Connection for PLC Success with TED 5000 (MTU to Gateway Communication).

1. Locate the circuit from which the Router is being powered. If the customer requests that the Footprints software be made available on their home’s wireless network, the Gateway will need to be plugged in near the router – but plugged into its own outlet.

* Please note that the MTU(s) cannot be connected to an AFCI circuit breaker – the PLC signal will cause the breaker to trip. The MTU(s) can be powered from any other available breaker, within specification of the National Electrical Code.

2. Once the circuit is located, trace the circuit back to the breaker. This circuit breaker is where the signal from the MTU(s) will need to reach for successful communication between the MTU(s) and Gateway - the Gateway will be plugged into an outlet on this circuit.

   **NOTE:** Use the provided plug-in noise filters on as many devices as possible that are plugged into the Gateway/router circuit (router, modem, computer, printer, fax, power strip powering various electronics, television, etc.). **DO NOT PLUG THE GATEWAY INTO A NOISE FILTER.** Be sure that the Gateway is plugged directly into an outlet and not into a power-strip or anything of that nature.

   **NOTE:** UPS Battery backup(s). Having a UPS or any other type of battery backup system on the same circuit as the Gateway will negatively affect the signal between the MTU(s) and Gateway. Typically having a plug-in filter on these items will cancel them out as a source of interference.

3. Now that Gateway circuit has been located (the ‘Gateway circuit’ breaker), the next step is to connect the MTU(s) in the panel(s). You will be connecting the MTU(s) as shown in video number four: [http://www.theenergydetective.com/support/troubleshooting](http://www.theenergydetective.com/support/troubleshooting).

4. To successfully communicate from the MTU(s) to the Gateway, the MTU’s black wire will need to be either connected directly to the Gateway circuit breaker, or connected on the same PHASE as the Gateway circuit. If the option of connecting the black wire directly to the Gateway circuit breaker is available, then do so, as this is the best possible configuration for the system. If this option is not available, the MTU will still need powered as shown in video number four above, but it will simply be powered from a circuit that is on the same PHASE as the Gateway circuit.

   **NOTE:** The steps above apply to any installation – whether it is a single MTU system or a two, three, or four MTU system (5000, 5002, 5003, 5004). When installing multiple MTUs however, if they are located in the same panel, you can connect them all identically by using a ‘pigtail’ connection. Essentially all this means is that the MTUs will be powered as though they are a single MTU by using a wire nut to connect all of the black wires together and then running a wire from that connection to a single breaker to power the units universally.