

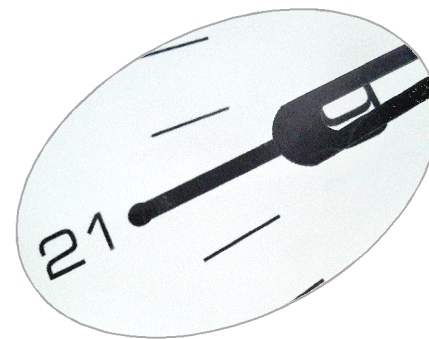
■ Sapling SAL Series Wireless Clock

Description

Sapling's innovative new SAL Series wireless clocks incorporate multi-function software. Every clock is capable of receiving and transmitting a signal. This type of system provides significant advantages because it is not limited to the distance or the signal path between the transmitter/receiver and the clock. Since each clock acts as a repeater and transmitter, the significant factor is the distance between one clock to another. The innovative 915–928 MHz frequency-hopping technology allows for a better and clearer signal even if there is interference in one of the frequencies. The SAL Series wireless clocks are designed to automatically work together without causing interference with each other. In fact, the more clocks in a specific area would increase the quality of the signal to each unit. These clocks include automatic calibration, as well as diagnostic functionality that allows the user to view the quality of the signal, how long since the last time the clock received a signal, and a comprehensive analysis of the clock itself. Sapling wireless clocks transmit a stream of data every four (4) hours (battery operated model only), and every minute (24V and 110V models). The SAL Series wireless clocks are compact, energy efficient and reliable. The clocks are available in 12" and 16" models. The SAL Series wireless clocks are FCC Compliant, part 15 Section 15,247.



Ordering Info: Page 17



Highlights

- ▶ Microprocessor based movement
- ▶ Each clock acts as a repeater and transmitter
- ▶ 915—928MHz frequency-hopping technology
- ▶ Receiving and transmission rate every four (4) hours for battery operation. Receiving and transmission rate of once a minute for 110V or 24V
- ▶ Internal antenna
- ▶ Automatic calibration
- ▶ Built-in diagnostic mode for easy maintenance
- ▶ Quick correction for time change (max. five (5) minutes)
- ▶ Ideal for renovation projects using existing wiring, or for new installations
- ▶ Hour, minute and second hands
- ▶ Energy efficient:
 - 5 year Battery life (2 "D" cell)**
 - 20 mA@ 24 VAC (voltage)
 - 15 mA@ 110 VAC (voltage)
- ▶ Wide dynamic range for input voltage
 - Battery powered (2 "D" cell)
 - 7 VAC—28 VAC (24 V model)
 - 85 VAC—135 VAC (110 V model)
- ▶ Does not require custom back box
- ▶ Plug in Molex connectors (in 110V or 24V AC model)
- ▶ Smooth surface black ABS case and polycarbonate crystal
- ▶ Made in U.S.A.
- ▶ Patents pending
- ▶ FCC Compliant, FCC part 15 Section 15,247

**Provided good reception

Architectural & Engineering Specifications

The secondary clock shall be Sapling SAL Series wireless clock. The clock will be capable of receiving a signal from multiple clocks. The clock shall receive and transmit with 915–928 MHz frequency-hopping technology. The clock is to be capable of transmitting the time simultaneously without interfering with each other. The clocks shall include automatic calibration, as well as a diagnostic function that allows the user to view the quality of the signal, the last time the clock received a correction signal, a gearbox test and a comprehensive analysis of the entire clock. The clock shall have a maximum correction time of five (5) minutes. It shall be designed to be used with the Sapling Transceiver or the Sapling Repeater, which can be regulated via Sapling wireless communication protocol. Upon receipt of the wireless signal, the clock will immediately self-correct. The clock shall have a semi-flush smooth surface ABS case. The dial is to be made of durable polystyrene material. The crystal is to be shatterproof, side molded polycarbonate. Glass and visible molding marks are unacceptable. The clock shall have black hour and minute hands as well as a red second hand. The clock shall be FCC compliant, part 15 Section 15,247.



