G3 Controller (Wired Only)

The wired G3 controller will attach to a home automation system in the same manner as the G2 controller by using an available wired wall switch port. The wireless version of the G3 controller does NOT support home automation connections without the required "RS485 GPIO Adapter" and cable which is included with the wired G3 kit.

1. Refer to the G2 home automation instructions for cable wiring and routing.
2. Make sure the RJ45 end home automation wire created is routed to the location of the RS485 GPIO Adaptor OR to a wall switch location with an available RJ45 port.
   The RS485 Adapter will be located near the motor.
3. Connect the home automation RJ45 cable into an available wall switch port, or one of the indicated ports on the RS485 Adapter.
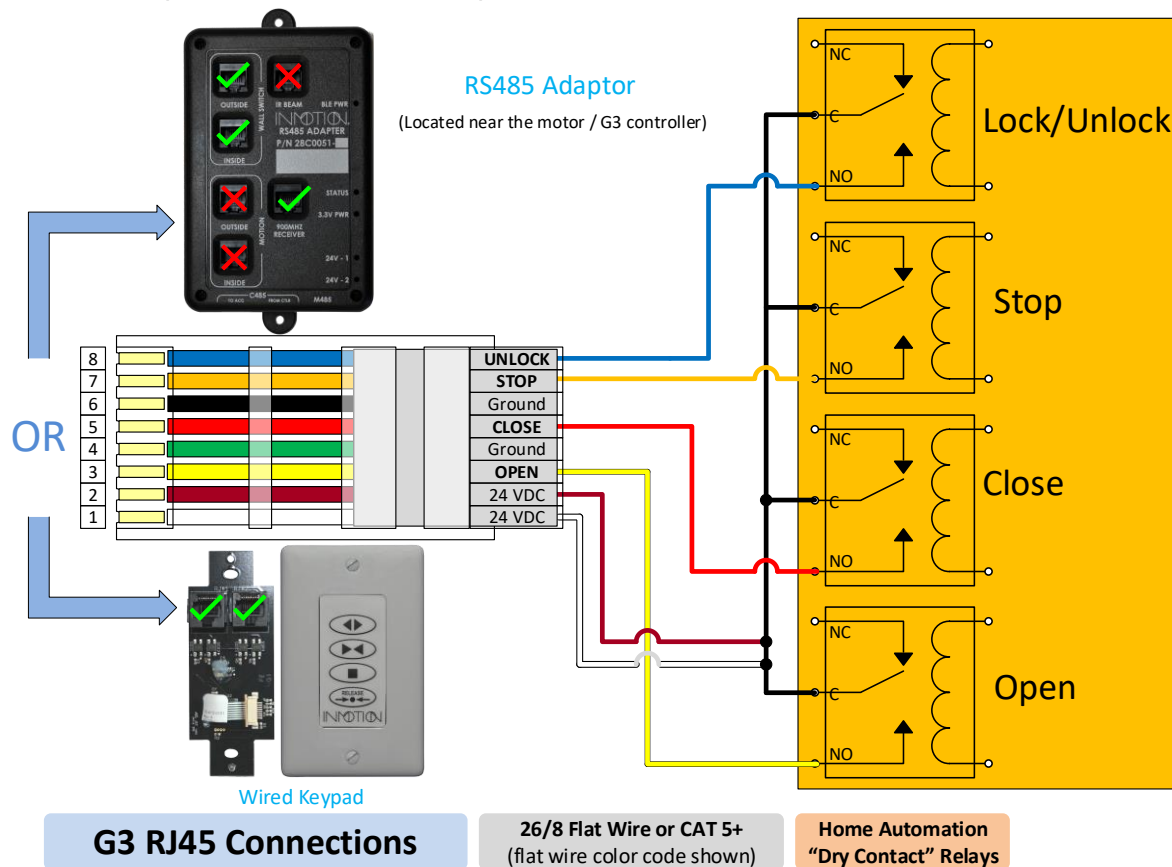
RS485 Adaptor
(Located near the motor / G3 controller)

OR

8		UNLOCK
7		STOP
6		Ground
5		CLOSE
4		Ground
3		OPEN
2		24 VDC
1		24 VDC

Lock/Unlock

Stop

Close

Open

Wired Keypad

G3 RJ45 Connections

26/8 Flat Wire or CAT 5+
(flat wire color code shown)

Home Automation "Dry Contact" Relays

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G2 Controller

The G2 controller will attach to home automation systems that support "dry contract" relays. The connection to the door controller is made through the keypad circuit and connects using flat wire and RJ45 connectors.

