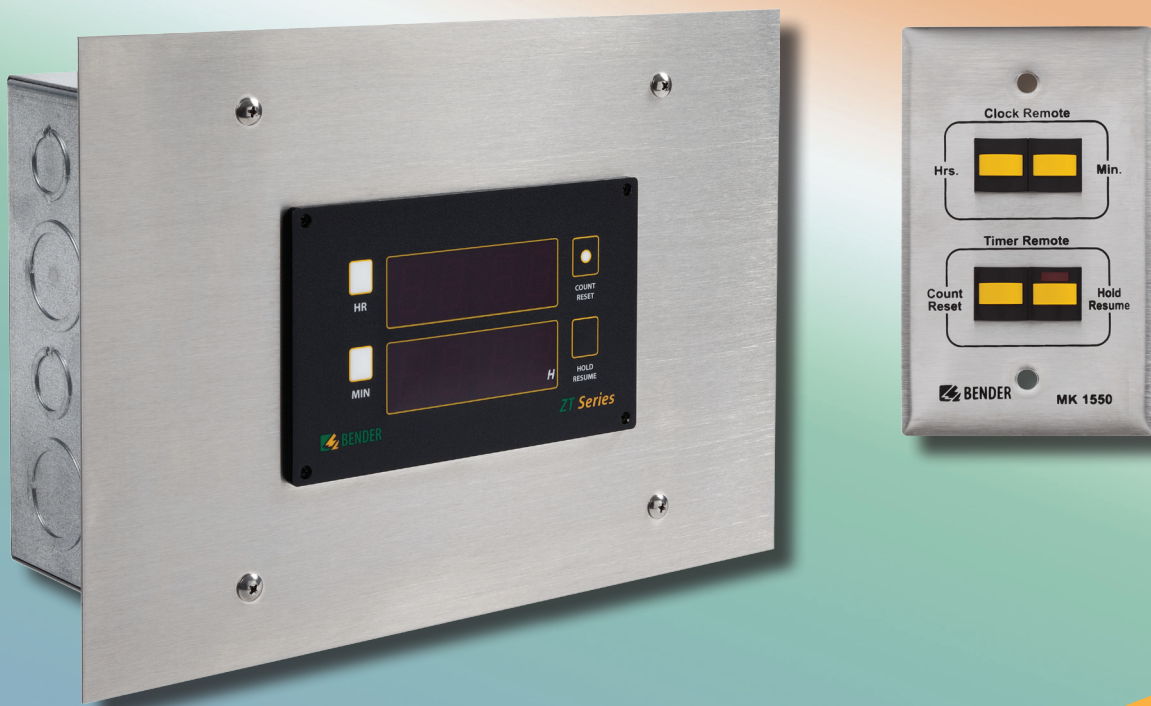


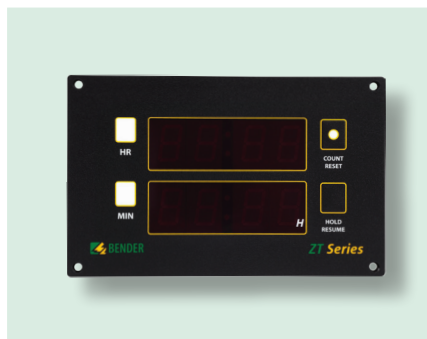
Clocks and Timers

Digital Clocks and Timers, Surgical Chronometers,
and Clock and Timer Remotes for Healthcare Facilities



Digital Clock and Timer

ZT1590



ZT1590 Digital Clock and Timer



ZT1590RS Clock Assembly

Description

The ZT1590 digital clock and timer is a complete, microprocessor-based device that displays both time of day and elapsed time information. The ZT1590 has a dual-row, 7-segment display with large, red LED characters, easily read in high ambient light. All features, as well as the device setup, may be carried out with the four, onboard push-button, or on an optionally connected MK1550 clock remote. No DIP switch configuration is required.

Clock

The digital clock on the ZT1590 may be set to 12 hour or 24 hour mode. The time is displayed on the top display. If power is lost to the device, the clock will continue to run (with the display inactive) for at least 24 hours, without loss of time.

Elapsed Timer

The elapsed time is displayed on the bottom display of the ZT1590. When the timer is not active, the display will be off. The display will initialize in minutes/seconds time. After reaching 59:59 on the elapsed timer, it will automatically switch to hours/minutes time. If there is a power loss to the device, the timer will continue (with the display inactive) for at least 24 hours, without loss of time. A code blue input can be connected to the ZT1590 to remotely activate the elapsed timer.

