

DATASHEET

Product Name	Digital Clock - large size, with LAN NTP synchronization	
Type / Model	NDC 160/4 R L20 PoE Ethernet	
Order Code	ZZ0676-2.10	Date of last revision: 22. 02. 2022

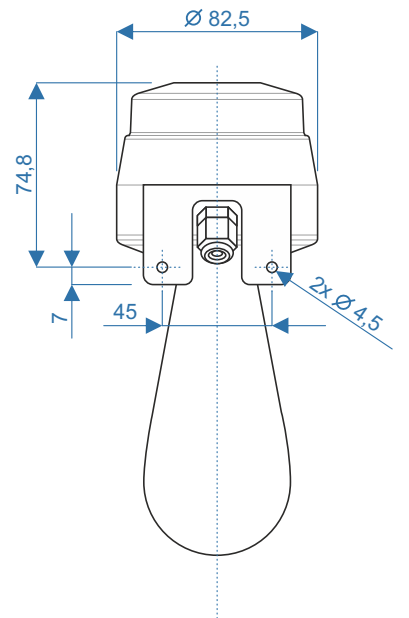
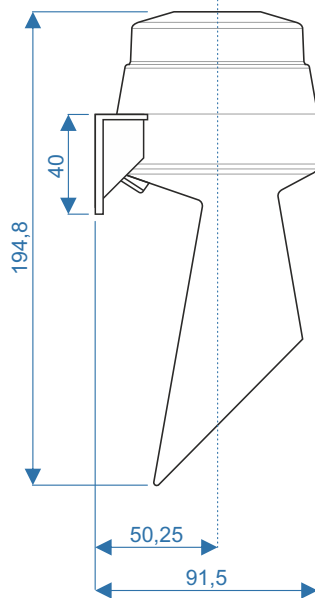
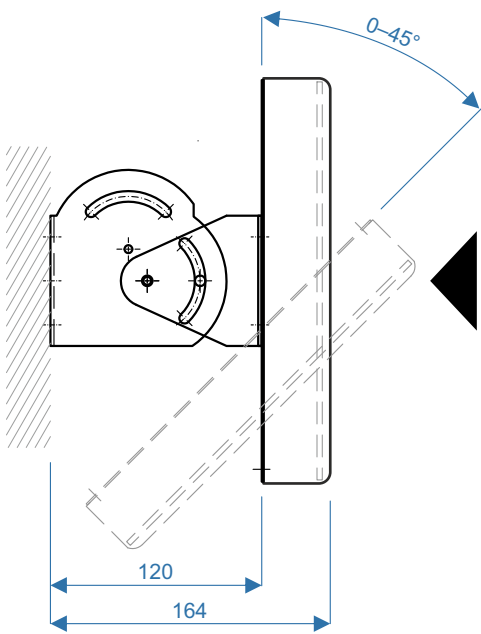
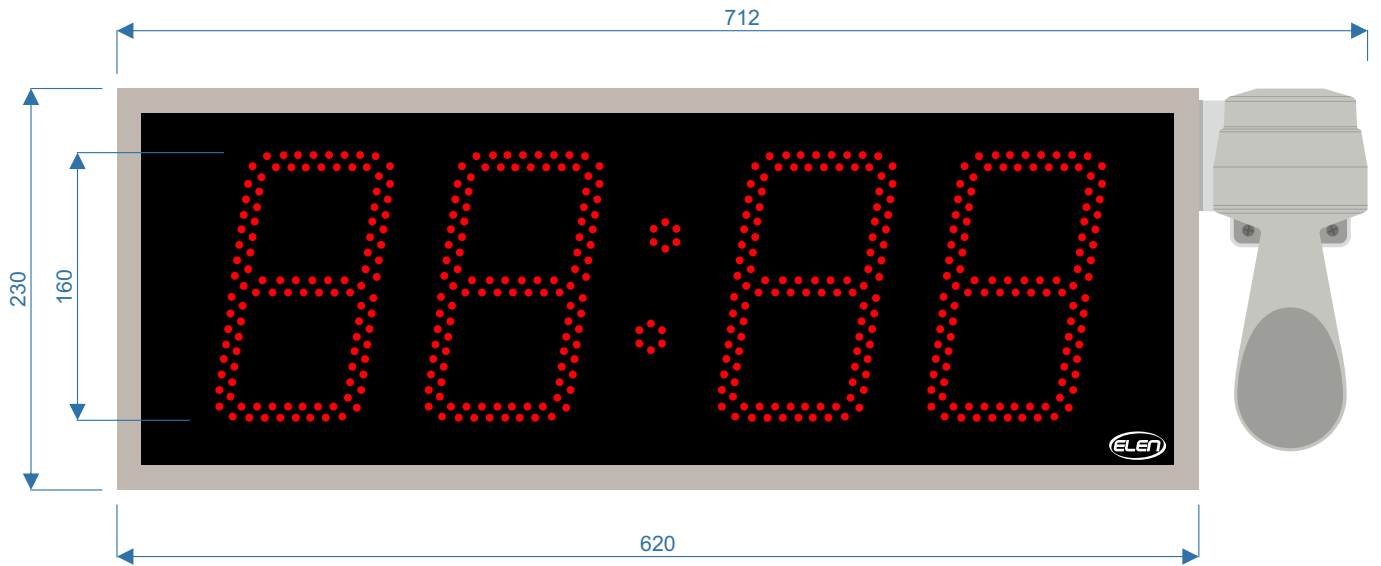


