

LTE POTSwap Troubleshooting

LED Indicators

The LED indicators on the front panel of the LTE POTSwap can provide information to assist in troubleshooting.



Signal Strength LED's

A stack of 4 LED's on the left side of the front panel.

These provide a similar function as the signal bar indicator on cellular telephones. The LED's will illuminate from bottom to top as follows:

- 1 LED – Marginal signal strength
- 2 LED's - Okay signal strength
- 3 LED's – Good signal strength
- All 4 LED's - Excellent signal strength

NO signal – if a single LED is being illuminated alternately from bottom to top and back in a 'scanning' manner, there is no detectable cellular signal available.

No signal is an indication of a cellular antenna issue or the inability to detect a cellular signal. Operation deep inside buildings and metal structures may require the use of a remotely located (cabled) antenna.

Note that even with no SIM card present the cellular radio can indicate the signal the availability of cellular networks.

The presence of a cellular signal is not an indication by itself of normal cellular operation.

Application Note 118

Operation LED's

A stack four LED's adjacent the signal strength LED's indicate operational status as follows:

POWER LED:

GREEN	System is powered
OFF	System has no power
RED or Blinking	System Fault (contact Janus)

STATUS LED:

GREEN	Phone line 9RJ11) is OFF-HOOK (also during initialization)
Fast blink	Phone line (RJ11) is ON-HOOK

CELL LED:

GREEN	Registered on cellular network
RED	Not Registered*

GPS LED:

GREEN	GPS has location fix
RED	No GPS location fix

* When the CELL LED stays red (not registered) for more than a few minutes after powering the POTSwap, it is usually an indication of a poor antenna connection or a problem with the activation on the cellular network. Check that the SIM card is properly installed and that it has valid activation with a cellular carrier. The plan provided by the carrier must support voice – a data only plan may not allow voice calls to be made.

Troubleshooting Tips

- When troubleshooting problems with a third party auto-dialer, it can be helpful to test the POTSwap with a standard POTS telephone or a linesman's handset connected to the RJ11 PHONE-FXS jack. Make sure not to use a PBX type telephone set as they are usually incompatible with a standard POTS line.
- The dial tone on connected telephone equipment is generated by the POTSwap and is not necessarily an indication of cellular network connectivity.
- The POTSwap is capable of supplying about 10mA at 40V to the external telephone equipment connected to the RJ11 jack.