Programming manual 175 4X2 and 176 4X2

Picture: 176 422

1 ⇒ Monday
2 ⇒ Tuesday
3 ⇒ Wednesday
4 ⇒ Thursday
5 ⇒ Friday
6 ⇒ Saturday
7 ⇒ Sunday

⎍ ⇒ Channel ON
⎓ ⇒ Channel OFF
⎍⎓ ⇒ IMPULSE 01 - 59 sec.

In mode AUTO manual switching possible by pressing relevant keys

Programming

Key functions

Menu Selection of programming modes
AUTO → PR → ? → ⟳ → S/W → AUTO ...

[**CL**] Cancelling of inputs in modes PR; ? and ⟳.

[◆] In PR; ?; ⟳ and S/W modes:
Change flashing digit resp. position.
In Mode ?:
Change selected inputs.

[**O.K.**] Confirm the selected mode.
In PR and ⟳ modes:
Head for required position. (forwards)
In ? mode:
Head for next switching time.
In S/W mode:
Enter into memory.

[◄] In PR and ⟳ modes:
Return to required position. (backwards)
In PR mode:
Head for holiday programme when **1** (Monday) is flashing.
In ? mode:
Return to switching time before.

[**A**] In AUTO mode:
[**B**] Press for manual override ON or OFF in relevant channel. Holding down key for 3 seconds, will switch ON or OFF PERM override. **perm** will be displayed. Programmed function in relevant channel will be suppressed.

Cancel permanent ON or OFF by holding down key for a further 3 seconds, **perm** will disappear.

Programming advice

The default setting on delivery is programmed real time and date, the summertime change is activated.

Programming possible also with time switch disconnected: Press O.K., display appears, start programming.

Make inputs step by step. The appropriate position in the display is flashing and can be changed by pressing ◆ key. Head for next position by using **O.K.** key, go backwards by using ◄ key. Inputs are terminated when flashing finishes.

Installation details

⚠ **The installation and assembly of electrical equipment must be only carried out only by a skilled person.**

Connect to voltage and frequency according to type label only.

Warranty void if housing opened by unauthorised person.

The high density electronic circuit is protected against a wide range of external influences. Incorrect operating may occur if external influences exceed certain limits.

Operating modes

AUTO Display of time, day of week, switch status of channel(s). Also indication of actual day's programme in full hours.
2 – channel – version: Change of the indication channel A/channel B every 10 seconds.
Manual overriding possible (KEY A, B)

PR Input of switching commands according to week day(s) and time, also the holiday programme
Use arrow ◄ and **O.K.** keys to alter flashing digit.
Use diamond ◆ key to increase value.
(Confirm last input with **O.K.** key, will enter into memory)
If Monday 1 is flashing, use the ◄ key to select the holiday programming.

? Displays number of free memory locations
Show switching times
Alter switching time
Clear single or all switching times
Use **O.K.** key forwards or ◄ key backwards to display switching times.
Use diamond ◆ key to change (alter) displayed switching time.
Use **CL** key to cancelling the displayed switching time.
Use **CL** key twice to cancel all switching times if number of free memory locations available displayed only.

⟳ Input of actual date and time
Use arrow ◄ and **O.K.** keys to alter flashing digit.
Use diamond ◆ key to increase value.
(Confirm last input with **O.K.** key, will enter into memory and change into AUTO mode)

S/W To activate / deactivate the summer/winter time change over.
Use diamond ◆ key to select automatic S/W – time change ON or OFF.
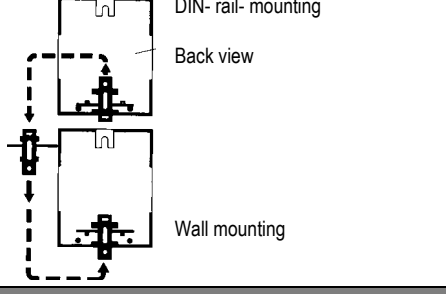(Confirm last input with **O.K.** key, will enter into memory and change into AUTO mode)

Reset

Pressing recessed key in the middle of ◄ key and **CL** key, will clear date, real time and microprocessor
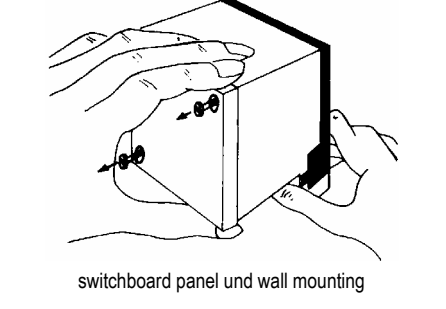Switching programmes normally will not be affected.
(Check by Read – Out; "?"mode)

