INTRODUCTION

The controlHUBB App is available for download free of charge from the Apple (iOS version) or Google Play (Android version) stores. The App is intended as a programming tool for configuration of various Hubbell Controls Devices including NX. The NX room device setup tool is now part of this App. Configuration of NX system is to be performed on a room by room basis. It is not intended for connection to Devices via the HubbNET network. Only one Smart Device such as a phone or tablet can connect to one Bluetooth* enabled NX Device at a time.

HOME PAGE

The controlHUBB App icon (see below) shows up on your phone after downloading from the App store. Upon clicking the icon, the first page that is seen is the home page with a menu. See screenshot below. From the menu, user can select the NX Room Setup in order to begin the configuration of the NX System.

CONNECTING TO BLUETOOTH ENABLED DEVICES

Upon selecting the NX Room Setup option from the home screen, user will be directed to the page showing all the NX bluetooth devices that are in range. See Figure 2. The type of Device, its MAC address, and signal strength meter will aid in determining the exact Device to which you are intending to connect. Note that if a security Passcode has previously been enabled for the Device, you will be prompted to enter the Passcode prior to connection. All NX Bluetooth enabled Devices except the NXBTR are security enabled and can be protected against unauthorized connection via a security PIN.

There are a number of NX Devices that are Bluetooth enabled. A connection to one of these Devices will enable configuration of all Devices that are contained within that Device or are connected to the same wired buss. NX Bluetooth enabled Devices include:

- NXBTR Bluetooth radio dongle
- NXBTC Bluetooth radio dongle with Real Time Clock
- NX5MP series Smart Sensors
- NXOFM series On Fixture Module

*How-To Video Available

Figure 2
NAVIGATING THE APP

Once a Bluetooth® connection is established, the App will display a list of the connected Devices that are available for programming. See Figure 3. The quantity of each type of Device is shown on each line. This quantity will vary depending the quantity of Devices connected in the room. Note that each room will always allow for programming up to 16 Presets and 99 Schedules regardless of the quantity of connected Devices.

A Discover button appears at the top of the Discovered Devices screen. Tapping this button will cause a re-discovery and a new listing of devices.

Tapping a Device type that has only a single entry will directly open the configuration screen for that device. Tapping a Device type with multiple entries will offer a listing of the entries for selection. For example, tapping the Relays line will open a screen with a listing of the two available Relays. Tapping a Relay in the list will open the configuration page for that relay. See Figure 4.

RELAYS AND DIMMERS

Note that configuration screens for Relays and Dimmers offer control of the connected lighting. The Relay Control button on the Relay screen and the Dimmer Control slider on the Dimmer screen will control the lighting in real time.

Relays and Dimmers must be included in at least one Group in order to function with other Devices in the room. Scroll to the bottom of the screen to access the selection array for the 16 available Groups. See Figure 7.
SWITCHES

NX offers two categories of Switches. Specialty switches have a singular functionality which cannot be changed. The NXSW-ORLO switch for example will always provide On, Off, Raise, and Lower functions. The programmable Smart Switches such as the NXSW-2 have buttons that each can be programmed for unique functions. Select Switches from the Discovered Devices screen to open a listing of the available switches. Tapping a Switch in the list will open the setup screen for the Switch.

Note that the configuration settings for the NXSW-ORLO Switch are for the entire Switch. On the NXSW-2 Switch, each button has a unique configuration. Select the button to program and use the pull down menu to select the button type. The configuration screens will change depending upon the button type selected. Scroll to the bottom of the screen to choose the Group(s) that the Switch or Button is to be a member of.

LEGACY DAYLIGHT SENSOR

Tap the Legacy Daylight Sensor line on the Devices Discovered screen to open the configuration screen for the Daylight Sensor. Note that the sensor can be configured to independently control up to 6 rows of lighting in the room. At least one Zone must be selected to calibrate the Daylight Sensor. The default setting for the Legacy Daylight Sensor is Test Mode. Use the pull down menu to select the desired function. The configuration screen will change based upon the Mode selected.
NXSMP SMART SENSORS

NXSMP series Smart Sensors are unique in that each sensor contains a Bluetooth radio, passive infrared occupancy sensor and a daylight sensor. See Figure 5.

Note that some installations will have a large number of Smart Sensors installed in close proximity. Naming the sensors will aid in relocating them in the future. Tap on the Name field, type a name and tap the Save button.

The Passcode feature is provided to prevent unauthorized Bluetooth connection to the devices. To use this feature enter, a 4 character Passcode in the fields. Note that all printable ASCII characters are usable in the fields allowing for an extremely strong Passcode. DO NOT FORGET the Passcode. Future Bluetooth connection is not possible without entering the correct Passcode.

