⟨R⟩ Uhlenbrock Elektronik

Mobile Station Adapter 63 810   *DIGITAL 2*

For connecting a Märklin mobile station to the LocoNet

1. Description

1.1 Function

The mobile station Adapter 63 810 connects a Märklin mobile station with the LocoNet-connector of a Digital Centre (Intellibox, DAISY, 6021-Infrared & LocoNet Adapter, TwinCenter). With the Adapter the mobile station can be used as an additional hand controller for controlling locomotives on any LocoNet control centre. With the Adapter the mobile station functionality is expanded. The mobile station can not control solenoids when connected directly to the track. This is however possible with the Adapter connected to the LocoNet control centre,

1.2 Connection

The mobile station Adapter has three sockets. The left socket is used to connect the Adapter to the digital control centre using the supplied LocoNet cable. The middle socket is used to connect the mobile station. The transformer that comes with each mobile station is plugged into the right socket.

If the layout is switched on by a single power switch (power board with power switch) then the transformer for the mobile station should be switched together with the transformer of the Digital control centre.

2. Operation

2.1 Locomotive control

Locomotives are controlled by the mobile station as described in the Manual for the mobile station. The locomotive addresses can either be entered directly or selected from the database in the usual way.

If a multi-protocol digital centre is used the mobile station will control the locomotives using the protocol designated for that address by the control centre which is connected.

Note: Should the locomotive speed, direction or special function be changed by LocoNet Centre, or other hand controller that is connected to the LocoNet, the changes will not be indicated on the mobile station Display.

2.2 Control of solenoids

As an enhancement of the functionality of the mobile station, it is possible, when used as an auxiliary controller to a LocoNet center, to control solenoids. To control solenoids one or more locomotive addresses in the range 1 to 80 can be used. To do this the Adapter must be programmed so that desired address is not used for controlling locomotives. Using this address up to 5 solenoids can be selected.

The address to be used for this is setup using LocoNet-CVs (Configuration variables). Every address in the range 1 to 80 has an associated LNCV which determines whether a locomotive or 5 solenoids are to be controlled using that address. If the LNCV has a value of 0, the address is used to control locomotives. If the LNCV has a value greater than 1, the number is used as a solenoid address for Key F1 of the Adapter. The solenoids with subsequent addresses are then controlled by special functions F2-F4 in the same way as with the light key. If for example address 80 is to be used to control a solenoid with addresses 1-5 then LNCV 80 must be programmed with a value of 1.

For this example the key assignment looks as shown below:

The solenoids can be switched using the special function keys. If the solenoid is in the "round" or "red" state, pressing the key once will switch the solenoid over to "straight" or "green" and vice versa. The solenoid status can not be read on the mobile station.

2.3 Configuration of the Adapters via LocoNet Configuration variables

LocoNet devices are programmed using LocoNet Configuration variables (LNCVs). These LNCVs can be programmed with the aid of an Intellibox (from Software Version 1.3), an IB-Control (from Software Version 1.55) or a TwinCenter (from Software Version 1.1).

2.3.1 Selecting the mobile station Adapter

- Connect the module to the LocoNet**.**
- Press the Intellibox [menu]-key followed by the [mode]-key to enter the Basic Settings menu.
- Press the [↓]-Key repeatedly until you reach "LocoNet Prog." Menu.

```
Basic Settings
> LocoNet Prog.
```

- Press the [→]-Key:

```
LocoNet Prog.:
Art.-Nr.:  .....
```

- Enter the part number of the module (in this case 63 810) and press the [↵]-Key.
  Note: In the Twin-Center part number 6381 must entered.

```
LN Prog.:  63810
Modul Adr.:.....
```

- Enter the address of the module (in a new module this is 1) and press the [↵]-Key.

```
LNPr 63810-00001
LNCV:....0=....1
```

On the top line the display will show the part number and the relevant address of the module. On the bottom line the display indicates the number of the LocoNet CV (in this case "0" for module address) and its current value (in this case "1"). The cursor blinks under the "0".

Important: Every module uses a module address for programming so that the control centre knows which module is being referred to. The factory default for the Adapters is address 1. If further Adapters are to be connected to the control centre they must have a different address. Addresses can be in the range 1 to 65534.

- To change the module address move the cursor to right using the [→]-Key
- Enter the new address using the number Keys
- For the new address to take effect press the [↵]-Key.

2.3.2 Reading and Programming the Adapters

Similar to DCC locomotive decoders the operation of the mobile station Adapters is determined by various configuration variables (CV). In contrast to the locomotive decoder CVs, these are not programmed via the track but via the LocoNet.

- After calling up the module (see Chapter 1.3.1) the Intellibox display reads:

```
LNPr 63810-00001
LNCV:....0=....1
```

The cursor blinks under the 0.
- At the cursor position enter the number of the LocoNet CV that you wish to program.
- Press the [↵]-Key.
- The Intellibox reads the CV. The value is displayed to the right on the lower line of the display.
- Move the cursor to the right using the [→]-Key and enter the new value using the number keys for the LNCV.
- Program the new value by pressing the [↵]-Key.
- Use the [←]-Key to move back to select another LNCV
- Use the [←]-Key to move back to select other mobile station Adapters
- Or the [menu]-Key to stop programming

As you are already familiar with the Intellibox, you can also change any number with a blinking cursor by pressing the [+]-Key to increment or [↓]-Key to decrement the number.

2.3.3 The Universal Address 65535

Using the universal address you can, as the name suggests, call up all mobile station Adapters.

As the universal address is not valid for addressing various mobile station adapters, it can only be used to call up an individual adapter for which the address is unknown. For this you connect the said adapter to the LocoNet. The adapter can then be called up and its address read from LNCV 0.

Use the following steps:

- Press the [menu]-Key
- Press the [mode]-Key
- Scroll to the "LocoNet Prog." menu using the [↓]-Key
- Continue with the [→]-Key
- Enter the part number 63810
- Enter the Universal address 65535
- Press the [↵]-Key
- The module address will read from LNCV 0 and be displayed.

Table of LNCVs (LocoNet Configuration Variables)

CV	Description	Value range	Default value
0	Module address	1-65535	1
1-80	Locomotive/solenoid control mode	1-2000	0
81	Startup time in 50ms intervals	0-255	100
82	Erase LNCVs: *LNCVs 1-80 are set to Zero*	1	0

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Visit our website for up-to-date information about the Intellibox, a Price or Dealer list or to download various publications.

Guarantee declaration

Each component is tested for its complete functionality before distribution. If a fault should arise within the guarantee period of 2 years, we will repair the component free of charge upon production of proof of purchase. The warranty claim is void if the damage was caused by inappropriate treatment.

Please note that, according to EMV regulation the component may only be installed in vehicles which carry the CE logo.

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Our contact Details:
Service
In the event of a defect or failure send the unit together with the invoice and a short description of the fault back to us for repair.

Hotline
We are available if you have any questions!
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Mon - Tue - Thu – Fri, 14:00~16:00 and Wed 16:00~18:00

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