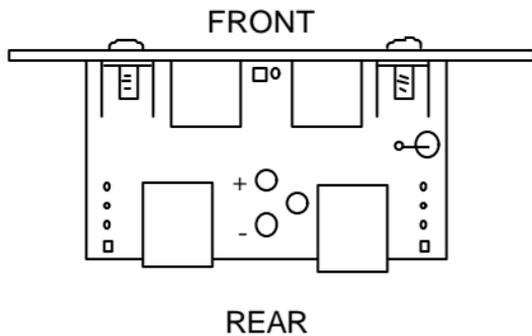


Cab Bus Fascia Panel

Model # UTP-DIN



NCE Corporation
1260 Creek Street 105
Webster, NY 14580

The UTP-DIN cab bus panel provides a means of adding walk around capability to your layout using DIN plugs. Two screws are provided to attach the panel fascia plate to the printed circuit board as illustrated in figure 1.

The panel has 2 RJ-12 connectors wired in parallel on the rear and two 5 pin DIN jacks on the front. The 4 wire cab bus can be “daisy chained” from one panel to the next using the rear connectors. One or two cabs can then be plugged in to

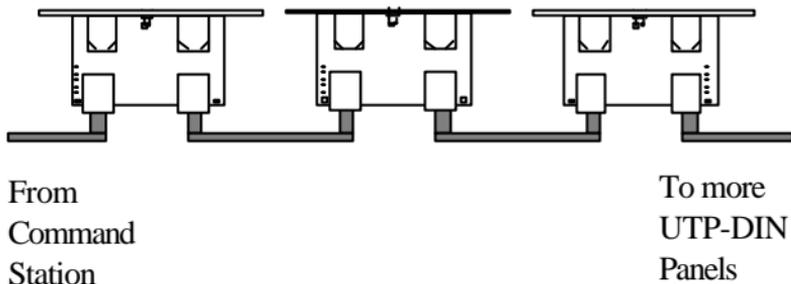


Figure 1 Connection of multiple UTP-DIN panels
the front connectors.

PLUG-n-PLAY CAB BUS CABLING

Pre-made cables can be used to connect the command station to the UTP-DIN and from UTP-DIN to UTP-DIN. These cables must be wired “straight through” meaning Pin 1 of one connector must be connected to Pin 1 of the other

connector (see figure 2). Please note that this is not the normal telephone cable wiring.

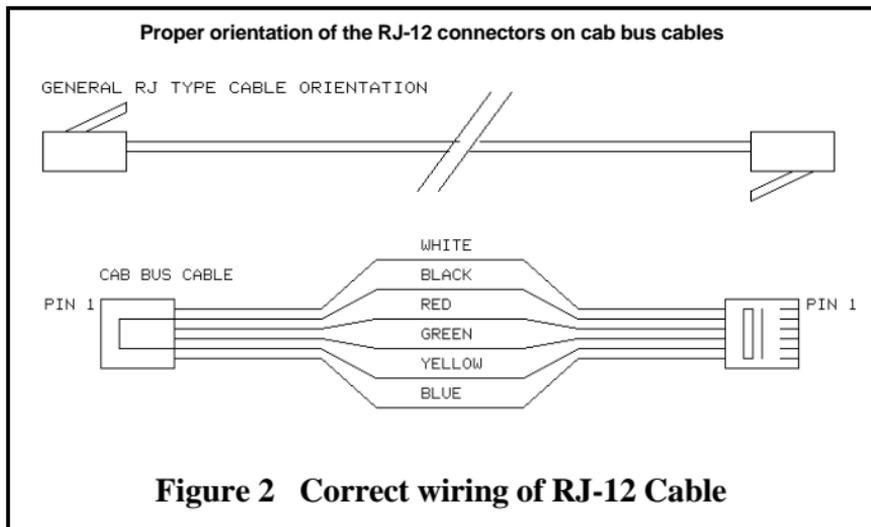


Figure 2 Correct wiring of RJ-12 Cable

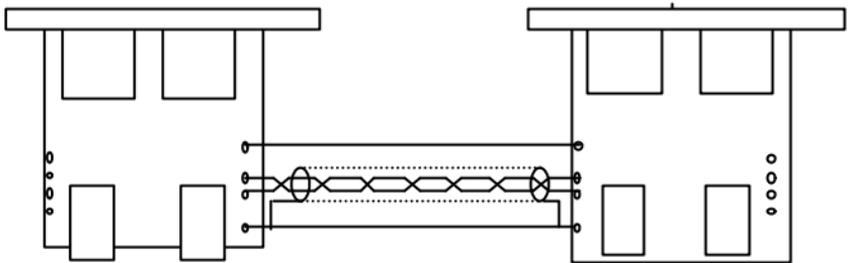
The normal wire gauge for RJ-12 cables is #28 or #26. This wire size is sufficient for cab bus lengths of up to about 30 or 40 feet (10-13 meters). If your layout requires a cab bus longer than this we suggest adding extra power to the bus at about 30 foot intervals.

Optional LED panel light

You may wish to install an LED on the panel to help operators to find the panel darkened or dimly lit rooms. Conventional T1 sized red, green or yellow LED can be used. Solder the LED to the top of the PC board. Leave enough lead length to bend the LED over and insert it through the hole in the fascia plate. Be sure to solder the shorter lead

(cathode) of the LED in to the square hole. You will also need to solder a 1K ¼ watt resistor in the two holes marked “1K”.

Connecting the cab bus using the provided solder holes at the sides of the UTP-DIN



Use #22AWG shielded twisted pair wire for the two center conductors of the 4 wire cable with the shield connected to ground (pin 2) of the UTP-DIN.

For more reliable connections to the panels you should solder cables from panel to panel rather than using RJ12 plug in cables. If you choose to solder the wires, a three pair shielded cable using #22 or #24 AWG stranded wire with an outer shield is recommended for the best noise immunity. The square solder pad on the UTP-DIN panel is ground and pin #4 is +12 volts DC. The outer shield should be connected to pin 2 at each end of the cable. Pins 3 and 4 should be a twisted pair. Pins 1 and 6 are another pair leaving pins 2 and 4 as the last pair of wires.