Power Supply

An external class 2 power supply (sold separately or as part of a kit), is available allowing the ZT Series devices to be powered by 100-240 VAC.

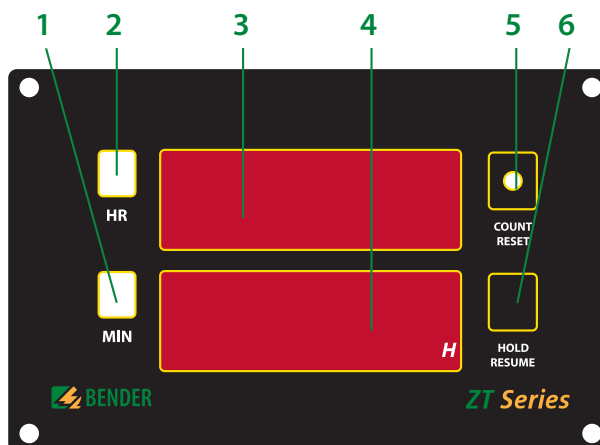
Features

- 12/24 hour clock time
- Elapsed time in minutes/seconds automatically carried over to hours/minutes
- All device features and setup carried out either by onboard push-button or connected MK1550 clock remote
- Pluggable connectors for simple installation
- Utilizes external class 2 power supply for low voltage power
- Power outage backup for at least 24 hours, no batteries required

Approvals

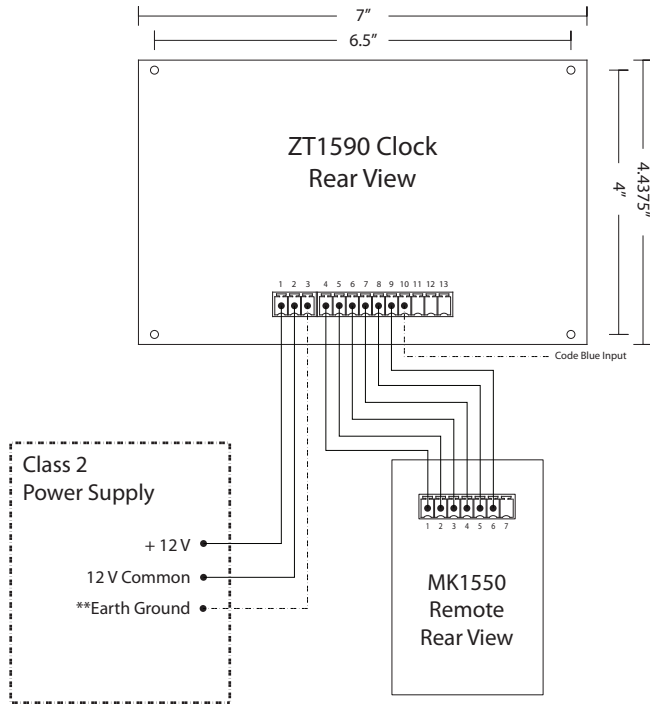


Front Panel Display



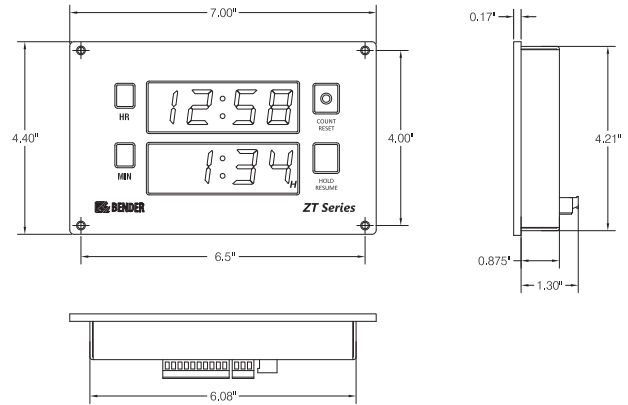
- | | |
|--|---------------------------------|
| 1 - Hours push-button | 5 - Count and reset push-button |
| 2 - Minutes push-button | 6 - Hold and resume push-button |
| 3 - Clock display, four digits | |
| 4 - Elapsed timer display, four digits | |

