

Common Issues and How to Avoid Them

Alignment and wind

We've had many antennas lose alignment in the wind. There's a few simple things you can do to prevent this-

1. Use a socket and drill to tighten hose clamps fast. It's hard to get the hose clamp tight with a screw driver. A socket and drill will get it really tight. You'll need a socket set that has both [american and metric sockets](#).
2. Put one layer of electrical tape under the hose clamp. This can help stop slipping, especially on smooth j-pipes like the Ubiquiti ones.
3. Make sure pipe mounts can't twist by putting a bolt through them. You'll need a set of metal drill bits (such as titanium) and some 2 1/2" long 1/4" bolts.

If you can move the LiteBeam with your hands, it will also move in the wind. Larger antennas, like the LiteBeam LR need even more care to stop them from moving in the wind.

Bad crimps

Ethernet testers aren't perfect so you need to check your crimps visually-

1. Wires are in correct order!
2. All wires are pushed all the way to the end
3. All pins are pushed down after crimping (important!)
4. The cable jacket is just inside the RJ-45

If the first three things are correct the cable will work! The jacket being inside the RJ-45 gives it a bit more strength.

It is possible that the cable tester will wrongly say it is fine even if the wires aren't at the end and the pins aren't all down.

The crimping tool's job is to push the pins into the wires. Look at the pins before and after crimping and you should see that they are all pushed down by the same amount. Some crimping tools are incompatible with the toughcable jacket and are unable to push the pins down evenly. We recommend [this crimper](#)

Not enough cable

To save carrying a full box of cable many installers take a roll of cable (and occasionally not enough)

Here's a short guide to help:

1. Tough cable is marked every meter. Each box is 305m so if the end says 255m you have 50m left
2. 50 meters of cable is enough to do an average install
3. Each floor adds about 3 meters to the length
4. Member's floor info is now on the schedule to help with calculation
5. Each extra apartment adds about 20m + floor calculation
6. 100m is the max length for Cat5 cable. (data loss and voltage loss is too much)
7. If you have a roll, you can measure one loop and multiply by the number of loops

1 meter = 3 feet

OmniTik power problems

The biggest confusion with OmniTiks is that one model has POE out (OmniTik POE) and one doesn't. They both look the same. There is obscure print near the ethernet ports that will tell you if it is ethernet out. OmniTik POE has a much larger power injector and this must be used to power it. If you accidentally power it with a smaller adapter it will work but the LiteBeam will occasionally reboot.

Sometimes the OmniTik won't automatically power the LiteBeam. You can force on the power by going to Webfig>Interfaces>ether5 and select "PoE Out: forced on". Also check that you are using the correct power injector for the Omni as this can also cause this problem. If the "PoE Out" option is missing you have the wrong kind of OmniTik!

Use electrical tape to tape the small DC power cable to the white injector after plugging it in. This often comes undone causing all sorts of problems. The DC power cable is the same as the tp-link DC cable, and will break the tp-link if you plug it into that instead.

The OmniTik should plug directly into a wall, not a power strip to avoid accidental power loss.

Revision #2

Created 9 December 2023 04:39:42 by Willard Nilges

Updated 9 August 2024 02:54:12 by Lydon Thorpe