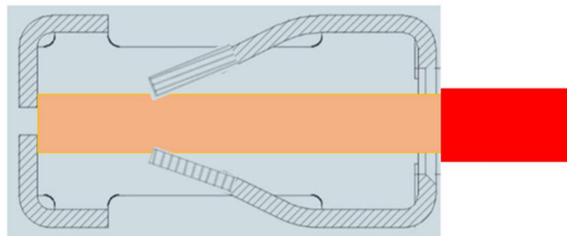
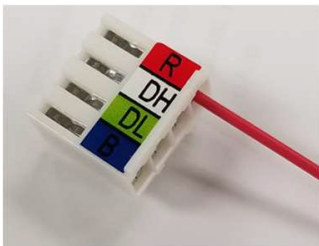
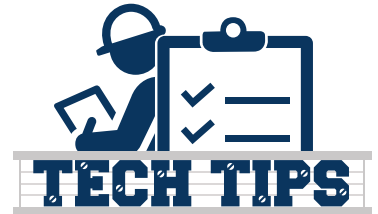




LINK COMMUNICATION TROUBLESHOOTING

Trane Technologies has launched its new LINK communication platform, and we want to provide you with technical support, wiring tips and tricks.

The images below show the CAN (Controller Area Network) connectors and a close-up view of the retainer clip used to hold the wire in place. LINK will utilize four wires for communication and voltage. Each wire is inserted into the clip, which is held in place by metal retainers. These do allow for some rotation but hold nicely. Be sure not to add multiple wires into a single port and to use an 18-gauge solid core wire.



Tips:

- CAN connectors are designed for 18-gauge solid core wire ONLY. No exceptions. No other wire size will properly fit the CAN connector.
- The Equipment Summary in the LINK app shows what's online and what's not online. This will guide you in troubleshooting by identifying which equipment or control to focus on.
- LINK products will come shipped with multiple CAN connectors. Be sure to save them for future use.
- See our previous tech tip on LINK Home Diagnostics Application and Connectivity.

Troubleshooting and testing communication voltages:

Normal communication: View image above for wire connection points while testing.

- DH to C = 2-4 VDC, typically around 2.5 VDC
- DL to C = 2-4 VDC, typically around 2.5 VDC
- DH to DL will vary depending on BUS traffic.

DL to DH short: Green and white terminals

- DL to C = 2-4 VDC
- DH to C = 2-4 VDC
- DH to DL = 0 VDC
- 60Ω (+/-10Ω) expected between DL to DH when SC360 (control) and variable speed ODU's are connected
- A short between DH and DL will read 0Ω.

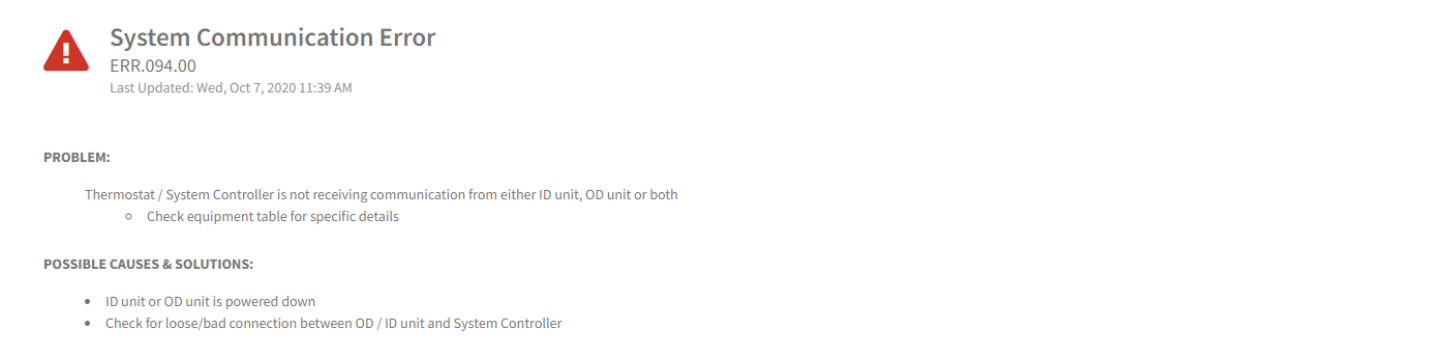
DL to common short: Green and blue terminals

- Equipment might still run.
- DH to C voltage will fluctuate.
- DL to C will = 0 VDC

DH to common short: White to blue terminals

- All devices stop communicating.

If a communication error occurs, the control home diagnostics device app will display an ERR.094.00 fault code. Both the control and device app will provide an explanation of the problem and possible causes. See image below. T



The furnace and equipment will feature a communication LED on the side. This light will flash to indicate device status and count (number of devices communicating). See image below.

Table 24. LED's in Comm Mode

Condition	Communication LED	Status LED
	(Amber)	(Green)
Power-Up	Solid ON	Solid ON
IDLE	Device Count	OFF
Active Demand	Device Count	1 Flash
Active Error	Device Count	2 Flash
Internal Comm Error	Device Count	3 Flash
CAN BUS Error	Fast Flash	OFF
BLE Pairing	ON-Flashing	ON-Flashing