

PR3

PR3 Decoder Programmer

USB Programmer/Interface

PR3 Features

- Multifunction USB 2.0 PC connectivity for your railroad
- **Digitrax "SoundLoader" compatible.** Programs Digitrax sound projects to SFX decoders
- Programs CV's for most DCC decoders
- LocoNet MS100 mode with Fully Buffered Input and Output data
- Runs on Windows XP, Vista and 2000.
- Runs on Mac OS 10.4/10.5 with JMRI.
- No external power needed for MS100 mode.
- Automatic configuration. No jumpers or switches required. Configurations can be set by software or manually.
- Selectable LocoNet termination. For standalone operation without needing a Command Station.
- LED state indicator lights.
- Small, convenient package
- Firmware updates available from Digitrax Web site.
- Meets FCC Class B requirements.

Parts List

1 PR3 Programmer

1 USB Cable

1 This Instruction sheet

Using Digitrax SoundLoader[™] software with your PC and the Digitrax PR3 Programmer you can create, manage, test, and download the Digitrax sound projects (.spj) in your SoundFX decoders. You can select which sound files (.wav) you want to have associated with different sound sequences in any sound project and download the modified sound project to any Digitrax SoundFX decoder. This gives you the ability to customize your sound decoders any way you want!



PR3 Hardware Setup

SoundLoader and PR3 have been tested to work on PC compatible computers running 550MHz and up, with Windows XP or Vista, 512MB of RAM

Other combinations of hardware and software may also work, but are not supported by Digitrax, and have not been tested to operate properly.

Installation consists three steps: (a) Hardware installation, (b) software installation, (c) software set up. Below is a photograph of the actual hardware connections required for SoundFX programming..



The connection diagram on following page will help you install the hardware correctly. Assemble the PR3 hardware as shown and connect to an appropriate power supply (Digitrax **PS14** or equivalent). Note the LocoNet output for MS100 operation, and the separate track output for SoundFX programming operations.







Complete Train Control Run Your Trains, Not Your Track!

PR3 Switch Functions

The Mode Switch:

The Mode Switch next to the Green "USB" LED is used to toggle back and forth between MS-100 mode and PR3 Programmer Mode. This Green LED will wink once per second if in the MS-100 Mode or toggle every second when in the PR3 SFX sound programming mode. If this LED is unlit there is no USB link established.

The Loconet Termination Switch:

A LocoNet network always requires a termination of some sort, typically from a Command Station. The LocoNet Termination switch next to the "ERR(or)" LED is designed to toggle the PR3 between a LocoNet terminated by a Digitrax Command station and a stand alone LocoNet where seperate termination is required. The PR3 has the ability to act as a LocoNet terminator. *Set this switch active ONLY when a Command Station is NOT connected to the Loconet and the red LED is solid on indicating there is no Command Station connected*.

NOTE: Do not turn on the Loconet termination mode AND connect to a command station at the same time.

To turn on the Loconet termination mode, press and hold this switch for at least 2 seconds then release. The red "error" LED should go off indicating the Loconet termination mode is working. If the red LED is blinking, then the PR3 DC power in the rear 2.1mm jack is not connected or is too low.

To exit the Loconet termination mode, press and hold this switch for 2 seconds and then release.

Factory Default Setting:

Pressing and holding both switches for 5 seconds or longer will reset the PR3 to its original factory settings (MS-100 mode with Loconet termination off) The bi-color "stat" LED will toggle between red and green a few times to indicate that the default settings were taken.

Refer to the table on the follow page for an explanation of LED indicator status meanings.



