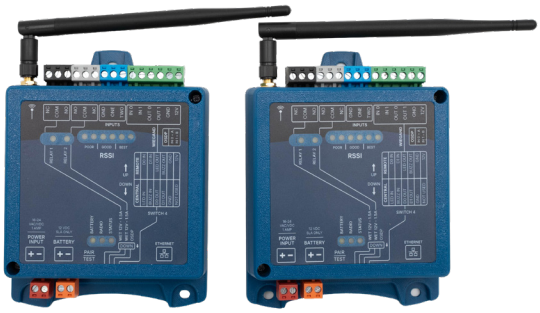
QUICKSTART GUIDE (WIEGAND)

# KNECT Endpoint Pair

**KEP-202** "Point to Point Wireless Bridge"

The KNECT Point to Point solution is a wireless bridge capable of reliably transmitting both Wiegand and OSDP data over 25+ miles (line of sight) using two KNECT Endpoints.



## BEFORE YOU BEGIN

The KNECT Point to Point system is a wireless bridge system consisting of two KNECT Endpoints.

Before installation designate one unit to be your Central unit (connected to main access control) and indicate the other unit will be your Remote unit (access point device).

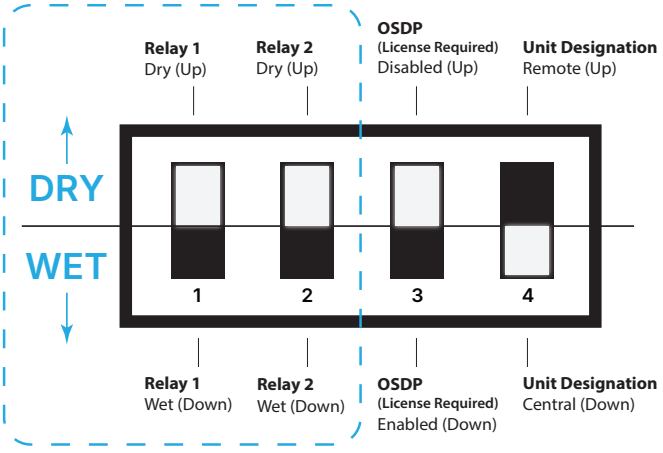
It is recommended that the system be onboarded into the Aether RF IoT cloud platform in order to obtain detailed insights on device performance.

If your organization is not already registered, it is recommended you do so at **AetherRFiot.com/register/dealer** before proceeding with the installation.

## DEVICE OVERVIEW

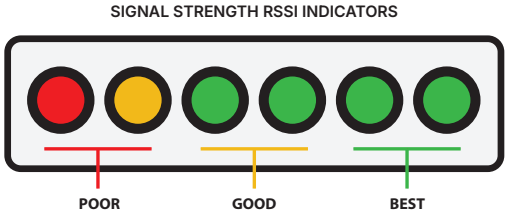
### DIP SWITCHES

Each device has specific dip switch combinations for various use cases. Ensure devices have the correct dip switch configuration for your intended use.




### RSSI & OTHER LED'S

Each device has various LEDs to signal specific operating states, or performance insights. Understanding the main LED behaviors will improve both installation and troubleshooting.




**RELAY 1**

**RELAY 2**

These LED indicators will illuminate green when the relay is switched from NC to NO, if no LED is present then the relay is in the standard NC position.

**BATTERY**

The battery LED will flash green when the battery is charging. You can check the LED status on Aether RF IoT as well.

