Signaling the CNW Western Division by Jim Osborn

Notes and references

A Few Lessons Learned

- Use 3 or 4 leaded LEDS for targets. 2 wire bi-color LEDS have a color imbalance and poor yellow.
- Use the Circuitron remote Tortoise mount for animation.
- Build the semaphore & actuator assembly off layout.
- The transformer coil track detectors work – less expensive. Use RR Cir-Kits not NCE or others.
- Carefully plan the sensed blocks before wiring track.
- Do not mix DCC & signaling on the same control buss.
- If you only want train position signals – see an MR article titled, "Simple Circuits for ABS". Mar. & Apr. 2001
- There are animation only signal drivers available for really simple signals. ref. Logic Rail Technology or Circuitron
- If you need flashing lights, use a flashing lite driver – not JMRI

System Hardware

- RR-CirKits**   www.rr-cirkits.com
- Digitrax   digitrax.com/products/detection-signaling
- Tomar Signals   tomarindustries.com/signals.htm
- Oregon Signals   www.oregonrail.com
- Southern Digital   www.sodigi.com/ho_signals.html
- NJ International   www.njinternational.com
- JCL Enterprises   www.jlcenterprises.net (Bruce Chubb)
- Logic Rail Technology**   www.logicrailtech.com
- Circuitron   www.circuitron.com
- Misc. Hardware, micro switches, optical detectors, LEDs, Cable, etc. Visit All Electronics, Digi Key, Jemco or Mouser

        ** NMRA partnership discount available

System Architecture – Evolving

- Hardware is being consolidated – This yields Lower Cost & Less wiring.
- NMRA Layout Command Control is arriving:

    o Eliminates naming devices

    o http://openlcb.org/

    o Hardware is starting to show-up

    o RR CirKits has a Tower Controller & Signal Driver boards

    o JMRI can be used to configure the system

    o Deepwoods Software is also developing config software

References

LCC Wiki   www.dccwiki.com/Layout_Command_Control

NMRA LCC   www.nmra.org/sites/default/files/standards/lcc_faq_handout.pdf

                         www.nmra.org/introduction-layout-command-control-lcc

North American Prototype Signaling

                         www.railroadsignals.us

JMRI   http://jmri.org/

RR-CirKits references

                         http://www.rr-cirkits.com/Clinics/Clinics.html

                         http://www.rr-cirkits.com/Notebook/index.html

Numerous reference articles on homemade target signals in Model Railroader, Railroad Model Craftsman, Web Blogs, etc.