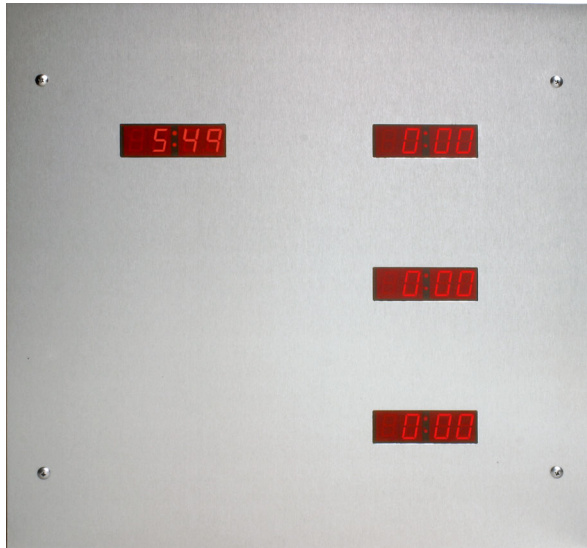


## ZT1494



**Surgical Chronometer ZT1494**

- 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 Surgical Chronometer ZT1494 is a complete microprocessor based unit that displays time of day and three elapsed times. The unit has four digit 7 segment displays 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. Only one Clock can serve as a Master.

The BENDER ZT1494 operates independently of line frequency. The unit has a unique power backup system 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.

Each timer may be activated from the remote control accessory or an external contact (code blue or other monitoring output). A count may be interrupted, resumed, and reset with the remote MK1454.

### Operational Information Clock

The ZT1494 has four, four digit 7 segment red LED displays. The left display indicates the time of day. Use a reference clock to set the time of day in hours and minutes.

Buttons on the Remote Control MK1454 are used to set the time.

### Operational Information Timer

The three timer displays on the right side are always "ON".

The timer may be activated by the Remote Control MK1454 or an external contact (code blue or other monitoring output).

### Design Description

The Surgical Chronometer ZT1494 is mounted on a 14GA front trim 20"(W) x 20"(H) in a steel wallbox of 18"(W) x 18"(H) x 4"(D). Connections are made to a 40+1-pole terminal strip on the backside of the stainless steel frontplate. There are no protruding switches on the frontplate.

The 12/24 hour display mode is easily changed by means of a dip switch located on the PC Board inside the unit.

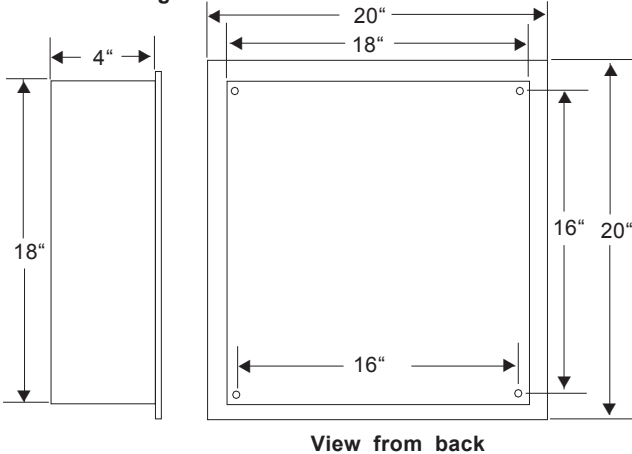
### Surgical Chronometer & Remote Control

Type	Model No.
Surgical Chronometer	ZT1494
Remote Control	MK1454
Connector Plate	927776

### Technical Data for ZT1494

Supply voltage $V_N$	100V to 277V
Frequency range of $F_N$	48Hz to 62Hz
Maximum power consumption	48VA @ 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
Data management after power outage	>24h
Character height	>3/4"
Character color	red
Connection	via 40+1 pole terminal strip AWG max. #14
Serial bus	EIARS485
	Front Trim      Back Box
Height	20"      18"
Width	20"      18"
Depth	14GA      4"
Weight	24 lb