1. Determine the location of the Home Automation attachment point, either at the door controller itself OR at the end of keypad circuit.

2. Route an appropriate length of 26/8 flat wire to the attachment point. If one end of the cable is already terminated with an RJ45 connector, make sure it is located at the attachment point. **Standard network wire should NOT be used!**

3. If needed, terminate the attachment cable with an RJ45 connector according to the wiring diagram. The "White" wire must be crimped to the "pin 1" side of the RJ45 termination.

4. **Use a RJ45 network cable checker to verify the cable lines are NOT shorted in any way.**
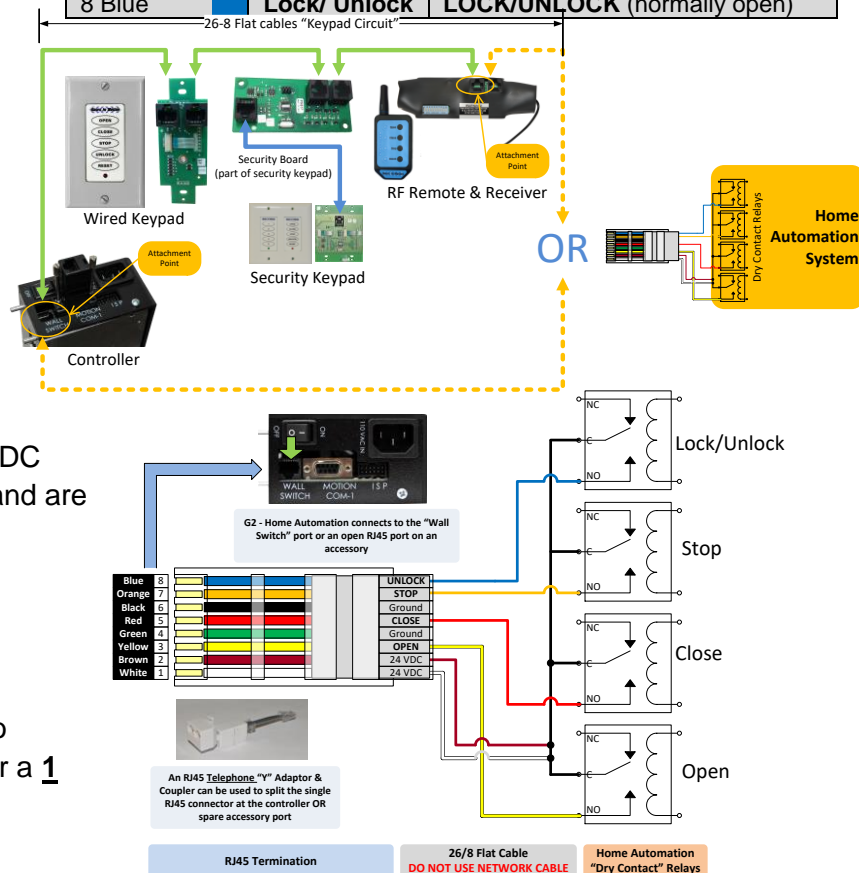
5. Wire the Home Automation system relays so that the 24VDC on pins 1 or 2 can be switched to the appropriate control lines for the desired door functions.
   a. Pins 1 & 2, White & Brown provide 24VDC Pins 4 & 6, Green & Black are ground and are not used.
   b. Pin 3, Yellow wire for **OPEN**
   c. Pin 5, Red wire for **CLOSE**
   d. Pin 7, Orange wire is for **STOP**
   e. Pin 8, Blue wire for **LOCK** or **UNLOCK**

6. Configure the Home Automation system to engage the required door function relay for a **1 second closure**, the relay then MUST be released (open).

