Glossary D

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D type connector

A D type connector is usually with 9 or 25 pins to connect computer cables. It is in two parts. A socket or female connector and a male plug. It is known as a D type connector due to the D shape of the surround to the pins and socket.

DC

Direct Current. DC is the unidirectional flow of electric charge. Direct current is produced by sources such as batteries a model train set controller or a dynamo on your bicycle. Typical DC voltage values used on model train layouts are 12V (motive power), 5V (logic circuits such as those used by CBus) and 2-3V (Light-Emmitting Diode (LED) illumination). More information about DC: Wikipedia - DC

DC Control

DC or direct current, usually from a 12v supply, is the traditional method of controlling and powering model locomotives by varying the voltage supplied to the track.

DCC

Digital Command Control. DCC systems allow you to simulate prototypical train operation on your model railroad. With DCC you can operate multiple locomotives independently at the same time on the same section of track without a computer and without blocking or other complex wiring schemes. DCC systems use digital data packets to communicate commands to decoders that control locomotives and turnouts on the railroad.
What will it do for me and my railroad?
Simply put, DCC will let you “run your trains, not your track.” DCC gives you the freedom to bring your railroad to life! With DCC you have truly prototypical operation at your fingertips.
Why use a digital system rather than an analoge system?
Because digital technology gives extremely reliable operation and the technology is almost infinitely extendable without causing backward compatibility problems (analoge systems are inherently more restrictive). Also, digital systems make wiring simple and easy to install. Because a digital system encodes information sent from the command station to the decoder as numbers grouped into packets, new types of packets can be added to a digital system to send more information thus extending the existing system without causing backward compatibility problems.

DecoderPro

A better tool for programming decoders. DecoderPro simplifies the job of configuring complicated DCC decoders by providing screens on which you can select the various options and values you want. Modern DCC decoders are complicated beasts to program. The simple idea of “put the address in CV01” doesn't cope well when you program complicated functions using combinations of bit patterns. A friendlier interface is needed. There are programs that provide better ways of programming specific decoders. Unfortunately, they are limited to specific types of computers, and only their authors can customize them for new types of decoders.
The DecoderPro symbolic programmer is meant to improve this. It is configured using text files, so that it can be adapted to additional decoder types easily. It talks to the decoders using the JMRI programming interface, so that it can run on any computer and layout hardware that JMRI has been ported to. It's freely available for download. And since the code is available via open source, if you want to improve on it you can.
http://jmri.sourceforge.net/help/en/html/apps/DecoderPro/index.shtml

Decoupling capacitor

Decoupling capacitors are used to prevent transfer of high-frequency noise between electrical nodes. The most common use of decoupling capacitors is on power supply rails where they prevent voltage drop when transient voltage spikes/current spikes are experienced. These capacitors can be viewed as small localized energy reservoirs.

Digital

The word digital is most commonly used in computing and electronics, especially where real-world information is converted to binary numeric form as in digital audio and digital photography. Such data-carrying signals carry either one of two electronic or optical pulses, logic 1 (pulse present) or 0 (pulse absent). The term is often meant by the prefix “e-”, as in e-mail and ebook, even though not all electronics systems are digital.

Digitrax

Digitrax is a sullpier of DCC systems located in Norcross, Georgia (just outside Atlanta). They supply a full range of command stations, decoders and accessories.
For their website see Digitrax

DIL

Dual In Line sockets. A DIL socket is usually plastic for soldering to a printed circuit board to receive the pins of a computer chip.

Wikipedia - DIL

Diode

The DIODE is an electronic component that allows the passage of current in only one direction.
Main article

DPDT

Double Pole Double Throw (DPDT) switch. A switch which connects or disconnects two inputs to two sets of outputs

DPR

DPR Double Pole Relay module from the RPC range.
In spite of all the advances in electronic components over the past few years, there is still no realistic alternative to the electro-mechanical relay. This is especially the case when the voltages or currents to be switched bear no relation to the circuitry switching them. Similarly, the 'Changeover Switch' arrangement is not easy (or economical) to implement in solid state form. Analogue Switches are available, but are generally only suitable for 'small signal' circuitry such as Audio/Video equipment. The DPR module provides eight independent double pole changeover relays, mainly intended for track section switching, frog polarity switching etc, although they can be used for any desired function within the specification of the relays. The module is designed to be Control Panel mounted, as part of an RPC (Remote Panel Control) system.

DPST

Double Pole Single Throw (DPST) A switch that connects or disconnects two inputs to two outputs.

Driver

This a system to get computer programs to work the hardware to work the track/locos signals

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Last update: **2015/01/09 03:13**