Digital clocks NDC 160/4 R L20 PoE Ethernet display actual time, which is synchronized with a central NTP time server over the LAN network. It can also show the break time period in the intervals set by a user in the configuration software application. After the break period is over, the clock shows actual time again. Beginning and end of work shifts or break periods are announced by a sound from the horn. The clock is powered directly from a LAN PoE network (PoE = Power over Ethernet), or it can be powered from the power mains (230VAC or 110VAC) using a PoE injector with power supply adapter. The clock frame is made of aesthetic anodized aluminum, which is of platinum matt color. LED diodes are super bright with viewing angle 120°. Digital clock delivery includes mounting tilting console installed on the back panel.

Technical Specifications

Digit height	160 mm
Readability range	60 m
Displaying format	88:88, HH:MM
Number of displaying sides	1 (single-sided display)
LED color	red (625 nm) standard, amber-yellow (590 nm) on request
LED type	super-bright 7-segment characters made of LED diodes, smd PLCC-2, AlInGaP type LED chips with long lifetime
Brightness control	automatic, adjusts according to ambient light conditions
Frame type	aesthetic frame made of anodized aluminum, platinum matt color, steel back panel treated with black powder paint
Front cover	clear anti-reflective PMMA glass, thickness 3 mm
Enclosure protection class	IP20
Power supply	PoE 802.3.af Class 0, Max. 13 W, 48 VDC
Working temperature	-20°C to +50°C
Dimensions	620 x 230 x 164 mm (without siren)
Mounting	tilting console for wall mounting
Sound signalization	Buzzer, piezoelement, min. 95 dB(A)/1m*, 12VDC / max. 70 mA. Mounted on the frame, powered directly from clock. * Sufficient sound power for standard work environment. For environment with higher ambient noise (e.g. rolling mill, etc.) a siren with higher output is needed.

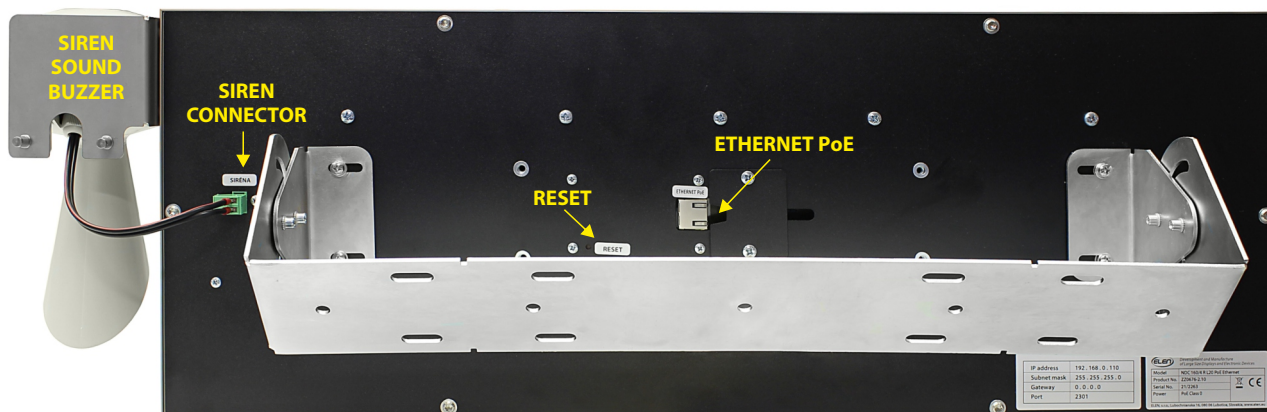
Dimensional drawing



Front view



Back view



Notes:

1. Configuration and control software:

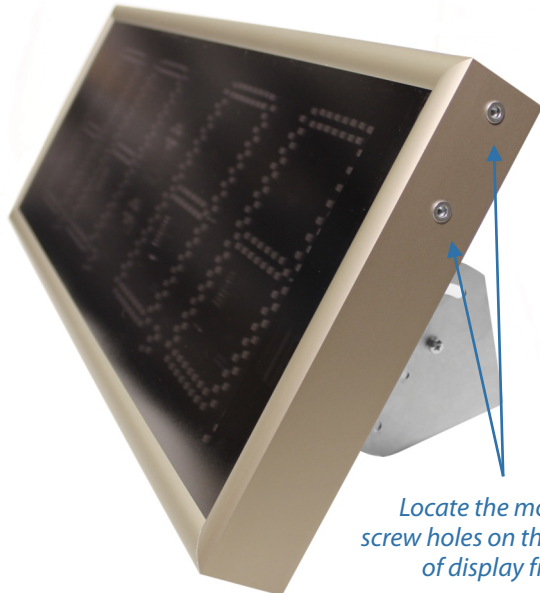
Configuration and control application software can be installed on a server, or PC. It allows to set the parameters for each digital clock on the LAN network (mainly the time schedule of work shifts and breaks). This software also provides periodical synchronization of all clocks according to central time server. Each clock has its own IP address.