### Dimension Diagram



### Safety Instructions



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

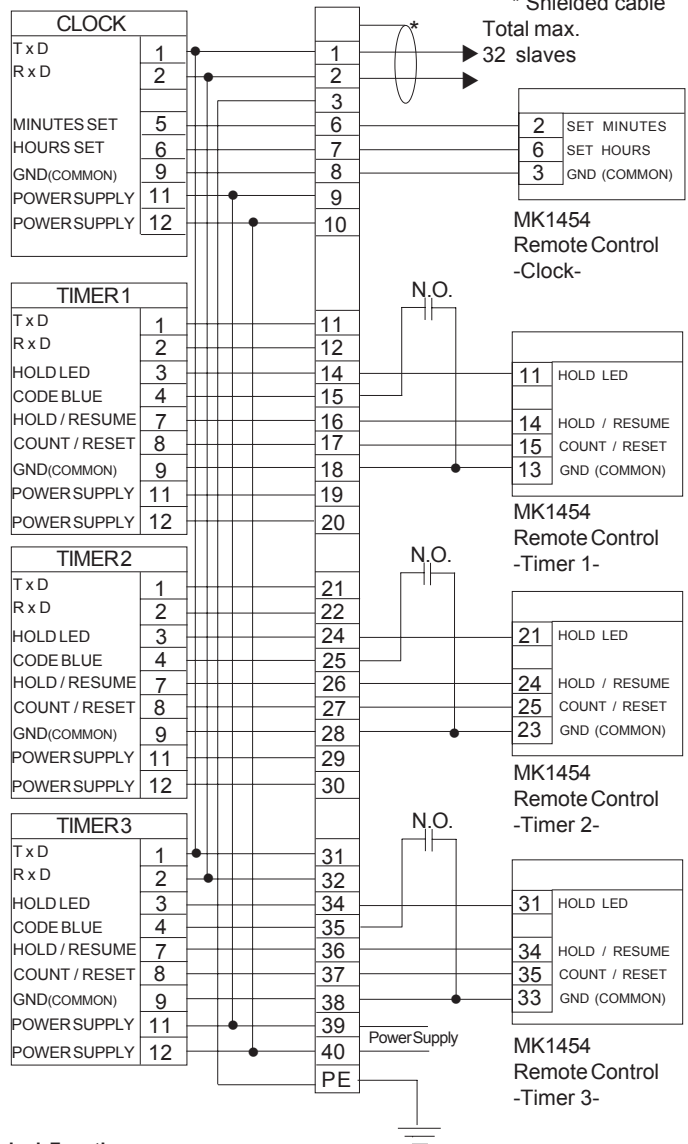
## Our Address

### BENDER MEDICAL PRODUCTS

700 Fox Chase  
Coatesville, PA 19320  
Phone: 800-356-4266  
610-383-9200  
Fax: 610-383-7100  
E-mail: [medical@bender.org](mailto:medical@bender.org)

Specifications and other data subject to change without notice.

### Wiring Diagram



### Terminal Functions

Terminal	Function	Terminal	Function
1	T x D	26	Hold / Resume (TR2)
2	R x D	27	Count / Reset (TR1)
3	Shield Ground	28	Common (TR1)
6	Set Minutes (CR)	34	Hold LED (TR3)
7	Set Hours (CR)	35	Code Blue (T 3)
8	Common (CR)	36	Hold / Resume (TR3)
14	Hold LED (TR1)	37	Count / Reset (TR3)
15	Code Blue (T 1)	38	Common (TR3)
16	Hold / Resume (TR1)	39	L1 (Power Supply)
17	Count / Reset (TR1)	40	L2 (Power Supply)
18	Common (TR1)	PE	Ground and Frontplate Grounding
24	Hold LED (TR2)		
25	Code Blue (T 2)		

CR - Clock Remote  
TR - Timer Remote  
T - Timer