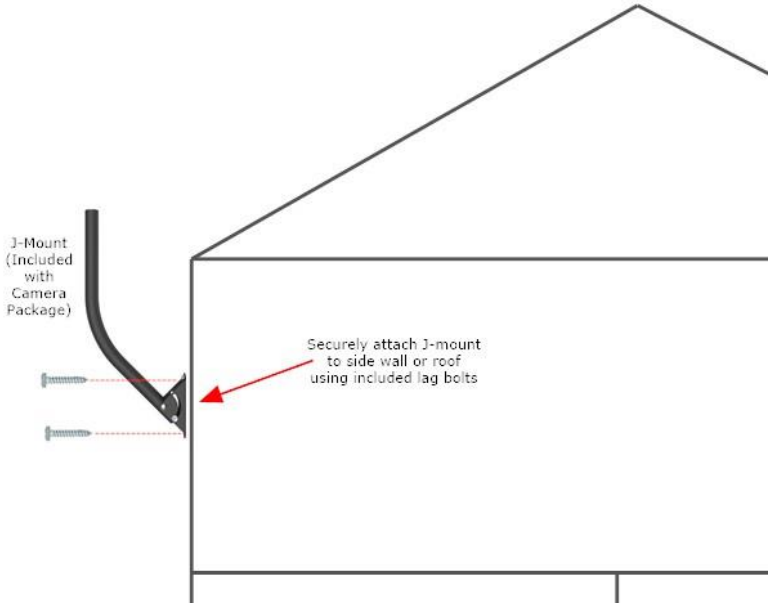
*** Note that line-of-sight is very important in your installation of wireless bridges. There should be no buildings or other obstacles between your Master Bridge and any of the Camera bridges. Trees are typically okay as long as the distance between bridges isn't greater than 1/2 mile.*

The Master Wireless Bridge and all Camera Bridges MUST be installed outside of any building. Typical mounting locations are on the roof, on the wall of the house/office (install as high as possible up the wall), or mounted to a sturdy post.

The Master Bridge and all Camera Bridges MUST be installed so the cable connecting to it exits DOWNWARD. Mounting the bridges so the cable exits sideways or up will result in your system functioning poorly or not at all

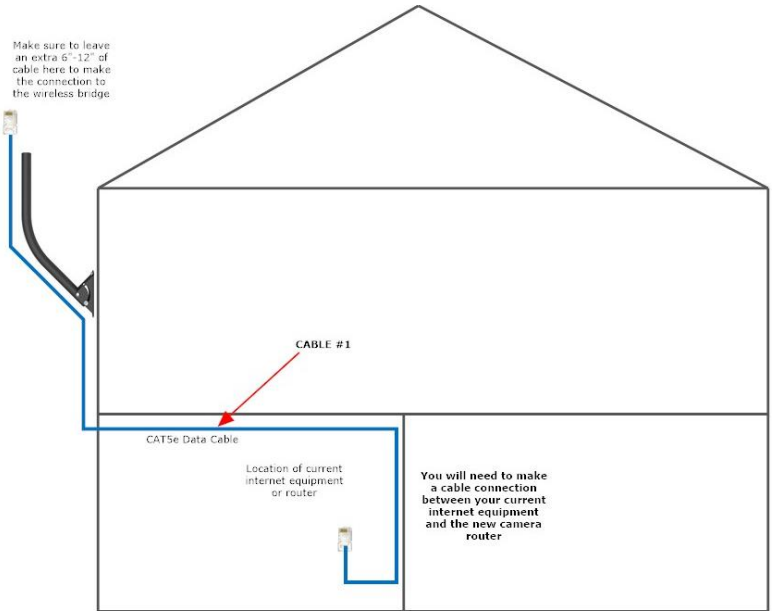
1. Install the Master Bridge J-mount:

   Attach the bracket to a solid object (roof fascia, wall, etc.) using the 2 lag bolts, supplied. Alternatively, you may install the Master Wireless Bridge to an existing tower or mast. However, there MUST be a MINIMUM of 3 feet (preferably 6 feet) between the Master Bridge and any other wireless antenna or satellite dish, including and especially 2-way radio antennas.