Condition	GREEN USB LED
No Power or USB	Off
No USB Connection or USB error	Blink once per second mostly off
USB Connected MS-100 Mode	Wink once per second mostly on
USB Connected MS-100 Mode Loconet termination Mode	Wink twice per second mostly on
USB Connected Sound Programmer Mode	Toggles ON-OFF once per second

Condition	RED ERR LED
Loconet not connected or in sleep state (MS100)	Solid On
+12VDC Power not connected or too low (Programmer mode)	Fast blink
No Errors	Off

Condition	RED/GRN STAT LED
MS100 Mode Data from PC to Loconet	Red blinks
MS100 Mode Data from Loconet to PC	Green blinks
MS100 Mode No Data activity	Off
Sound Programmer Mode (PR2 emulation)	Same status indications as for PR2 status LED. See SoundLoader documentation/help file on the CD for details

PR3 Software Setup for Microsoft Windows XP®

First time Install:

• Make sure the supplied SoundLoader Installation CD is inserted in your PC's CD player.

 \bullet Plug the USB cable connected to the PR3 into a vacant USB socket on your PC .

• Depending on which operating system you have on your PC, you will next see a dialog box appear on your PC's monitor. <u>The procedure we document in</u> <u>the following pages is for Windows XP</u>, if you have Windows Vista[®], Windows 2000[®], or MAC PC please refer to the PR3 help file (PDF format) on the provided PR3 Installation CD. A copy of this CD is also on the Digitrax Web site.

Note: Regardless of your Windows version, <u>the PR3 requires that the Windows</u> <u>use the device driver that is shipped on the PR3 installation CD</u>. Do not let Windows attempt to install the software drivers automatically - direct Windows to install the software driver from the specific Windows version directory on the Digitrax-provided PR3 installation CD.



If using Windows XP, when the PR3 USB cable is connected, the following screen should appear.



Select the "Install from a list or specific location" button. Click Next.

The following screen should appear.

Found New Hardware Wizard	
Please choose your search and installation option	•
● Search for the best driver in these locations.	
Use the check boxes below to limit or expand the de paths and removable media. The best driver found w	fault search, which includes local ill be installed.
Search removable media (floppy, CD-ROM)	
Include this location in the search	
d \win_xp_vista32_64	Biowse
O Don't search I will choose the driver to install.	
Choose this option to select the device driver from a the driver you choose will be the best match for your	list. Windows does not guarantee that hardware.
< <u>B</u> ack	<u>N</u> ext > Cancel

Select "Search for the best driver in these locations:" Click "Include this location in the search:" option box **Browse** to the "win_xp_vista32_64" folder on the Soundloader Install CD. and click the "Next" button

On this next screen you'll want to



1	The software you are installing for this hardware:
<u> </u>	Communications Port
	has not passed Windows Logo testing to verify its compatibility with Windows XP. (<u>Tell me why this testing is important.</u>)
	Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly

Click on "Continue Anyway"

a final "Finished" screen should appear, thus completing the Installation.

Note: If the driver installation process fails, you will have to uninstall the VCOM USB driver before attempting reinstallation. We have included on the PR3 installation CD a utility called USBDeview for this purpose. The process is simple, run the USBDeview program, location the VCOM driver in the list and right click to uninstall - Please the The PR3 README file for more info.

Troubleshooting

I cannot see LocoNet messages when the PR3 is in MS100 mode:

1) Be sure the USB green led is lit, indicating that the PR3's USB link is active and correctly communicating with the driver on your PC.

Run the CD-included 'DigiMon' application to give a LocoNet data viewer functionality and be sure that the correct "com" port reported by the System Hardware Manager is selected. Watch a throttle connect to see messages, and the STAT bicolor led should blink red and green showing activity both ways.
Be sure the ERR red led is not lit, showing that the LocoNet is; unterminated, not connected to a Command Station or maybe asleep.

I cannot program an SFX decoder sound project:

1) Be sure the ERR red led is not lit, which shows there is no external 12V DC needed to run the programmer.

2) Be sure the correct "com" port is selected in e.g. SoundLoader. The correct PR2/SFX programmer mode is automatically set.

3) Be sure the programming track leads connect to the SFX decoder or locomotive.



PR3 Decoder Programmer

Program DCC decoders - USB Interface standard