Wiring

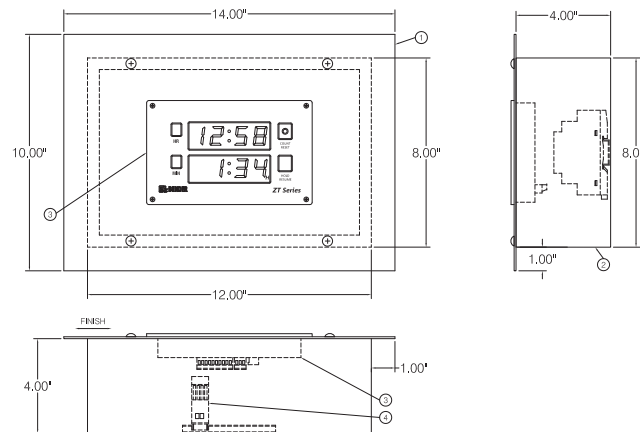


** Use Earth Ground connection only when required by the power supply.

Dimensions: ZT1590 Digital Clock and Timer



Dimensions: ZT1590RS Clock Assembly



Ordering Information

| Clock Assembly | | |
|----------------|--|--------------|
| Product Type | Description | Ordering No. |
| ZT1590RS | Dual digital clock/timer, pre-assembled with front trim, backbox, and power supply | B 5213 00297 |

| Clock Components and Accessories | | |
|----------------------------------|---|--------------|
| Product Type | Description | Ordering No. |
| ZT1590 | Dual display digital clock/timer | B 5111 00012 |
| MK1550 | Remote control station for ZT Series clocks/timer | B 5111 00019 |
| B120804 | Backbox for ZT1590, 12" W x 8" H x 4" D | B 5213 00367 |
| T1410-LIM | 304SS front trim for ZT1590, 14" W x 10" H | P 1030 0003 |
| CP-D 12/0.83 | Power supply with DIN rail 100 - 240 VAC input | P 1380 0050 |

Technical Data: ZT1590 Digital Clock

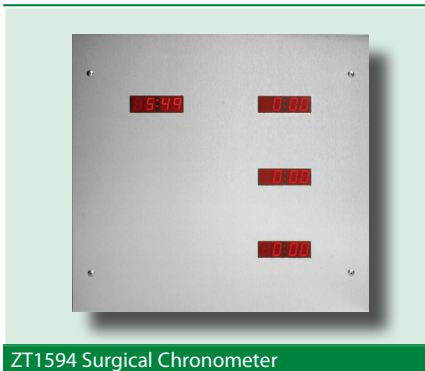
| | |
|--------------------------------------|--|
| Supply voltage requirements | Class 2 power supply |
| Class 2 power supply, voltage rating | 12 VDC |
| Class 2 power supply, power rating | 3 VA |
| Ambient temperature when operating | +32° F to +122° F 0° C to +50° |
| when stored | +14° F to +158° F -10° C to +70° C |
| Connector, number of connections | 10-pin / 3-pin |
| Connector mfr. | Ria |
| Connector mfr. P/N | 31114110 / 31114103 |
| Max. conductor size | AWG 16 |
| Mounting | Qty. 4, #4-40 oval head, black oxide finished screws |
| Weight | Approx. 1.3 lbs |

Additional Technical Data: ZT1590RS Digital Clock

| | |
|-------------------------------------|----------------------------|
| Backbox Dimensions | 12" x 8" x 4" |
| Weight | Approx. 7.9 lbs |
| Supply voltage U _s | AC 100-240 V |
| Frequency range U _s | 47-63 Hz |
| Inrush current (115 V AC/ 230 V AC) | < 15 A / < 30 A |
| Operating range U _s | AC 90...264/DC 120...370 V |

Surgical Chronometer

ZT1594



ZT1594 Surgical Chronometer

Features

- 12/24 hour clock time
- Elapsed time in minutes/seconds automatically carried over to hours/minutes
- All device setup and features carried out via connected MK1554 chronometer remote
- Plugable connectors for simple installation
- 100 - 240 VAC supply power input
- Power outage backup for at least 24 hours, no batteries required

Description

The ZT1594 surgical chronometer is a complete, microprocessor based system that displays time of day and three elapsed times. The system has four seven-segment displays with large, red LED characters easily read in high ambient light. All features, as well as device setup, are carried out on the connected MK1554 chronometer remote.

