

This page is intended for installer use in the installation of the BluePass 2-N-1 Multi-Tech Reader.

Introduction

This guide will walk a professional installer through the steps needed to attach a 2-N-1 BluePass Multi-Tech Reader to an access control panel. The 2-N-1 supports 125 KHz proximity fobs and cards as well as Linear BluePass mobile credentials. Please review the information below to ensure the reader is installed quickly and properly.

WARNING: DO NOT connect the reader up with energized wires until instructed to do so.

Grounding

- The shield must run continuously from the reader to the panel. At the panel, the reader ground, shield line, and earth ground must be connected together at a single point.
 - Do not ground the shield line at the reader end, as this will create a potential ground loop.

Power

- A non-switching power supply at the panel is recommended to power the reader for the highest noise immunity and best performance.
- For UL 294 Compliance, the readers shall be connected to a class two power limited power supply or control panel output.
- The recommended wire gauge is 24 AWG.

Voltage

- The minimum reader voltage required is +6 VDC to a maximum of +16.0 VDC, and 12.0 VDC is recommended.
- The reader will require 100 mA (typical @ 12 VDC) in standard mode, 220 mA (typical @ 12 VDC) in advanced mode.
- The reader is in “standard” mode by default. “Advanced” mode can be configured via in-app settings using the BluePass app.

Connection

- Connections must be in accordance with NFPA 70. DO NOT connect to a receptacle controlled by a switch.

Mounting the Reader

- If the unit is used to control a door or pedestrian gate, locate the unit as near as practical to the entry point. If the unit is mounted on or in a wall adjacent to the entry point, be sure the wall is sturdy. The repeated shock and vibration from a slamming access door or spring-loaded pedestrian gate must be isolated from the unit.
- Never mount the reader directly on a moving door or gate.
- Choose a well-lit location near the controlled opening. Wiring access for power, network, and earth ground must be available to the mounting location.

Mounting

- Both the Mullion and Single-gang readers can be mounted on a wall or any suitable flat surface.

Mobile Device and Software

- The 2-N-1 Multi-Tech Reader utilizes BLE version 4.0.
- The reader is to be used in conjunction with the BluePass Mobile App (Version 1.0 or higher).
- In order for the reader to function properly, the mobile device’s software must be up to date.
 - iOS Devices: iOS 10.0 or higher
 - Android Devices: v5.0 (Lollipop) or higher and peripheral mode supported.
- Refer to <http://bluepass.io> or use the QR code for obtaining full versions of the User and Installation manuals.



Reader Wiring

Wiegand	
Conductor	Purpose
Red	DC +6-16 VDC
Black	Ground
Green	Data 0
White	Data 1
Purple	Red LED
Orange	Beeper
Yellow	Card Present
Blue	Green LED
Drain	Shield Ground

Current Draw: 100mA (typical @ 12VDC)

UL 294 Performance Levels

MODEL #	ACCESS CONTROL LINE SECURITY LEVEL	DESTRUCTIVE ATTACK LEVEL	ENDURANCE LEVEL	STANDBY POWER LEVEL	CONDITIONS
BLUEPASS 2-N-1 MULTI-TECH READER	Level I	Level I	Level III	Level I	N/A

Certifications

- FCC Compliance Statement: This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:
 - This device may not cause harmful interference.
 - This device must accept any interference received, including interference that may cause undesired operation.