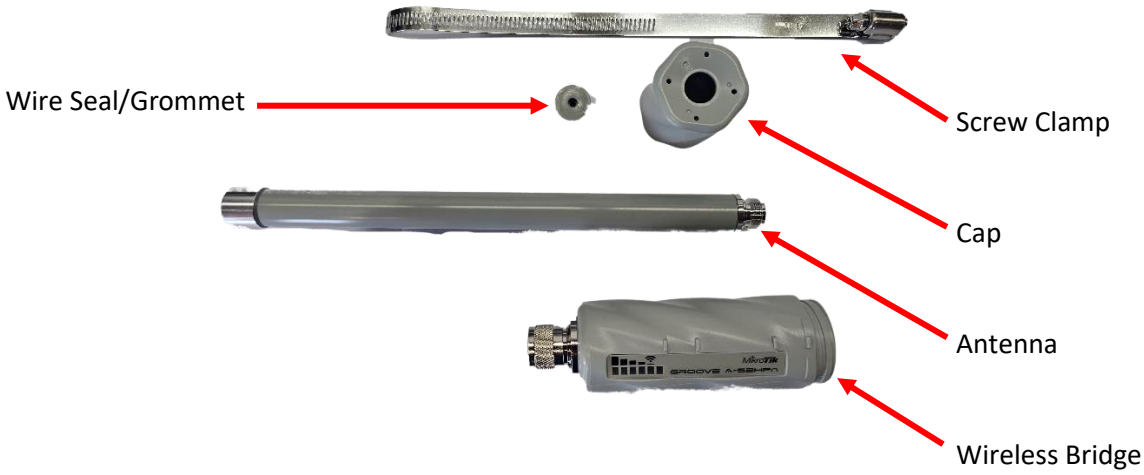


2. Run the pre-terminated CABLE #1 Ethernet cable from the location where you will have the Primary Router to the location of the Master Wireless Bridge. Drill a 5/8" or 3/4" hole through the wall to run the cable to the outside of the house/office. Seal this hole with silicone or plumber's putty once the job is done.

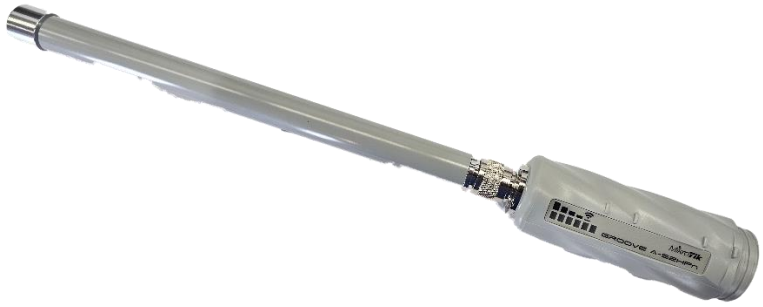
3. Run the CABLE #1 data cable up to the J-mount . Make sure to have an extra 6" to 12" at the mount to make the connection to the bridge. Secure with the included black tie straps or electrical tape.



