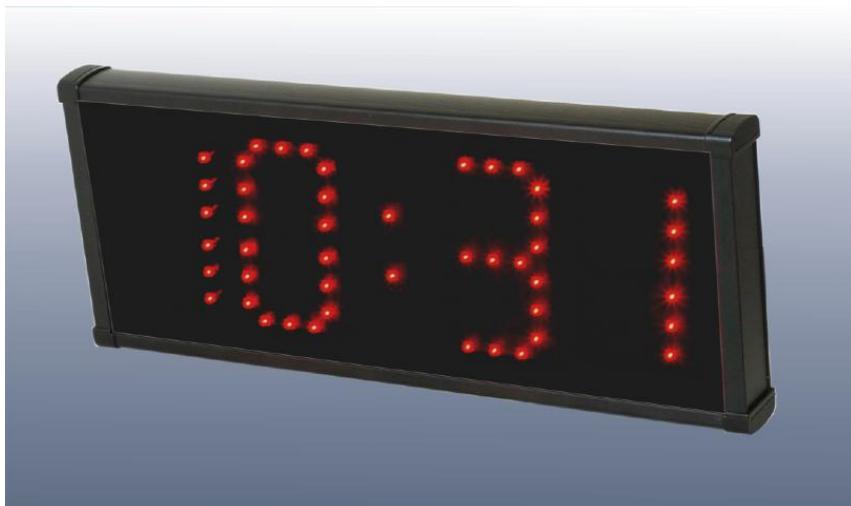


Large digital clock VDH17

User manual



RMC s.r.o. Trenčianska 863/66, 018 51 Nová Dubnica
Tel.: 042/4455621, Fax: 042/4434175, E-mail: rmc@rmc.sk,
www.rmc.sk

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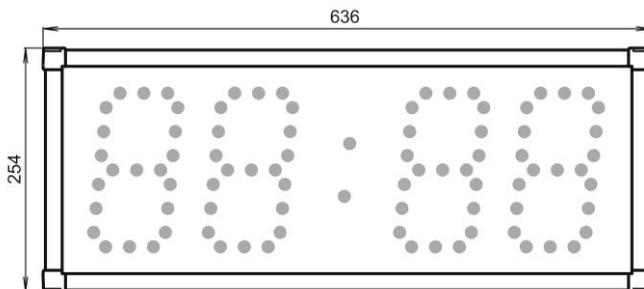
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1. Technical description

The clock is designed for displaying of real time **HOURL:MIN**, date **DAY.MON**, and temperature in the interior or exterior. Intervals of displaying of data can be adjusted. Setting of parameters is simple by wireless IR controller RC403. Display brightness can be adjusted in eight steps manually or automatically in dependence on surrounding lighting. The clock may be installed on any straight surface by means of angle brackets fixed to the rear or side wall. The power supply and thermal sensor is connected through the terminal in the rear or side wall of the clock depending on chosen type of installation. The clock is supplied also in two-sided version with the same depth.

2. Technical data

Power supply:	15-30 VDC, protection against reversing of polarity
Current consumption:	max. 0,5A
Number of digits:	4 – single sided 8 - double sided
Height of digits:	170mm
Colour of digits:	red, regulation of brightness in 8 steps high brightness SuperFlux LED diodes
Display:	HH : MM, DD. MM., TT °C
Temperature measurement:	-50°C ÷ +99°C, accuracy ±1°C
Controlling:	IR controller RC403H, range max. 20m
Ambient temperature:	-20°C ÷ +40°C
Dimensions:	636 x 254 x 56 mm
Installation:	rear, see Pic.2, Pic.3, side, see Pic.4
Digit readability:	cca 50m
Protection:	IP42, internal version IP65, external (E) version

