## SLD Premium Large Digital Clock (V1.3)




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## Features

- $6.0^{\prime \prime}(15.2 \mathrm{~cm}), 9.0^{\prime \prime}(22.9 \mathrm{~cm})$ or $12.0^{\prime \prime}(30.5 \mathrm{~cm})$ digits
- 24V, 110VAC, 230VAC or PoE power supply (PoE in select IP clocks only)
- 12 or 24 hour display
- Red display standard; Optional White, Green, or Amber displays
- Immediate correction for time change
- Microprocessor based clock
- Automatic LED brightness adjustment based on outside lighting conditions.
- Automatic Daylight Saving Time change (if applicable)


## Highlights

- Built-in web interface - Each clock has a built in web interface allowing the user to set up, control, and monitor the clock
- Web interface settings include: Network settings, NTP server selection, UTC/GMT offset selection, automatic Daylight Saving Time adjustments, and much more!
- Ability to alternate between time and date in U.S. (MM:DD:YY) and international (DD:MM:YY) format at user-changeable rates
- Ten year battery backup for internal real time clock and clock settings.
- Capable of Interfacing with Sapling's Elapsed Timer Control Panel (SBD-ELT-001-0), Temperature Sensor (SLD-TEMP-000-0), and Buzzer (L-BUZZ-3300-1) accessories.
- Four selectable display font options.
- The clock features time loss notification by flashing the colon
- In addition to your chosen synchronization method, all versions of the clock support a variety of wired protocols. These protocols include 2-Wire Communication, RS485, 58 minute, 59 minute, National Time and Rauland sync-wire, Dukane Digital, and Once a Day Closure.
- Can interface with a third party system via a contact closure such as a nurse call system that can automatically trigger an elapsed timer.
- Designed and Produced by Sapling Inc. in Pennsylvania, United States of America


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## Sapling large Digital Clocks are offered with synchronization methods to cover all of your project needs. Each method comes with bonus features that add additional capabilities to the clock!

## Wi-Fi Clocks

- Interfaces with Sapling's Clock Monitor software which will allow the user to view, monitor, and access all of the clocks in the system
- Receives time data from one of five pre-programmed third party NTP servers (user changeable) for added reliability and redundancy. Alternatively, it can be set to receive the time data from an in-house NTP Server or from any Sapling Master Clock model.
- Accepts encryption protocols for enterprise network environments.


## Wired IP Clocks

- Interfaces with Sapling's Clock Monitor software which will allow the user to view and monitor all IP clocks in the system.
- Receives time data from one of five pre-programmed third party NTP servers (user changeable) for added reliability and redundancy. Alternatively, it can be set to receive the time data from an in-house NTP Server or from any Sapling Master Clock model.
- Select models available with Power-over-Ethernet (PoE) powering options.


## $900 \mathrm{MHz} / 2.4 \mathrm{GHz}$ Wireless Clocks

- Each clock acts as a repeater for the time data signal
- Either 900 MHz or 2.4 GHz frequency hopping technology to ensure signal reliability
- No FCC or special operating license required
- Receives time correction once every minute
- "BELL" and "FirE" messaging capabilities
- Capable of receiving pre-scheduled countdown command from the SMA Master Clock (optional SMA function)


## $900 \mathrm{MHz} / 2.4 \mathrm{GHz}$ Wireless TalkBack Clocks

- Each clock acts as a repeater for the time data signal
- Either 900 MHz or 2.4 GHz frequency hopping technology to ensure signal reliability
- No FCC or special operating license required
- Receives time correction once every minute
- "BELL" and "FirE" messaging capabilities
- Capable of receiving pre-scheduled countdown command from the SMA Master Clock (optional SMA function)


## GPS Clocks

- Obtains Time Data at minimal infrastructure cost to the user via GPS satellites.
- Same reliable system as used by commercial and military navigation systems.