4. Master Wireless Bridge parts:

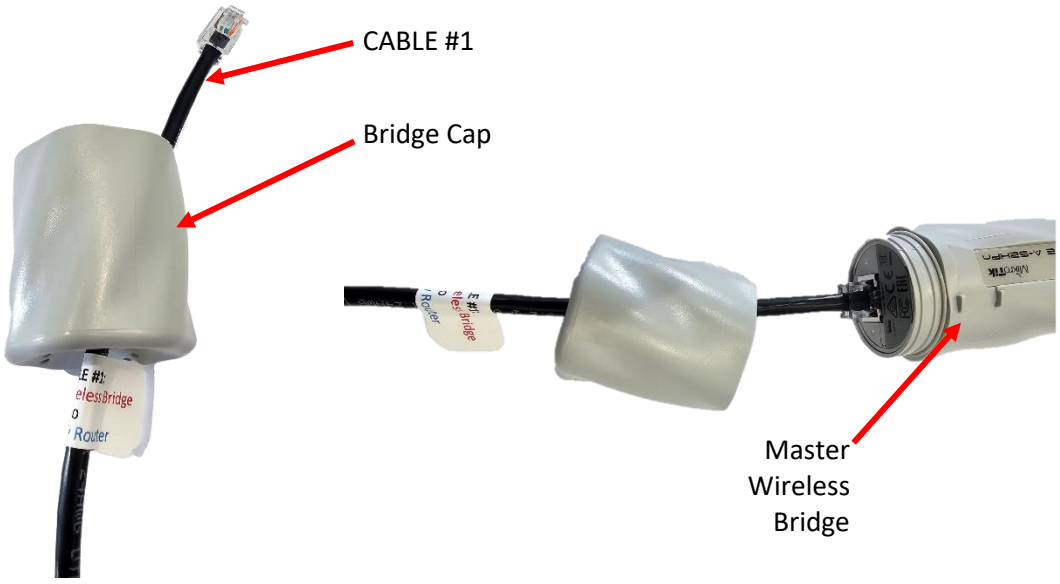


5. Install the antenna on the Master Wireless Bridge. Screw the included 8dbi antenna onto the female threads of the Wireless Master Bridge. Tighten until SNUG – **DO NOT OVER-TIGHTEN, AS YOU CAN EASILY BREAK THE BRIDGE.**



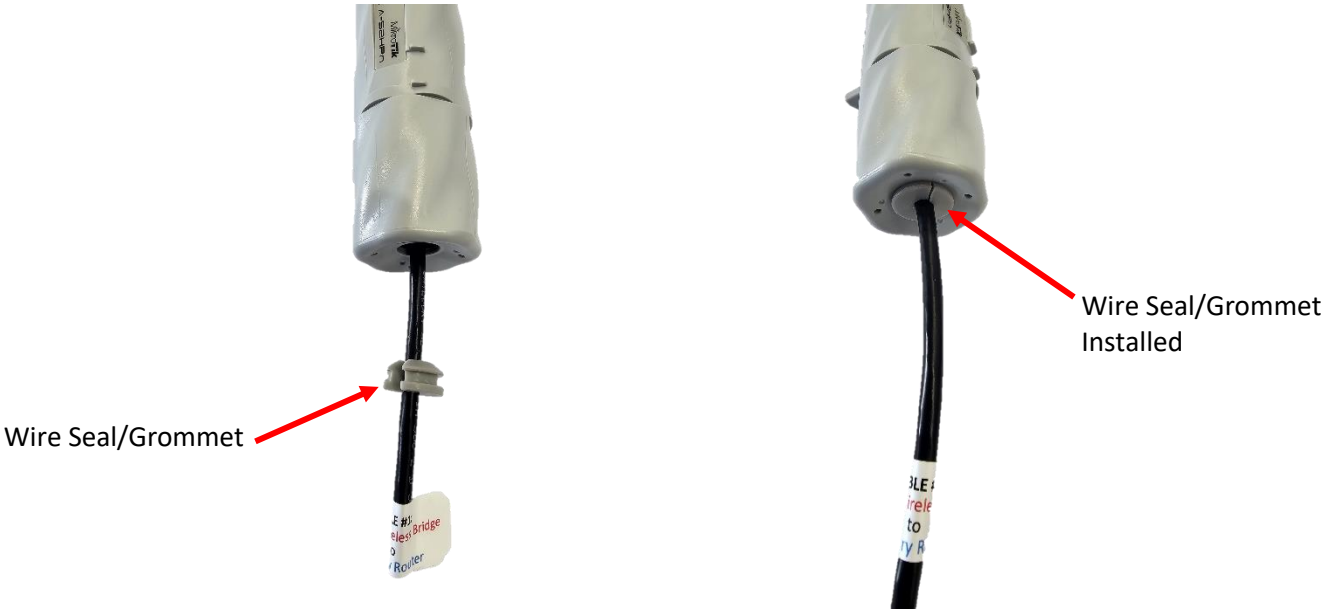
6. Connect the CABLE #1 data cable to the Master Wireless Bridge:

