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APPLICATION NOTE	AN0136	
Title: WIEGAND BRIDGE WIRING WITH DOORKING ACCESS CONTROLLER AND TRACKER EXPANSION BOARD		Page 1 of 9

1 Scope

- 1.1** This document outlines the connections that are required to wire the Sure-Fi Wiegand Bridge to the DoorKing® 1838 Multi-Door Access Controller as well as to a DoorKing® 2358 Tracker Expansion board.

2 Summary:

- 2.1** The Wiegand Bridge interfaces directly with the DoorKing® 1838 Access Controller on the Wiegand Inputs 1 & 2 that are on the Auxiliary Terminal when interfacing directly to the Wiegand device at the access entry point when a Tracker Expansion Board is **not** used.

If a DoorKing® 2358 series Tracker Expansion Board **is** being used between the DoorKing® Access Controller and the Wiegand device at the access entry point, then the Wiegand Bridge must be connected at the point that is between the Tracker Expansion Board and the Wiegand device that is at the access entry point.




The Sure-Fi Wiegand Bridge cannot be used with the DoorKing® 2358 series Tracker Expansion Board at the Communication Data Output ‘Data 1’ and ‘Data 2’ terminal connections on pins 28 and 29 of the Tracker Expansion Board. The Wiegand Bridge must be connected at the Wiegand Input Data 0 / Wiegand Input Data 1 on the terminal connection pins 6 and 7 of the Tracker Expansion board.

3 References (current version unless otherwise specified)

- 3.1** DoorKing® 1838 Multi-Door Access Controller Series Installation/Owner’s Manual
- 3.2** DoorKing® 2358 series Tracker Expansion Board Installation/Owner’s Manual
- 3.3** Sure-Fi Wiegand Bridge Operators Manual Doc #PI0026

4 Procedure

- 4.1** When the DoorKing® 2358 series Tracker Expansion Board is **not** being used:
- 4.1.1** This example shows the DoorKing® Wiegand Input 1/Relay 1 combination connected to control a Door-Strike, Mag-Lock, or Gate Operator, but the Wiegand Input 2/Relay 2 combination can also be connected in the same manner. The Wiegand Bridge interfaces directly with the DoorKing® Access Controller on the two Wiegand inputs on the Auxiliary Terminal when interfacing directly to a Wiegand device at the access entry point.
- 4.1.1.1** See Figure 1 for the Wiegand Controller Interface wiring.
- 4.1.1.2** See Figure 2 for the Wiegand Remote Interface if connected to a Door-Strike or Gate Operator.
- 4.1.1.3** See Figure 3 for the Wiegand Remote Interface if connected to a Mag-Lock.

		A
APPLICATION NOTE	AN0136	
Title: WIEGAND BRIDGE WIRING WITH DOORKING ACCESS CONTROLLER AND TRACKER EXPANSION BOARD		Page 2 of 9

- 4.2** When DoorKing® 2358 series Tracker Expansion Board **is** being used:
- 4.2.1** This example shows how to connect the Sure-Fi Wiegand Bridge to the Tracker Expansion Board to provide a wireless-bridge for the Wiegand, Output Relay, and a REX button out to the remote access entry point for control of a Door-Strike, Mag-Lock, or Gate Operator.
 - 4.2.1.1** See Figure 4 for the Wiegand Controller Interface wiring.
 - 4.2.1.2** See Figure 5 for the Wigand Remote Interface if connected to a Door-Strike or Gate Operator.
 - 4.2.1.3** See Figure 6 for the Wiegand Remote Interface if connected to a Mag-Lock

Figure 1: Wiegand Bridge **CONTROLLER** Interface connected directly to the Wiegand 1 / Relay 1 of the DoorKing® 1838 Access Controller. See Figure 2 or Figure 3 for **REMOTE** side connections.

