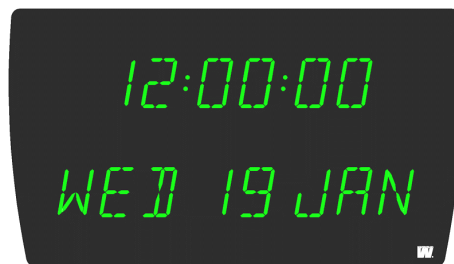
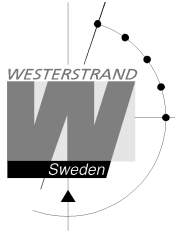


Manual

AUREA ALPHA

Art. no: 119425-10





General

This product is a digital clock for indoor use. The digital clock can be used as a quartz clock, via radio signal (DCF/RDS) or via impulse from a master clock (sync). The clock is changing, summer and winter time, the last Sunday in March and the last Sunday in October automatically.

The Digital clock can be programmed for alternating time/temperature display in 0-25 sec intervals.

Temperature sensor is not included. It is an option.

The clock has adjustable light intensity.

If power failure occurs the display is turned off. The internal clock continues to keep the correct time for 48 hours. After power failure the display is turned on and correct time is shown.

If not specified in order the clocks are preset from factory in impulse Synchronisation mode.

Options

For connection of the options look at the special manuals of the options.

Following options is available:

- Radio receiver DCF
- Radio receiver RDS
- IRIG-B –input (factory mounted option)

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Installation

General

The digital clock consists of two parts: the mounting plate and the clock. All the connections are made to the mounting plate.

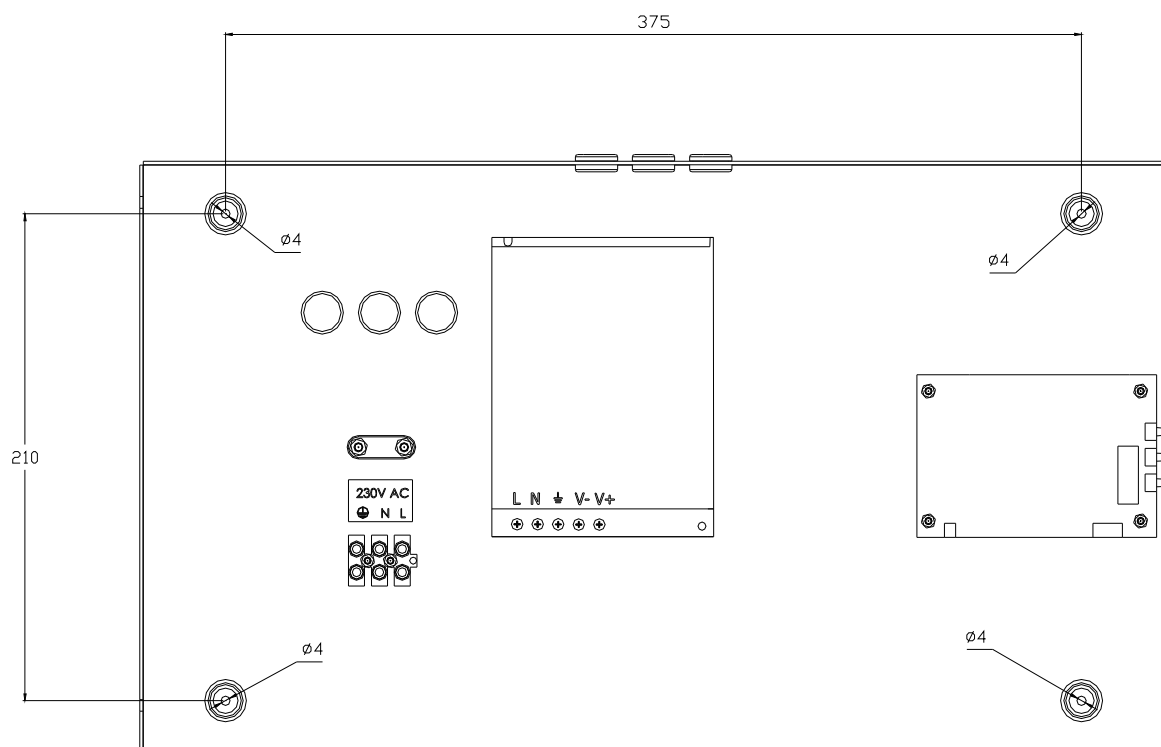


Figure. Mounting plate

The holes in each corner on the *mounting plate* are used to fasten the mounting plate on the wall. The power (230VAC, 50Hz) is connected to a screw terminal, which is mounted on the mounting plate.

Fuse: 10A max

Cable area: 1,5mm²

If the digital clock will be connected to a synchronisation source, it will be connected to the computer board on the mounting plate. See *Connection synchronisation wire*, page 4.