Note that the NXBTC and NXOFM also support the security Passcode feature.

SMART OCCUPANCY SENSOR

Tap the Occ Setup button at the top of the screen to open the setup screen for the integral passive infrared occupancy sensor. See Figure 5 Aside from entering setup parameters, the occupancy sensor setup screen offers access to the NX exclusive Intelliscope™ feature. Tap the View Occ Data button at the top of the screen to access the Intelliscope screen. This screen shows the actual operation of the occupancy sensor in real time to assist in precise calibration of the occupancy sensor. See Figure 6.
SMART DAYLIGHT SENSOR

Tap the PC Setup button at the top of the Smart Sensor screen to open the photocell setup screen. See Figure 5. The default condition for the photocell is Disabled. Use the Mode Select to choose Closed Loop Full Range Dimming. This will expand the page and provide a fully prompted calibration sequence.

GROUPS

The Occupancy Sensor and the Daylight Sensor must each share membership in at least one Group with a Relay and/or Dimmer in order to control lights. When setting up the Occupancy Sensor insure that at least one Group containing a Relay is selected at the bottom of the screen. When setting up the Daylight sensor insure that at least one Dimmer is in the Group. See Figure 7.

PRESETS

Select the Preset Settings line in the main menu to open the setup screen for a preset. Select the preset number (1 – 16) you wish to program. Note that Preset 1 – 4 have factory default settings. Tap the Test Preset button to view the room lighting at the preset levels. Tap the Save button to save the preset. See Figure 8.

SCHEDULES

Select the Schedules line in the main menu to open the setup screen for a schedule. Select the schedule number (1 – 99) you wish to program. Note that the Time and Date must be entered before a Schedule will be valid. See Figure 9.
CLONING FUNCTIONALITY

COPY PASTE

This functionality in the App allows the user to save (copy) an individual device such as an occupancy sensor, a relay or a dimmer setting and re-use (paste) it on another device of the same type. This relay or dimmer can be part of a room controller or an in-fixture module.

To configure using this feature, on the device page, click on settings. Upon configuring the device, save settings. Now go to a different device of the same type (which could be part of a room controller or a standalone one) and select the recall settings option from the settings icon. See Figure 7.

CLONE

Allows user to clone (copy) an entire container such as a room controller, an in-fixture module, a switch station, preset and/or a schedule. For example: In a school with 2 classrooms with 1 room controller, 1 switch, 1 schedule and 4 presets each can be identical to each other. With the help of this function, user can setup one room and create a profile using that. Note: For each container, a profile will have to be created. For example, 1 for room controller, 1 for schedule etc.

Upon visiting the second classroom, user can recall the profile created and apply it to that room. Again, this step must be repeated for each individual container.

Note also: When recalling a profile for a room controller, user can opt to include presets. There is no need to create a profile separately for presets. See Figure 8.
SUPER CLONE
Recalling the same example as in the above section, if we suppose instead of 2 classrooms, there are 10 with identical control intent. Instead of visiting each individual classroom and recalling the same profile 9 times, user can select all 9 containers (1 for each room) and apply the saved profile simultaneously to all of them. This is the function of the super clone. Moreover, in case the user does not want to replicate the profile on all of them but only on 5 out of the 9, then only those 5 containers can be selected, and profile applied only to them. This selective cloning is part of the super clone feature. Note: Super clone will work for each individual container - room controller, in-fixture controller, switch station (of the same kind), schedule and presets. The super clone function does not apply to occupancy sensors or smart sensors as of today. See Figure 9.

GLOBAL DISCOVERY
This functionality allows user to save time when configuring networked devices. The devices may be connected either wired (via a bridge) or wireless (via mesh). Using global discovery, the user can enter/access the network through a single Bluetooth® device and start configuring all individual devices or groups or zones from that single connection, using the global discover option. See Figure 10
As shown below, the user will need to select the discovery type (local or global) and then also setup the global discovery filters. Note: Only 1 device type can be selected at a time when performing global discovery.

See Figure 9.
GLOBAL DISCOVERY (CONTINUED)

A classic application for global discovery is a wireless mesh network of fixtures but with only one of those fixtures having a smart sensor. In this scenario, the user only has 1 Bluetooth® device in the entire network, which is the smart sensor. Without global discovery, user would be unable to access and configure the non-smart sensor wireless fixtures even though they are part of the same mesh network. However, using the global option in the discover tab, each wireless fixture in the mesh (subject to device limits) can be discovered, accessed and configured. See Figure 11.

See Figure 11.