



## 4010E and 4200E Digital Clocks



4010E.02



4200E.02



4010E.05



4010E.057



4200E.05



4200E.057

The 4010E and 4200E series of digital clocks provide a precise and elegant display of time using red, green, yellow/amber or blue LED display characters with an unrivalled flexibility of operation in the most demanding timekeeping and stopwatch applications.

The 4010E & 4200E units can be configured for over 30 different types of secondary clock operation, included GPS, MSF and DCF radio time code synchronisation when used with the appropriate option module or radio receiver.

Model No.	Case Size	Character height	Viewing distance	LED Display Colour Options
<b>4010E.02</b>	Front bezel: 144 x72 x 3mm Case body: 132 x58 x147mm	20 & 14mm	7m (20 ft)	.R, .G, .SR
<b>4010E.05</b>	305 x 90 x 58mm	50 & 30mm	20m (60ft)	.R, .G, .Y, .B
<b>4010E.057</b>	390 x 90 x 58mm	57mm	25m (75ft)	.R, .G, .Y, .B
<b>4010E.100</b>	670 x 180 x 58mm	100mm	50m (150ft)	.R, .G, .Y, .B
<b>4010E.12</b>	670 x 180 x 58mm	120 & 100mm	50m (150ft)	.R, .G, .UR, .UY
<b>4010E.170</b>	990 x 260 x 66mm	170mm	80m (250ft)	.R, .G, .UR, .UY
<b>4010E.220</b>	1070 x 320 x 66mm	220 & 170mm	100m (300ft)	.R, .G, .UR, .UY
<b>4200E.02</b>	as 4010E.02 above	25mm	10m (30ft)	.R, .G, .SR
<b>4200E.05</b>	240 x 90 x 58mm	50mm	25m (75ft)	.R, .G, .Y, .B
<b>4200E.057</b>	305 x 90 x 58mm	57mm	25m (75ft)	.R, .G, .Y, .B
<b>4200E.100</b>	480 x 180 x 58mm	100mm	50m (150ft)	.R, .G, .Y, .B
<b>4200E.120</b>	480 x 180 x 58mm	120mm	50m (150ft)	.R, .G, .UR, .UY
<b>4200E.170</b>	730 x 260 x 66mm	170mm	80m (250ft)	.R, .G, .UR, .UY
<b>4200E.220</b>	810 x 320 x 66mm	220mm	100m (300ft)	.R, .G, .UR, .UY



4010E.100



4010E.12



4200E.12

### Key Features

Synchronisation from a wide range of time sources.

High visibility LED display with both automatic and manual brightness adjustment.

Time display in 4 digits (4200E) or 6 digits (4010E) with multiple time and date display formats.

Seven different display sizes offering a wide range of viewing distances between 30cm (12") -> 100m (300')

'Set Once' world time zone configuration allowing digital clock to support all international time zones.

Wireless IR remote control for configuration and multifunction stopwatch operation.

High quality aluminium case with anodised or RAL painted finish.

Battery backup for maintaining timekeeping during periods of disconnection.

## Operational Features

High visibility 4 digit (4200E - hours and minutes) or 6 digit (4010E - hours, minutes and seconds) LED display.

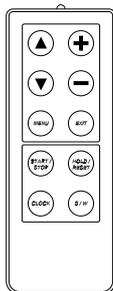
Seven different display sizes offering viewing distances from 30cm (12") -> 100m (300ft).

User selectable 12 or 24 hour time display. Colons provide AM/PM indication in 12 hour mode.

Automatic and 7 manual brightness settings.

Alternating time and date display with US, European and ISO date formats. (US and European date formats on 4 digit 4200E units only) User specified hold time for both time and date.

Multifunction Stopwatch operation with wireless RC100 infrared remote control.



RC100

User selection from over 30 different types of secondary clock operation including synchronising control by alternate and single polarity impulses, EBU/SMPTE time code, GPS and radio time codes, IRIG-B/Afnor NFS 87 500 time codes, MB serial and MOBALine time codes, serial ASCII messages at RS232 or RS485/422 levels in a wide range of formats and data rates, 48x0 time code and control using w482 time code to display time from one of fifteen different time zones.

Optional low cost internal wBus2 interface cards are required for EBU/SMPTE, IRIG-B/Afnor NF S 87-500, RS232, RS485 and 24V/48V Single/Alternate polarity impulse operation. Time synchronisation from MSF or DCF radio time codes and the GPS or GLONASS satellites requires the appropriate receiver.

Control of standard stopwatch operation 'start/stop' and 'hold/reset' operation using customer supplied external switches or voltage free contact closures.

Alternating time and temperature display in °C and °F when used with optional 406 temperature sensor. User specified hold time for both time and temperature.

Local Synchronisation output, allowing the time synchronisation or remote stopwatch display on up to 10 other 4010E and 4200E digital clocks using a simple cable pair.

## Timing accuracy

High Quality Quartz Crystal Oscillator

Unsynchronised: 0.1 sec/day @ 20-25°C

MSF or DCF synchronisation: ±20mS of UTC \*1

GPS/GLONASS synchronisation: ±1mS of UTC \*2

\*1 4010E & 4200E only - When used with either a 484.02 (MSF) or 484.03 (DCF) radio receiver.  
\*2 4010E & 4200E only - When used with either a 488HS2, 488HS3 or 488HS3-GLONASS receiver.

## Case Styles and Colours

The 4010E and 4200E series of digital clocks are available as standard with a wide range of mounting options to ensure ease of integration in all applications.

- .S Surface Mounting case suitable for wall mounting.
- .FP Flush mounting case for use in a panel with rear access. \*1
- .FB Flush mounting case, supplied with back box for use in a solid wall.
- .SS Single sided ceiling suspended case
- .DS Double sided ceiling suspended case

Digital clocks are supplied as standard with cases finished in black or silver fine brushed anodising. Painted case finishes to any RAL paint colour available at extra cost.

\*1 4010E.02 and 4200E.02 digital clocks are only available with .FP mounting

## Power Supply

Internal PSU 110-240V AC. 50/60Hz

Units available with UK, European, US or Australian mains leads. (.UK, .EU, .US & .AU order codes)

DC power options: 24V & 48V DC power options available at extra cost. (Order code .24VDC & 48VDC) \*1

Other power options available on request, please contact our sales team for more information.

Battery Backup: >1 Year. (The battery backup maintains the internal timekeeping during periods of mains failure)

\*1 Contact Sales Team for availability regarding DC power option.

## Environment

Operating temperature: 0-50°C

Relative Humidity: 0% to 95% (non-condensing.)

Altitude: 0 to 3,000m

## Electromagnetic Compatibility, Safety and RoHS2 Directives

4010E and 4200E digital clocks, when used in accordance with our recommendations, comply with the European Community Electromagnetic Compatibility Directive 2004/108/EC, Low Voltage Directive 2006/95/EC and RoHS2 Directive 2011/65/EU and conform to the following standards:

- EN 50121-4:2006
- EN 61000-6-2:2005
- EN 61000-6-4:2007+A1:2011
- EN 55022:2010
- EN 55024:2010
- EN 60950-1:2006

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