

You can use the hand programming unit to transmit and receive switching programs (data).  
You compile the switching programs:

- on a PC (laptop) with the software „user software“  
(see separate manual)
- in the normal way, at the time switch  
(see the operating instructions for the time switches)

You can transfer the relevant switching program exclusively to the time switch (type)  
for which the switching program was compiled (pay attention to the application name).

The hand programming unit has 4 program locations.

You can transfer 4 different switching programs of read out switching programs.

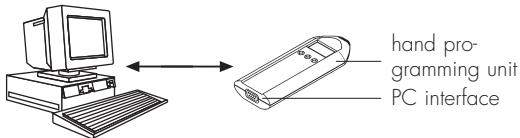
Memory locations empty = P 1, P 2, P 3, P 4

Write memory locations = P \_ 1, P \_ 2, P \_ 3, P \_ 4

Delete the EEPROM – see the „user software“ manual

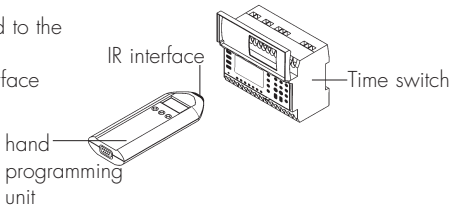
### 2.1 From the PC to the hand programming unit and vice versa

The switching programs are transferred to the hand programming unit from the PC via the serial interface or are written to the PC by the hand programming unit.



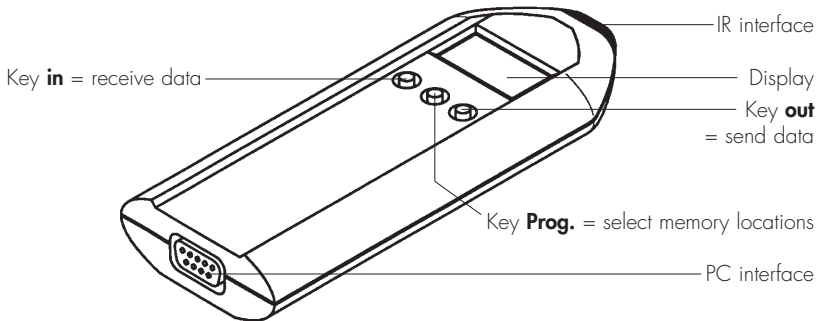
### 2.2 From the hand programming unit to the time switch and vice versa

The switching programs are transferred to the relevant time switch from the hand programming unit via the infrared interface or are read out from the time switch by the hand programming unit.



The switching programs are also transferred from time switch to time switch in the same way.


## 3.1 Unit functions

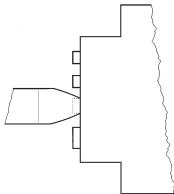



## 3.2 Transferring switching programs to the time switch and vice versa

With the Prog. key, select the corresponding memory location P\_1 .... P\_4

- Transfer the contents or
- With a memory location

-  Hold the taxi **directly** on the two IR diodes (hold the hand programming unit still during this operation)



-  Press the corresponding key twice, depending on the transfer direction – **in** or **out**
- Press the key once. The transfer is prepared and the relevant program location and the assignment **in** or **out** flash alternately
  - Press the key again. The data is transferred. An audible signal (continuous tone) is output during the transfer.

If the data has been correctly transferred, the number of the program location, e.g. P\_1, can be seen in the display (of the hand programming unit).  
If the data has not been correctly transferred, there is a short, audible signal and the corresponding error message appears in the display (see Section 5).


## 4.1 From the PC to the hand programming unit

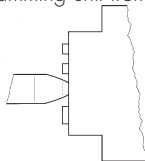
The time is transferred to the hand programming unit from the PC via the serial interface (see "user software" manual).


## 4.2 From the hand programming unit to the time switch

The time is transferred via the infrared interface from the hand programming unit to the relevant time switch or is read out by the hand programming unit from the time switch.

Select "**c lo**" with the Prog. key.

-  Hold the hand programming unit **directly** on the two IR diodes (hold the hand programming unit still during this operation)



-  Press the corresponding key twice, depending on the transfer direction – **in** or **out**
- Press the key once. The transfer is prepared.  
**c lo** and the assignment **in** or **out** flash alternately.
  - Press the key again. The time is transferred. An audible signal (continuous tone) is output during transfer.

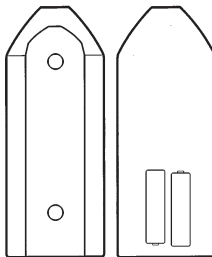
If the time has been correctly transferred, **c lo** can be seen in the display. If the time has not been correctly transferred, there is a short audible signal and the corresponding error message appears in the display (see Section 5).

When working with the hand programming unit, it can happen that an error message appears in the display.

- Er 3 = Time switch not recognised (name of the application is not correct)
- Er 2 = Data not correctly transferred. Repeat the transfer.
- Er 1 = Batteries not supplying sufficient voltage

## 6. Changing the batteries

- Undo the screws
- Replace the batteries
- 2 x type LR 6 alkaline (1.5 volt)
- Close the hand programming unit again



- Power supply 2 x 1.5 volt  
(protected against polarity reversal)
- Battery type LR 6 alkaline
- Running reserve min. one year (approx. 1000 transfer operations)
- Protection class III
- Protection type IP 20
- Ambient temperature  $-10\text{ }^{\circ}\text{C} \dots +55\text{ }^{\circ}\text{C}$
- Interface to the PC RS 232, 9-pole, SUB - D socket
- Interface to the time switch IR