

FRED-CS

Description

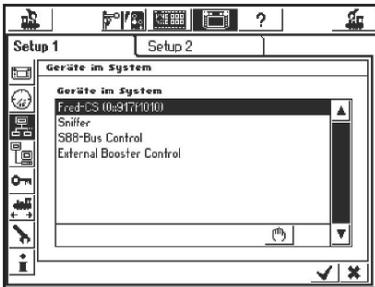
The FRED-CS is intended as an additional hand controller for a Märklin central station with the software version 2.0.4 or lower.

Operation with an ECoS from ESU is likewise possible. Operation with a Mobile Station does however not function.

The equipment cannot be used alone, it must always be operated as a secondary unit on one of the aforementioned devices, since it has no processor of its own. The FRED-CS is intended as controller for a vehicle. A change of the selected vehicle is easy from the center's the locomotive list.

Operation on a Central Station/ECoS

The FRED-CS registers with the Central Station /ECoS like all other system devices and appears in the list "Devices in the system" with its name and a serial number.



Tip: If the registration should fail, try to plug FRED-CS in again.

Changing of the device name is not intended. Several controllers are distinguished only by the serial number.

If one now calls up the FRED-CS by clicking in the display one can take control of any vehicle from the locomotive list in the center.

So a maximum of one vehicle can be handed over to the FRED-CS. An assignment of more than one vehicle is not accepted by the FRED-CS.

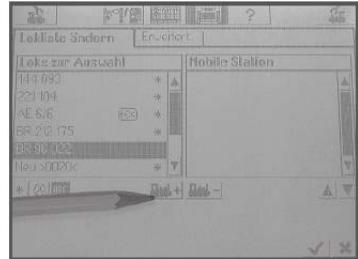
If during the first registration of the FRED-CS more vehicles appear in the list, the list must be cleared completely and then reloaded.

On handing over of a vehicle to the FRED-CS a possible bar on this vehicle, which was already set by another hand controller, is ignored by that FRED-CS!

Assignment of Vehicles

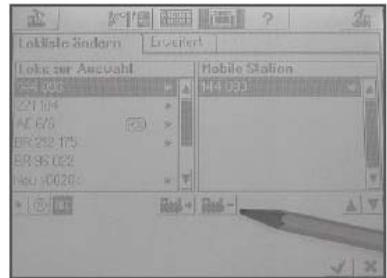
The operation when assigning vehicles corresponds to the procedure with the Märklin Mobile Station.

For changing the vehicle on the hand controller one deletes the vehicle from the "equipment locomotive list" by touching the "Lok-" symbol and confirms this once with the tick at the bottom right of the display.



After this, one calls the FRED-CS again and points it to another vehicle by touching the "Lok+" symbol.

This is also confirmed with the tick at the bottom right of the display.



Since bars by other hand controllers are not considered such vehicles can also be handed over to the FRED-CS and be controlled immediately. The last function is always the default regardless from which equipment it was issued.

Simultaneous operation of several FRED-CS controllers on a Center is possible. A combination with Mobile Stations also functions.

Driving

The speed can be finely adjusted with the red rotary knob. The travel direction is selected with the rocker switch which is below it. The driving direction is indicated by the two LEDs to the right and left of the switch.

If the travel driving is to change, the rotary knob must be turned to the left stop so the vehicle can restart slowly. This is indicated by blinking of the left LED above the rotary knob.

If the speed of the assigned vehicle is changed by another controller it is indicated by blinking of one of the two LEDs above the rotary knob. In order to regain control of the vehicle, the rotary knob must be slowly moved in the indicated direction. When the speed is reached the blinking stops and control of the vehicle is back with the FRED-CS.

From stop to stop of the rotary knob there are 126 speed steps. The conversion of the number of speed steps of the vehicle is exclusively determined by the master on which the FRED-CS has no influence!

Stop Key

The stop button underneath the rocker switch does not only serve as STOP for the assigned vehicle! The key switches the entire attached system into the stop state! The system's STOP state is indicated by both LEDs above the rotary knob blinking. These also blink if the system is switched to STOP from another source.

Pressing the key when the system is stopped switches the system on again.

This key has a STOP/GO function.

Function Keys

Up to 15 functions can be switched with a FRED-CS.

Due to the available keys, the functions are divided into three levels. The LEDs placed above the keys indicate each of these levels by a color.

This way the function presently assigned to the keys can be recognized. If no function level is active the LED under the level key briefly blinks at a slow rate so that one can recognize the selected level at any time. Flashing stops as soon as a function of the active level is switched on.

The level is changed by pressing the "Lok#" key. While the key is operated the block of four LED above the keys lights in the color of the selected level. Each pressing of the "Lok#" key moves to the next level. After the third, the first level is active again.

Each level has five functions to be assigned, starting with F0 to F4 with red indication, and then upward with F5 to F9 to which green is assigned and F10 to F14 with orange indication.

If functions of the assigned vehicle are switched by another controller the LEDs on the FRED-CS are also switched.

However, no update of the current function states on the FRED-CS takes place when the vehicle is changed at the Center.

The default state of all functions when a FRED-CS assumes control is "function OFF"

Note: *Momentary functions are not automatically switched off again but remain active until they are manually reset. This particularly concerns sounds like whistle and bell and also digital couplings. In this case care is required!*