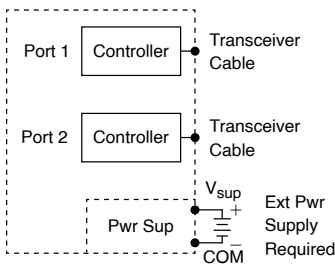# NI-9860 Getting Started

Contents

NI-9860 Getting Started

NI-9860 Block Diagram

The NI-9860 is a two-port C-Series module based on the XNET architecture. Users can choose the physical bus protocol by plugging in the corresponding transceiver cable. The NI-9860 supports hot-swapping of transceiver cables and can detect and identify transceiver cable types.

Wiring the NI-9860

The NI-9860 has two ports for connecting to NI-XNET CAN/LIN Transceiver Cables (required to connect to the CAN/LIN bus) and a two-position connector for use with an external power supply.

The NI-9860 requires an external power supply of +9 to +30 V to power the transceiver cables. Supply power to the NI-9860 V_{SUP} connector on the module front panel using the supplied power cable. The exposed lead wires at the end of the power cable are routed as follows: black wire—COM, red wire—V_{SUP}. The power cable lead wires may be daisy-chained to the controller power port when the controller supply voltage is in the appropriate range.

> ⚠️ **Caution** Do not connect Vsup to a DC mains supply or to any supply requiring a connecting cable longer than 3 m (10 ft). A ***DC mains supply*** is a local DC electricity supply network in the infrastructure of a site or building.

> ⚠ **Attention** Ne pas connecter Vsup à une alimentation secteur CC ou à une alimentation nécessitant un câble de raccordement de plus de 3 m (10 pieds). Une **alimentation secteur CC** est un réseau local d'alimentation électrique CC présent dans l'infrastructure d'un site ou d'un bâtiment.

> ✏ **Note** Power on V_{SUP} is required for transceiver cable operation.

> ✏ **Note** When using more than four transceiver cables with your CompactRIO chassis, refer to the mounting instructions for the cables for guidelines to limit the thermal impact to your CompactRIO system.

The following figure shows the NI-9860 with Port 1 connected to an NI-XNET CAN HS/FD Transceiver Cable and the two-position connector connected to the power cable. The breaks in the cables represent additional cable length.

Figure 1. NI-9860 with Power and Transceiver Cables Attached
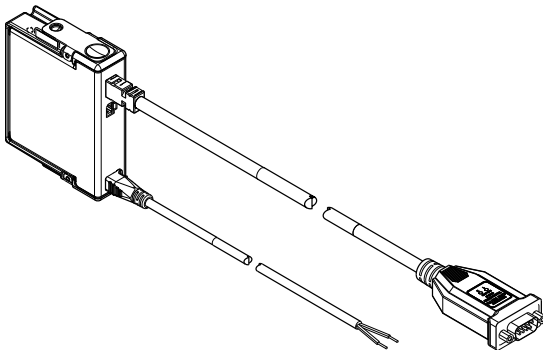
Inserting and Removing the NI-XNET Transceiver Cable

The NI-XNET Transceiver Cable connects to a host device with an active latching connector. To connect the NI-XNET Transceiver Cable to a host device, push the connector assembly into the host receptacle until the internal latch snaps into position. The latch emits an audible click when engaged. To remove the NI-XNET Transceiver Cable, push the lock ejector forward to disengage the latch and simultaneously pull the NI-XNET Transceiver Cable, as shown in the following figure.

Figure 2. Inserting and Removing the NI-XNET Transceiver Cable
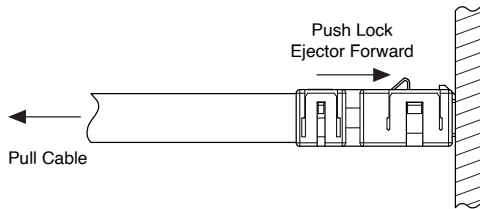
Inserting and Removing the Power Cable

The NI-9860 connects to the provided power cable with an active latching connector. To connect the power cable, push the end of the power cable into the two-position connector until the internal latch snaps into position. The latch emits an audible click when engaged.

To remove the power cable, push the lock ejector down to disengage the latch and simultaneously pull the power cable away from the module, as shown in the following figure.

Figure 3. Removing the NI-9860 Power Cable