7. Test the Home Automation system with the automated door.

RJ45 / Flat Wire Colors		Command	24VDC "Dry Contact" Command
1 White			**24VDC (common)**
2 Brown			**24VDC (common)**
3 Yellow		**Open**	**OPEN** (normally open)
4 Green			Ground
5 Red		**Close**	**CLOSE** (normally open)
6 Black			Ground
7 Orange		**Stop**	**STOP** (normally open)
8 Blue		**Lock/ Unlock**	**LOCK/UNLOCK** (normally open)

G2 Controller
"Dry Contact" Relay Rating: **25mA** @ 24VDC

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G1/G1D Controllers

The G1x controllers can be attached to home automation systems that support "dry contract" relays. The connection to the door controller is made through a connection terminals located on the main board.

1. Route an appropriate length of 26/8 flat wire from the door controller to the home automation system. **Standard network cable is not recommended.**
2. Wire the Home Automation system relays so that the 24VDC can be switched to the appropriate control lines for the desired door functions.
3. Configure the Home Automation system to engage the required door function relay for a **1 second closure**, the relay closure then MUST be released (open).
4. Test the Home Automation system with the automated door.

Home Automation System — Dry Contact Relays
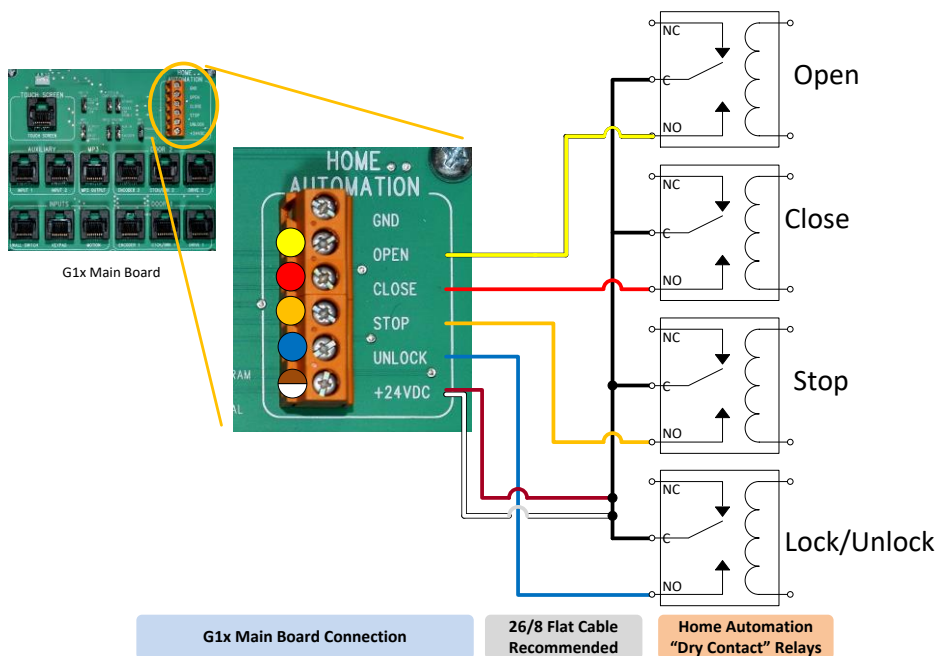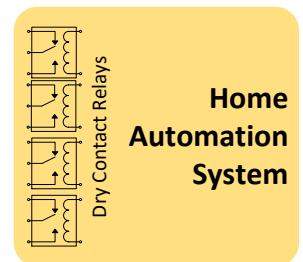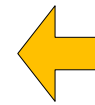
G1x Main Board

G1x Main Board Connection

26/8 Flat Cable Recommended

Home Automation "Dry Contact" Relays

Open
Close
Stop
Lock/Unlock

G1 Controller
"Dry Contact" Relay Rating: **18mA** @ 24VDC

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