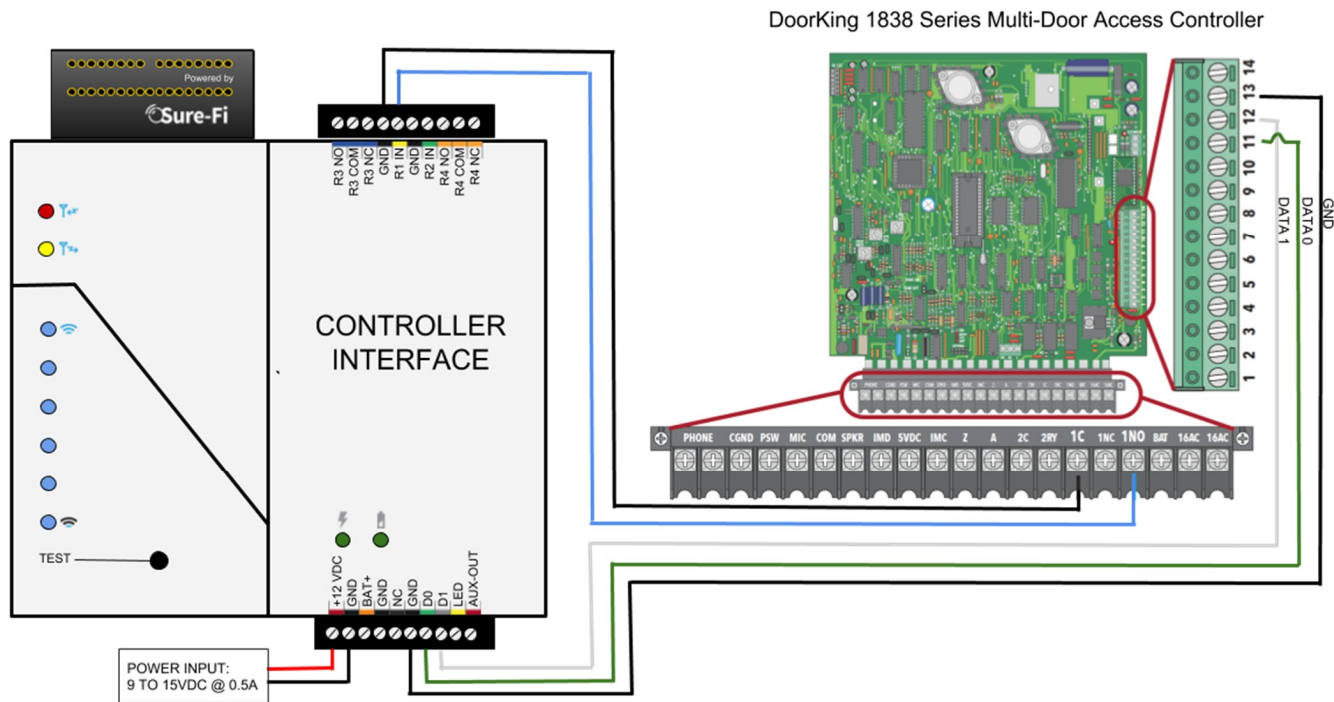
