CAN-StellPult

The CAN-StellPult

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System requirements:

The CAN-StellPult (control panel) is intended as an accessory for switching solenoids. If one likes to operate DCC or MM switch decoders with the "CAN-Stellpult", one needs a Märklin Gleisbox (track box) which generates the desired track formats from the CAN commands.

It extends comfortably the switching with the Central Station 2

...and works also fine with the Mobile Station

...or, from **Version 2.0 on**: one connect it
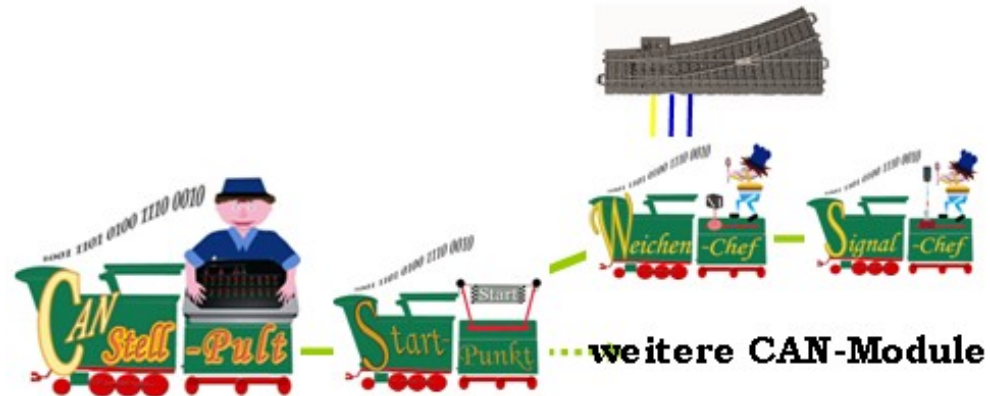
to the Z21 of Roco

...or

to the MX10 of Zimo

It can also be used as a control panel in a pure CAN-digital-Bahn system structure...

and alone with switching modules, such as e.g. the „LampenChef" (light decoder), „SignalChef" (signal decoder), „RelaisChef" (relay decoder), „WeichenChef" (turnout decoder) or any other module, which is responsive to magnetic adresses, may be used. Furthermore, the construction can be combined arbitrarily with other CAN modules and be expanded by them.

up

Connection:

The conjunction is quite simply effected through a plug connection.

Operation with the Central Station 2/3:

A direct connection with the Central Station 2 might be possible. Indeed, for the connection to the two jacks at the front, the 10-pole plugs of the standard cable are conditioned mechanically a little bit too thickly. If you dare, you can taper the sheathing of the plug with a knife so that the cable can still be plugged in directly.

If you want it to be less 'tinkering', connect the CAN-StellPult to the CS2/3 via a [image]. Here a 12V DC 1,5A power supply and the cable 60123 from Märklin is needed for the connection CS2/3 to StartPunkt 2.

Alternatively you can use a Märklin cable 60124 as an adapter and if neccessary the Märklin terminal 60145.

CAN-digital-Bahn Das CAN-StellPult und die CS2

Operation with the Gleisbox (track box) / Mobile Station 2:

The „CAN-StellPult" can be simply plugged to the track box like a Mobile Station 2. It is necessary neither an adaptor nor a power supply.

If both jacks of the track box are already occupied, one can raise in an easy manner the number of the places with a [image] ,

or (distributors).

CAN-digital-Bahn CAN-StellPult für MS2

[▶]

Operation with the Z21 of Roco:

The CAN-StellPult cannot be connected directly to the Z21, but there is the StartPunkt Z21 or the SternPunkt Z21, that can function as adapters. As long as no further ZCAN modules are connected, no power supply unit is required and a SternPunkt Z21 suffices as adapter.

CAN-StellPult an der Z21

Operation with the MX10 of Zimo:

The CAN-StellPult cannot be connected directly to the MX10 but there is the StartPunkt Z21 or the SternPunkt Z21, that can function as adapters. As long as no further ZCAN modules are connected, no power supply unit is required and a SternPunkt Z21 suffices as adapter.

CAN-StellPult an der MX10

**Operation within the CdB-System:**

The same is valid for the connection with the CAN-digital-Bahn system structure, also here the „CAN-StellPult" can be plugged to any 10-

pole jack, so to every , or .

If one needs several „CAN-StellPults" at one desk, one can connect them directly with each other by the available two sockets at the back of the device. Also for this a suitable cable is procurable.
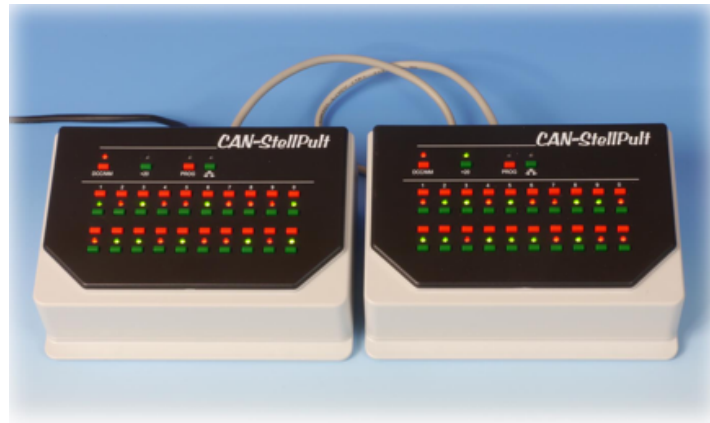
up

Handling:

It makes almost no difference whether the CAN-StellPult is operated in a Märklin or a Roco system, except that after first plugging in one first has to press the corresponding button to specify that the device is to be operated from now on with the Märklin CAN or Zimo's ZCAN protocol.

