



## BlueDiamond™ Readers Quick Reference Guide

### SPECIFICATIONS

#### Performance Level for Access Control

This product complies with the following UL 294, 6th edition Access Control Performance Levels:

Feature	Level
Standby Power	I
Endurance	IV Prox
Line Security	I Bluetooth®
Destructive Attack	I

See the UL listed access control unit controller installation instructions for reader compatibility.

#### Environmental

Operating Temperature	-31°F to +151°F	(-35°C to +66°C)
Humidity	86 ±3°F	(85 ±5% at 30 ±2°C)
Ingress Protection	IP65	(not evaluated by UL)
Positioning	Suitable for OUTDOOR use.	

#### Electrical

Power supply	Power is to be provided by a UL 294 Listed, low-voltage Class 2 Limited Power Supply or controller, capable of 4 hours standby.
Voltage	+10Vdc to +16Vdc
Current:	maximum average measured at 10Vdc

Model	Part No.	Normal Standby	Operating
HON-R11330-05TB	BD Mullion	60mA	75mA
HON-R11320-05TB	BD S-Gang	60mA	75mA
HON-R11325-05TB	BD S-Gang Keypad	65mA	100mA

Data Voltage	Rest >4Vdc / Active <1Vdc
Data Output	Wiegand, Open Supervised Device Protocol (OSDP), OSDP Secure Channel (SC), F/2F
Indication	1 RGB LED + RGB LED illuminated keypad to: HON-R11325-05TB
Sounder	Integral speaker

Specifications subject to change without notice.

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100-02971-B-HONEYWELL



#### Bluetooth® 4.0

The Bluetooth word, mark and logo are registered trademarks of Bluetooth SIG, Inc.

- Honeywell BlueDiamond™ mobile application for: iOS version 10.0 and later
- Android OS version 6.0 and greater
- Device PIN Code / Biometric security enabled
- System Monitoring for Bluetooth configurations



#### NFC support for Apple and Google

#### Supported Card Technologies in Multi-Tech Modes

##### 125kHz proximity cards

- HID® Proximity

##### 13.56MHz smart cards

- MIFARE® DESFire® EV1/EV2/EV3

Supported Card Technologies not evaluated by UL.

- AWID® Proximity
- CASI/GE Security ProxLite
- MIFARE Classic® - ISO 14443
- Vicinity Card Serial Number - ISO 15693
- HID® iCLASS

#### Dimensions

Model	Part No.	Size - Inches (millimetres)
HON-R11330-05TB	BD Mullion	3.8 x 2.1 x 0.8 in (96 x 52 x 21)
HON-R11320-05TB	BD S-Gang	4.7 x 3.0 x 0.8 in (120 x 76 x 21)
HON-R11325-05TB	BD S-Gang Keypad	4.7 x 3.0 x 0.8 in (120 x 76 x 21)

#### Wiring

Wiring methods shall be in accordance with the National Electrical Code (ANSI/NFPA70), local codes, and the authorities having jurisdiction.

Cable length Up to 492 feet (150m) from controller.

#### Recommended for Wiring

Cable type (S)/F/2F.	BELDEN 953x (or equivalent UL listed) for Wiegand and BELDEN 9502 (or equivalent UL listed) for RS-485.
Minimum wire size	Not less than 24 AWG.
Shielding	Connect the reader's ground wire to cable shielding and connect shield wires at the microcontroller.

All cables and wiring must be UL listed and suitable for use.



UTJ-AV90

These devices comply with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

These devices contains: FCC ID:TCZ-10103751G1  
IC: 1175F-10103751G1

CNCC C-21595

CNCC C-21596

CNCC C-21597

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.



Mounting this reader on (or near) metal may impair the read range of the unit.

#### BD Mullion Mobile Enabled

##### HON-R11330-05TB

125kHz  
13.56MHz  
Supra® BTLE (2.4GHz)  
Wiegand  
OSDP and SF/2F outputs



#### BD S-Gang Mobile Enabled

##### HON-R11320-05TB

125kHz  
13.56MHz  
Supra® BTLE (2.4GHz)  
Wiegand  
OSDP and SF/2F outputs



#### BD S-Gang Keypad Mobile Enabled

##### HON-R11325-05TB

125kHz  
13.56MHz  
Supra® BTLE (2.4GHz)  
Wiegand  
OSDP and SF/2F outputs



04642-19-07348



This symbol on the product or on its packaging indicates that the product must not be disposed of with normal household waste. Instead, it is your responsibility to dispose of your waste equipment by arranging to return it to a designated collection point for the recycling of waste electrical and electronic equipment. By separating and recycling your waste equipment at the time of disposal you will help to conserve natural resources and ensure that the equipment is recycled in a manner that protects human health and the environment.

EU Directive 2012/19/EU

For more information on warranty disclaimers and product safety information, please check:

<http://thwll.co/BlueDiamond>

or scan the QR code.



Together with information provided by suppliers and subcontractors, these devices comply with the requirements and relevant provisions of:

EU Directive 2011/65/EC.

These RFID proximity readers comply with the essential requirements and relevant provisions of:

EU Directive 2014/53/EU

Please turn over for general wiring diagrams

The illustrations and notes:

1 to 6

are provided as a general guidance for mounting, fixing and connecting the BlueDiamond (BD) series of RFID readers.

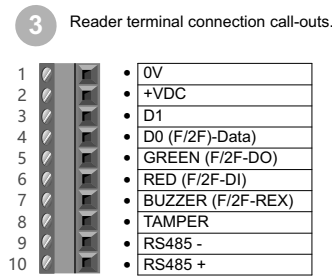
Consult your installer and the manufacturer's details of your controller when configuring your access security system.