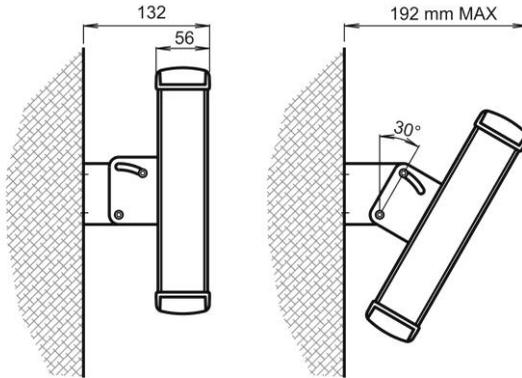


Pic.1: Dimensions schema

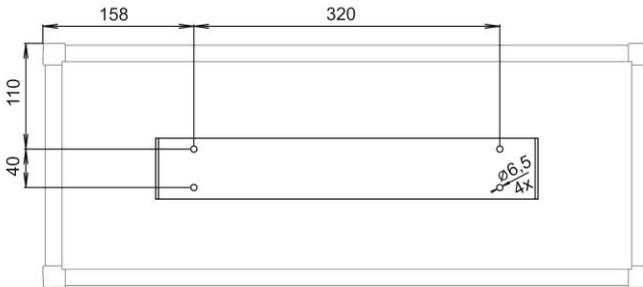
3. Operating manual

3.1. Installation and putting into operation

The clock is installed depending on the type of installation. At the rear gripping, you have to mount the console with four screws to desired position. Respect proper console rotation. Slip-on the console as the clip at the rear side of the clock is located from the outside and mount with applied screws M6. Mount in desired elevation angle and finalize the screws.



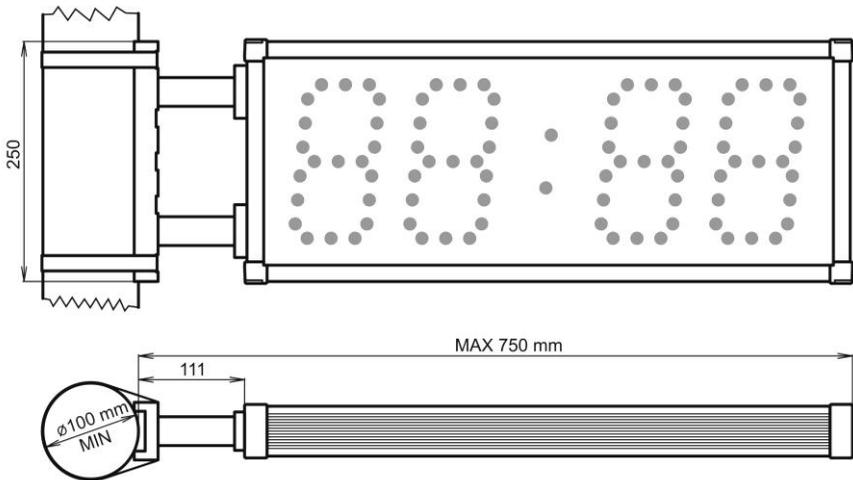
Obr.2: Rear gripping



Obr.3: Terminals in gripping console

The side gripping is possible to a vertical column or a wall. Mounting to a column is possible with steel (rostfest) mounting stripes. Use at least two stripes that are placed to jags in upper and lower part of the console. To achieve higher stability, you can use up to 5 stripes. Stripes are firmly finalized and fixed by clips. The

column diameter shouldn't be smaller than 100mm because of placement of the socket for cables.



Obr.4: Side gripping to a column

After mounting the clock, connect the power supply and put the temperature sensor to an adequate place. With the internal version of clock, there's a supplied power supply SSZ02 with protection IP65 in the box. If you can put the power supply close to the clock, connect the power supply cable directly through the terminal to the output connectors (13.7V/1.5A). Remove the cover, put the power supply cable to the terminal and connect the blue wire to the - jack and the red (brown) wire to the + jack. Connect the network power supply **230V/50Hz** to the main terminal. Mount the power supply cover and finalize screws and both terminals. If you have to place the power supply further from the clock, you can use the applied installation box with terminal and jacks and extend the power supply cable to proper length (max. 10m).

!!!Warning: the clock can be supplied by DC in range of 12÷30V. Supplying by other DC can cause malfunction or even destroying of the clock. In no case, do not connect the clock to AC 230V/50Hz.

For exact temperature measurement, the proper place of the sensor is very important. Put the sensor into a proper position to avoid direct sunlight, wind and objects that produce heat. It's recommended to put the sensor into supplied white plastic pipe and mount it with stripes.

!!!Warning: you must remember that the clock shows the temperature in place of the temperature sensor. This temperature can be different from the place of the clock.