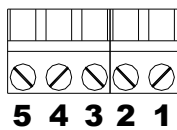
Connection Synchronisation wire

TC/MIN-imp 3,4

DCF 2-line 3 – V+, 5 – GND

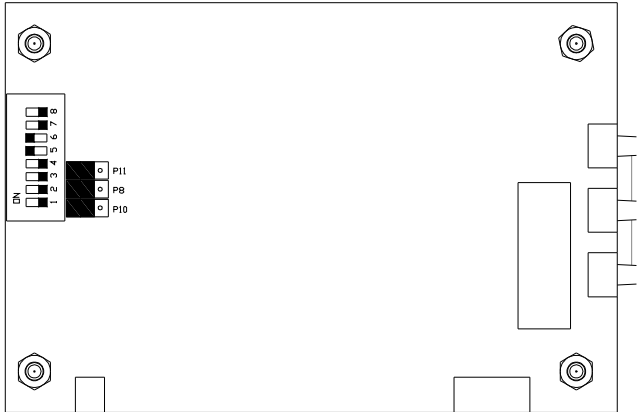
DCF 3-line 3 – V+, 4- DCF, 5 – GND

Sync. input

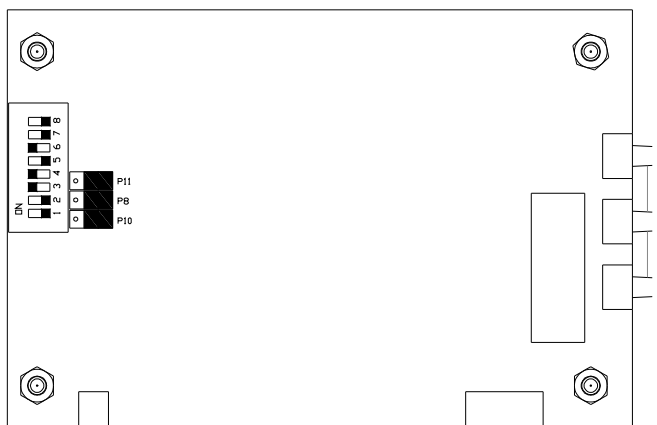


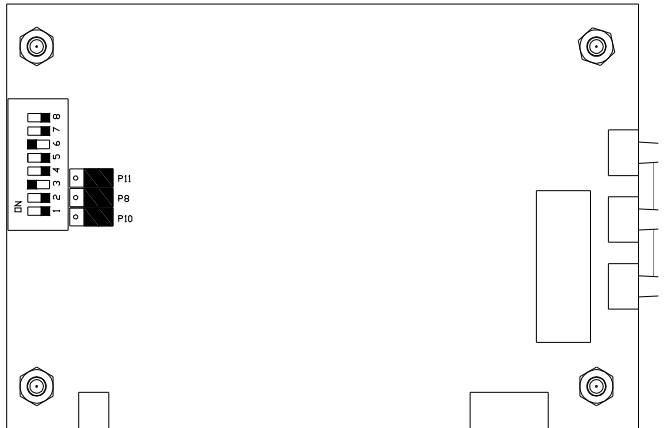


Strapping/DIP switch setting for TC / MIN-impulse (default)



Strapping/DIP switch setting for DCF-radio (2 –wire) computer board

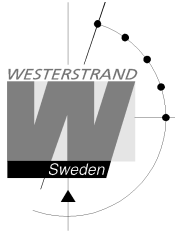


**Strapping/DIP switch setting for DCF-radio (3 –wire) computer board**

The DIP-switch on the computer board should be set as follows:

Dip 1: OFF	Display format is HH:MM.
ON	Display format is HH:MM:SS.
Dip 2: OFF	always OFF
Dip 3: OFF	TC/Min impulse synchronisation. (default)
ON	DCF synchronisation.
Dip 4: OFF	TC/Min impulse or 3-wire DCF synchronisation. (default)
ON	2-wire DCF synchronisation.
Dip 5: OFF	DCF synchronisation.
ON	TC/Min impulse synchronisation.(default)
Dip 6: OFF	½ Min impulse synchronisation.
ON	TC/Min impulse synchronisation or DCF synchronisation. (default)
Dip 7: OFF	always OFF
Dip 8: OFF	always OFF

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Synchronisation

Stand alone

If the clock does not have an external synchronisation, it operates Stand alone.

Minute impulse

Make the strapping according to the drawing for strapping page 5.

Connect the minute impulse wire according to the schema page 4.

The clock can be set in synchronisation or slave mode.

Synchronisation mode:

Set the clock for synchronisation, mode InSy See programming page 9.

Set time and wait for next minute impulse. The clock will be synchronised

Slave mode:

Set the clock for slave, mode InSL See programming page 9.

Set time and wait for next minute impulse. The clock operates as a slave clock.

TC

Check the strapping according to the drawing for strapping page 5.

Connect the TC wire according to the schema page 4.

Set the clock for synchronisation, function DCF See programming page 9.

When a correct time message appears the clock sets the time.