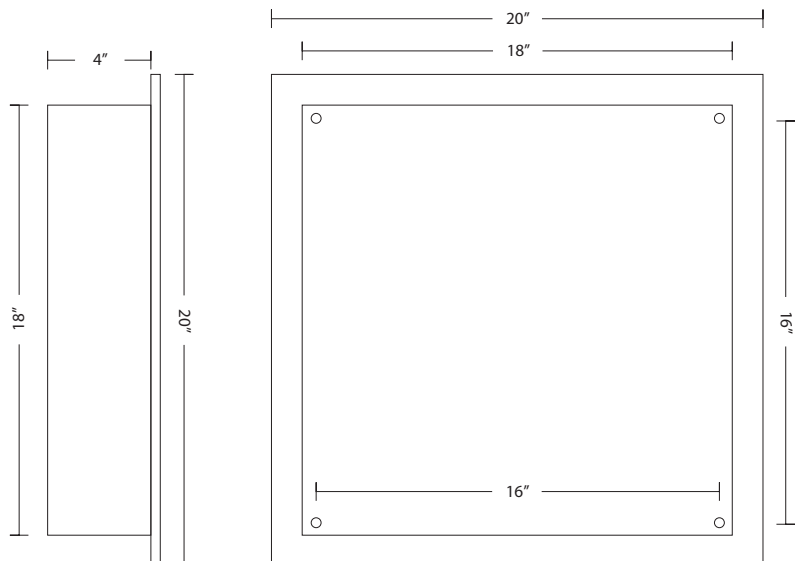
Clock

The digital clock may be set to 12 hour or 24 hour mode. If power is lost to the device, the clock will continue to run (with the display inactive) for at least 24 hours, without loss of time.

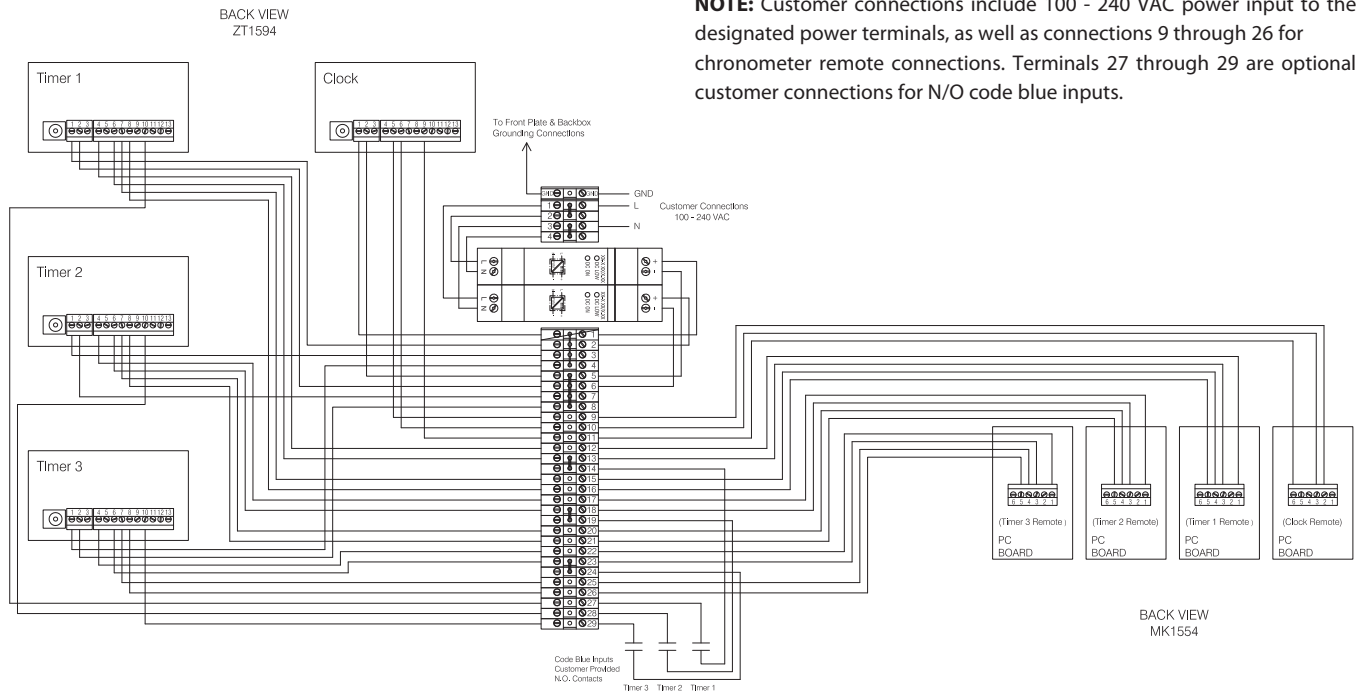
Elapsed Timer

When the timer is not active, the display will be off. The display will initialize in minutes/seconds time. After reaching 59:59 on the elapsed timer, it will automatically switch to hours/minutes time. If there is a power loss to the device, the timer will continue (with the display inactive) for at least 24 hours, without loss of time. A code blue input can be connected to the ZT1594 to remotely activate the elapsed timers.

