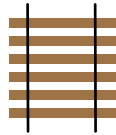


Model Railroading Digital Protocols

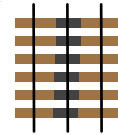
Digital protocol: the "language" spoken by the digital command station to the digital decoders inside the locomotives, through the tracks.
Analog (AC or DC) layouts do NOT use any digital protocol.

3 protocol families

All scales, 2-rail tracks

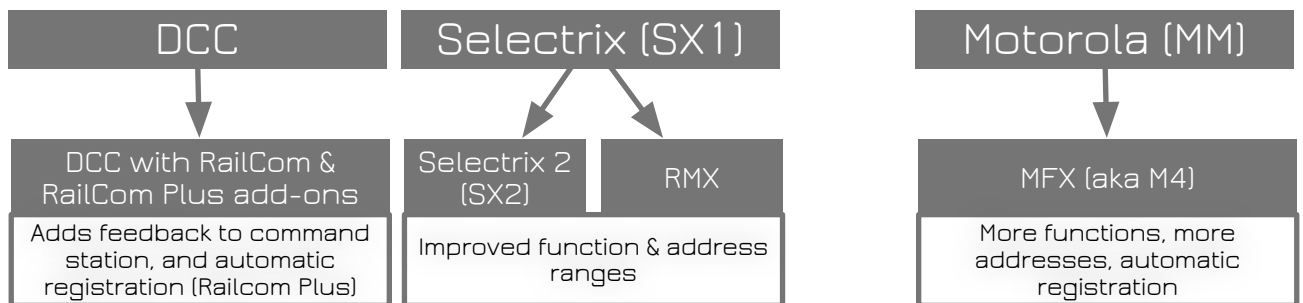


Märklin 3-rail H0



	DCC	Selectrix	Motorola
Where	All scales. Most used protocol worldwide.	Mostly N, Z and H0. Popular mostly in German speaking countries.	Märklin H0 (mostly). Defacto protocol for 3-rail systems.
Origin	Developed by Lenz. 1993: standardised by the American NMRA.	Originally developed for Trix/ Minitrix by Doehler & Haass in the 1980's.	1994, developed by Märklin

Protocols have evolved over time



In a nutshell

- 1 DCC is the most universal protocol.
For Märklin 3-rail trains in H0, MFX is the standard.
- 2 Your digital locomotive (or added digital decoder) and your digital command station must be able to speak the same protocol.
- 3 Choose 1 protocol for all your trains & decoders and stick to it: it's easier.
- 4 Multiprotocol command stations can send several protocols to the tracks
Multiprotocol decoders can understand several protocols.