3.2. Parameter setup

After switching on the power supply, time, date and temperature are showed on the display in adjusted intervals. The clock can be adjusted by supplied infra-red controller RC403HL. You can access the menu after pointing the controller to the clock and pressing the **P<P** button for longer than 2 seconds. To move to another item, press the button shortly. After moving to another item, the adjusted value is saved immediately. The menu mode can be switched off in the same way as it was switched on. After no operation within 20 seconds, the clock switches back to the basic display mode.

!!! Warning: controlling of the double-sided clock is possible only from the front side. If the clock is gripped at the side, you have to stay in front of the clock and the console must be at the left side. The controller range is app. 20m. The solar radiation reduces the operating range and you have to step closer. We recommend to set up the clock at lower solar radiation.

3.2.1. Time setup

After entering the menu, the first digit blinks. After overwriting the value with the **0-9** button, the next digit blinks. In this way you can set up hours and minutes and the whole cycle than repeats. Desired value can be set by pressing the **P<P** button, which also moves the blinking digit.

3.2.2. Date setup

Date is set in the same way as before in the *DAY. MONTH* format.

3.2.3. Year setup

Can be adjusted in range of 2000-2099.

3.2.4. Setup of interval of displayed time

An abbreviation **th** and blinking digit is displayed. The display interval can be changed from 2 to 59 seconds.

3.2.5. Setup of interval of displayed date

An abbreviation **th** and blinking digit is displayed. The display interval can be changed from 0 to 59 seconds. After setting the **0** value, the title **OF** is displayed and the date won't be showed. From 1st to 7th January, after displaying the date, the title **PF** with year will be showed for three seconds.

3.2.6. Setup of interval of displayed date

An abbreviation **tt** and blinking digit is displayed. The display interval can be changed from 0 to 59 seconds. After setting the **0** value, the title **OF** is displayed and the temperature won't be showed. If there is any malfunction of the temperature sensor, the temperature won't be showed.

3.2.7. Setup of the display brightness

The display brightness can be adjusted in 8 steps. An abbreviation **br** and the brightness step 1 to 8 is displayed. If you choose **0**, an abbreviation **AU** is displayed and the brightness is changed automatically depending on the solar radiation.

After this setup, everything is adjusted. After adjusting the brightness, you return to the time setup. The setup mode can be ended by the same way as started.

In case of need, by pressing the **I-II** button, menu can be expanded to a special menu for data correction. Moving through digits is done by this button or by **P<P** button.

3.2.8. Time correction setup

Is used for time measure correction. For proper setup, you have to know, how the time changes in seconds in a week. A letter **H** is displayed and the number after shows the value in seconds that must be added or subtracted. The – symbol means subtracting and can be entered by pressing the button **-/-** -. The time correction is distributed equally and is set every day at 00:00:30.

3.2.9. Temperature correction setup

Measured temperature can be also corrected. An abbreviation **Ct** is displayed and the value of degrees can be changed in the range -9 to 9. Degrees will be added or subtracted from the temperature.

3.2.10. Time format setup

Displaying of time can be in 12 or 24 hour format. An abbreviation **Fo** is displayed and by pressing the **0** button you choose 24 hour format, by pressing the **1** button you choose the 12 hour format.

4. Certificate of warranty

Product: Large digital clock VDH17

Type:

Serial number:

Date of sale:

Warranty terms

The producer and distributor are responsible for the product characteristics defined in the technical specifications and provide warranty within 24 month from date of sale (taking over) of the product provided that the product is used and operated in accordance with specifications stated in this Warranty and in the Operating and Maintenance Manual. All product malfunctions caused by the defective material or by the incorrect production assembly will be corrected free of charge in warranty time if these conditions are met.

The warranty is prolonged by the time, when the product was in warranty repair, it means from the date when the product was delivered to repair till its taking over.

The buyer's warranty is void if the following facts have been found out, or faults have been caused by:

1. connecting the product to the power supply, which does not conform to the technical specifications.
2. using the product in unsuitable environment, mechanical damaging during transport, or by buyer's mistake.
3. any changes in the warranty made by unauthorized person, if the warranty is not filled in, loss of the warranty, damaged seal, when the product damage is caused by any vis majeure event, any product modification made by unauthorized person, replacement of product parts without permission.