Pull bottom edge of reader module away from the backplate, and lift up.



Mount the reader backplate to a flat surface using suitable hardware having a diameter no greater than 0.15 in (4mm).



Supervised inputs of F/2F configuration were not evaluated by UL.

Use the appropriate READER to INTERFACE wiring installation diagram below.



Position the reader module, ensuring the top-edge fixing lugs engage correctly with the recesses located at the top of the backplate.



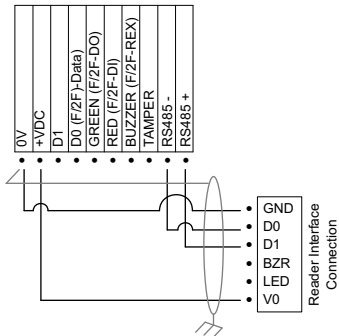
Swing the bottom edge of the module down and forward until you feel the unit click shut.



Secure the reader module to the backplate using the M3x10mm screw as supplied. If required, use a security screw.

### READER to INTERFACE wiring installation diagrams

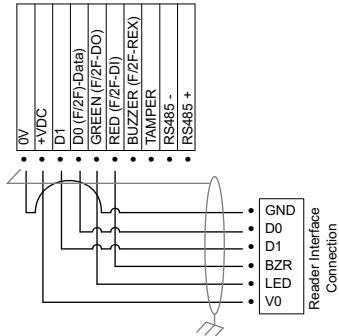
#### OSDP (Preferred)



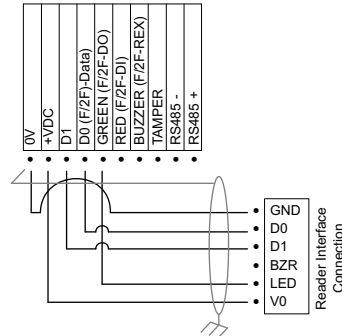
OSDP is self sensing. Be sure of your requirements before connecting.

#### WIEGAND

##### Wiegand 2-Wire (Recommended)

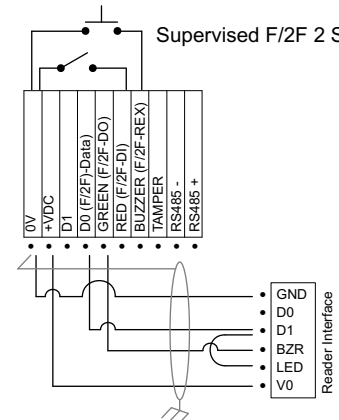


##### Wiegand 1-Wire

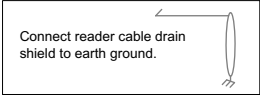
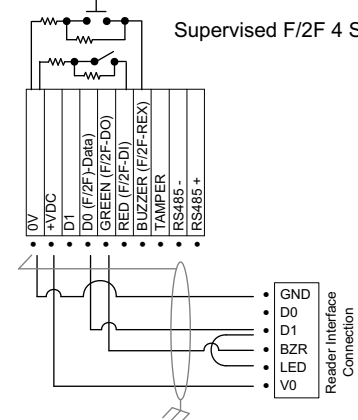


#### SUPERVISED F/2F

##### Supervised F/2F 2 State



##### Supervised F/2F 4 State



### LED Behaviour TABLE

Expected LED Behaviour based on above Reader to Interface wiring

Card Reader Modes		OSDP	WIEGAND		Supervised F/2F
OnGuard Software Setting for Mode		* Preferred wiring	2-WIRE LED	1-WIRE LED	
1	Card and PIN	1 Blinking Red to Blinking Yellow	1 Red and Blue - Alternating	1 Solid Blue	1 Solid Blue
2	Card Only	2 Blinking Red	2 Red and Blue - Alternating	2 Solid Blue	2 Solid Blue
3	Card or PIN	3 Blinking Red	3 Red and Blue - Alternating	3 Solid Blue	3 Solid Blue
3b	PIN only	3b Blinking Red to Solid Yellow	3b Red and Blue to Solid Yellow	3b	3b Solid Blue to Solid Yellow
4	Cipher Lock emulation	4 Blinking Red	4 Red and Blue - Alternating	4 Solid Blue	4 Solid Blue
5	Facility Code mode	5 Blinking Red	5 Red and Blue - Alternating	5 Solid Blue	5 Solid Blue
6	Locked	6 Solid Red	6 Solid Red	6 Solid Blue	6 Solid Blue
7	Unlocked	7 Solid Green	7 Solid Green	7 Solid Green	7 Solid Green
8	Default State when Powered On line	8 Red and Blue - Alternating	8 Red and Blue - Alternating	8 Red / Green / Blue then Solid Blue	8 Red / Green / Blue then Solid Blue
9	Access Granted	9 Blinking Green (2-Beeps)	9 Green and Blue - Alternating	9 Green and Blue - Alternating	9 Yellow Flash to Solid Green (1-Beep)
10	Access Denied	10 Solid Red (3-Beeps)	10 Solid Red	10 Blue (Flashes for a second)	10 1-Yellow Flash (1-Beep)
11	Waiting for PIN	11 Blinking Yellow	11 Flashing Yellow	11 Blue and Yellow - Alternating	11 Solid Yellow
12	Waiting for Second Card	12 Blinking Green	12 Green and Blue - Alternating	12 Green and Blue - Alternating	12 Solid Yellow (1-Beep)

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