EL01: Indoor & Outdoor Unit Communication Error

Indoor Air Handler Can Not Communicate With Outdoor Heat Pump Condenser

Please note by default this unit communicates via RS-485 communication. This is accomplished via the S1 & S2 terminals. Wires need to be connected to both S1 & S2 at the indoor air handler and the outdoor condenser in order for the unit to communicate properly. The air handler and condenser can be wired traditionally (via 24 volt wires) but if this is done DIP switch settings **must** be changed or this error will occur.

24 Volt Wiring - Getting EL01

If you have connected the indoor air handler and the outdoor heat pump condenser with standard 24 volt wires (meaning you are not using the communication feature) you must change DIP Switch SW1-4 to ON (on the air handler). If you fail to do so the unit will display error code EL01. You must adjust DIP switches with the power off to the air handler. SW1-1 should be on as well to allow a 24 volt thermostat to work (although if this is not done it gives a separate error code).



Data Transfer Board - Air Handler (Above)

Please note SW1-1 should be ON as well

TURN ON

Communicating Set Up - Getting EL01

Parts Affected

17122000055979 - Outdoor Communication Board (24K)

17122000056145 - Outdoor Communication Board (36K, 48K)

17122000058548 - Data Transfer Board (24K, 36K, 48K)

(Step 1) Power Unit Off At The Breaker (Both Outside & Inside). Restart After 5 Minutes. Is the Issue Fixed?

Yes = Done. No = Move To Next Step.

(Step 2) Verify DIP Switch Settings Are Correct (Reference Quick Start Guide) Are They Correct?

Yes = Move To Next Step. No = Fix (Move To Next Step If Still Getting Error After Fix)

(Step 3) Verify S1 & S2 Are Connected To The Correct Location (Reference Quick Start Guide) Are They Correct?

Yes = Move To Next Step. No = Fix (Move To Next Step If Still Getting Error After Fix)

(Step 4) Inspect Outdoor Communication Board, Does It Have A Burn Mark In This Location? (See Pictures On Next Page)



The communication chip on the outdoor condenser will be damaged if the unit is improperly wired and powered up. Once the chip is burned up the board needs replaced.

To see this spot on the board you will need to take the cover off to the outdoor unit (where the wires are connected) and look at a downwards angle.

Please **DO NOT** touch the board. This board has DC voltage present and can hold a charge even after the AC power has been shut off.

Circled in red is the location the board will burn up.
Please take a picture and have it ready to share
with tech support for verification.

Yes = Board is bad. IMPORTANT. Find out what caused this failure. No = Move To Next Step.

(Step 5) Verify That 18/2 Shielded Wire Was Used.

Yes = Move To Next Step. No = Run Correct Wire (Move To Next Step If Still Getting Error After Fix)

(Step 6) Replace Indoor Main Control Board



Zoomed Out Picture Of Outdoor Communication Board Location. (Left)

For Tech Support Please Reach Out To Us: 1-877-909-ACiQ (2247)

https://aciq.com/documentation/