Synchronized Clock Systems

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## Specifications - All Clocks

## Case Material:

Aluminum
Case Color:
Black

## Mounting:

Wall or Double Mount

## Brightness:

Four levels, adjustable
Wired Signal Input Options:
RS485, 2-Wire Digital Communication (24V model only), 59 minute correction, 58 minute correction, National Time/Rauland, Dukane, Once-a-Day Pulse
Wired Signal Output:
RS485, 59 minute correction, 58 minute correction, National Time/Rauland, Rauland Digital, Once-a-Day Pulse

## Temperature Range

$-40^{\circ} \mathrm{F}$ to $167^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.$ to $\left.+75^{\circ} \mathrm{C}\right)$
Ingress Protection Rating:
IP 66 (Outdoor only)
Voltage Input:
22-28V (24 Volt Model)
85-130 VAC (115 Volt Model)
180-260 VAC (230 Volt Model)
48V Power over Ethernet (PoE Model)
Power over Ethernet Class (PoE Model Only):

## Class 3

Average Current Consumption (Maximum Brightness for Red Display):
6.0" ( 15.2 cm ) 4 and 6 Digit Clock:

250 mA @ 24 V
50 mA @ 115 VAC
25 mA @ 230 VAC
9.0" ( 22.9 cm ) 4 and 6 Digit Clock:

340 mA @ 24 V
$68 \mathrm{~mA} @ 115 \mathrm{VAC}$
34 mA @ 230 VAC
$12.0^{\prime \prime}(30.5 \mathrm{~cm}) 4$ and 6 Digit Clock:
775 mA @ 24 V
155 mA @ 115 VAC
78 mA @ 230 VAC

## Wi-Fi

## Data Protocols:

NTP, SNTP

## Network Protocols:

## IPv4

## Compatible Wi-Fi Communication Protocols:

802.11 b/g/n (2.4GHz only)

## Compatible Security Protocols:

WEP, WPA,WPA2-PSK, WPA2-Enterprise

## Enterprise Inner Authentication

PEAPv0 (MSCHAPv2)

## Enterprise Inner Authentication

EAP-FAST, EAP-TTLS, EAP-PEAP
IP

## Signal Input:

(S)NTP via RJ45 connector

## Data Protocols:

NTP, SNTP, Sapling Proprietary
Network Protocols:
IPv4
Wireless/Wireless Talkback

## Receiver Sensitivity:

-103 dBm

## Transmitter Power Output:

8 dBm
Operating Frequency ( 900 MHz model):
915-928 MHz frequency-hopping technology
Operating Frequency (2.4GHz model):
2.4 GHz frequency-hopping technology

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## SLD Premium Large Digital Clock (V1.3)



Dimensions (Double, Wall, $6^{\prime \prime}$ and $9^{\prime \prime}$ )


Dimensions (Double, Wall, 12")


Dimensions (Double, Ceiling, $6^{\prime \prime}$ and 9


Dimensions (Double, Ceiling, 12")



Surface
Mount:

Wall Avg:

4 Digits 6.0"
( 15.2 cm )
W = 26.0" ( 66.0 cm )
$H=11.0^{\prime \prime}(28.0 \mathrm{~cm})$
D $=4.06^{\prime \prime}(11.2 \mathrm{~cm})$
4 Digits 12.0" (30.5cm) $W=47.2^{\prime \prime}(119.8 \mathrm{~cm})$ $H=19.9^{\prime \prime}(50.5 \mathrm{~cm})$

## 6 Digits 6.0 ( 15.2 cm )

 $\mathrm{W}=36.4^{\prime \prime}(92.6 \mathrm{~cm})$ $H=11.0^{\prime \prime}(28.0 \mathrm{~cm})$
## 6 Digits $9.0^{\prime \prime}$

 ( 22.9 cm )W = 51.8" ( 131.6 cm ) $W=67.2^{\prime \prime}(170.8 \mathrm{~cm})$ $H=15.2^{\prime \prime}(38.6 \mathrm{~cm}) \quad H=19.9^{\prime \prime}(50.5 \mathrm{~cm})$ $D=4.06^{\prime \prime}(11.2 \mathrm{~cm}) \quad D=4.06^{\prime \prime}(11.2 \mathrm{~cm})$