    a. Remove the rubber grommet from the bridge cap. Feed the CABLE #1 data cable through the hole in the bridge cap and firmly plug it into the Master Wireless Bridge.



    b. Screw cap onto bridge and tighten snug. Again, don't over-tighten in case you ever need to remove the cap in the future.

c. Place the rubber grommet over the cable (the grommet is split) and slide up to the cover. Carefully and fully tuck the grommet into the bridge cap, creating a weatherproof seal.



7. Attach the Master Wireless Bridge to the mount:

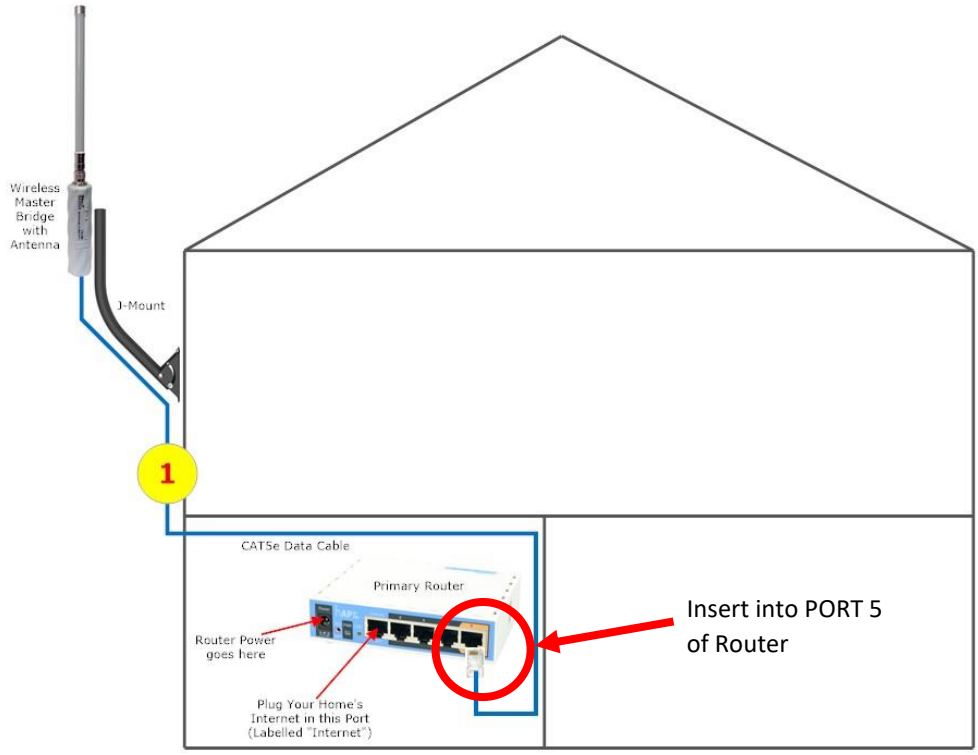
a. Use screw clamp (included with bridge) to securely attach Master Wireless Bridge to J-Mount. Coil up extra cable neatly (DO NOT KINK) and attach to the J-mount using wire ties, electrical tape, etc.

Be sure to leave a little slack in the cable before it enters into the bridge – if not, when the wire shrinks due to cold weather, it could disconnect the cable from the bridge.