**RADIO**

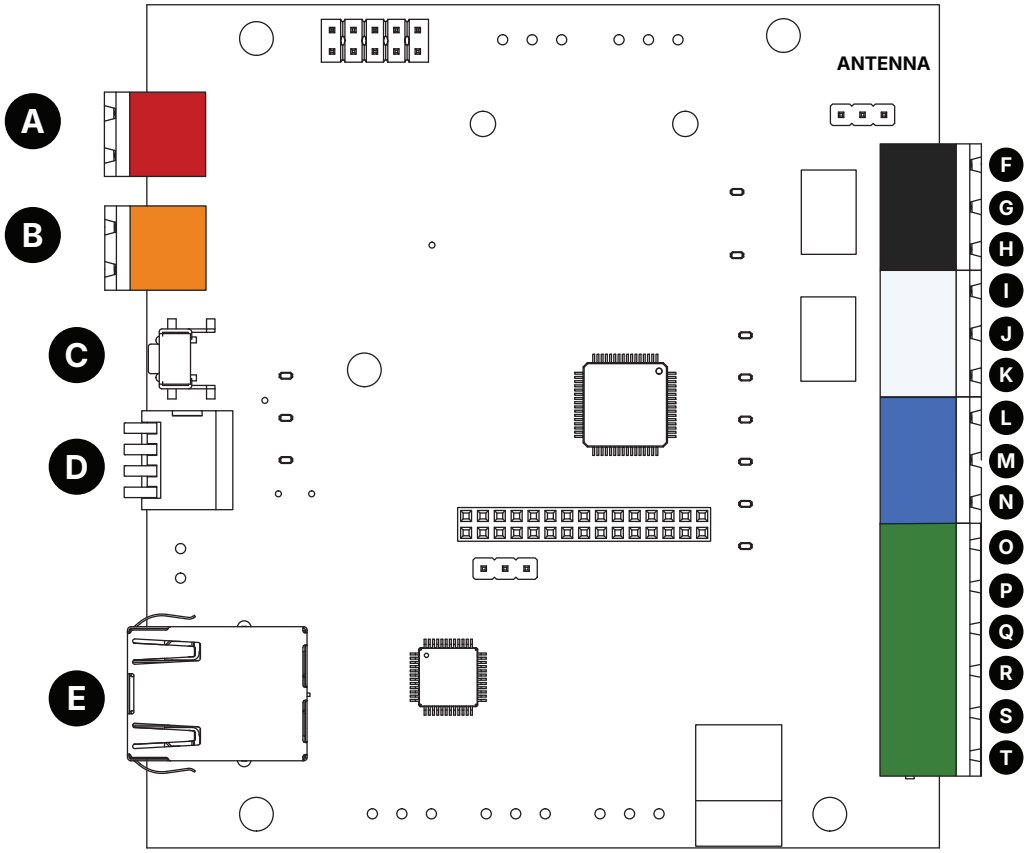
The radio LED will flash on every transmit from the device (i.e. on a wiegand card scan or relay input).

**STATUS**

If no device is paired, it will flash **twice** every 5 seconds. If atleast one device is paired, it will flash **once** every 5 seconds.

Contains FCC IDs: 2BGQ6KM100A
and X8WBT840F

## DEVICE OVERVIEW CONTINUED




- **A** RED: 16-24VAC/ VDC POWER
- **B** ORANGE: BATTERY BACKUP, 12VDC SEALED LEAD ACID BATTERY
- **C** PAIR / TEST BUTTON
- **D** DIP SWITCH
- **E** ETHERNET
- **F** BLACK (RELAY 1): NC
- **G** BLACK (RELAY 1): COM
- **H** BLACK (RELAY 1): NO
- **I** WHITE (RELAY 2): NC
- **J** WHITE (RELAY 2): COM
- **K** WHITE (RELAY 2): NC
- **L** BLUE: GND
- **M** BLUE: ONE
- **N** BLUE: TWO
- **O** GREEN: IN 0 / OSDP A
- **P** GREEN: IN 1 / OSDP B
- **Q** GREEN: DATA 0
- **R** GREEN: DATA 1
- **S** GREEN: GND
- **T** GREEN: 12V

## MOUNTING CONSIDERATIONS

Before mounting, ensure the antenna is tight enough and doesn't fall or swing freely in any position.

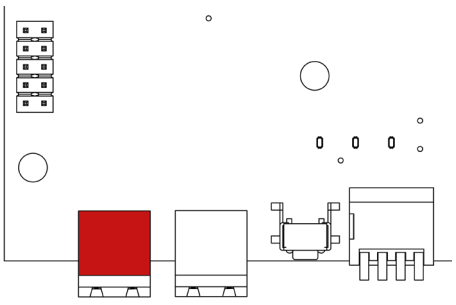
Mount the unit in an area where the antenna has a mostly-unobstructed airway, preferably high and near an exterior wall or window if mounted indoors.

The antenna should be straight and pointed up for maximum performance.

⚠ The KNECT Endpoint is NOT water resistant. ⚠

## POWER

Connect 16-24VAC/VDC power to the RED terminal block on both units.

