Firmware for a märklin Sound Decoder		
Decoder	mSD /3.5 - märklin Sound Decoder /3.5	
Trace	H0	
Sound memory	256 MBit	
Protocols	Analog: AC, DC Digital : MM, DCC with RailCom, MFX	**mSD/3**
Article	- -	
Type	**Retrofit decoder**	
Version (fwd)	3.5.1.1	
Date	13. August 2025	

Changelog

This changelog is designed to help you identify what improvements to the firmware from version to version were performed. Please understand that minor or insignificant changes are not here can be mentioned. Jumps in the version numbers indicate internal developments that were not delivered.

Version: 3.5.1.1 (13. August 2025)

- Feature : In RailCom channel 2 ID 1 and ID 2 are now sent to the ACK ACK or ACK NACK in addition to the ACK ACK or ACK NACK, if nothing else is to be sent
- Improvement : Analogue starting voltage improved
- Improvement : Improved handling of flash memory, deleting an empty area and double saving values prevented
- Bugfix : In certain situations, a 0 read was read in the very first mfx reading instead of the real value
- Bugfix : Fix error in SUSI module detection if the SUSI module had the participant number 3
- Bugfix : In the SUSI block of the mfx CC structure, if participants 2 and participants were presented, twice the CVs of participants 2 instead of the participants 2 and participants 3 were displayed
- Bugfix : The control of the engine output corrected, the PWM was not set to fit
- Bugfix : The change of direction with Analog AC (switchover) was not saved
- Bugfix : Fixed error in the Märklin dynamic sound (mDS), each sample was used twice
- Bugfix : Fixed a bug in the sound that could lead to permanent cracking and crackling
- Bugfix : In DCC mapping, the functions SUSI-F21 to SUSI-F24 could not be programmed
- Bugfix : In the output mode FGL coupling, the period value of 0 has led to a long switch-on time
- Bugfix : If the direction bit was set at the traction address CV19, this was distributed in RailCom

as part of the address in ID 2
- Bugfix   : Motorola programming with connected voltage buffer has been improved. For control panels without automatic programming procedure, e.g. Control Unit 6021, must be waited at least 10 seconds when programming after pressing the "Stop" button until the next step is continued
- Bugfix   : Control of a voltage buffer remains enabled during Motorola programming

Version: 3.5.0.12 (03. February 2025)

- Corresponds to the first delivery state of the series/games world decoder mSD3.5