Introduction to JMRI. The JAVA Model Railroad Interface
By Barry Rosier and Mike Dettinger
What is JMRI?

- JMRI (Java Model Railroad Interface) is an open source (FREE) software that is used in conjunction with your DCC (Digital Command Control) system to:
  
  • Program your DCC-equipped locomotives.
  • Operate your layout (turnout control, signals, block detection, etc.).
  • Realistic operations (i.e.: switch lists, train builds, car forwarding, etc.).

- It has different program modules for the various functions it performs.
Short history of JMRI

– In 2001 Mark Gurries gathered together with Bob Jacobsen, Dave Falkenburg, and John Jabour to discuss projects they had been working on.
– On October 28th of 2002 v1.1 of JMRI DecoderPro was released.
– Between 2003 to 2009 additional modules were released such as:
  • PanelPro
  • Layout Editor
  • Operations
– Bob Jacobsen over sees the JMRI project.
What is it used for

- Decoder programming
  - DecoderPro interface

- Layout control
  - PanelPro interface

- OperationsPro
  - PanelPro interface
  - Tools Menu

- DispatcherPro
  - PanelPro interface
  - Tools Menu
System Requirements

– Common Requirements
  • Using JMRI requires a combination of hardware and Java software.
  • JMRI® version 4.2 requires Java 1.8.
  • Version 3.10.1 requires Java 1.6 or later.
  • Version 2.14.1 requires Java 1.5 (or 1.6 if you wish for drag & drop).
  • Version 2.8 requires Java 1.5 or later.

– Windows
  • Windows 7-10 and Vista SP2 can run the current JMRI test and production releases with Java 8.
  • Computers running Vista SP1 can run JMRI 3.10.1 using Java 1.7.

(con’t)
- **Mac**
  - Mac OS X version 10.8.3 "Mountain Lion"/10.9 "Maverick"/10.10 "Yosemite"/10.11 "El Capitan" can run the current JMRI test and production releases with Java 8. Mac OS X version 10.7.3 "Lion" can run JMRI 3.10.1 using Java 1.7.
  
  - Mac OS X version 10.5.8 "Leopard" can run JMRI 2.14.1 using Java 1.6.
  
  - Mac OS X version 10.4 "Tiger" through 10.5.7 can run JMRI 2.14.1, because that's the last JMRI version that can run on Java 1.5, the last JVM available for "Tiger".

- **Linux**
  - Xunbuntu
  - Open SUSE
  - Mint
  - Raspberry Pi

Connecting to your DCC system

- Digitrax
  - Digitrax PR3
  - RR_Cirkits LocoBuffer
- NCE
  - NCE USB Interface for Powercab
- MRC
  - Cable computer interface
  - Wireless computer interface
- SPROG
  - Included
- Others
  - Manufacturer computer interface
## Decoder Programming

- DecoderPro Interface
- Demo

### Decoder Programming Interface

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### Decoder Programming Details

- **Operator:**
- **Manufacturer:**
- **Model:**
- **Decoder Family:**
- **Decoder Model:**
- **Filename:**
- **Date Modified:**

### Programming Options

- Basic Programmer
- Comprehensive Programmer
- Throttle Labels
- Roster Media
- Launch Throttle
Layout Control (Turnouts)

- DecoderPro Interface
- Demo
Other Modules (Brief Overview)

- PanelPro Interface
- Layout Editor
- Control Panel Editor
Other Modules (Brief Overview)

– PanelPro Interface
– OperationsPro
JMRI Introduction

Thank you for attending our clinic