AUTO PR ? ⟳ S/W

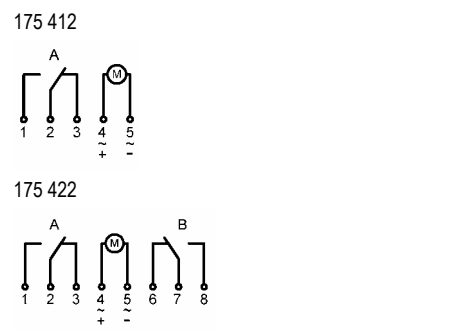The ⟳ mode is selected because date and real time must be programme new.
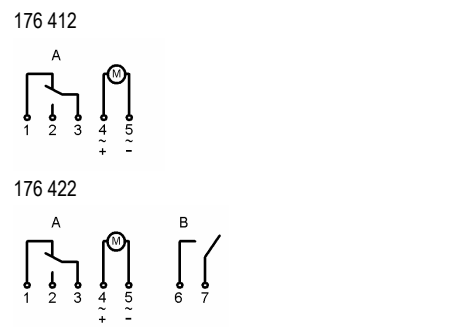
Mounting advice 175 4X2

DIN- rail- mounting

Back view

Wall mounting

Mounting advice 176 4X2

switchboard panel und wall mounting

Wiring diagrams 175 4X2

175 412

175 422

Wiring diagrams 176 4X2

176 412

176 422

Switching programme

Programming day or week programme

	⎍ ⇒ channel ON
	⎓ ⇒ channel OFF
	⎍⎓ ⇒ IMPULSE

TIME	Mo	Tu	We	Th	Fr	Sa	Su	A	B	REMARK

Holiday programme (Permanently ON / OFF)

| | | ⎍ ⇒ channel ON |
| | | ⎓ ⇒ channel OFF |

START	END	A	B	REMARK

Red: Flashing symbol in display

⟳ mode
Current date and real time input or change

Example: Date 01.02.2000; time 14:00
after Reset

0 DATE
AUTO PR ? ⟳ S/W

O.K. 3x
◆ 1x

0102 DATE
AUTO PR ? ⟳ S/W

O.K. 2x

0102 2000
AUTO PR ? ⟳ S/W

O.K. 1x
◆ 1x

1 : TIME
2
AUTO PR ? ⟳ S/W

O.K. 1x
◆ 4x

14 : TIME
2
AUTO PR ? ⟳ S/W
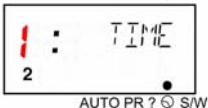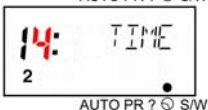
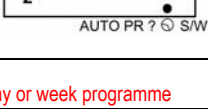**O.K.** 3x

PR mode
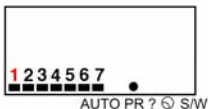Programming day or week programme

Several possibilities:
1. Single day, one channel
2. Several days, one channel.
3. Single day, several channels
4. Several days, several channels.

Example: Tuesday (2) and Thursday (4) to Sunday (7);
Switching time 19:00;
Channel A ON; Channel B IMPULSE 05 sec.
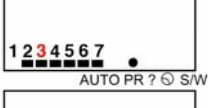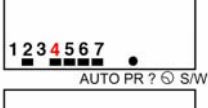Start from: AUTO mode

⟳ 1x
O.K. 1x

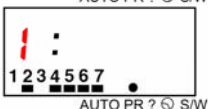**1** 2 3 4 5 6 7 ●
AUTO PR ? ⟳ S/W

◆ 1x
O.K. 2x

1 2 **3** 4 5 6 7 ●
AUTO PR ? ⟳ S/W

◆ 1x
O.K. 1x

1 2 3 **4** 5 6 7 ●
AUTO PR ? ⟳ S/W

O.K. 4x
◆ 1x

1 :
1 2 3 4 5 6 7 ●
AUTO PR ? ⟳ S/W

O.K. 1x
◆ 9x

19 :
1 2 3 4 5 6 7 ●
AUTO PR ? ⟳ S/W

O.K. 3x
◆ 1x

19:00 AON
A ⌐
B
1 2 3 4 5 6 7 ●
AUTO PR ? ⟳ S/W

O.K. 1x
◆ 3x

19:00 BIMP
A ⌐
B ⊓⌐
1 2 3 4 5 6 7 ●
AUTO PR ? ⟳ S/W
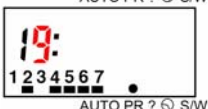
Example 2 channel clock

O.K. 2x
◆ 5x

19:00 05
A ⌐
B ⊓⌐
1 2 3 4 5 6 7 ●
AUTO PR ? ⟳ S/W

O.K. 1x

1 2 3 4 5 6 7 ●
AUTO PR ? ⟳ S/W
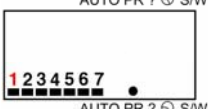
Continue with input of further dates / functions or press key ⟳ 1x to return to mode AUTO.

