

QWTIME III MASTER CLOCK  
**User Manual**

Document: 1789en02.doc  
Author: PM  
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Page: 1 of 7

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# User Manual Expansion unit



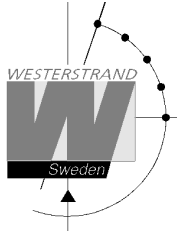
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Page: 2 of 7

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## List of contents

<b>TECHNICAL SPECIFICATIONS</b> .....	<b>3</b>
<b>GENERAL DESCRIPTION</b> .....	<b>4</b>
<b>INSTALLATION</b> .....	<b>5</b>
CONNECTION MASTER CLOCK → EXPANSION.....	6
CONNECTION TO EXISTING QWTIME III MASTER CLOCK.....	7

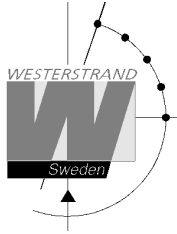
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## Technical specifications

Crystal Frequency:	4,915200 MHz.
Microprocessor:	HD6412394.
Program memory:	>100 years (EE-memory).
Number of control functions:	800.
Relay outputs:	4 changeover and 4 closing potential-free contacts.
Max. load/relay output:	230 V 6A.
Total load relay outputs:	48A
Connection voltage:	230 V 50 Hz -5% +10% alt. 24 V DC -5% +20 %.
Max ripple (24V DC):	0,7V RMS.
Power consumption:	30 VA.
Ambient temperature:	Between 0°C and +40°C.
Relative humidity:	Max. 85% non-condensing.
Case:	IP 65, light grey plastic (Polystyrol) with transparent protection cover.
CE-Approval, EMC	Emission acc. to EN61000-6-3, Immunity acc. to EN61000-6-2.

Art. numbers:	EXPANSION 9-16	124332-00 (230V AC)
	EXPANSION 9-16	124330-00 (24V DC)
	EXPANSION 17-24	124337-00 (230V AC)
	EXPANSION 17-24	124335-00 (24V DC)
	EXPANSION 25-32	124342-00 (230V AC)
	EXPANSION 25-32	124340-00 (24V DC)

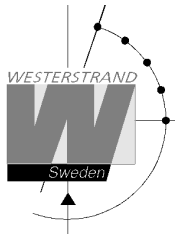
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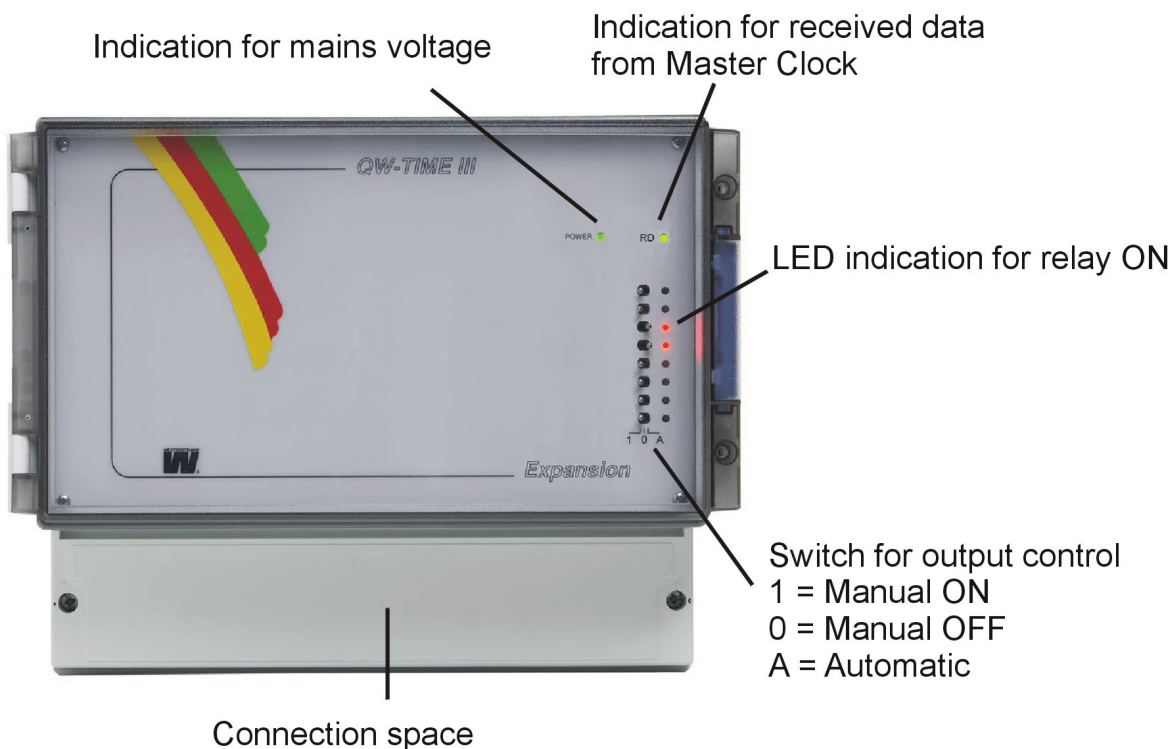


## General description

The Expansion unit is equipped with 8 outputs for control and regulation of various energy consumers such as electrical striking plates, buzzers for pause signalling etc.

The unit is connected to a Master Clock, WDP-Y8, or a Yearly Programmer, WYP-8, using a 3-wire cable. All programming is done from the Master Clock / Programmer.

In case of power failure the outputs are set to position OFF. When power returns and the outputs resume their positions (ON/OFF) which were previously programmed.



