Märklin digital

Converting a locomotive to digital operation

Märklin 3003

DB Baureihe 24 DB Class 24 DB type 24



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Märklin BR 24, catalog no. 3003 converted to digital operation (2)

It is easy to convert locomotives prepared for digital conversion with a NEM or DCC connector. You remove the original direction switch and replace it with a decoder.

It is not quite so easy regarding locomotives that are not prepared for digital conversion. If you want to operate elder locomotives from the manufactors Märklin, Roco, Mehano, Lima etc. on your digital layout, your need to find your solder iron. Don't make this stop your from converting analogue locomotives to digital operation if you wish to continue to operate your elder locomotives.

In addition to the locomotive, locomotive decoder, condensers 100 nF and noise suppression chokes 10 μH you need a solder iron.

Märklin 3003 DB class 24 converted with Uhlenbrock 75 000 AnDi

The Märklin classic 3003 is converted to digital operation and equipped with an Uhlenbrock 75000 AnDi decoder. The decoder replaces the original direction switch demanding no further conversion of the model. The locomotive can hereafter be operated on layouts like this analogue layouts, Märklin Delta, Märklin Digital (Motorola) and Märklin Systems (mfx).



First you remove the direction switch and all cable connections as well as the old condensers, Leave the noise suppression choke soldered the the upper solder point.

On the picture below the two condensers are still to be removed.

Märklin BR 24, catalog no. 3003 converted to digital operation (3)



Elder Märklin locomotives like this one was equipped with a pin used for manual direction switching. It no longer has any function and should be removed.



The locomotive decoder is installed using the same scew that was used to fasten the directional switch. It also secures a very good ground connection – BUT – ad some tape on the back of the decoder to avoid any electrical ...



Märklin BR 24, catalog no. 3003 converted to digital operation (4)





Before mounting the locomotive top, you need to shorten the screw fastening the decoder or use a shorter one.



Märklin BR 24, catalog no. 3003 converted to digital operation (5)

Lubricate the model e.g. with Super Lube – with Teflon® and check the pick-up shoe (catalog no. 7185), adhering tires and the brushes.



The top is fixed and the model is ready for digital operation.

