

## BubblyBox for Hotel Guest Room | B-1T-00-2B-D0 1 Circuit

B-1T-00-2B-DH 1 Circuit + Thermostat Set Back

B-2T-00-2B-D0 2 Circuits

B-2T-00-2B-DH 2 Circuits + Thermostat Set

Back B-3T-00-2B-D0 3 Circuits

B-3T-00-2B-DH 3 Circuits + Thermostat Set Back



### Description

BubblyBoxes are stand-alone control solutions in a box. BubblyBoxes are the ultimate in simplicity. They are already programmed on their own network and do not require the installer to pair devices or open an app. All works as per sequence of operation.

All devices are labeled with a QR code identifying the network which allows BubblyNet Authorized Service Providers to modify settings or even reset the devices and re-add them to a network upgrading the stand-alone system to a full integrated networked system, all over-the-air and without the need of additional hardware.

- Dimensions - 8" x 8" x 6" (203 x 203 x 152mm)

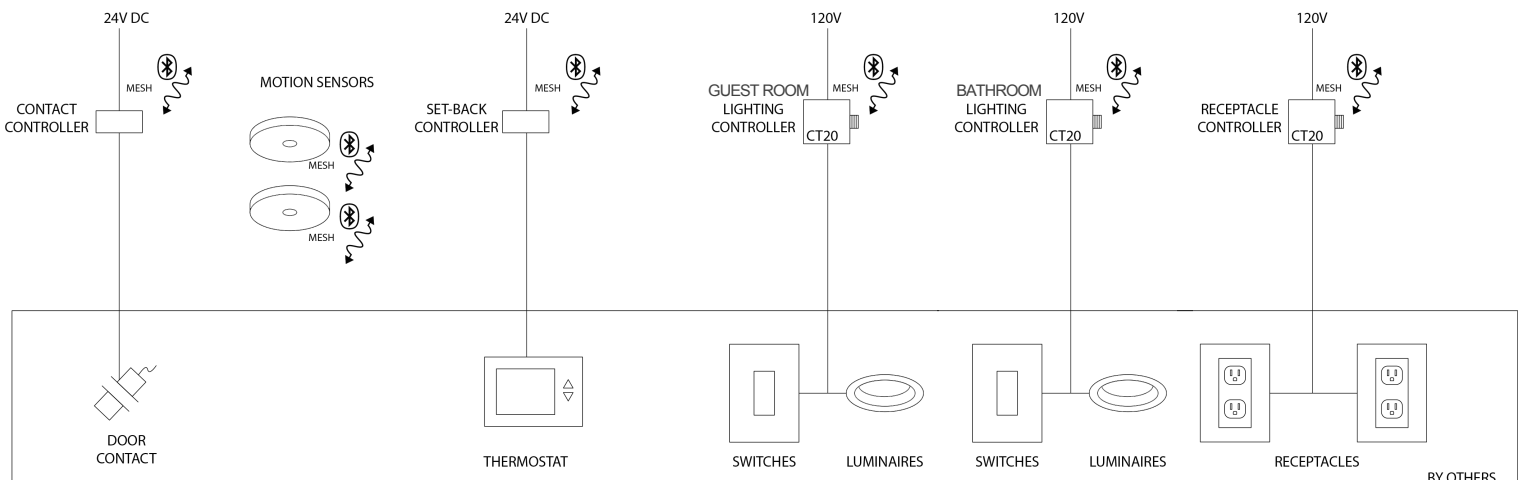
### Sequence of Operations (ASHRAE 90.1-2022)

30 minutes after occupants leave the bathroom, lighting is turned OFF.

20 minutes after occupants leave the guestroom lighting and switched receptacles are turned OFF. HVAC goes to set-back temperature.

### Contains Up To

- 3 X C-T20-17-DJ00
- 2 X S-OI-SO3-DMWH
- 1 X C-S1C-24-DS00
- 1 X C-HVA-42-DS00



## 20A Load Controller 0-10V / Plug Load | Model: C-T20-17-DJ00



### Specification

- AC Input Voltage - 100-277VAC | 50/60Hz
- Output Relay - 100-277VAC | 50/60Hz | 20 Amps Max
- Operating Temperature - 4° to 122°F (-20° to 50°C)
- Wire Range - 12 - 18 AWG Wire
- Dimensions - 3.25" x 2.17" x 1.22"

### Connectivity

Devices are repeaters for other devices and should be installed within a certain maximum distance from each other.

Typical maximum distance:

<u>Outdoor (line of sight):</u>	200ft
<u>Indoor (through building material):</u>	
Glass:	100ft
Drywall:	70ft
Cinderblock:	60ft
Brick:	50ft
Concrete + rebar	0ft

Devices with external antenna should have the antenna outside any metal box and away from metal surfaces as metal reduces connectivity.

For design purposes a 60ft. maximum distance is appropriate for most installations.