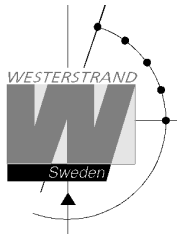
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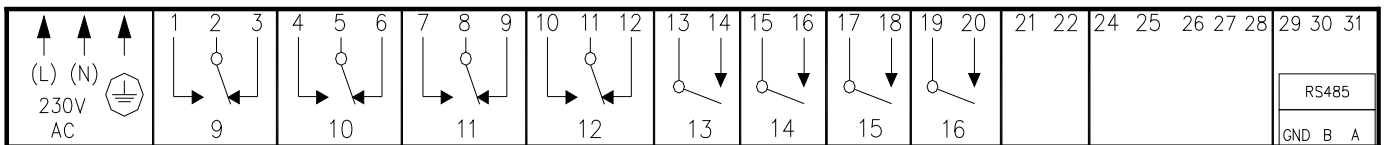


## Installation

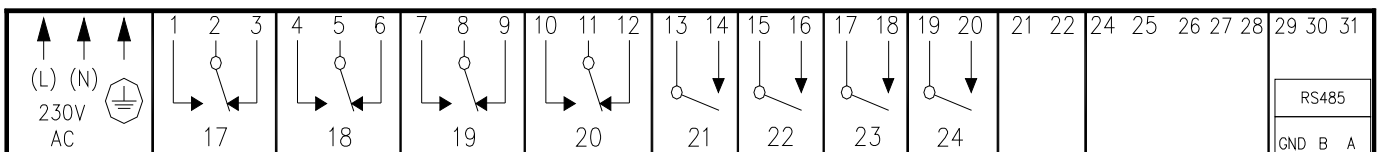
The Expansion unit is intended for wall mounting. Please remark that if the expansion unit is connected to an existing Master Clock, not originally prepared for expansion, then the procedure described on page 6 has to be followed.

1. Screw in the upper fixing screw halfway and hang up the unit.
2. Screw in the two lower screws, accessible under the connection space cover.
3. Connect the RS485 communication wires to the Master Clock.
4. Connect the signal line/lines (to relay contacts).
5. **NOTE!** For connection of signals etc., mixed voltages must not be used. Therefore, choose either 230VAC or, for example 24VAC for connection to the relays.
6. Connect the supply voltage.

### Expansion 124332-00



### Expansion 124337-00

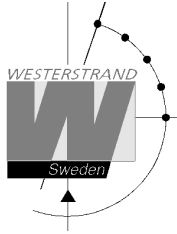


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## Connection Master Clock → Expansion

The Expansion is connected to the Master Clock using a serial RS485 port. The Master clock must be from QWTIME generation III with software version QW3-A195 or higher.

The models that can be used is:

WDP-Y8, art. no. 123352-00, 123357-00

WYP-8, art. no. 124322-00

WDP M+S, art. no. 123362-00

Master Clock	Expansion
GND (29) -----	(29) GND
B (30) -----	(30) B
A (31) -----	(31) A

Master Clock with 9-polar D-sub	Expansion
GND (5) -----	(29) GND
B (3) -----	(30) B
A (2) -----	(31) A

Maximum distance: 1200 m.

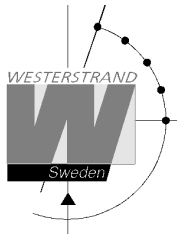
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## Connection to existing QWTIME III Master Clock

If the Expansion unit is going to be connected to an existing Master Clock, not originally prepared for expansion, then follow the procedure below.

### 1. Software verification

Verify that the Master Clock software version is QW3-A141 or higher.

This information can be found in the special function *SOFTWARE VERSION*.

### 2. Software configuration

To be able to program more than 8 outputs a software setting has to be changed in the **hidden** special functions.

**Enter hidden special-functions mode**

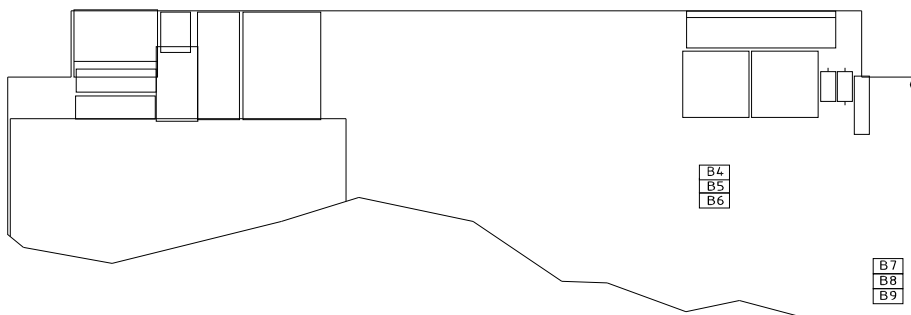
- 2.1 Start from running mode.
- 2.2 Press ↑ → ← YES quickly in a sequence.
- 2.3 The display shows:

SPEC. -FUNCTIONS  
ARTICLE

- 2.4 Press YES.
- 2.5. Change article by pressing ↑ ↓. Accept with YES.  
 Depending of the type of Master Clock used change the article setting to the following:  
 123352-00 WDP-Y8 => 123352-00 WDP-YE  
 123357-00 WDP-Y8 19" => 123352-00 WDP-YE  
 123362-00 WDPM+S => 123362-00 WDPMSE  
 124322-00 WYP-8 => 124322-00 WYP-8E

### 3. RS485 communication

- 3.1. Turn off power.
- 3.2 Open the Master Clock by loosening the four screws holding the front panel.
- 3.3 Lift the panel and set the jumpers B7-B9 according to the instruction below (RS485).
- 3.4 Remount the front panel and turn on the power again.



	B7	B8	B9	
PREPARED FOR RS232	X		X	FACTORY DEFAULT
PREPARED FOR RS485		X		