## Wireless time clock Station

### General

#### The Astronomical Time Clock Station shall be the Echoflex Wireless TimeClock as manufactured by Echoflex Solutions, Inc., or equal

### Mechanical

#### Time Clock stations shall provide a user interface for timeclock programming, scene recall, and event override

#### Stations shall be available in cream, black and white faceplates

##### Manufacturer's standard colors shall conform to the RAL CLASSIC Standard

##### Station faceplates shall be designed for flush or surface mounting

##### Station faceplates shall be constructed of ABS plastic and shall use no visible means of attachment

#### Station electronics shall mount directly behind the faceplate. The entire assembly shall mount into a two gang back box

##### Back boxes for the flush mounted stations shall be industry standard back boxes

##### The manufacturer shall provide back boxes for surface mounted stations

#### The station shall provide connection for an external antenna

##### A selection jumper shall be used to select which antenna is being used

##### The external antenna shall attach to the timeclock via an SMA connector

##### The manufacturer shall offer optional antenna cables to extend the mounting location of the antenna from the timeclock

### Electrical

#### Stations shall use 902MHz EnOcean radios. Systems using other frequency radios shall not be acceptable

#### Stations shall use (2) #16 AWG stranded wires for 24VDC/AC operating power

##### Connectors for wire termination shall be provided with all stations

#### Stations shall have a wireless range of at least 24 m. (80ft.) – commercial office space (typical), up to 100 m. (330ft.) line of sight

#### Stations shall comply with FCC Part 15.231 and IC RSS-210

### Functional

#### Stations shall allow the programming of timeclock events

##### Stations shall support astronomical, real-time and manual control events in up to 24 control groups

##### Station events shall be programmable via the timeclock user interface.

###### Stations shall support 50 events

###### Events shall be assigned to a recurring day type

Standard day types include; everyday, weekdays, weekends, Sunday, Monday, Tuesday, Wednesday, Thursday, Friday and Saturday

###### Events shall be activated based on sunrise, sunset, or time-of-day

Events shall allow a configurable timed offset for sunrise and sunset activation

Events shall allow a configurable time-of-day for event activation

###### Stations shall automatically compensate for regions using a fully configurable daylight saving time

#### Stations shall support configurable actions for each event in up to 24 control groups

##### Scene activation shall recall controllers preset values when the controller is a member of the assigned group

##### Mask activation shall command controllers to ignore linked sensor or switch stations when the controller is a member of the assigned group

##### ON to Level activation shall command controllers to a configurable set value when the controller is a member of the assigned group

##### OFF activation shall command controllers to the OFF state when the controller is a member of the assigned group

#### Stations shall support manual scene activation from the user interfaces default screen

#### Stations shall support linking and unlinking controllers from the user interface

##### Linked controllers shall be viewable on screen

##### Stations shall support cycling a linked controller’s relay

##### Stations shall support testing the radio signal strength between the station and linked controller and displaying the result on screen

#### Stations shall support timed event hold

##### It shall be possible to start a timed hold event from the user interfaces default screen

###### Timed event hold shall meet energy code requirements

#### Stations shall support defining the following calendar day as a holiday

##### Holidays events are assigned to groups

###### Defined holidays will shut lights off and ignore all scheduled events

##### Stations shall allow the holiday event to span several days