

3 Settings

The following settings described here are stored in the Z21 persistently.

These settings can be reset by the user to the factory settings by keeping the STOP button on the Z21 pressed until the LEDs flash violet.

3.1 LAN_GET_LOCOMODE

Read the output format for a given locomotive address.

In the Z21, the output format (DCC, MM) is persistently stored for each locomotive address. A maximum of 256 different locomotive addresses can be stored. Each address ≥ 256 is DCC automatically.

Request to Z21:

DataLen		Header		Data
0x06	0x00	0x60	0x00	16 bits Loco-Address (big endian)

Reply from Z21:

DataLen		Header		Data	
0x07	0x00	0x60	0x00	16 bits Loco-Address (big endian)	Mode 8 bit

Loco Address 2 Bytes, **big endian**, i.e. first comes high byte, followed by low byte.

Mode 0 ... DCC Format
1 ... MM Format

3.2 LAN_SET_LOCOMODE

Set the output format for a given locomotive address. The format is stored in the Z21 persistently.

Request to Z21:

DataLen		Header		Data	
0x07	0x00	0x61	0x00	Loco address 16 Bit (big endian)	Modus 8 bit

Reply from Z21:

none

Meaning of the values: see above.

Note: each locomotive address ≥ 256 is and remains "Format DCC" automatically.

Note: the speed steps (14, 28, 128) are also stored in the command station persistently. This automatically happens with the loco driving command, see [4.2 LAN_X_SET_LOCO_DRIVE](#).

3.3 LAN_GET_TURNOUTMODE

Read the settings for a given accessory decoder address ("Accessory Decoder" RP-9.2.1).

In the Z21, the output format (DCC, MM) is persistently stored for each accessory decoder address. A maximum of 256 different accessory decoder addresses can be stored. Each address ≥ 256 automatically is DCC.

Request to Z21:

DataLen		Header		Data
0x06	0x00	0x70	0x00	16 bits Accessory Decoder Address (big endian)

Reply from Z21:

DataLen		Header		Data	
0x07	0x00	0x70	0x00	16 bits Accessory Decoder Address (big endian)	Mode 8 bit

Accessory Decoder Address 2 Bytes, **big endian**, i.e. first comes high byte, followed by low byte.

Mode 0 ... DCC Format
 1 ... MM Format

At the LAN interface and in the Z21, the accessory decoder addresses are addressed from 0, but in the visualization in the apps or on the multiMaus from 1. This is only a decision of the visualization.
 Example: multiMaus switch address #3, corresponds to address 2 on the LAN and in Z21.

3.4 LAN_SET_TURNOUTMODE

Set the output format for a given accessory decoder address. The format is stored in the Z21 persistently.

Request to Z21:

DataLen		Header		Data
0x07	0x00	0x71	0x00	16 bits Accessory Decoder Address (big endian) Mode 8 bit

Reply from Z21:
 none

Meaning of the values: see above.

MM accessory decoders are supported by Z21 firmware version 1.20 and higher.
 MM accessory decoders are not supported by SmartRail.

Note: Each accessory decoder ≥ 256 is and remains DCC automatically.