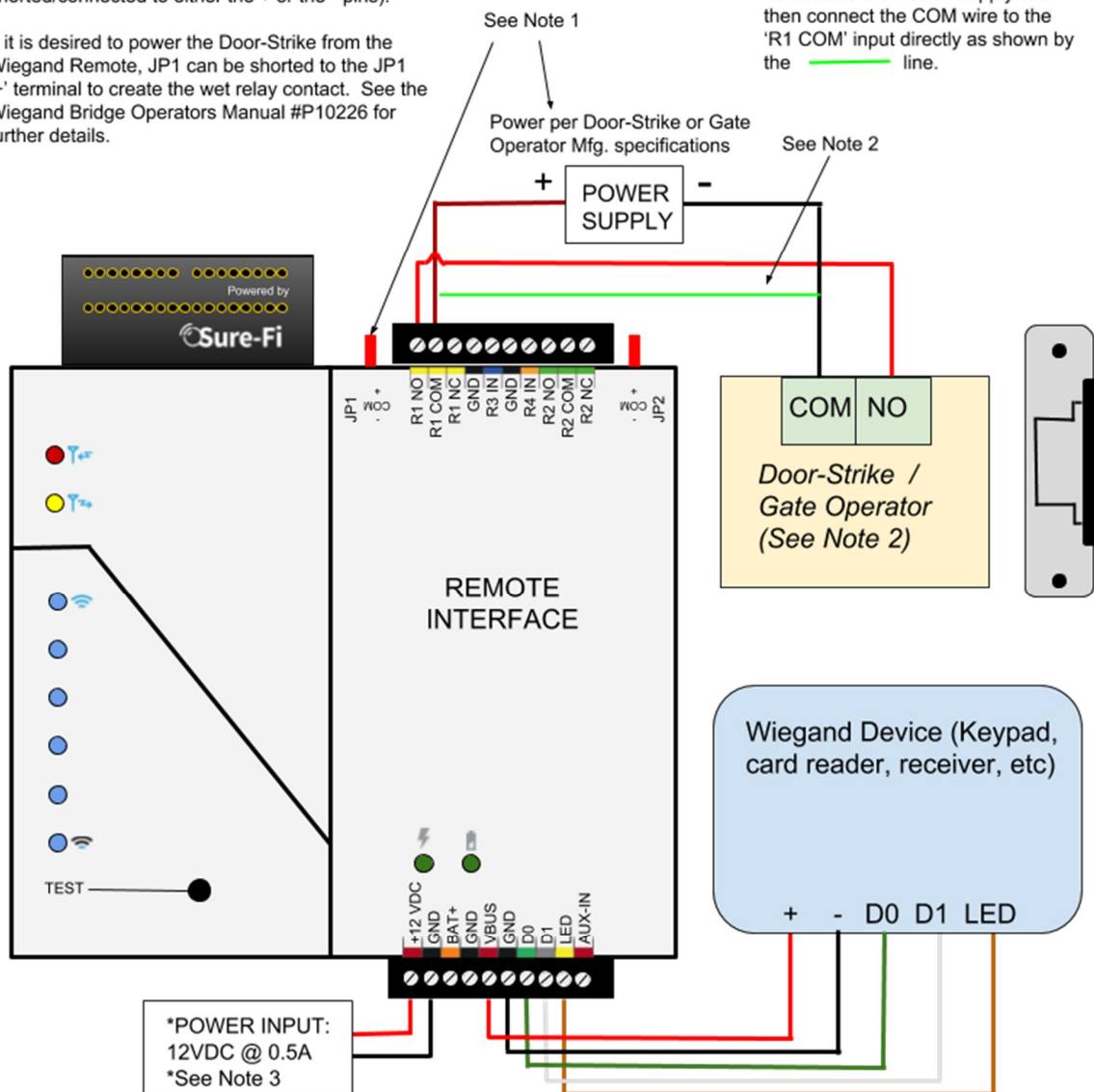