Install the Router and NVR

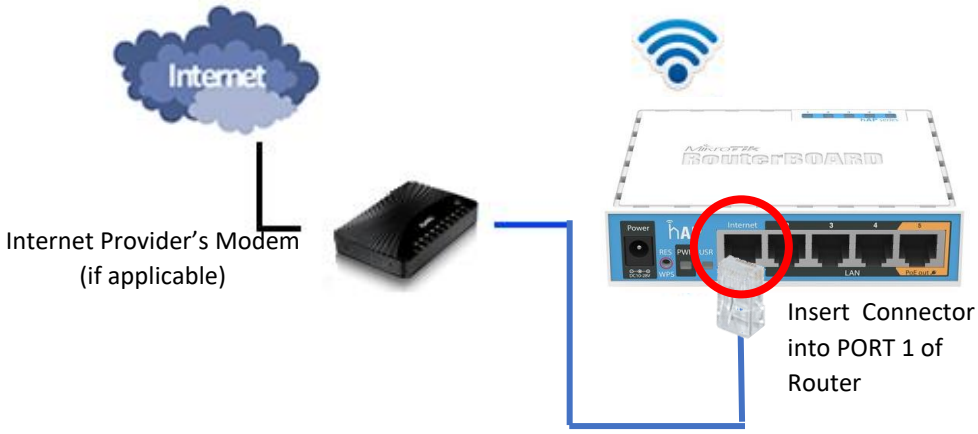
You will connect the CABLE #1 Ethernet cable that you just ran into the house from the Master Wireless Bridge to the Primary Router. This cable MUST be installed into port #5 of the router.

1. Connect the CABLE #1 from the Master Bridge to the Port #5 of the Primary Router.



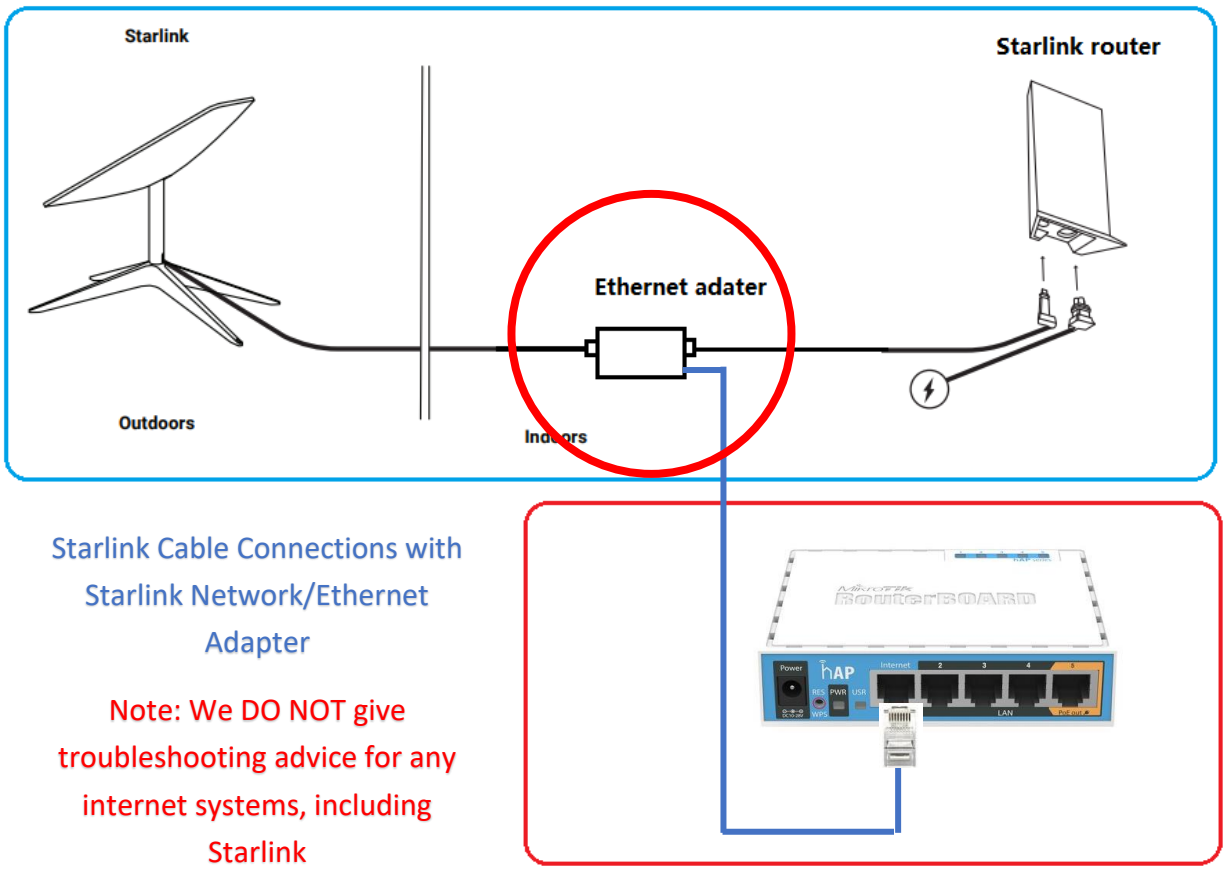
2. Connect the router's power cord to the back of the router.

