

ZigBee Home Gateway Tips & Tricks

Having trouble getting your ZigBee Home Gateway device to connect to your SolarEdge Inverter?

Here are a few recommended actions to perform and items to check to get the ZigBee master and slave devices to sync!

Try this first!



Regardless if it's BlueTooth, WiFi or ZigBee, the hardest part of any wireless communication setup is getting it going. For this trick you might need an extension cord to get power to the Home Gateway where the inverter is located, but the success rate is almost 100%.

- A) Make sure the ZigBee slave card is installed, and the inverter AC power is on.
- B) Remove the Home Gateway's antenna.
- C) Sync the Gateway RIGHT NEXT to the inverter (4 feet or less with no obstructions).
- D) Once the link is established, **re-attach the antenna** and move the Home Gateway back where the internet connection is located and plug it in.

Do you need to update the firmware?

New SolarEdge ZigBee Home Gateway kits require the inverter's CPU version to be 2.9+ or 3.12+ (depending on communication board model). Each kit includes an SolarEdge Micro-SD card with the newest firmware which will upgrade either model with the necessary update.

To confirm you have the appropriate firmware version, tap the green LCD button until you see the ID screen showing the inverter serial number, and check the CPU version displayed.



Is there a plasma TV in the way?

The ZigBee protocol, just like BlueTooth or WiFi, is susceptible to signal interruption. One common device in particular which can interrupt this signal is a plasma TV. When troubleshooting a connection, verify there isn't a plasma TV directly between the Home Gateway and the inverter, and if possible, relocate the Home Gateway to avoid that path.

If none of that achieved a link, check the following:

1.) MODULE COMPATIBILITY

SolarEdge recently changed ZigBee modules used in the Home Gateway Kits. It's important to know which version of each device you're using, because if you're mixing and matching kits, not all configurations work; and one requires an extra setting modification.

Home Gateways: The version-1 [V1] Home Gateway has its antenna attached below the lights and button on the left hand side. The version-2 [V2] Home Gateway has the antenna connector above the lights and button.

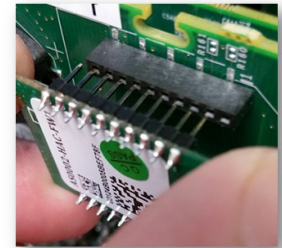
Slave Modules: The V1 slave module is blue, and the antenna attachment is mounted right on the board. The V2 slave module is green, and has a short wire connecting the board to the antenna attachment.



- ◆ If you're using a full V1 kit, or full V2 kit, there are no special configuration requirements.
- ◆ If you are using a V1 slave Module with a V2 Home Gateway, you will need to change the **Communication** menu **ZigBee Config** option **Profile** from "DIGI" to "ZB2007".
- ◆ **A V1 Gateway will not work with a V2 slave module.**

2.) PIN ALIGNMENT

One easy mistake to make is to have the pins on the slave module mis-aligned. If the slave module is not aligned correctly, the inverter will never detect it and the Home Gateway will not be able to sync to it. Install carefully.



3.) AC POWER CYCLING

Any time the slave module is put in, it is necessary to cycle the power to the inverter for that slave module to be detected. This will only happen if the inverter is COMPLETELY powered down, which means interrupting AC power at a breaker or exterior disconnect.

4.) SYNC TIMING



To sync the Home Gateway to the inverter with the slave module connected it is important to start this sequence correctly. If the button is held down too long the Home Gateway goes into a diagnostic mode which will not accomplish the sync. To sync: hold the red button down until all the LED lights on the side light up, and then immediately release. The lights should flash for approximately 2 to 3 minutes.

5.) BE GENTLE

It is important not to jam the Micro USB connector into the Home Gateway. The power supply connector should slide easily into place without much resistance. If it doesn't want to fit, try flipping the connector over.

If you're still unable to link, contact our Technical Support team at 877-360-5292.