2. LAN + PoE installation:

In order to install the clocks, a LAN network with PoE power supply is required (Power over Ethernet). The clocks are powered directly from LAN network. For this reason a PoE LAN switch is necessary to be installed, or place a PoE injector module with external power supply adapter between the clock and LAN. These devices are readily available on the PC market.

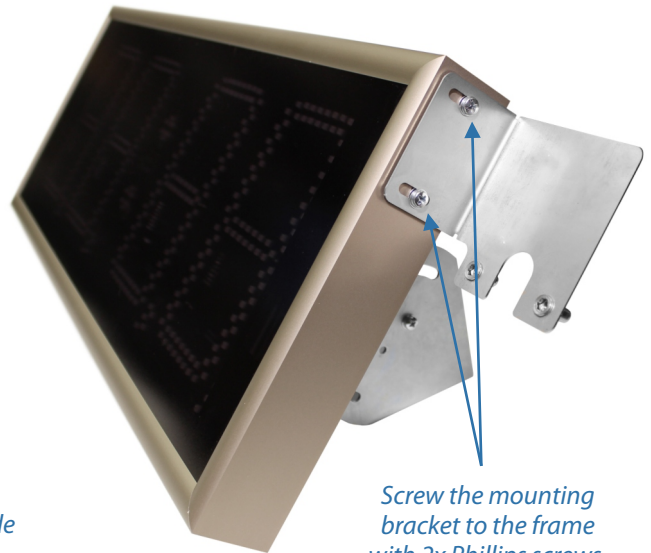
Sound Buzzer Installation

1



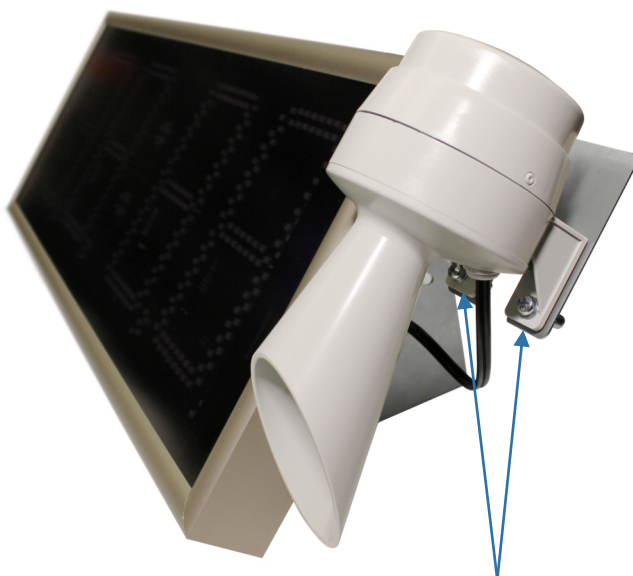
Locate the mounting screw holes on the right side of display frame.

2



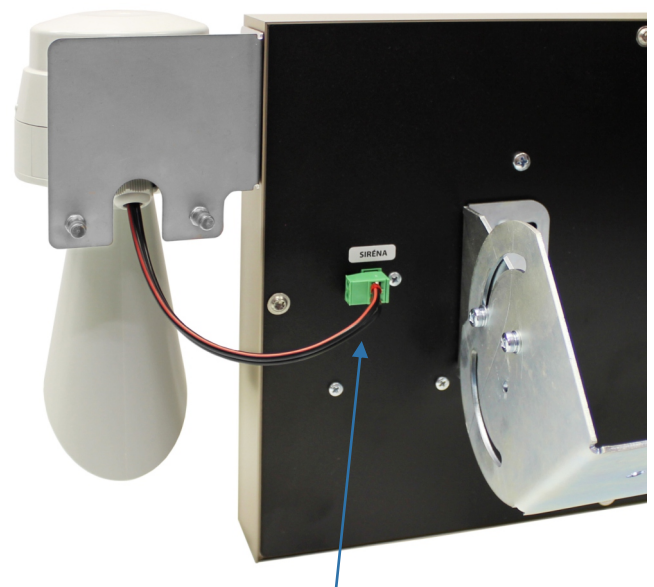
Screw the mounting bracket to the frame with 2x Phillips screws.

3



Screw the siren to the bracket with 2x Phillips screws.

4



Connect the siren power cable into the back panel connector.