PR mode
Holiday programming
Start and End programming by date

Programming for certain channels (permanently ON / OFF), while others carry out the week programme.

Example: Start 20.04; End 24.04
Channel B OFF (permanent)
Start from: AUTO mode

⟳ 1x
O.K. 1x

1 2 3 4 5 6 7
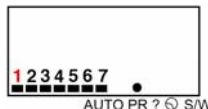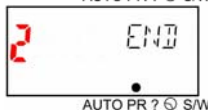AUTO PR ? ⟳ S/W

◄ 1x

0 START
AUTO PR ? ⟳ S/W

◆ 2x

2 START
AUTO PR ? ⟳ S/W

O.K. 3x
◆ 4x

2004 START
AUTO PR ? ⟳ S/W

O.K. 1x
◆ 2x

2 END
AUTO PR ? ⟳ S/W

O.K. 1x
◆ 4x

24 END
AUTO PR ? ⟳ S/W

O.K. 2x
◆ 4x

2404 END
AUTO PR ? ⟳ S/W

O.K. 2x
◆ 2x

BOFF
A
B 1
AUTO PR ? ⟳ S/W

Example 2 channel clock

O.K. 1x

1 2 3 4 5 6 7 ●
AUTO PR ? ⟳ S/W
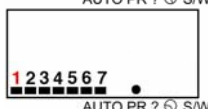
Continue with input of further dates / functions or press ⟳ key 1x to return to AUTO mode.

The holiday programme does not occupy a storage location.
By input a new holiday programme the old holiday programme is overwrite.
The hoilday programme is clear at the end of the holiday programme and the outputrelais goes into the state of the switching programme. (Prgramme review)

S/W mode
Deactivate automatic summertime changes (daylight saving)

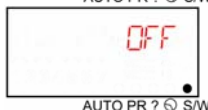The default setting on delivery, S/W time change is activated.
Initial form: AUTO mode

⟳ 4x
O.K. 1x

ON
AUTO PR ? ⟳ S/W

◆ 1x

OFF
AUTO PR ? ⟳ S/W

O.K. 1x

14:00
A 1
2
AUTO PR ? ⟳ S/W

The S/W – time change is deactivated

The time changeover is executed automatically according to the „European Regulation".
Start: **Last Sunday in March**
End: **Last Sunday in October**

? mode
Display or alter switching times

Example: Alter Tuesday and Thursday to Sunday 19:00;
Channel A ON; Channel B IMPULSE
into: Wednesday to Sunday 19:30;
Channel A ON; Channel B ON
Start from: AUTO mode

⟳ 2x
O.K. 1x

29 PL
AUTO PR ? ⟳ S/W

Number of free storage locations available

O.K. 3x

19:00 05
2 4 5 6 7 B ⊓⌐
AUTO PR ? ⟳ S/W

◆ 1x

19:00
1 2 3 4 5 6 7 A ⌐ B ⊓⌐
AUTO PR ? ⟳ S/W

O.K. 1x
◆ 1x

19:00
1 **2** 3 4 5 6 7 A ⌐ B ⊓⌐
AUTO PR ? ⟳ S/W

O.K. 1x
◆ 1x

19:00
1 2 **3** 4 5 6 7 A ⌐ B ⊓⌐
AUTO PR ? ⟳ S/W

O.K. 7x
◆ 3x

19:30
1 2 3 4 5 6 7 A ⌐ B ⊓⌐
AUTO PR ? ⟳ S/W

O.K. 3x

19:30 BIMP
1 2 3 4 5 6 7 B ⊓⌐
AUTO PR ? ⟳ S/W

◆ 2x

19:30 BON
1 2 3 4 5 6 7 A ⌐ B ⊓⌐
AUTO PR ? ⟳ S/W

O.K. 1x

29 PL
AUTO PR ? ⟳ S/W

Number of storage locations available

⟳ 1x

14:00
2 A ⌐ B ⌐
AUTO PR ? ⟳ S/W

? mode
Cancel function

Example: Cancelling holiday programme
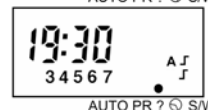Start: 20.04 End: 24.04
Sart from: AUTO mode

⟳ 2x
O.K. 1x

29 PL
AUTO PR ? ⟳ S/W

Number of storage locations available

O.K. 1x

2004 -- 2404
A B 1
AUTO PR ? ⟳ S/W

CL 1x

19:30
3 4 5 6 7 A ⌐ ⌐
AUTO PR ? ⟳ S/W

⟳ 1x

14:00
2 A ⌐ B ⌐
AUTO PR ? ⟳ S/W

If CL key is pressed twice while free storage locations available are displayed, all inputs are cancelled. (Clear all)