For this purpose the LEDs above the keys "PROG" (= red) = Märklin and 🖧 "Enter" (= green) = Zimo blink alternately.

This selection can be repeated again by holding down the DCC button - while plugging in the cable - until both LEDs blink again. (Then, of course, please release the button again!)

RESET of the Device:

Important: If the LED of the **DCC/MM button** lights green after this procedure and one wishes to switch with **MM** (Märklin) instead, then one needs to push *once more* the **DCC/MM button** so that the LED lights red again.

However, the handling is very easy. Two keys are available for every magnet address: For every direction one key. If the key is pressed, the turnout switches in the elected direction. The impulse remains switched on as long as the key is operated.

Data Format:

The choice whether one likes to switch a DCC or Motorola track signal is effected permanently by the key "DCC/MM".

If the LED lights above the key in "red", the switch commands are converted into Motorola, if the LED lights above the key in "green", switch commands in DCC are released. The changes between both formats occurs simply through actuation of the key and can be changed if needed, before every switch process.

+20 Levels:
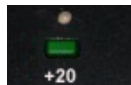
With the 20 pairs of buttons (red/green) one can always reach directly 20 addresses coherently. One can reach in each case the next 20 addresses by operating the "+20" button. A total of 4 levels with 20 addresses are available which means that one can switch all in all 80 addresses with a „CAN-StellPult". Being in the fourth level, after a further actuation of the "+20" button one is again at the beginning.

Position Indication:

The display of the positions is effected respectively by a two-tone LED. Therefor, not the switch command itself but only the confirmation of the execution of the switch process becomes indicated. Thus all switch processes - also these effected from other devices, like the PC or a MS2 - are indicated and the status of the position is always topical. Furthermore, all addresses, which are not in the current operating level but can be reached with the device, are also supervised and their changes are recorded. Thus the display is always current with the change between the levels.

Because the positions are stored, they are always available again after a new turning on of the „CAN-StellPult".

However, this also means, if one operates a button and the display does not alter itself, it is not necessarily defective. It can also be due to the fact that the requested switch command was not really effected what can result from different reasons, started from a cable break

up to the failure of the track processor.

Software Version:

One can call up the software version by pushing the rightmost button ⬌ of the top queue. It gets displayed in two rows.

The upper row shows the first value. If e.g. two LEDs are lit under the numbers one and two, then this means version 2.

The row below indicates the decimal place. Here e.g. the first six LEDs are illuminated. Together both rows show that the device is equipped with the software version 2.6.

Notice: An update of the device unfortunately is not possible because of technical reasons.

STOP / GO: (From firmware 2.7 on and for Märklin system only)

This function is available since firmware version 2.7 (Juni 2020) and for operating exclusively with Märklin-devices.

The Märklin trackbox or Central Station can be switched on and off by the CAN-Stellpult (STOP/GO) and thus the stop button of the Central Station can be manipulated. If the central unit stands in STOP, the CAN-Stellpult shows this status by blinking of the four uppermost LEDs.

The STOP/GO function is effected by pushing the button ⬌. The operation of the blinking LEDs is a reaction of the central unit's answer. If the LEDs are still blinking after pressing the button, the sending of the actuation signal was unsuccessful. Either the central unit did not respond or it could not be switched on for a specific reason. One then have to eleminate the upcoming fault and try switching again.

STOP: The 4 red LEDs in the uppermost row are blinking together (on and off). It is not possible to switch any solenoid address.

GO: If the central unit is turned on, the LEDs stop blinking and e.g. turnouts can be switched again.

This function makes it possible to use the CAN-Stellpult stand-alone, i.e. **without** a Mobile Station at a trackbox as a pure switching system. By simply plugging the two units together, you get a complete digital system that can be used for switching while the locomotives are running parallel.

up

Start address:

A special setting is not necessary for the normal operation of only one device! If one likes to let, however, not begin the lowest address with 1, one can shift the starting address arbitrarily. .

For that purpose one must operate merely the "Prog" key for a second, then the device indicates the topically adjusted start address. Now, the uppermost line of the display with the red LEDs represents the 1000s' place, the green LEDs then show the 100s' place. Then in the second line the red LEDs stand for the 10s' place and, finally, the ones' place is indicated with the green LEDs.

To enter now the new address, one just proceeds, as above explained with reference to the display, only that now merely the keys are actuated manually. The input then is indicated immediately and the transfer of the input occurs through pressing of the ⬛"Enter" key.

up

Manual:

Download : Manual CAN-StellPult

up

Technical Data:

On the part of the CAN-Bus:

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Operating voltage on the bus-system   9 to 12 Volt DC

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Current consumption at 12 Volt   ca. 100 mA

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Digitalsystem / CAN-Protokoll   MM - DCC / ZCAN or MCAN

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Measurement of the housing W x D x H   180 mm x 136 mm x 85 mm

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Software Versions:

Latest:	**Version 2.7** Restructure Production and STOP/GO Function	Jun 2020
	Version 2.6 Restructure Production	Dez 2019
	Version 2.4 ZCAN Operation	Okt 2017

up

Subject to technical changes and errors.