3. If you have internet service, connect the grey 5-foot CAT5e patch cable (provided) from your internet service into port #1 of the router (labelled "Internet").



IMPORTANT

If you have Starlink internet with the Generation 2 equipment, you MUST have the Starlink Network Adapter plugged into the Starlink modem, and a network cable connecting the Starlink Network Adapter to PORT 1 of the primary router. There is no other way to do this with Starlink internet. You can purchase the adapter from the Starlink store or from Amazon.



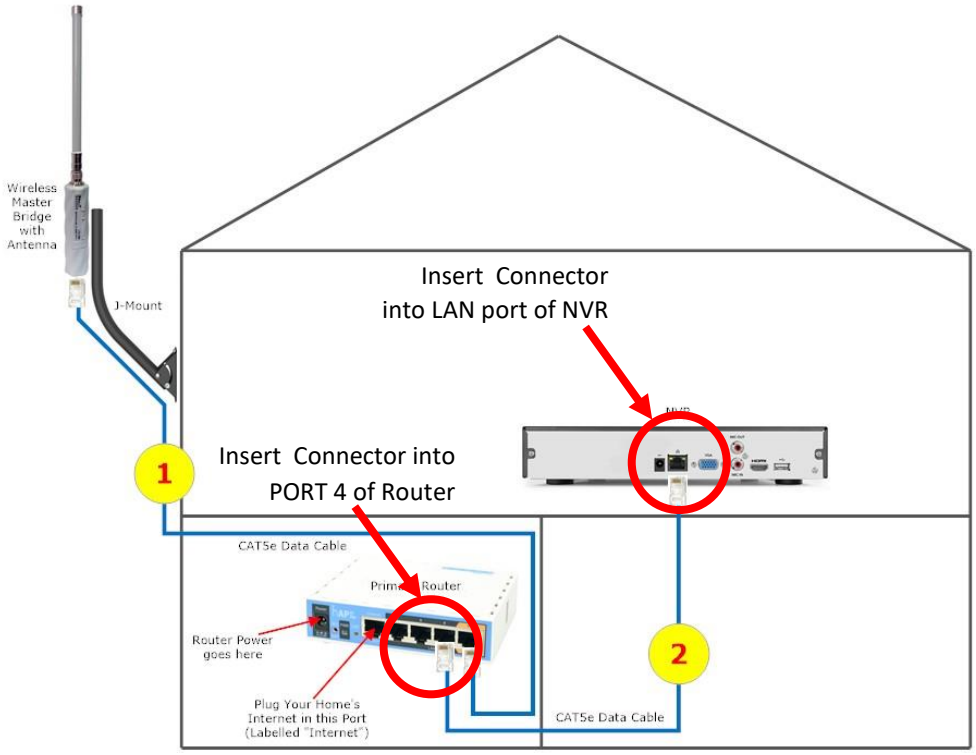
Starlink Cable Connections with Starlink Network/Ethernet Adapter