### Description

The Load Controller is a wireless Bluetooth NLC device that controls via Bluetooth any ON/OFF and/or 0-10V load up to 20 Amps. It can be installed outside of J-boxes through the standard opening according to electrical codes. It can control a single or multiple AC devices connected together.

### Operation

The C-T20-17-DJ00 Load Controller operates on 100-277V. Once powered up, the device broadcasts its identification code waiting to be provisioned through the BubblyNet App.

### Features

- Simple to Install
- Does Not Require a Gateway

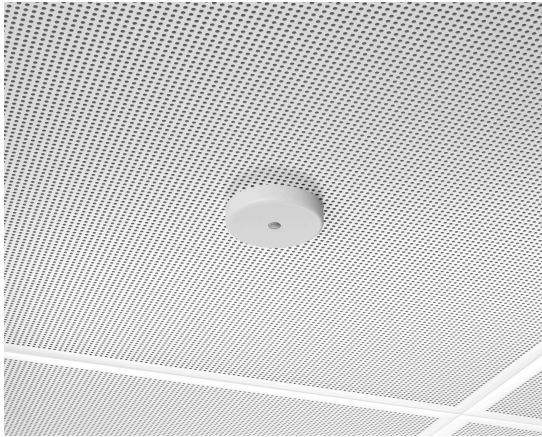
### Certification



### Relay Ratings

Load Type	100-277VAC Signal Converter with 20A Relay, SR-BL2421-SVVT
AC General Use	20A@120-277VAC
Resistive	20A120VAC 20A277VAC
Inductive	10A@120-277VAC
Capacitive	8A@120-277VAC
Motor	0.5HP@120VAC 1 HP@240VAC

## Battery Powered Occupancy Sensor | Model: S-OI-S03-DMWH



### Installation

All battery operated devices (Low Power Node) do not retransmit network messages and communicate with the network via an automatic designated device (Friend Node) which keep the LPN updated with the latest network settings. For best results, the battery operated device should be installed within 40 feet of the closest device within the Bluetooth Mesh network.

### Connectivity

Devices are repeaters for other devices and should be installed within a certain maximum distance from each other.

### Specifications

- Sensor Type - PIR Occupancy sensor
- Battery- CR2477
- Mounting Height - 10' to 12'
- Max Detection Area\* - 23' Diameter field
- Bluetooth Mesh Qualified
- Surface mounted installation. Magnetic on most T-grids, metal ceilings and ducts. Screw mounted on drywall or wood.
- Operating Temperature - 4°F to 140°F (-20°C to 60°C)
- Dimensions - 2.75" diameter (77 mm), 9/16" thick (14 mm)
- LED Motion Indicator
- Buy American Act compliant
- Battery life - 5 years
- Warranty - 2 Years

\*results may vary based on mounting height, temperature, angle, floor material, and line of sight.

### Sensor Operation

Using the App, these are the settings:

- Occupancy/Vacancy mode
- Motion/no-motion light levels
- Run time / Prolong time
- Transition times
- Suitable for Indoor Use Only

### Certifications



Typical maximum distance:

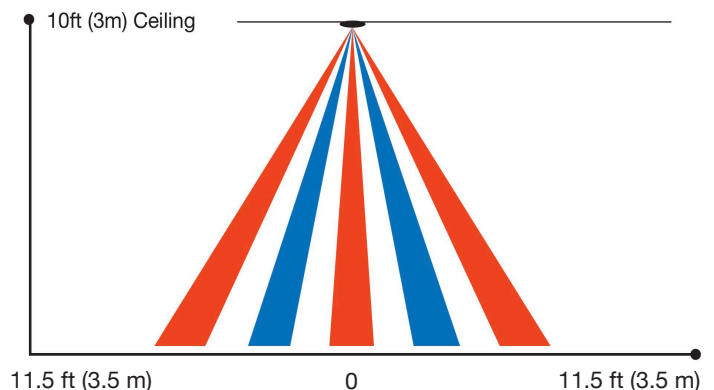
Outdoor (line of sight):

Indoor (through building material):	200ft
Glass:	100ft
Drywall:	70ft
Cinderblock:	60ft
Brick:	50ft
Concrete + rebar	0ft

For design purposes a 60ft. maximum distance is appropriate for most installations. Devices are repeaters for other devices, except for battery powered devices. Battery powered devices do not replay messages and are not counted when establishing Mesh continuity.

Devices with external antenna should have the antenna outside any metal box and away from metal surfaces as metal reduces connectivity.

### Detection Area:



## Close Contact/Sensor Controller | Model: C-S1C-24-DS00



### Certifications



### Installation

The installation of the **Close Contact/Sensor Controller** is very simple. The analog output of the Non Mesh sensor is connected to the sensor input of the controller. The Non Mesh sensor and Sensor Controller should be powered with the same 12-24VDC input. As soon as the Controller is powered on it will start broadcasting the non-provisioned advertising messages that will tell the provisioning app that a new device is ready to join. The provisioning app will connect to the new driver, configure security keys, addresses and other data so the new Controller can join the Mesh Network. After the new Controller joins the Mesh Network it is ready to be configured (publishing / subscribing data.)