Figure 2: Wiegand Bridge REMOTE interface connected at the access entry point with a Door-Strike or Gate Operator. See Figure 1 for CONTROLLER side connections.

NOTE 1: When powering the Door-Strike externally as shown, the Jumper on JP1 must be disconnected (Jumper should not be shorted/connected to either the + or the - pins).

If it is desired to power the Door-Strike from the Wiegand Remote, JP1 can be shorted to the JP1 '+' terminal to create the wet relay contact. See the Wiegand Bridge Operators Manual #P10226 for further details.

NOTE 2: If a Dry Relay contact is required without providing power, such as for a Gate Operator, then do not include the Power Supply and then connect the COM wire to the 'R1 COM' input directly as shown by the — line.

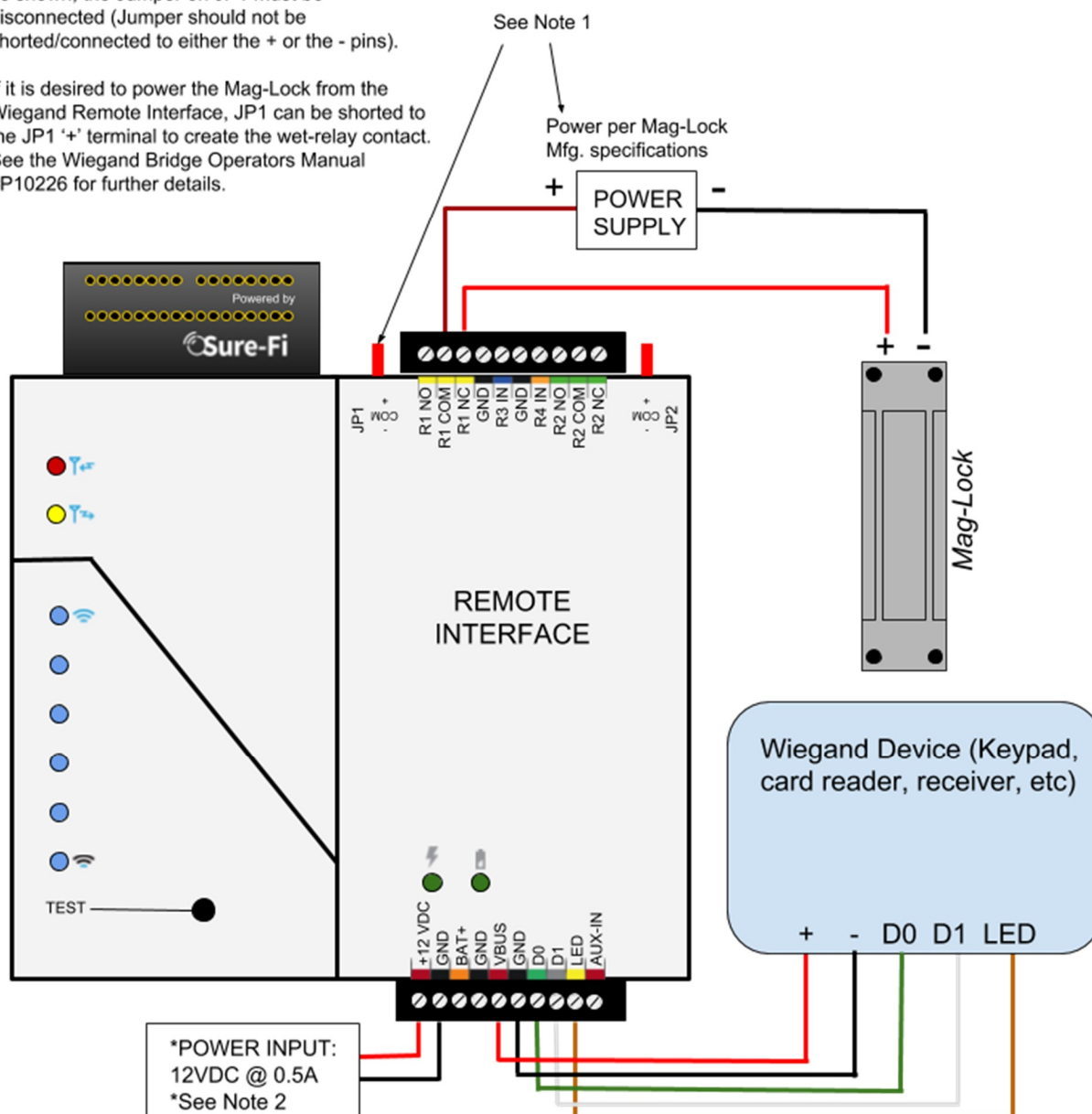


Note 3: If providing power to external devices (Door-Strike, wiegand device, etc), ensure voltage compatibility and adjust power requirements. The input voltage is fed out to the 'VBUS' for wiegand and also on the JP1 and JP2 '+' terminal pin.

Figure 3: Wiegand Bridge REMOTE interface connected at the access entry point with a Mag-Lock. See Figure 1 for CONTROLLER side connections.

NOTE 1: When powering the Mag-Lock externally as shown, the Jumper on JP1 must be disconnected (Jumper should not be shorted/connected to either the + or the - pins).

If it is desired to power the Mag-Lock from the Wiegand Remote Interface, JP1 can be shorted to the JP1 '+' terminal to create the wet-relay contact. See the Wiegand Bridge Operators Manual #P10226 for further details.



Note 2: If providing power to external devices (Mag-Lock, Wiegand device, etc), ensure voltage compatibility and adjust power requirements. The input voltage is fed out to the 'VBUS' for Wiegand and also on the JP1 and JP2 '+' terminal pin.

Figure 4: Wiegand Bridge CONTROLLER Interface connected to the DoorKing® 2358 series Tracker Expansion Board. See Figure 5 or Figure 6 for REMOTE side connections.