Note: We DO NOT give troubleshooting advice for any internet systems, including Starlink

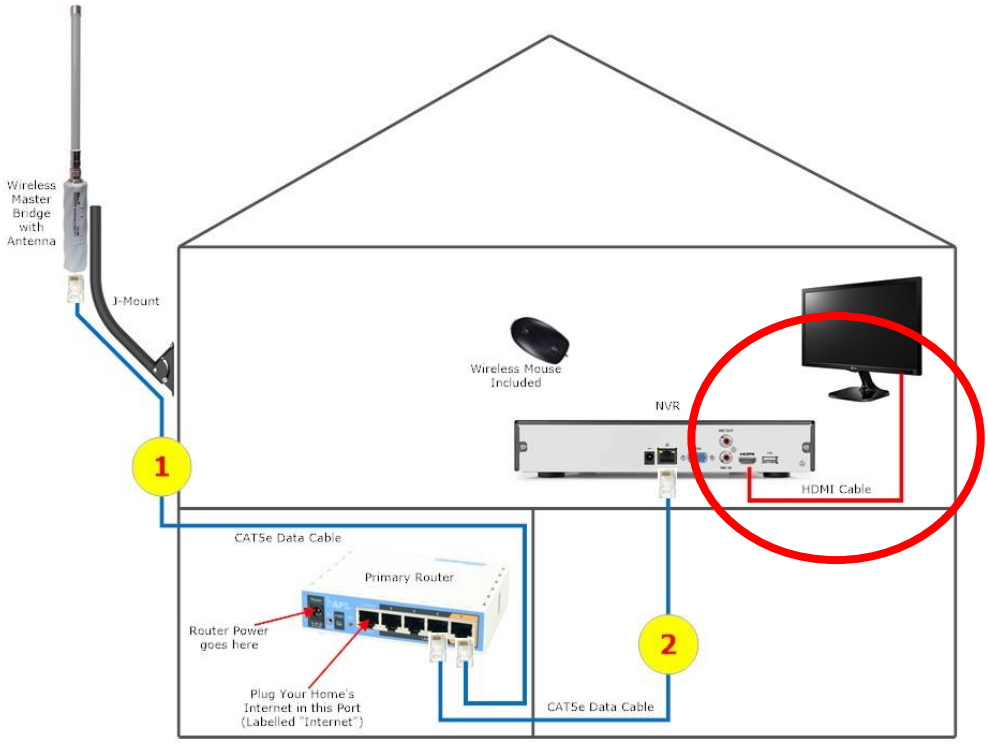
4. Plug the power supply for the Router into a surge-protected electrical outlet, power bar, or for the best power protection, a UPS battery backup.

A UPS (uninterruptable power supply) battery backup not only protects from power surges, but also small power disruptions, called “brown-outs”, which are notoriously damaging to electronics. This is by far the best protection. Look for the Schneider/APC brand for the best quality.

5. Connect the CABLE #2 (indoor-rated Ethernet cable, provided) from the NVR's LAN port to PORT #4 of the Router. **Note**: *If the NVR is in a different room than the Router, a longer CABLE #2 cable can be ordered.*



6. A short (6' or 10') HDMI cable will be included to connect the NVR to your TV, if desired. If you are using your computer or smartphone only to view the cameras, there is no need to connect the NVR to a TV or monitor.



7. In most kits a wireless mouse is supplied; in this case the wireless mouse receiver has already been installed in the NVR, all you have to do is turn the mouse power switch on (located underneath the mouse), or click the mouse buttons a few times to turn it on if no power switch is present.