Dimensions



Wiring



Ordering Information

| Chronometer Assembly | | |
|----------------------|--|--------------|
| Product Type | Description | Ordering No. |
| ZT1594RS | Digital Chronometer installed in backbox, with MK1554 remote | B 5213 00296 |

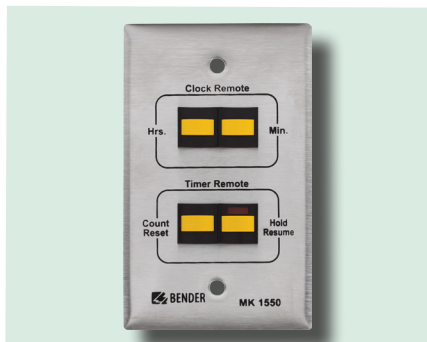
| Surgical Chronometer Components and Accessories | | |
|---|---|--------------|
| Product Type | Description | Ordering No. |
| ZT1594 | Digital Chronometer Only | B 5213 00293 |
| MK1554 | Remote control station for ZT Series Chronometers | B 5213 00294 |
| B181804 | Chronometer Backbox, 18"H x 18"W x 4"D | P 1020 0063 |

Technical Data: ZT1594 Chronometer

The ZT1594 chronometer consists of four ZT1590 digital clock and timers. See "Technical Data: ZT1590 Digital Clock and Timer" above for technical data.

Clock Remotes

MK1550 and MK1554



MK1550 Clock Remote

Features

- Duplicates all pushbutton and setup features of connected clocks, timers, and chronometers
- MK1554 provides function for clock and all three timers on one four-gang plate

Description: MK1550

The MK1550 is a clock remote is required for use with the ZT1591 and optional for use with the ZT1590 digital clock and timer. The remote duplicates all functions of the clock and timer. The clock may also be set up utilizing the MK1550's four push-buttons. The timer push-buttons may also be used to pause, resume, or reset an elapsed time when desired. The "HOLD/RESUME" push-button is supplied with a red LED, which flashes when the count is paused. The MK1550 mounts in a standard single-gang electrical box.

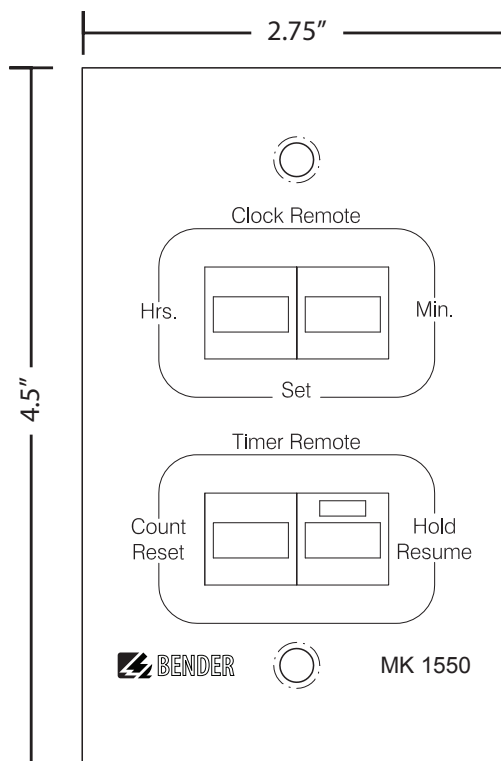
Description: MK1554

The MK1554 is a required clock remote for use with the ZT1594 surgical chronometer. The remote consists of two push-buttons for the clock, and two push-buttons for each of the elapsed timers. Each timer push-buttons may be used to pause, resume, or reset an elapsed time when desired. Each "HOLD/RESUME" push-button is supplied with a red LED, which flashes when the corresponding count is paused. The MK1554 mounts in a standard four-gang electrical box.

