

# DecoderPro®

The Easy Way To Program DCC Decoders

# What Is DecoderPro®

- It is one of several open source programs from the JMRI project for model railroad computer control.
- JMRI = Java Model Railroad Interface
- Java (by Oracle) is the #1 programming language and development platform (JRE=Java Runtime Environment)
- You don't need to know any of this to use it.

# Other JMRI Project Programs

- PanelPro™
- DispatcherPro™
- OperationsPro™
- SoundPro™
- LccPro™

# Why Use DecoderPro®

- Programming decoders, especially sound decoders, is cumbersome from a throttle using CV's (Configuration Variables).
- With DecoderPro®, programming is done with drop-down boxes and sliders, without needing to know the CVs.
- The program remembers all the settings in a roster file and the loco can be reloaded if ever necessary, or copied to another loco.

# Getting Started

- Go to <https://www.jmri.org/> (or search for JMRI)
- Download the most current “production” version
- The version you should download will depend on which Java release your computer will run.
- If your computer doesn't already have Java loaded, then go to <https://www.java.com/en/> and click (before starting DecoderPro®)  

- You will also need an interface between your computer and the layout or programming track (depends on your DCC System)
- The JMRI site is full of help screens. Look around before starting

[releases](#)[applications](#)[hardware](#)[help index](#)[manuals](#)[developers](#)[acknowledgements](#)

JMRI® is...

### **DecoderPro®**

A great tool for programming decoders, simplifying the job of configuring DCC decoders from your computer

### **PanelPro™**

Design and Operate control panels that reflect the real-time state of your railroad *and* let you control it

### **DispatcherPro™**

A system for Dispatching, grouping your Roster and Throttles

### **OperationsPro™**

Build Trains from your Roster and print Train Manifests that detail the work your train crews will perform

### **SoundPro™**

A set of tools for using Audio with JMRI

### **Cool Uses**

People have used JMRI to do some great things for the model railroad community. Our [Gallery page](#) highlights some of these.

Also, there are [many apps with JMRI connections](#).

### **Tools**

## **What is JMRI?**



The JMRI project is building tools for model railroad computer control. We want it to be usable to as many people as possible, so we're building it in Java to run anywhere, and we're trying to make it independent of specific hardware systems.

JMRI is intended as a jumping-off point for hobbyists who want to control their layouts with a computer without having to create an entire system from scratch.

You can manage your locomotive rosters and easily program your decoders using [DecoderPro®](#).

You can build control panels and control your layout using [PanelPro™](#) to set up signaling and other functions. [OperationsPro™](#) lets you create manifests that route cars across your railroad from shipper to receiver, and provide train crews with operating instructions.

Going beyond the basics, you can use [Logix](#) to automate your layout's behavior, interface with X10 and Insteon systems to control your layout room's [lights](#) and write [scripts](#) to extend the capabilities of the system.

As an open source project, JMRI is evolving in many directions at once. You can get involved at as many levels:

- **Learn about JMRI:**
  - check out the [online Help](#) and [FAQs](#)
  - follow the [DecoderPro manual](#)
  - study the [PanelPro FAQs](#) and [JMRI Clinics](#)



- **Learn about JMRI:**
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  - study the [PanelPro FAQs](#) and [JMRI Clinics](#)
  - (or switch to our [French](#) online Help)
- **Kick the tires:**
  - [download](#) JMRI
  - install it on [Windows](#), [macOS](#) or [Linux](#)
  - [connect it](#) to your layout
- **Share your experiences:**
  - browse or [join](#) the [JMRI Users Groups.io](#) Group
- **Help extend and develop the program code:**
  - look [under the hood](#)
  - [get the source code](#)
  - browse or [subscribe](#) to the [JMRI-Developers](#) mailing list
- [Make a small donation](#) to help defray the costs of keeping JMRI going. [Donate...](#)

Whatever it is that you choose to do with JMRI, and however you get involved, **welcome to our community!**

## Downloadable Releases

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JMRI 5.10 Production Release