The clock will blink colon when it is in sync and accepts transmitted code.

DCF

Check the strapping according to the drawing for strapping page 5.

Connect the DCF wire according to the schema page 4.

Set the clock for synchronisation, function DCF See programming page 9.

When a correct time message appears, the clock sets the time.

The clock will blink colon when it is in sync and accepts transmitted code.

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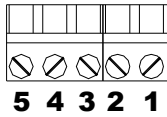
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Connection temperature sensor (this is an option).

Temperature sensor connection

- 1 red.
- 2 black
- 5 Screen





Programming

General

On the right side of the digital clock there are three buttons (Figure *Placement of the buttons*). When the `R` button is pressed the digital clock gets back to the basic state (the time is displayed on the digital clock). The buttons `F` and `P` is used for programming.



Figure. Placement of the buttons

- R (Return)** Enter the base mode (display time)
- F (Function)** Next function / Accept displayed value
- P (Program)** Enter the displayed function / Increase displayed value.

Programming time

Push [F] until display shows

Push [P] display shows year.

Push [P] until desired year (00-99)
Accept with [F].

Display shows month.

Push [P] until desired month (1-12).
Accept with [F].

Display shows day.

Push [P] until desired date (1-31).
Accept with [F].

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Display shows hour.

Push [P] until desired hour (0-23). Accept with [F].

Display shows minutes.

Push [P] until desired minute (00-59). Push [F] for synchronisation and the clock starts

Display shows:

Push [R]. The Programming is finished.

Display shows:

Setting light intensity

The light intensity for the digits can be adjusted in 8 levels.
An automatic dimmer function regulates the light intensity.

Push [F] until display shows.

Push [P]

Display shows: . Light intensity 1 (weakest), 8 (strongest).

Push [P] for desired light intensity. Accept with [F].

Display shows

Push [R] for entering base mode or push [F] for next function.

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Setting synchronisation

Synchronisation for this model are minute impulse, TC, DCF (or stand alone).

Push [F] until display shows.

SY NC

Push [P] until desired synchronisation.

NO SY

No synchronisation, stand alone.

DCF

TC or DCF.

IN SY

Impulse synchronisation.

IN SL

Impulse slave.

Push [R] for entering base mode or push [F] for next function.

Setting alternating time, Loop time

Push [F] until display shows.

LO OP

Push [P].

Display shows

L1 4

Alternating time for display time is 4 seconds.

Push [P] for desired alternating time (0-25). Accept with [F].

Display shows
seconds.

L2 0

Alternating time for display temperature is 0

Push [P] for desired alternating temperature (0-25). Accept with [F].

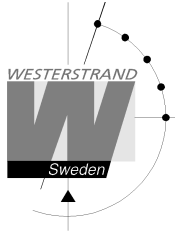
Push [R] for entering base mode or push [F] for next function.

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Setting Correction value for the temperature sensors.

With this function the temperature sensors can be adjusted ± 9 °C.

Push [F] until display shows.

Push [P].

Display shows

Push [P] for desired correction value (± 9 °C). Accept with [F].

Push [R] for entering base mode or push [F] for next function.

Setting Language-function.

With this function the display language can be choosed.

Push [F] until display shows.

Push [P].

Display shows

(FL = Flemish, FR = frensch, DE = german,
FI = Finish, SV = Swedish, NO = Norwegian,
DK = Danish, EN = English)

Push [P] for desired language.

Push [R] for entering base mode or push [F] for next function.



Setting nation-function. (for the dls rules)

With this function the nation can be choosed.

Push [F] until display shows.

NA

Push [P].

Display shows

B

(B = Belgium, F = France, D = Germany,
SF = Finland, S = Sweden, N = Norway,
DK = Denmark, GB = England, ND = NO DST)

Push [P] for desired nation.

Push [R] for entering base mode or push [F] for next function.

Setting 12/24 h format.

With this function the format 12/24 hours display can be set.

Push [F] until display shows.

FO RM

Push [P].

Display shows

12

12 hour format.

or

24

24 hour format.

Push [P] for desired format.

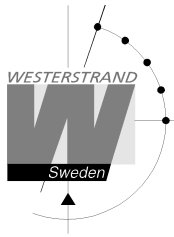
Push [R] for entering base mode or push [F] for next function.

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Technical specification

Data	119425-10
Main power	100-240V AC
Connection current	2 A
Temperature range	0° - +40° C
Size of digits	58 mm
Diode colour	Green
Diod light intensity	300mcd
Power consumption (impulse)	5 mA
Synchronisation	Polarised 24V impulse 1/1, ½ min* Radio signal DCF**, RDS** Time code via IRIG-B***
Running reserve	72 hours
Accuracy	0,1 sec/24 h quartz operation
Protection class	IP43
Standards compliance	EN50081-01 och EN50082-02
Weight	3,3 kg
Dimensions	520 x 295 x 75 mm

* Sync. The clock will continue if the impulse disappears.

** Option

*** Factory mounted option

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