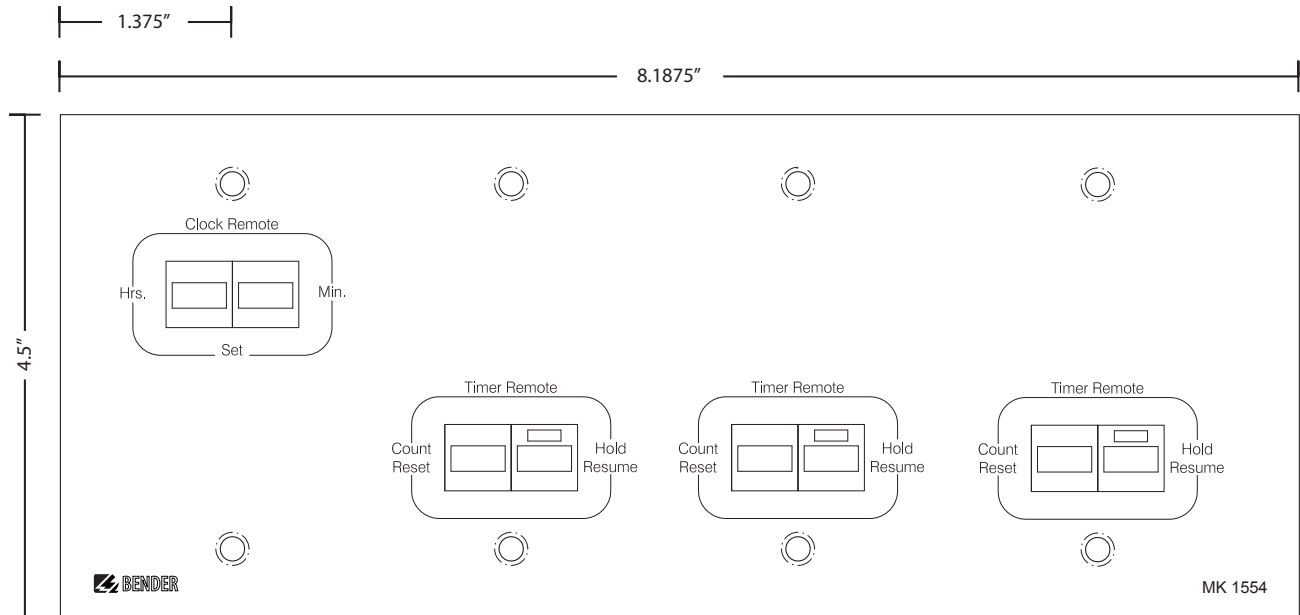
Power Supply

Each remote is powered by the connected ZT series device. No additional power supply is required.

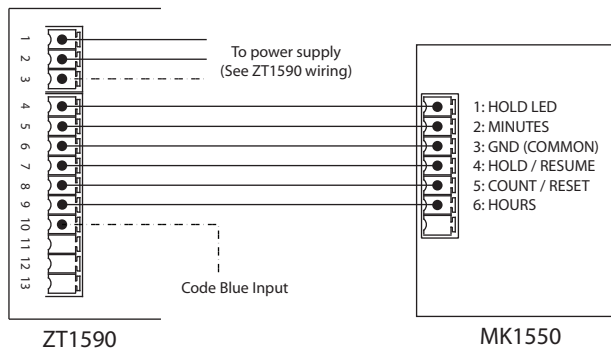
Dimensions: MK1550 (Standard One-Gang Wall Plate)



Dimensions: MK1554 (Standard Four-Gang Wall Plate)



Wiring: MK1550



Wiring: MK1554

See "Wiring," ZT1594 surgical chronometer.

Ordering Information

| Clock / Chronometer Remotes | | |
|-----------------------------|---|--------------|
| Product Type | Description | Ordering No. |
| MK1550 | Remote control station for ZT Series Chronometers | B 5111 00019 |
| MK1554 | Remote control station for ZT Series Chronometers | B 5213 00294 |

Technical Data: MK1550 Clock Remote

| | |
|------------------------------------|---------------------------------------|
| Operating voltage | 5 VDC |
| Max. current | 20 mA |
| Operation class | continuous operation |
| Ambient temperature when operating | +32° F to +122° F 0° C to +50° |
| when stored | +14° F to +158° F -10° C to +70° C |

| | |
|----------------------------------|--|
| Connector, number of connections | 7 |
| Connector mfg. | Ria |
| Connector mfg. P/N | 31114107 |
| Max. conductor sizes | AWG 16 |
| Mounting | #6-32 oval head machine screw, stainless steel |
| Weight | App. 0.25 lb |



North American Headquarters • Coatesville, PA
Toll-Free: 800.833.6834 • Fax: 610.383.7100

Canada • Brampton, ON
Toll-Free: 800-243-2438 • Fax: 905-799-3051

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