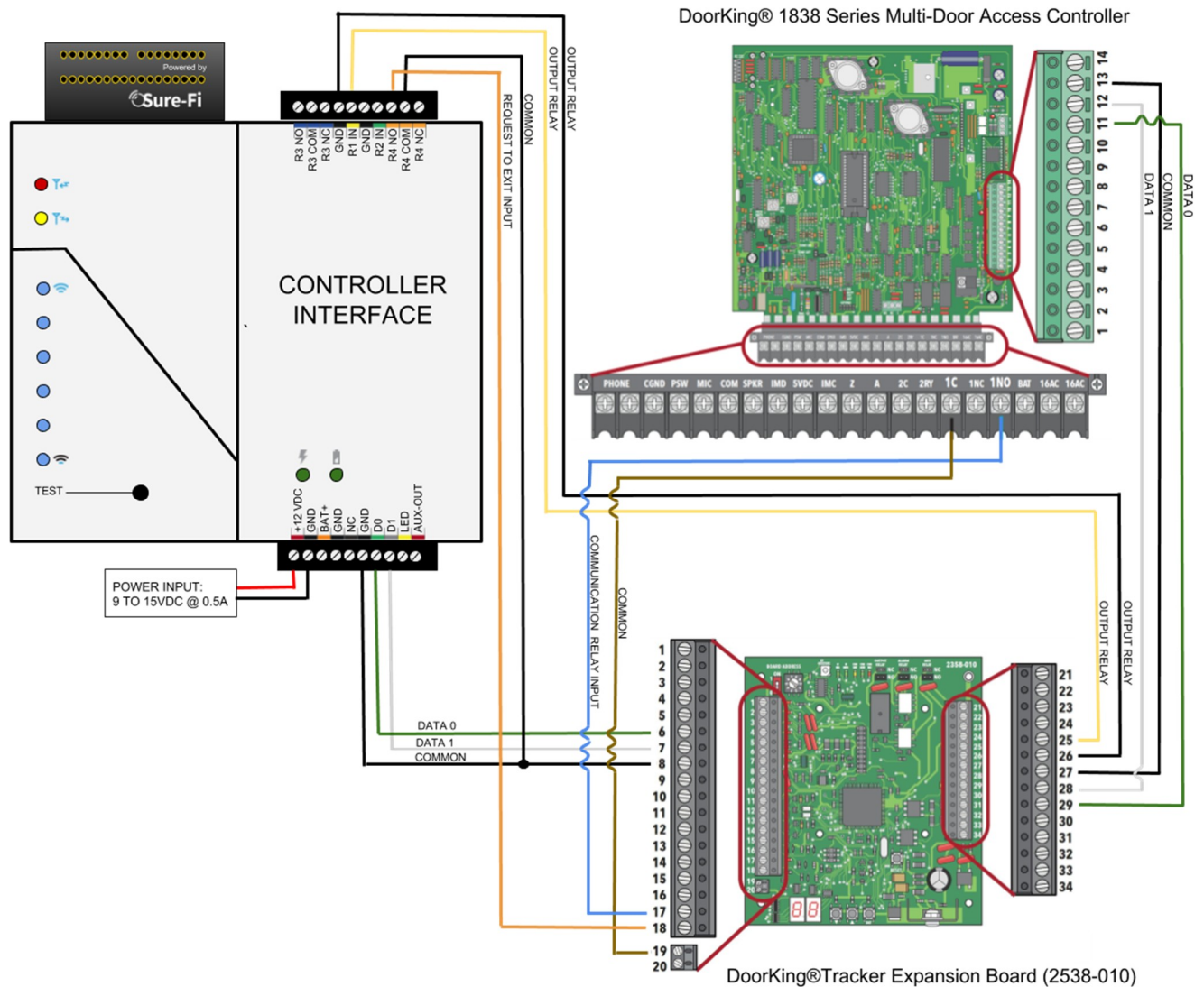
