

## SBT(G) 3300 Series Digital Clock

The secondary clock shall be a Sapling SBT(G\*) 3300 TalkBack wireless digital clock. It shall have a high-efficiency LED numeral display with digits measuring either 2.5" or 4.0" high. The clock shall be available in both four (4) and six (6) digits. The clock will be capable of receiving and then re-transmitting a time data signal from any other Sapling device that transmits data on the same frequency using Sapling's wireless protocol. The clock shall use frequencyhopping technology to receive time data on a frequency range of either 915-928 MHz or 2.4GHz, depending on the type of transmitter that was ordered. The clock shall also be able to retransmit time data on the same frequencies: either 915-928MHz or 2.4GHz, depending on the type of transmitter that was ordered. The frequency-hopping technology shall allow the clock to transmit time data without causing interference to other wireless devices that may be transmitting at the same time. It shall use Sapling's proprietary TalkBack technology to report data back to the master clock. The clock shall be designed to be used with the Sapling SMA Series Master Clock (with the TalkBack transmitter option installed) or the Sapling TalkBack Repeater. Time data shall be transmitted and received by the clock via Sapling's wireless communication protocol. The clock shall also be designed to receive and retransmit time data to Sapling's SAT(G\*\*) Series clocks and other SBT(G) Series clocks. Upon receipt of the wireless signal, the clock will immediately self-correct. The clock's transmitter shall be able to successfully transmit data over a line-of-sight, unobstructed distance of up to 1320 feet (402 meters). The clock shall have data LEDs on the circuitry board that light up when the clock receives data. The 24V, 115VAC or 230VAC models of the clock shall be capable of receiving a signal every minute. The clock shall have circuit components which allow it to interface with any one (and only one) of the following accessories: the Sapling Elapsed Timer Control Panel, Sapling's Temperature Sensor, or Sapling's SBDConfig program. It shall also have the ability to display a four-character message such as "BELL" or "FirE" when a relay on the clock circuit board is activated. Additionally, it shall have relays which allow it to accept other wired time protocols such as 59-minute correction, 58-minute correction, National Time and Rauland, Midnight Reset, and Dukane. The clock shall have a smooth surface ABS case which can be attached to a standard-sized gang box. No external screws shall be visible on the bezel or clock housing. The digital clock housing shall be designed and molded so that it can be attached to a Sapling double-mount pole. It shall be capable of displaying time in a 12 or 24 hour display format. The display shall use either red, green, white, or amber LEDs, depending on the type of display that was ordered. The clock will have four (4) levels of adjustable brightness. When the input is lost, the colon on the display of the clock shall flash. When power is lost, the clock will rely on a small battery and quartz timer to keep track of (but not display) the time. The clock shall be able to interface with Sapling's Buzzer accessory. The clock shall be FCC compliant, part 15 Section 15,247.

<sup>\* (</sup>G) is used for 2.4GHz models, in which case the model code is SBTG. In 900MHz models, the model name is SBT.

<sup>\*\* (</sup>G) is used for 2.4GHz models, in which case the model code is SATG. In 900MHz models, the model name is SAT.