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## WIRING

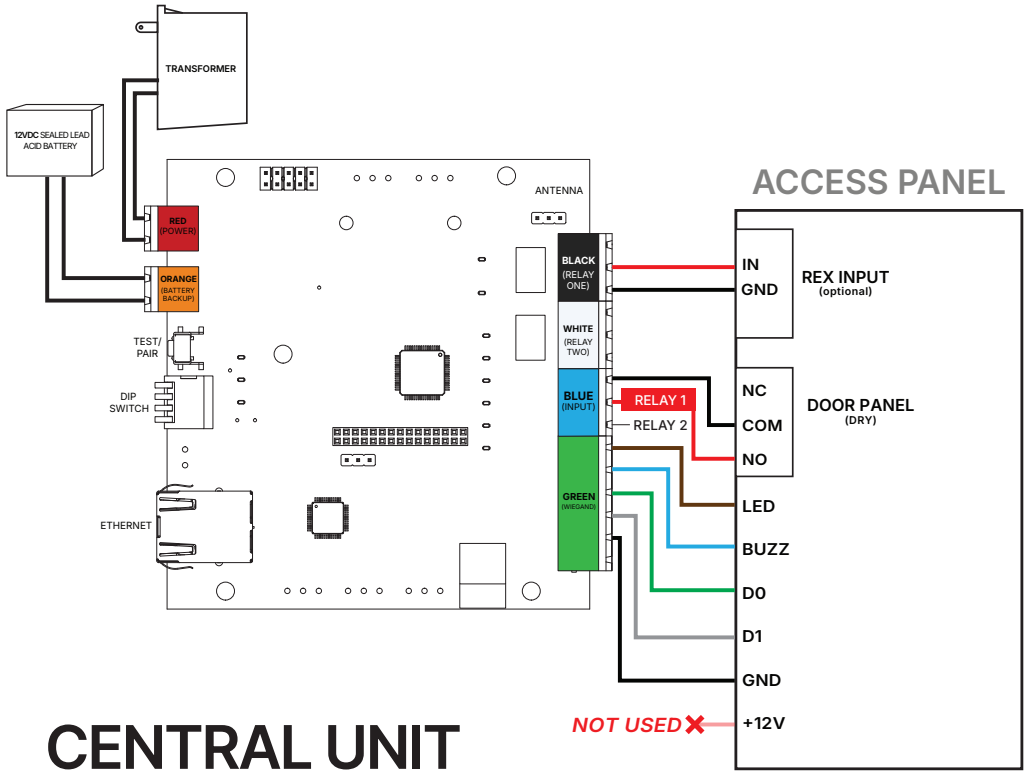
### **CENTRAL UNIT** WIRES TO CONTROL PANEL

GREEN TERMINAL - WIEGAND:
12V, Ground, Data 1, Data 0, LED (IN 1), Buzzer Control (IN 0)

BLUE TERMINAL - INPUTS:
Input 2, Input 1, Ground

WHITE TERMINAL - AUX:
Normally Open, COM, Normally Closed

BLACK TERMINAL - RELAY:
Normally Open, COM, Normally Closed




# CENTRAL UNIT

DEVICES NOT SHOWN TO SCALE

### **REMOTE UNIT** WIRES TO ACCESS POINT

GREEN TERMINAL - WIEGAND (CARD READER):
12V, Ground, Data 1, Data 0, LED (IN 1), Buzzer Control (IN 0)

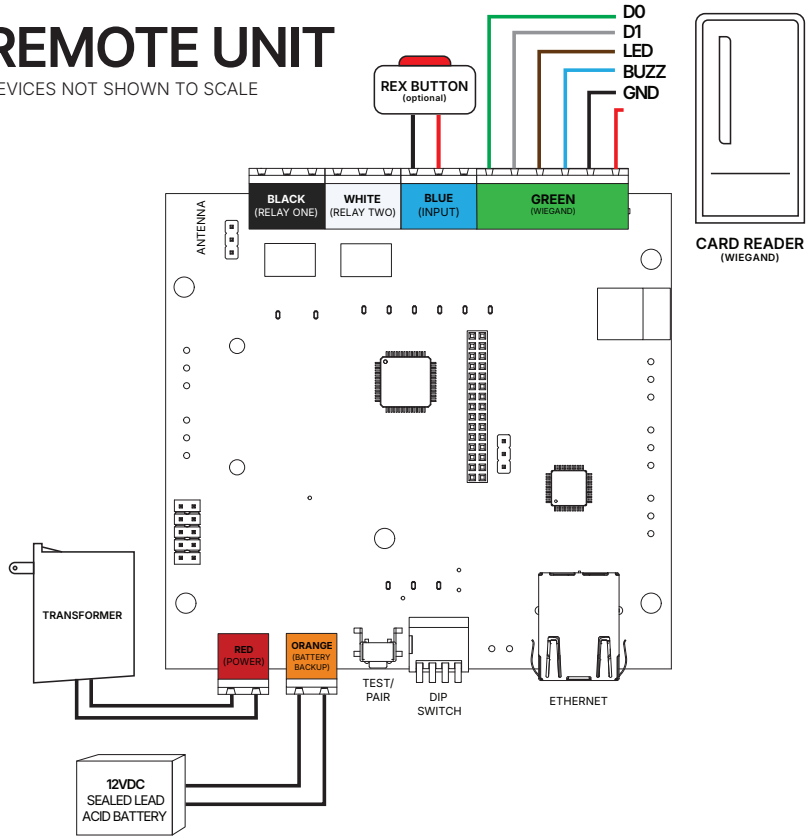
BLUE TERMINAL - INPUTS (REX MOTION, DOOR POSITION): Input 2, Input 1, Ground

