WHAT IS MRCS?

MRCS is your home for Open Source electronics for Model Railroad Operations. We offer Open Source hardware and software to help you operate your Railroad as prototypically as you like.

Our cpNode system is an updated, completely open, layout control system based on the popular and proven CMRI system (introduced by Dr. Bruce Chubb in 1985).

We offer signaling and telephone systems for dispatching, Order Board Systems for TT&TO operation, RFID systems for train tracking and car forwarding and many useful accessories!

We also welcome designs from community contributors

Consulting, Design and Implementation

DIY (Do it Yourself) boards and system development are a great tool for those with an electronics hobby within the hobby, but what about those modelers who want a control system or phone system but don't want to take the time to learn a new sub-hobby?

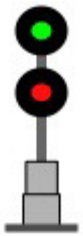
Many of the products offered on our web site were developed in response to requirements of our clients for signaling, train order board and telephone systems. MRCS principals Seth Neumann and Chuck Catania bring deep expertise in developing and implementing solutions on model railroads of all sizes and eras.

- Electrical (DCC Power) Design
- Signal System Design
- Custom product design
- System Integration
- Signal System Set up and Programming
- Installation

MODEL RAILROAD
CONTROL SYSTEMS

Phone: 415-602-1510
E-mail: sales@modelrailroadcontrolsystems.com
modelrailroadcontrolsystems.com/

Model Railroad Control Systems



OPEN SOURCE
ELECTRONICS FOR MODEL
RAILROAD OPERATIONS

Product & Service Information

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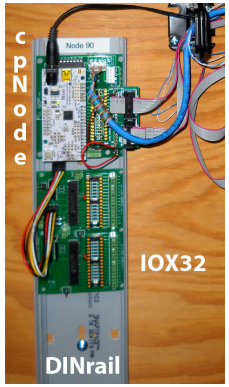
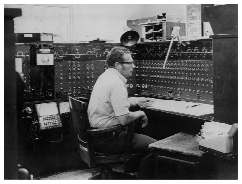


cpNode with 32 line expansion for 48 lines

cpNode - Arduino based CMRI

cpNodes are Arduino-based nodes for the Computer Model Railroad Interface (CMRI) system. They communicate with each other and with classic CMRI nodes via CMRInet. These nodes allow economic entry at as few as 16 lines and expand to as many as 144 lines per node with I2C peripherals (IOX16/32). cpNode can be run with standard software which emulates traditional SMINI or SUSIC nodes. You can modify the software with free Arduino development tools and or add real-time intelligence to your CMRI- compatible nodes, this keeps your technology base up to date. cpNode is compatible with JMRI and traditional BASIC/ Visual Basic development tools on the host side. cpNode is also a great platform for developing a free standing vital logic control points, interlocking towers, or ABS/APB signaling system. Software for these applications is posted in the Arduini Yahoo

Telephones for Model Railroad Operation



WP Dispatchers' office in Sacramento, CA, circa 1982

Telephone systems for dispatching model railroads. MRCS offers boards to power telephone systems, control dispatcher stations and perform useful functions in assembling layout phone systems. We also re-sell parts such as hook switches, handsets, speech networks from which you can assemble custom telephones that fit nicely in your layout's fascia.

We can often match the equipment seen in photos of vintage dispatch and train order offices. If you'd like us to help you secure the equipment to match your prototype, please contact us at sales@modelrailroadcontrolsystems.com and include a photo of the installation you'd like to model!

Community Designs

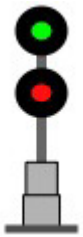
MRCS serves as a hub for community-supported open-source hardware. These products are submitted by hobbyist developers who make their designs available to other model railroaders. MRCS has the boards manufactured and offers them for sale as is. Support is by the developer. Our price is based on actual production cost plus overheads for inventory, shipping, taxes, merchant fees and the costs of running

Radio Frequency Identification (RFID)

An RFID system for Model Railroads. Reads 125KHz EM4100 tags.

Prototype RFID Reader Antennas on the BNSF near Gillette, WY

RFID is used by the railroads for car tracking and generating switch lists. Our RFID system supports switch list generation and train tracking. We offer RFID tags, reader assemblies, and a pre-packaged server which plugs into your home network and offers the switch list and train tracking (OS) applications. We also offer HO scale models of the prototype antennas.



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