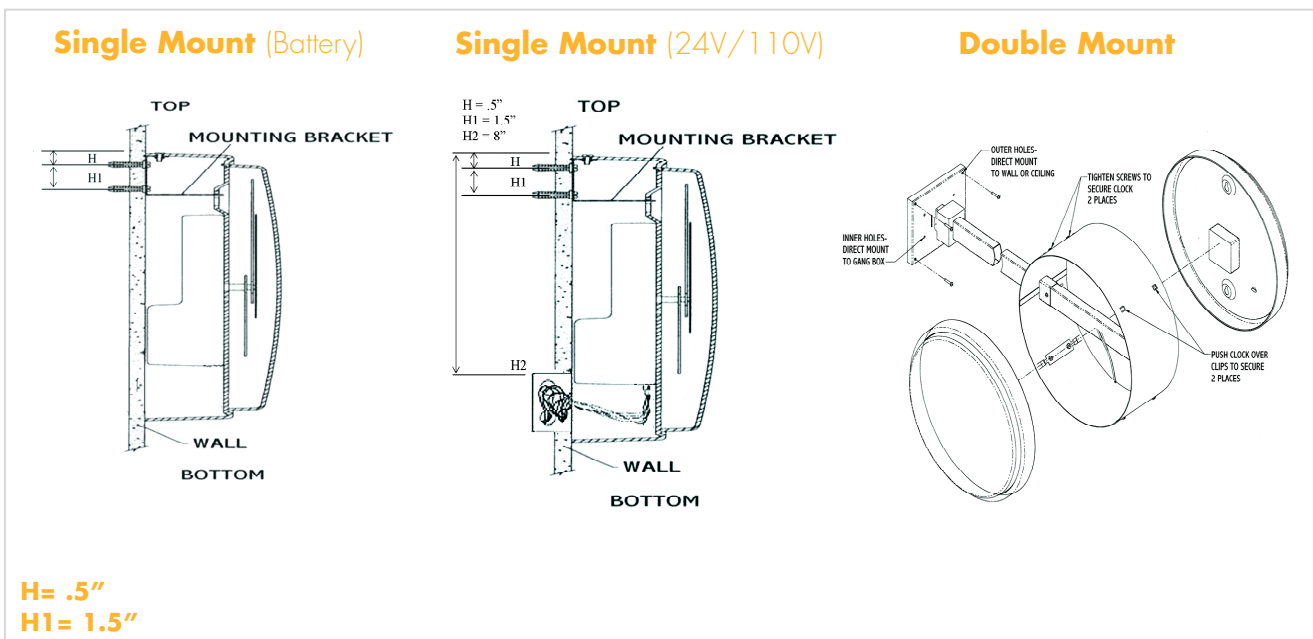
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Specifications

Time Base:	Quartz, automatic calibration
Voltage Input:	Battery (2 "D" cell) 95–135 VAC/ 60 Hz 7–28 VAC/ 60 Hz
Average Current Consumption:	Battery—Five (5) year, 2"D" cell** 20 mA @ 24 VAC 15 mA @ 110 VAC
Power Output:	8 dbm
Input Sensitivity:	-103 dbm
Operating Frequency:	915–928 MHz frequency-hopping technology
Display:	12 or 24 hour format
Color:	Standard black
Clock Size:	12.65" diameter, 2.18" depth 16.65" diameter, 2.18" depth
Dial:	Durable polystyrene material
Case:	Smooth surface ABS case
Crystal:	Shatterproof, side molded polycarbonate crystal
Temperature Range	
Operating:	0°C–45°C
Shelf:	-15°C–75°C
Movement Dimensions: (L x W x D)	7.32" x 3.46" x 1.81"
Shipping Box Dimensions: (L x W x D)	12"–13.31" x 14.25" x 3.5"
Shipping Weight:	12"–2.5 lbs. 16"–4.0 lbs.
Power Kit Includes:	2—blue plastic anchor 2—sheet metal screw 10 x 1.5 1—4mm thread, 10mm length screw 1—mounting bracket
Compliance:	FCC Compliant. FCC part 15 Section 15,247

**Provided good reception

Mechanical Drawing



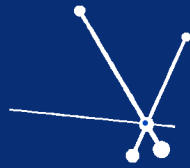
Hands Options

STANDARD CHOICE

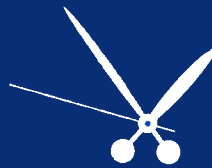


Style 1

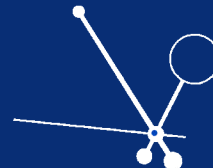
CUSTOM CHOICES



Style A



Style B



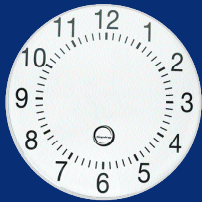
Style C



Style D

Dial Options

STANDARD CHOICE

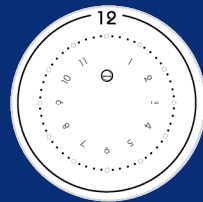


12 Hour
Style 1



24 Hour
Style 2

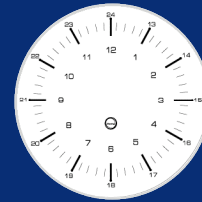
CUSTOM CHOICES



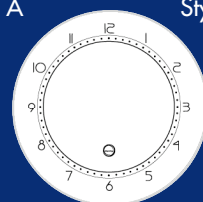
Style A



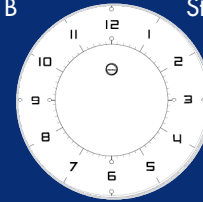
Style B



Style C



Style D

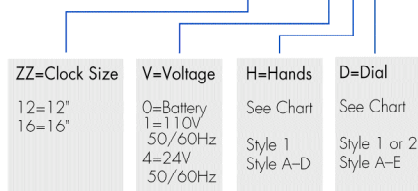


Style E

Ordering Information

Wireless Clock

SAL-2BS-ZZR-VHD

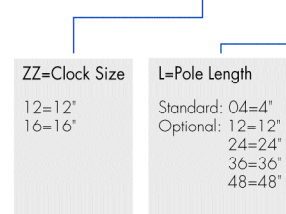


Options:

