

Digital Clock / Elapsed Timer with large 2-1/2" display



ZT1491



Clock / Elapsed Timer ZT1491

- UL recognized
- Overload protection with automatic reset
- Microprocessor design with special quartz timing circuitry for ultimate stability and repeatability
- No harness between PC boards, potential for maintenance at board level
- Power outage backup for at least 24 hours, no batteries
- Protected against HF interference and transient voltages
- Code blue output
- Serial bus RS485, with a twisted pair shielded cable
- Up to 32 Clock/Elapsed Timer (ZT1490/1491) and/ or Surgical Chronometer (ZT1494) can be connected in a Master/Slave arrangement, via approximately 3200 feet of cable

Product Description

The Clock/Elapsed Timers are complete microprocessor based units that display either time of day or elapsed time information. The ZT1491 has a large 2-1/2" 7 segment display with large bright red LED characters that are easily read in high ambient light. A Master/Slave Clock configuration is possible. With this arrangement, the time of day is set at the Master Clock via the remote control MK1450. Only one Clock can serve as a Master. The BENDER ZT1491 operates independent of line frequency. This unit has unique power backup systems that requires no

battery so there is no need for battery monitoring and replacement. In the event of power outage, both clock and timer functions will continue to work for at least 24 hours. However, the displays are not visible during this time interval.

The Timer may be activated from the remote control MK1450 or an external contact (code blue or other monitoring output). A count may be interrupted, resumed and reset at the remote control MK1450.

Operational Information Clock

The ZT1491 has a single row digital 7 segment LED display. The clock can only be set when the ZT1491 is in the clock mode. Use a reference clock to set the time of day in hours and minutes.

Buttons on the Remote Control MK1450 and MK1450C are used to set the time.

In the Master/Slave configuration, the time setting can only be done at the master clock.

Operational Information Timer

The Elapsed Timer can be set only when the ZT1491 is in the Elapsed Timer Mode.

The timer may be activated by the Remote Control MK1450 and MK1450T or an external contact (code blue or other monitoring output).

Design Description

The Clock / Elapsed Timer is enclosed in a durable phenolic housing 10" x 5-1/2" x 3-1/8" (W x H x D). There are no protruding switches on the front foil.

The connector plate model #927775 is required for installation.

The 12/24 hour display mode is easily changed by means of a DIP switch located on the PC board inside the unit. Please refer to catalog data sheet "Setting the Operation Mode for BENDER Clocks" for information on this procedure.

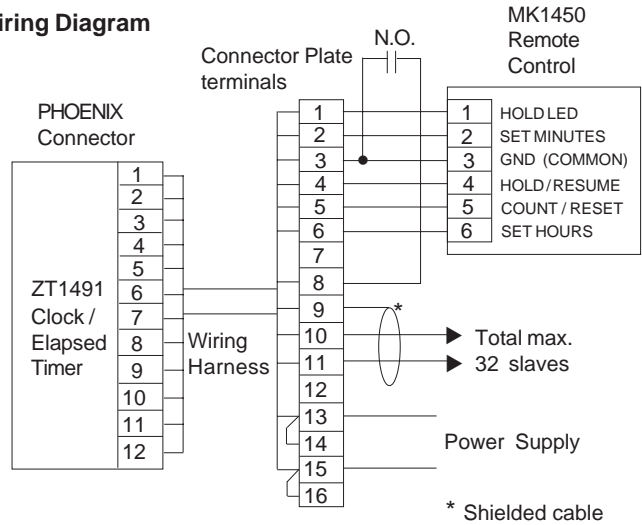
Clock/Elapsed Timer & Accessories

Type	Model No.
Clock/Elapsed Timer	ZT1491
Remote Control	MK1450 - G1
Remote Control	MK1450 - G2
Remote Control	MK1450C - G1
Remote Control	MK1450T - G1
Connector Plate	927775

Technical Data for ZT1491

Supply voltage V_N	100V to 277V
Frequency range of F_N	48Hz to 62Hz
Maximum power consumption	36VA @ 120V AC
Ambient temperature when operating	+32 °F to +122 °F 0 °C to +50 °C
when stored	+14 °F to +158 °F +10 °C to +70 °C
Timing accuracy	max. deviation 50ppm
Clock or Elapsed Timer mode factory setting	Clock mode
Data management after power outage	>24h
Character height	>2-1/2"
Character color	red
Connection	via 12 pin Phoenix Connector and cable to 16 pole terminal strip
Serial bus	EIA RS485
Height	5-1/2"
Width	10"
Depth	3-1/8"
Weight	approx. 2.66 lb

Wiring Diagram



Terminal Functions

Connector Plate Terminal	Phoenix Connector ZT1491	Function
1	3	Hold LED
2	6	Set Minutes
3	10	GND (Common)
4	8	Hold / Resume
5	9	Count / Reset
6	7	Set Hours
8	4	Code Blue
9	5	Shield Ground
10	1	T x D
11	2	R x D
13, 14	11	L1(Power supply)
15, 16	12	L2 (Power supply)

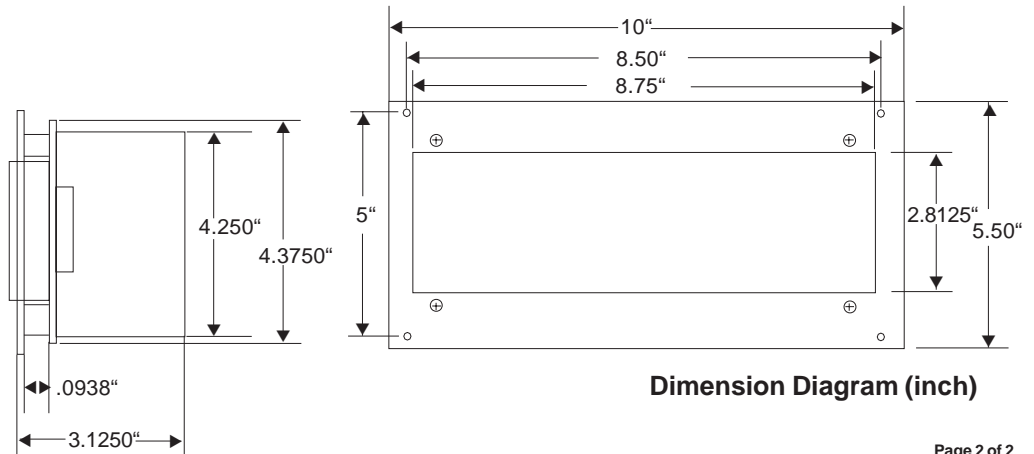
Safety Instructions



Electrical equipment shall only be installed by qualified personnel in consideration of the applicable safety regulations.

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Specifications and other data subject to change without notice.