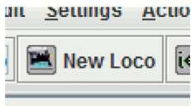
JMRI 5.11.5 Test Release

JMRI 4.26 Production Release

JMRI 3.10.1 Production Release

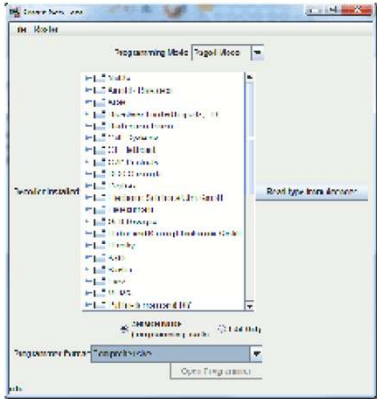
JMRI 2.14.1 Production Release

## Getting Started



Click on the "New Loco" Button in the toolbar to get started.

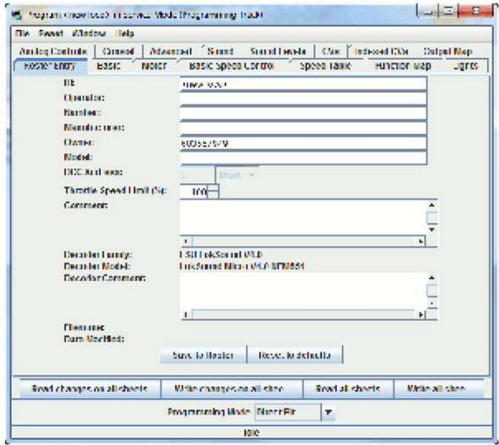
1



Then either select your decoder from the list or choose "Read type from decoder".

Once Selected, click on "Open Programmer" to then begin programming your decoder.

2



In the next screen enter in the basic information of the loco to create your first roster entry.

3

ID:  
Road Name:  
Road Number:  
Manufacturer:  
Owner:  
Model:  
DCC Address:  
Decoder Family:  
Decoder Model:  
Filename:

Edit Only

Program...

Labels & Media...

Throttle

No Service Mode Programmer Available
No Operations Mode Programmer Available
Programmer Status: Idle
Active Profile: My JMRI Railroad