Additional Power Kits: 12": A-WK-12-1 or 16": A-WK-16-1
Additional Mounting Brackets: 12": M-MB-W-12-1 or
16": M-MB-W-16-1

Double Mount Bracket

SAB-1BD-ZZR-OL

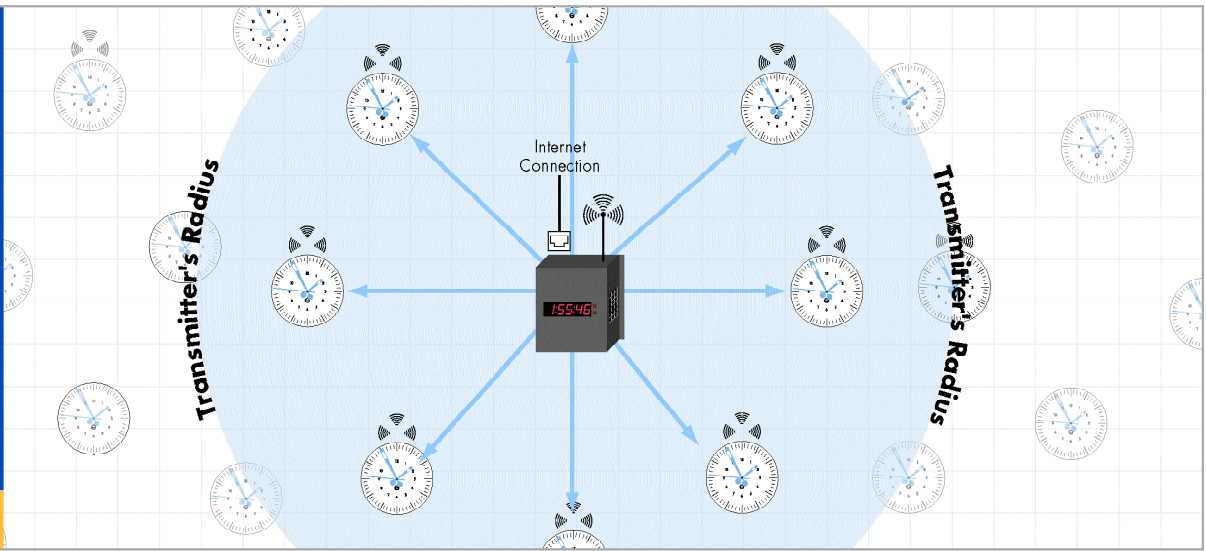


Example:

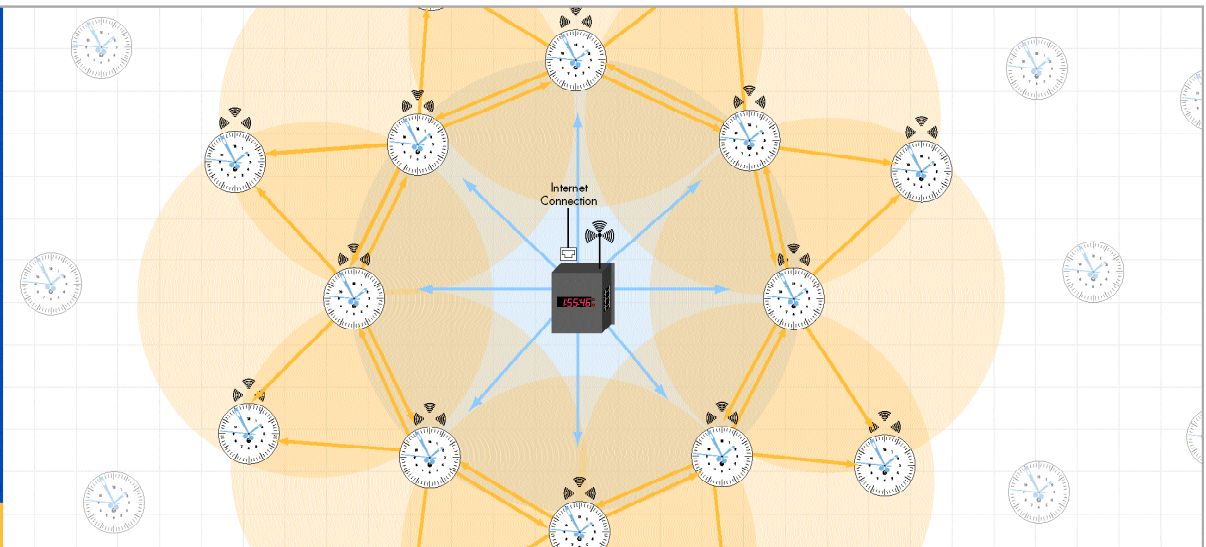
SAB-1BD-12R-048: 12" Double Mount Bracket, 48" Length
SAB-1BD-16R-024: 16" Double Mount Bracket, 24" Length

Sapling SAL Series Wireless Clock

1 Transmitter transmits to surrounding clocks.



2 Transmitter and surrounding clocks continue transmission.



3 More clocks continue to receive and transmit.