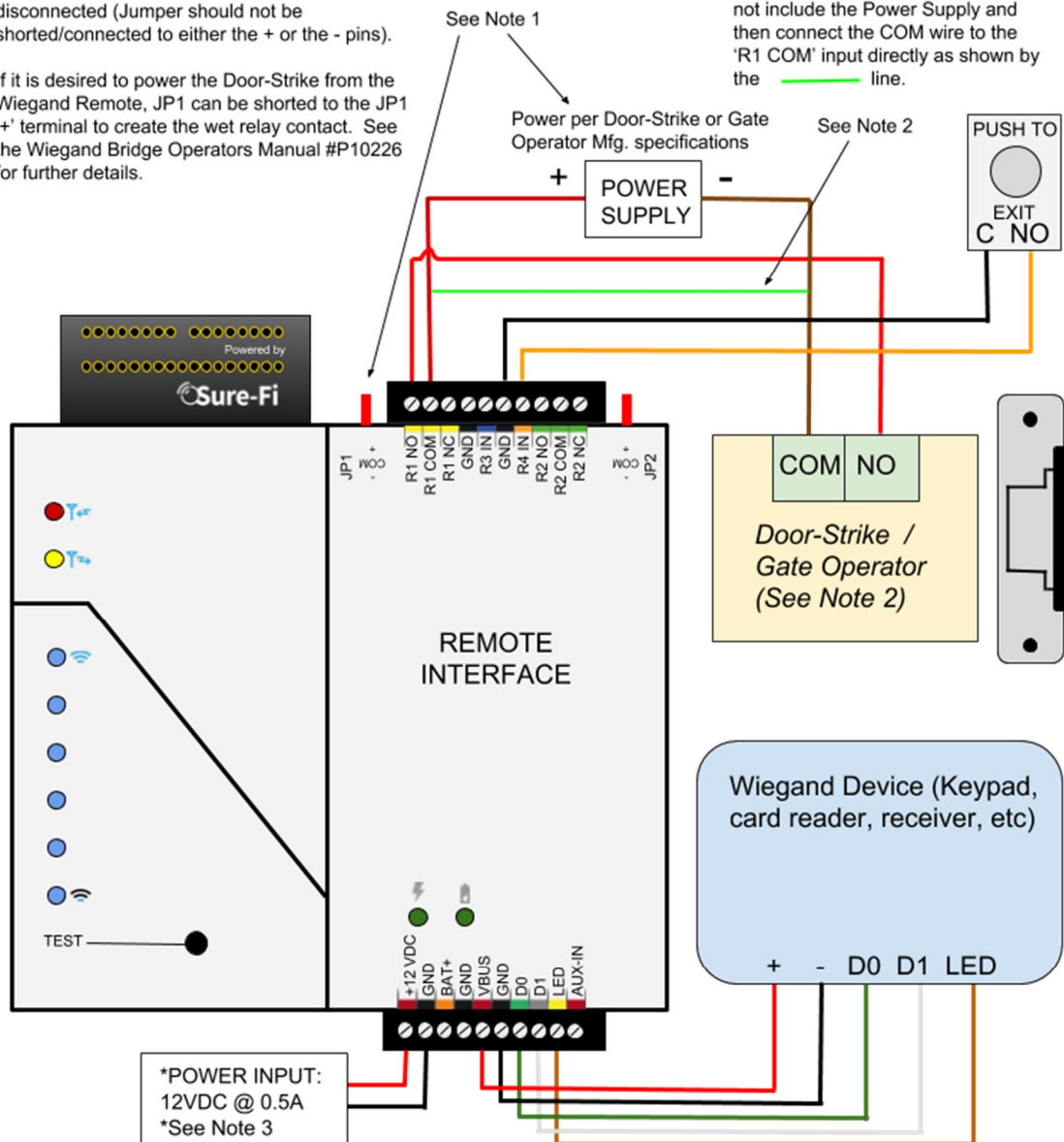


