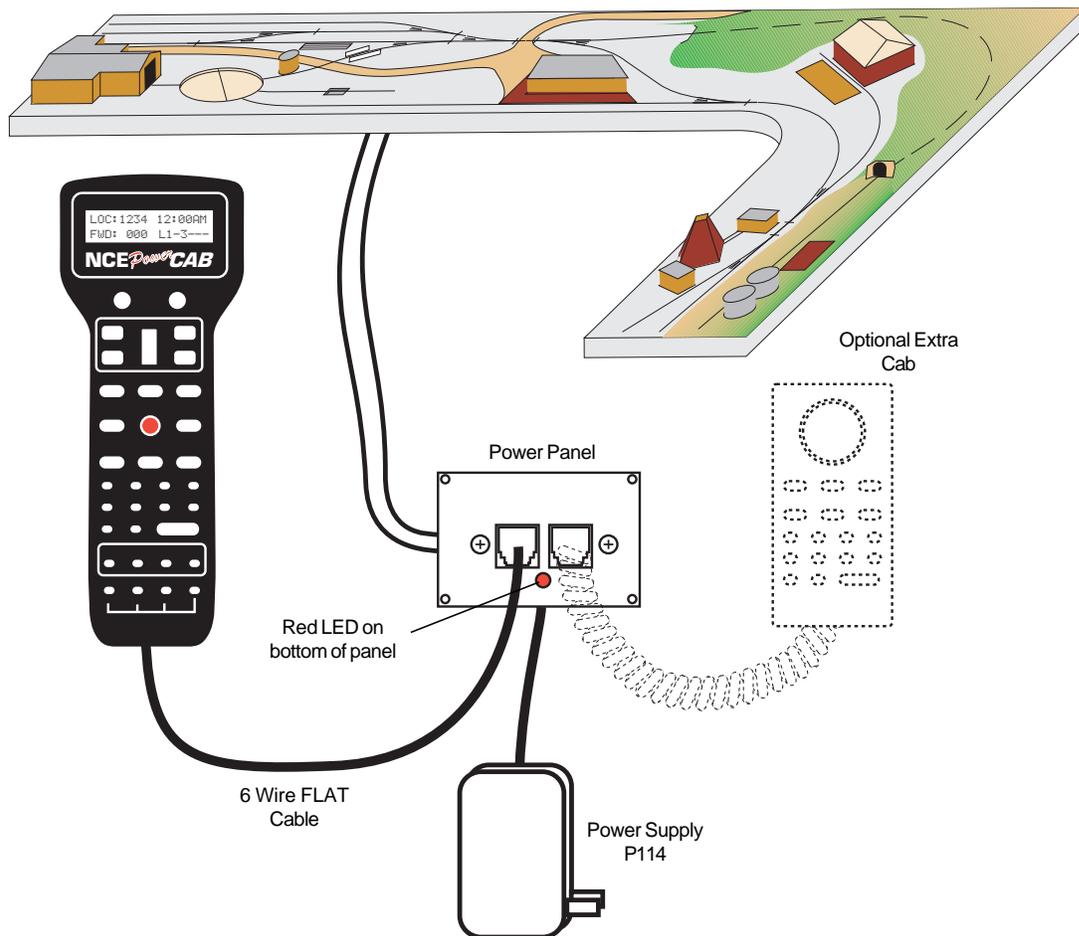


Power Cab System Reference Manual



NCE
The Power of DCC

Rev. 1.28



Basic Set Up of the Power Cab System

Your Power Cab™ is a full featured DCC system. It must be used with the 6 wire, **FLAT** cable supplied. All features described in this manual are available to you when used in the Power Cab™ mode.

If you own or operate with a PowerHouse™ or Power Pro™ NCE system, you can use the Power Cab™ as a Pro Cab™ using the 4 wire coiled cord that is also supplied.

BE CAREFUL

An NCE P114 power supply (13.5VDC Regulated) is the supplied transformer for your system.

Quick Start

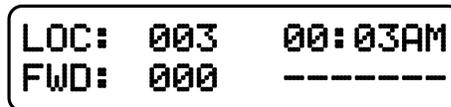
Contents of the Power Cab™ System:

Power Cab™	Power Panel (marked PCAB-PP)
Seven foot flat cable	Coil Cord (4 wire) to use as a Pro Cab
Power Supply	Power Cab™ system reference manual

We recommend that you follow the instructions below to connect your system to a small test track first. After your system is checked out completely and known to be working then consider the final installation locations for components and connections to the track.

TRYING OUT YOUR POWER CAB™:

- #1 Assemble the Power Panel by screwing the black plate to the circuit board with screws provided.
- #2 Connect the long 7 foot flat cable from the Power Cab™ into the socket marked (on the drawing) POWER CAB™ (left socket).
- #3 Use a small, flat screw driver to attach the test track feeder wires to the small two place connector. Make sure that there are no shorts or frayed wires between the connections.
- #4 If you have a locomotive with a DCC decoder already installed place it on the track.
- #5 Plug the power supply into the socket marked POWER. Plug the power supply into a wall outlet.
- #6 The display of the cab should look something like:



This is what we call the 'NORMAL DISPLAY'. The fast clock in the upper right hand corner will most likely show a different time.

