

Installation Checklist

Power Supply and Communication Wiring

Installation checklist for Prolon VC2000 hardware

(Refer to document PL-INSTL-WIRING-EN for detailed drawings of communication and power wiring.)

Power connection:

- Power supply to terminals 1 & 2 is 24 VAC +/- 10%.
- Polarity of power supply is correct. ("24 VAC" terminal #2 must show 24 VAC +/- 10% to earth ground, "COM" terminal #1 must show 0 VAC to earth ground)

Note: Incorrect power supply polarity will not cause damage to controllers but will cause communication failure until corrected.

Communication Connection:

- Polarity of communication connections to other controllers on the segment is correct (NET A to NET A; NET B to NET B). Controllers must be connected in a daisy-chain pattern.
- Communication bus shield is grounded at only 1 location per segment and is joined but floating at all other locations on the segment. (See Shielded Wire Connection document for proper connection)
- Set termination jumper correctly depending on controller location in network segment. (See page 3 of document PL-INSTL-WIRING-EN for jumper settings)
- Set unique address using either wall module (requires display) or through Focus software addressing tool. Use any address other than 99 if a NC2000 Network Controller is present.

Note: A solid lit "NETREC" light on a controller indicates a polarity problem somewhere on the network, however, it does not necessarily indicate that the problem is at the controller with the light lit.

Wall Module Connection:

- Wiring for wall module connected to dedicated wall module terminals 9, 10, 11, 12. (See page 5 of document PL-INSTL-WIRING-EN)



Installation checklist for Prolon M2000 hardware

(Refer to document PL-INSTL-WIRING-EN for detailed drawings of communication and power wiring.)

Power connection:

- Power supply to 24VAC terminals is 24 VAC +/- 10%.
- Double check that Power input on M2000 controllers is connected to the bottom level power connector that has only 2 screws, not the communication connector above it with 3 screws.
- Polarity of power supply is correct. (24 VAC "+" terminal must show 24 VAC +/- 10% to earth ground, ground terminal must show 0 VAC to earth ground)

Note: Incorrect power supply polarity will not cause damage to controllers but will cause communication failure until corrected.

Communication Connection:

- Polarity of communication connections to other controllers on the segment is correct. (INT A to INT A; INT B to INT B; NET A to NET A; NET B to NET B). Controllers must be connected in a daisy-chain pattern.
- Communication bus shield is grounded at only 1 location per segment and is joined but floating at all other locations on the segment. (See Shielded Wire Connection document for proper connection)
- Set termination jumper correctly depending on controller location in network segment. (Refer to document PL-INSTL-WIRING-EN for jumper settings)
- Set unique address using dip-switches on control board. (see Dip-Switch Addressing document) Use any address other than 99 if a NC2000 Network Controller is present.

Note: A solid lit "NETREC" or "INTREC" light on a controller indicates a polarity problem somewhere on the network segment, however, it does not necessarily indicate that the problem is at the controller with the light lit.

Wall Module or Follower Bus Connection:

- Option for RTUS/HPS controllers only: Wall module communication connected to "NET A" and "NET B" terminals with correct polarity. (Refer to page 6 of document PL-INSTL-WIRING-EN)
- Option for RTU/HP/HYD/MUA controllers only: Follower Device Network connected to "NET A" and "NET B" terminals with correct polarity. (Refer to page 3 of document PL-INSTL-WIRING-EN)



Installation checklist for Prolon C1000 hardware

(Refer to document PL-INSTL-WIRING-EN for detailed drawings of communication and power wiring.)

Power connection:

- Power supply to terminals 1 & 2 is 24 VAC +/- 10%.
- Polarity of power supply is correct. ("24 VAC" terminal #2 must show 24 VAC +/- 10% to earth ground, "COM" terminal #1 must show 0 VAC to earth ground)

Note: incorrect power supply polarity will not cause damage to controllers but will cause communication failure until corrected.

Communication Connection:

- Polarity of communication connections to other controllers on the segment is correct. (NET A to NET A; NET B to NET B). Controllers must be connected in a daisy-chain pattern.
- Communication bus shield is grounded at only 1 location per segment and is joined but floating at all other locations on the segment. (See Shielded Wire Connection document for proper connection)
- Set termination and bias jumpers correctly depending on controller location in network segment. (Refer to document PL-INSTL-WIRING-EN for jumper settings)
- Set unique address using dip-switches on control board. (see Dip-Switch Addressing document) Use any address other than 99 if a NC2000 Network Controller is present.

Note: A solid lit "NETREC" or "INTREC" light on a controller indicates a polarity problem somewhere on the network segment, however, it does not necessarily indicate that the problem is at the controller with the light lit.

Wall Module or Follower Bus Connection:

- Option for RTUS/HPS/VAV controllers only: Wall module communication connected to RJ-45 via CAT5 patch cable or using T-1000-ADAPT (Refer to page 7 of document PL-INSTL-WIRING-EN)
- Option for RTU/HP controllers only: Follower Device Network connected to terminals 19 (NET A) and 18 (NET B) with correct polarity



Installation checklist for Prolon NC2000 hardware

(Refer to document PL-INSTL-WIRING-EN for detailed drawings of communication and power wiring.)

Power connection:

- Power supply is 24 VAC +/- 10%
- Polarity of power supply is correct (“24 VAC” terminal must show 24 VAC +/- 10% to earth ground, Ground terminal must show 0 VAC to earth ground)

Note: incorrect power supply polarity will not cause damage to controllers but will cause communication failure until corrected.

Communication Connection:

- Polarity of communication connections to other controllers on the segment is correct (Connections from NC2000 to Prolon network will be made on RS485 OUT terminals). Controllers must be connected in a daisy-chain pattern
- Communication bus shield is grounded at only 1 location per segment and is joined but floating at all other locations on the segment. (See Shielded Wire Connection document for proper connection)
- Set termination and biasing jumpers correctly depending on controller location in network segment (Refer to document PL-INSTL-WIRING-EN for jumper settings). It is suggested to have the NC2000 perform network biasing since you are only allowed 1 NC2000 per network and the network must only be biased in one location.
- Factory default address is 99. Ensure that no other controller on the network has been addressed to 99.

Note: A solid lit “REC” light on the NC2000 indicates a polarity problem somewhere on the network segment, however, it does not necessarily indicate that the problem is at the NC2000.