DecoderPro: Russell

File Edit Settings Actions SPROG Programmer Window Help

New Loco

Identify

Help

Roster Groups

All Entries

Carver

Cytron

Edwards

Ferraron

Gollow

Manley

Marshall

McGloin

McKee

Poidomani

Riga

Russell

Seckler

Stamatov

Zeleny

Zucchini

ID	DCC Address	Icon	Decoder Model	Road Name	Road Number	Manufacturer	Model	Owner	Date Modified
Alco RSD-15 Demonstrator	600		BLI RSD-15	Alco	DL600	Broadway Limited	Alco RSD-15, 6-Axle Road Locomotive	Scott Russell	May 17, 2025...
ATSF E1A #2	2		Diesel	Santa Fe	2	Broadway Limited	EMD E1A Passenger Locomotive	Scott Russell	May 17, 2025...
ATSF E1B #3	3		Diesel	Santa Fe	3	Broadway Limited	EMD E1A Passenger Locomotive	Scott Russell	May 5, 2018, ...
QV Diesel Switcher #2	2		TCS Mx series decoders	QV ?	2	?	2 Axle Diesel Industrial Switcher	Scott Russell	Jul 1, 2012, 1...
SP AC-5 Cab Forward #4111	4111		Broadway Limited AC5 Cab Forward	Southern Pacific	4111	Broadway Limited	AC-5 Cab Forward 4-8-8-2	Scott Russell	May 17, 2025...
SP E7A #6000	6000		BLI E7A/B	Southern Pacific	6000	Broadway Limited	EMD E7A Passenger Locomotive	Scott Russell	Nov 23, 2015,...
SP E7B #5900	5900		BLI E7A/B	Southern Pacific	5900	Broadway Limited	EMD E7B Passenger Locomotive	Scott Russell	Nov 23, 2015,...
SP GP35 #6322	6322		TSU-KT1000 Kato GP35	Southern Pacific	6322	Kato	EMD GP35 Road Switcher	Scott Russell	Jan 9, 2021, ...
SP GP35 #6531	6322		TSU-KT1000 Kato GP35	Southern Pacific	6531	Kato	EMD GP35 Road Switcher	Scott Russell	May 13, 2025...
SP RS-11 #5726	5726		DP2X	Southern Pacific	5726	Atlas	Alco RS-11 Road Switcher	Scott Russell	May 13, 2025...
Test Box	3		090LC Steam					Scott Russell	May 13, 2025...
UP 2-8-2 #2497	2497		WOW Sound 101	Union Pacific	2497	Athearn	USRA 2-8-2 Class MK-Special	Scott Russell	Dec 11, 2015,...
UP 4-12-2 Union Pacific #9039	9039		Steam	Union Pacific	9039	Broadway Limited	4-12-2 Union Pacific	Scott Russell	Jun 20, 2015,...
UP 4-12-2 Union Pacific #9083	9039		Steam	Union Pacific	9083	Broadway Limited	4-12-2 Union Pacific	Scott Russell	Jun 20, 2015,...
UP Big Boy #4015	4015		1630 - HO Scale - Steam	Union Pacific	4015	Athearn Genesis	Alco 4-8-8-4	Scott Russell	May 13, 2025...
UP C630 #2901	2901		C628LC Diesel	Union Pacific	2901	Stewart Hobbies	Alco Century C630	Scott Russell	May 13, 2025...
UP C630 #2902	2902		DP5X	Union Pacific	2902	Stewart Hobbies	Alco C630 Road Switcher	Scott Russell	May 13, 2025...
UP Challenger #3967	3967		1627 - HO Scale - Steam	Union Pacific	3967	Athearn	Alco Challenger 4-6-6-4 Series 3	Scott Russell	May 13, 2025...
UP Challenger #3975	3975		1627 - HO Scale - Steam	Union Pacific	3975	Athearn	Alco Challenger 4-6-6-4 Series 3	Scott Russell	May 13, 2025...
UP Erie-Built #704	704		AT100LC/KT100LC Diesel	Union Pacific	704	Life-Like Proto 1000	Fairbanks-Morse "Erie Built" A	Scott Russell	May 13, 2025...
UP Erie-Built #704B	703		T1	Union Pacific	704B	Life Like Proto 1000	Fairbanks-Morse "Erie Built" B	Scott Russell	Jun 30, 2017,...
UP F3A #1410	1410		AT100LC/KT100LC Diesel	Union Pacific	1410	Athearn Genesis	EMD F3A	Scott Russell	Mar 14, 2013,...
UP F7A #1479	1479		DSD diesel	Union Pacific	1479	Stewart Hobbies	EMD F7A Phase 1 Late	Scott Russell	Oct 7, 2014, ...
UP F7B #1484c	1484		D13SRJ	Union Pacific	1484c	Stewart Hobbies	EMD F7B Phase 1 Late	Scott Russell	Jul 5, 2012, 1...
UP F7B #1492b	1492		D13SRJ	Union Pacific	1492c	Stewart Hobbies	EMD F7B Phase 1 Late	Scott Russell	Jul 5, 2012, 1...
UP GP30 #868	868		AT100LC/KT100LC Diesel	Union Pacific	868	Proto 2000	EMD GP30 Road Switcher	Scott Russell	Dec 29, 2017,...
UP GP35 #762	762		T1	Union Pacific	762	Kato	EMD GP35 Phase 1b	Scott Russell	Jul 5, 2012, 1...
UP H-15-44 #1325	1325		Four Function #345	Union Pacific	1325	Atlas	Fairbanks-Morse H-15-44	Scott Russell	Jul 5, 2012, 1...
UP H-15-44 #1328	1328		Four Function #345	Union Pacific	1328	Atlas	Fairbanks-Morse H-15-44	Scott Russell	Jul 5, 2012, 1...
UP Mountain #1001	2		Quanta	Union Pacific	1001	Broadway Limited	Alco Mountain 4-8-2	Scott Russell	May 13, 2025...

ID: ATSF E1A #2

Road Name: Santa Fe

Road Number: 2

Manufacturer: Broadway Limited

Owner: Scott Russell

Model: EMD E1A Passenger Locomotive

DCC Address: 2

Decoder Family: Paragon 3

Decoder Model: Diesel

Filename: ATSF\_E1B\_2.xml

Edit Only

Program...

Labels & Media...

Throttle