Figure 5: Wiegand Bridge REMOTE Interface connected at the access entry point with Door-Strike or Gate Operator. See Figure 4 for the CONTROLLER side connections.

NOTE 1: When powering the Door-Strike externally as shown, the Jumper on JP1 must be disconnected (Jumper should not be shorted/connected to either the + or the - pins).

If it is desired to power the Door-Strike from the Wiegand Remote, JP1 can be shorted to the JP1 '+' terminal to create the wet relay contact. See the Wiegand Bridge Operators Manual #P10226 for further details.

NOTE 2: If a Dry Relay contact is required without providing power, such as for a Gate Operator, then do not include the Power Supply and then connect the COM wire to the 'R1 COM' input directly as shown by the — line.

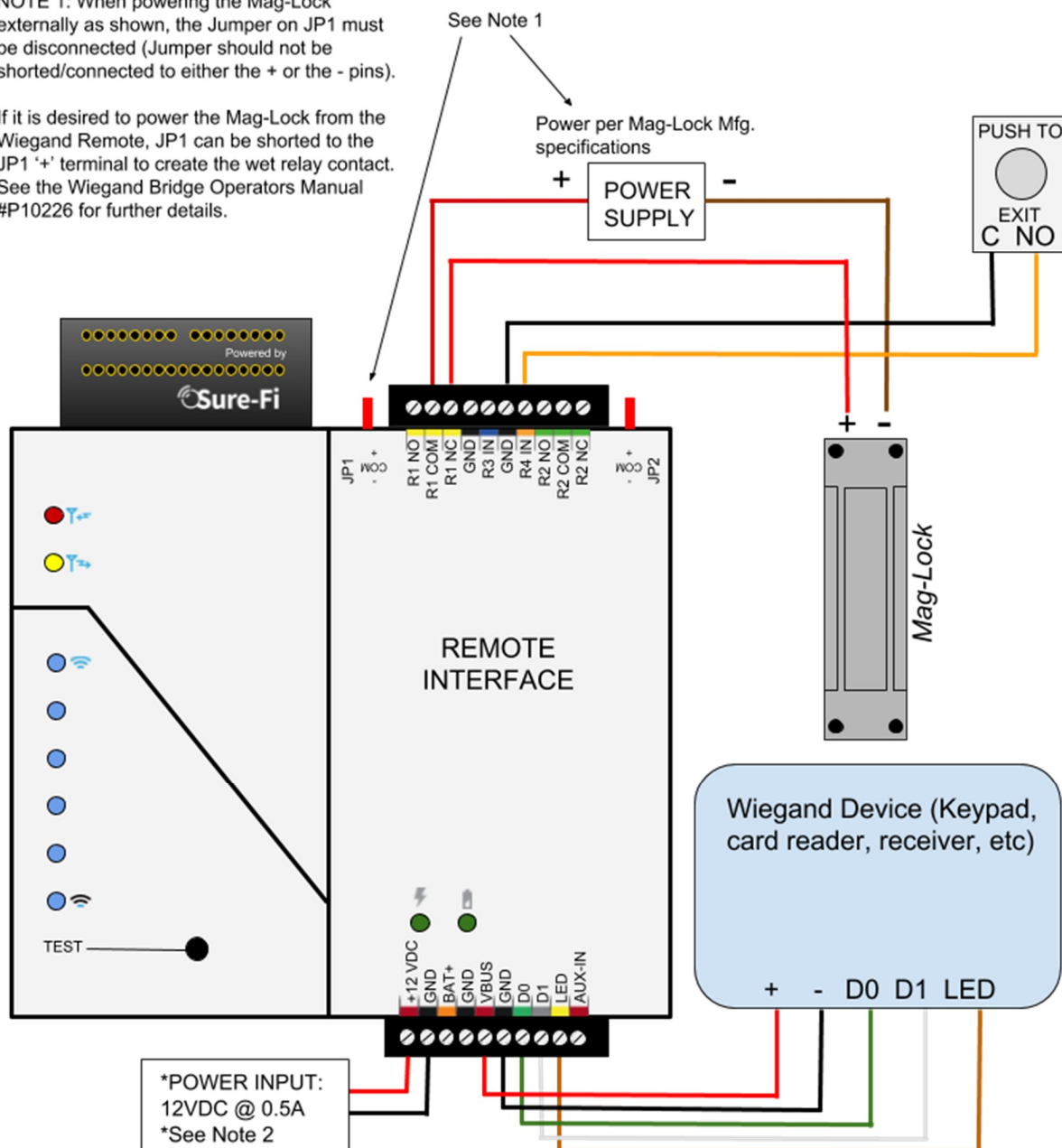


Note 3: If providing power to external devices (Door-Strike, wiegand device, etc), ensure voltage compatibility and adjust power requirements. The input voltage is fed out to the 'VBUS' for wiegand and also on the JP1 and JP2 '+' terminal pin.


Figure 6: Wiegand Bridge REMOTE Interface connected at the access entry point with Mag-Lock.
See Figure 4 for the CONTROLLER side connections.

NOTE 1: When powering the Mag-Lock externally as shown, the Jumper on JP1 must be disconnected (Jumper should not be shorted/connected to either the + or the - pins).

If it is desired to power the Mag-Lock from the Wiegand Remote, JP1 can be shorted to the JP1 '+' terminal to create the wet relay contact. See the Wiegand Bridge Operators Manual #P10226 for further details.



Note 2: If providing power to external devices (Mag-Lock, wiegand device, etc), ensure voltage compatibility and adjust power requirements. The input voltage is fed out to the 'VBUS' for wiegand and also on the JP1 and JP2 '+' terminal pin.

		A
APPLICATION NOTE	AN0136	
Title: WIEGAND BRIDGE WIRING WITH DOORKING ACCESS CONTROLLER AND TRACKER EXPANSION BOARD		Page 9 of 9

Revision History		
Revision	Comment	Date
A	Initial document release	March 2018

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