### Applications

The **Close Contact/Sensor Controller** is a wireless module that controls a Non Bluetooth Mesh Sensor. This pairing can be used in a multitude of applications such as; turning lights on or off when vacancy or occupancy has been detected.

### Connectivity

Devices are repeaters for other devices and should be installed within a certain maximum distance from each other.

Typical maximum distance:	50ft
<u>Outdoor (line of sight):</u>	200ft
<u>Indoor (through building material):</u>	
Glass:	100ft
Drywall:	70ft
Cinderblock:	60ft
Brick:	50ft
Concrete + rebar	0ft

Devices with external antenna should have the antenna outside any metal box and away from metal surfaces as metal reduces connectivity.

For design purposes a 60ft. maximum distance is appropriate for most installations.

### Specifications

- DC Input Voltage - 12-24VDC
- Auxiliary Output Voltage - 0-10VDC
- Sensor Input Voltage - 12-24VDC
- Operating Temperature - -22° to 158°F (-30° to 70°C)
- 0-10V Dimming\* - 100mA Max
- Optional Power Supply
- Dimensions - 3.25" x 1.5" x 0.25"  
(82.5 x 38 x 6.35 mm)

### Description

The **C-S1C-24-DS00 Close Contact/Sensor Controller** is a Bluetooth Mesh Bridge that converts any 12-24VDC Occupancy Sensor into a Bluetooth Mesh Node. It can be installed inside fixtures, j-boxes, or remoted. The non-bluetooth sensor can be added to any network with the addition of the Sensor Controller. The auxiliary 0-10V DC output can control a single or multiple 0-10V devices connected together.

### Operation

The **Close Contact/Sensor Controller** operates on 12-24VDC. Once powered up, the device broadcasts its identification code waiting to be provisioned through the BubblyNet App.

The Sensor Controller is a Bluetooth Mesh Qualified device. This means that it can be controlled and be part of any Bluetooth Mesh Network, independently of the brand or manufacturer of the additional devices or controls.

### Features

- Simple to Install
- Converts any Non Mesh sensor into a Mesh Device
- Auxiliary 0-10V Output
- Does Not Require a Gateway

## Thermostat Setback Controller | Model: C-HVA-42-DS00



### Specifications

- DC Input Voltage - 12-24VDC
- Output Voltage - 12-24VDC + 0-10VDC
- Sensor Input Voltage - 12-24VDC
- Operating Temperature - -22° to 158°F (-30° to 70°C)
- 0-10V Dimming - 100mA Max
- Optional Power Supply
- Dimensions - 3.25" x 1.5" x 0.25"  
(82.5 x 38 x 6.35 mm)

### Description

The **C-HVA-42-DS00** Thermostat Setback Controller is a Bluetooth Mesh device that activates setback temperature on any thermostat with a CCI (Closed Contact Input). Setback can be activated by vacancy sensing, a schedule or a Demand Response event.

### Certifications



### Installation

The installation of the Thermostat Controller is very simple. The device can be either powered by the 12VDC or 24VDC auxiliary of the thermostat or from external low voltage line. The CCO (Closed Contact Output) of the C-HVA is connected to the CCI (Closed Contact Input) input on the thermostat and all settings and logics of the C-HVA are configured via the BubblyNet app (iOS or Android).

### Applications

Here's a list of popular thermostat brands and models that support CCI (Closed Contact Input) functionality:

Honeywell VisionPRO 8000 (TH8321WF1001)  
Honeywell T6 Pro Z-Wave Thermostat

Ecobee SmartThermostat with Voice Control  
Ecobee3 Lite

Johnson Controls TEC3000 Series Thermostat  
Johnson Controls T2000 Series

Siemens RDG100 Series Thermostats  
Siemens RDS120 Smart Thermostat

Schneider Electric SE8000 Series  
Schneider Electric SmartX Living Space Thermostat

Trane XR524 Smart Thermostat  
Trane ComfortLink II XL1050

Emerson Sensi Touch Wi-Fi Thermostat

### Connectivity

Devices are repeaters for other devices and should be installed within a certain maximum distance from each other.

Typical maximum distance:	50ft
<u>Outdoor (line of sight):</u>	200ft
<u>Indoor (through building material):</u>	
Glass:	100ft
Drywall:	70ft
Cinderblock:	60ft
Brick:	50ft
Concrete + rebar	0ft

Devices with external antenna should have the antenna outside any metal box and away from metal surfaces as metal reduces connectivity.

For design purposes a 60ft. maximum distance is appropriate for most installations.