The following cab buttons must be pressed in the proper sequence to acquire control of the locomotive #3 (in the above example locomotive #3 is already selected):

Note: By convention, locomotive decoders usually have their short address set to 3 at the factory.

- a. Press **SELECT LOCO** button once.
- b. Press the "3" button once. DO NOT press 0 then 3.
- c. Press **ENTER**.

TIP #1 If you make a mistake while entering numbers on the cab just keep pressing more numbers until the number entry field clears, then enter the correct numbers.

TIP #2 Whenever the cab is waiting for you to enter data (a flashing black square is on the screen at the point where the numbers will go) you can press the **PROG/ESC** key to "escape" what you were doing and return to normal operation mode.

TIP #3 Whenever you have pressed a button (such as **SELECT LOCO**) and you want to keep what ever number that is already on the screen just press **ENTER**.

- #7 To operate the locomotive, the following controls are used:
 - a. The thumbwheel will increase/decrease speed. The speed control buttons that flank the thumbwheel on either side may also be used as desired to control the loco speed.
 - b. Pressing the **DIRECTION** button will cause the loco direction to reverse.

CONGRATULATIONS! You are now operating a locomotive with DCC control. In most cases, less than ten minutes has elapsed since you started reading this Quick Start Guide.

COMPLETING THE QUICK START

Operating one locomotive is fun — for awhile. But operating two locomotives is a lot more fun for a much longer time. Advancing beyond this simple DCC testing requires decoder installation into more locomotives and perhaps a few straight pieces added to your circle of track. After you have two locomotives with decoders we can continue with both locomotives simultaneously operating under DCC control. At least one locomotive will need to be programmed with a different address.

PROGRAMMING A LOCOMOTIVE ADDRESS

#1 The first item of business in this section is to remove any locomotives from the layout that will **not** be programmed.

#2 Place the locomotive to be programmed with an installed decoder on the track.

#3 Press the **PROG** button four times to get to the programming track menu.

Your cab should read:

```
SELMODE  xx:xxPM  
USE PROGRAM TRK
```

xx:xx represents the fast clock which may display any time at this point.

#4 Press **ENTER** to use the programming track and you will see:

```
PROG TRK  xx:xxPM  
1=STD  2=CV  3=REG
```

#5 Press “1” to use Standard programming. You will see:

```
MAIN OFF  xx:xxPM  
MANUFACTURER: ___
```

After a moment the blank space after MANUFACTURER: will be filled in with “011” which is the NMRA code for NCE Corporation. All manufacturers have different codes.

If you get a CAN NOT READ CV message the decoder is not responding. Check the locomotive, decoder and programming track wiring. An older decoder that uses “paged” mode (discussed later) can take up to 15 seconds to read the values.

#6 Press **ENTER** to read the decoder version installed in your locomotive.

#7 Press **ENTER** again to see:

```
ACTIVE ADR: SHORT  
SETUP ADR  1=YES
```

By convention all DCC locomotive decoders are set to short address #3 at the factory. If your decoder has not had its address changed you will see a short address as the active address. Press **1** to set up the address.

```
ACTIVE ADR: SHORT
SHORT ADR: 003
```

TIP A decoder can have 2 different addresses, the Short Address (values from 1-127) or the Long Address (sometimes called 4 digit with a range of 0000-9999). A decoder can use one or the other but not both at the same time. Some entry level decoders can only use the Short Address.

#8 Press **ENTER** to keep the current short address set to 3.

#9 Press **ENTER** to skip activating the short address.

#10 Next you will see the Long Address (which is probably set to 0000 or sometimes to 9999). With older decoders, it may take a up to 30 seconds to read the long address.

This is the address we will change.

#11 You will likely want to enter the number on the side of the locomotive cab as the Long Address. Type in the number of the locomotive and press **ENTER**.

#12 Press **1** to activate the Long Address.

You have just changed the Long Address.

At this point, press **PROG/ESC** twice to exit the program track mode.

You have just completed the hardest part of DCC... programming the locomotive on the programming track.

To select the locomotive:

- a. Press **SELECT LOCO** button
- b. Press the digits corresponding to the Long Address you just programmed..
- c. Press **ENTER**

At this point you should have control of the locomotive. Now is the time to program up a second locomotive and run them both.

RUNNING TWO LOCOMOTIVES WITH ONE CAB

#1 Select the first locomotive you wish to run (**SELECT LOCO** followed by its address then **ENTER**).

#2 Press **RECALL** to store this locomotive in one of the internal recall "slots" of the cab. The display of the cab will now show a locomotive of 000.

#3 Select the second locomotive and start running it.

#4 By pressing **RECALL** you can toggle back and forth between the two different locomotives. At any time you can select a new locomotive "over the top" of any locomotive already on the display. The existing locomotive will be forgotten by the cab with the new one taking it's place. The one in **RECALL** will remain available for recall.