WHITE TERMINAL - AUX:
Normally Open, COM, Normally Closed

BLACK TERMINAL - RELAY:
Normally Open, COM, Normally Closed

# REMOTE UNIT

DEVICES NOT SHOWN TO SCALE



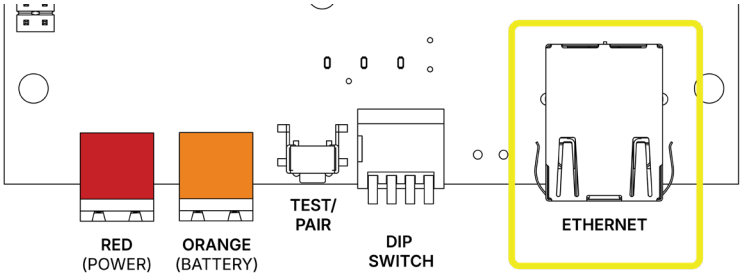

Contains FCC IDs: 2BGQ6KM100A and X8WBT840F

## WIRING (continued)

### Wiring to Ethernet

If you intend to utilize the cloud based monitoring features for your Point to Point system, you'll need to connect your Central Unit to ethernet.

It is not necessary to connect the Remote Unit to ethernet.



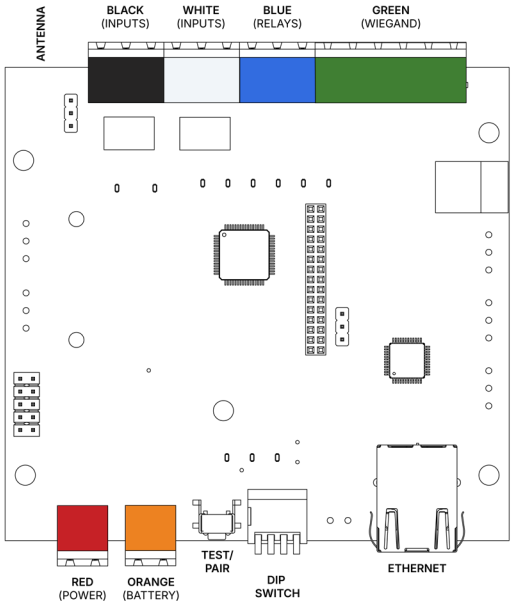

## PAIRING AND UNPAIRING

### To Pair

It's recommended to have both Endpoints in close proximity for pairing, but is not required.

1. Ensure devices are connected to power.
2. Set one device to Remote using **Dip Switch #4**
3. Set the other device to Central using **Dip Switch #4**
4. Power cycle both devices by unplugging from the power source for 30–60 seconds, then plugging back in.
5. **RSSI LEDs will light up on the Central unit** once the Remote device starts transmitting.
6. Quickly press the **Test/Pair** button on the Central. The two devices will transmit back and forth 6 times, the RSSI lights should light up on each device.
7. Once the devices stop transmitting pairing is complete

Once successfully configured and paired, the units will communicate every 30 seconds. The RSSI LEDs will indicate signal strength between the two units

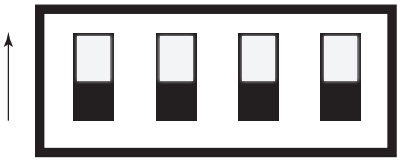



### To Unpair and Factory Reset

1. Move **ALL DIP switches** to the **UP** position on **both units**.
2. Hold the green **Test / Pair** button on **both units** until the **Radio** and **Status** LEDs stay solid for 5 seconds.

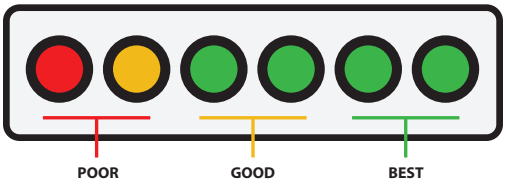
Once the LEDs have shown solid, the devices have been unpaired and restored to their factory settings.

DIP SWITCH UP POSITIONS



## FUNCTIONAL TESTING

Set up has been completed correctly when the **Status** LED flashes once every 5 seconds to indicate proper pairing. If the **Status** LED is still flashing twice, it has not been paired properly.

Press and release the **Test/Pair** button to send a test radio transmission. If both devices are paired and within range, each device will show an RSSI reading, indicating the signal strength for the current distance between the devices.

SIGNAL STRENGTH RSSI INDICATORS