Double Mount

Double Mount
Wall Max/Min
Wav =38.0" $(96.5 \mathrm{~cm})$ Wav $=48.7^{\prime \prime}(123.6 \mathrm{~cm})$ Wav $=59.2^{\prime \prime}(150.3 \mathrm{~cm})$ Wav $=48.4^{\prime \prime}(123.0 \mathrm{~cm})$ Wav $=63.8^{\prime \prime}(162.1 \mathrm{~cm})$ Wav $=79.3^{\prime \prime}(201.3 \mathrm{~cm})$ $D d=12.7^{\prime \prime}(32.2 \mathrm{~cm}) \quad D d=12.7^{\prime \prime}(32.2 \mathrm{~cm}) \quad D d=12.7^{\prime \prime}(32.2 \mathrm{~cm}) \quad D d=12.7^{\prime \prime}(32.2 \mathrm{~cm}) \quad D d=12.7^{\prime \prime}(32.2 \mathrm{~cm}) \quad D d=12.7^{\prime \prime}\left(32.2^{c m}\right)$
$W_{m x=46.2^{\prime \prime}(117.4 \mathrm{~cm}) ~ W m x=56.9^{\prime \prime}(144.6 \mathrm{~cm}) W m x=67.5^{\prime \prime}(171.3 \mathrm{~cm}) W m x=56.7^{\prime \prime}(144.0 \mathrm{~cm}) W m x=72.1^{\prime \prime}(183.1 \mathrm{~cm}) W m x=87.5^{\prime \prime}(222.3 \mathrm{~cm}) .}$ $W_{m n}=34.2^{\prime \prime}(87.0 \mathrm{~cm}) W m n=44.9^{\prime \prime}(114.2 \mathrm{~cm}) W m n=55.5^{\prime \prime}(140.8 \mathrm{~cm}) W m n=44.7^{\prime \prime}(113.6 \mathrm{~cm}) W \mathrm{mn}=60.1^{\prime \prime}(152.6 \mathrm{~cm}) \mathrm{Wmn}=75.5^{\prime \prime}(191.8 \mathrm{~cm})$

Hav $=23.0^{\prime \prime}(58.4 \mathrm{~cm})$ Hav $=27.2^{\prime \prime}(69.0 \mathrm{~cm})$ Hav $=32.1^{\prime \prime}(81.6 \mathrm{~cm})$ Hav $=23.0^{\prime \prime}(58.4 \mathrm{~cm})$ Hav $=27.2^{\prime \prime}(69.0 \mathrm{~cm})$ Hav $=32.2^{\prime \prime}(81.8 \mathrm{~cm})$

## Double Mount

 Ceiling Max/Min* Hmx=31.3" (79.4cm) Hmx=35.5" (90.0cm) Hmx=40.4" (102.6cm) Hmx=31.3" (79.4cm) Hmx=35.5" (90.0cm) Hmx=40.5" (102.8cm) Hmn=19.3" ( 49.0 cm ) Hmn =23.5" ( 59.6 cm ) Hmn=28.4" ( 72.2 cm ) Hmn=19.3" ( 49.0 cm ) Hmn=23.5" ( 59.6 cm ) Hmn=28.5" ( 72.3 cm ) * In $12^{\prime \prime}$ models, the bracket end cap is lower than the bottom of the clock. This measurement refers to the distance between the end cap and bottom of the mounting pole base.Ordering Information:
SLD Premium Large Digital Clock: SLD-WXB-33S-XXXY-XYZ


Double or Flag Mount Pole Kit: SLD-1XM-XXXY-XS

| Number of Clocks: <br> D: Double-mount (two displays) <br> F: Flag-mount (one display) | $\begin{aligned} & \text { Digit Size: } \\ & \text { 060: 6" } \\ & \text { 090: } 9^{\prime \prime} \\ & \text { 120: 12" } \end{aligned}$ | Clock Orientation: W: Wall-mount C: Ceiling-mount |
| :---: | :---: | :---: |
|  |  | Number of Digits: <br> 4 Digit <br> 6 Digit |

*PoE is available only with clocks that have Red or Amber displays, and have 6.0" or 9.0" digits.

