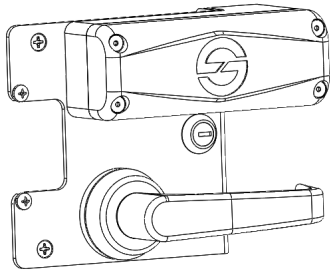




2890 Automatic Bolt Retraction Installation Instructions



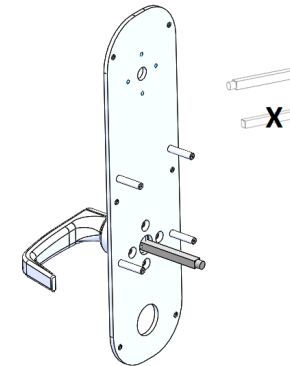
The Sargent and Greenleaf 2890 automatic bolt retraction (ABR) system is intended to be used in conjunction with an S&G 2890 locking system and an automatic door opener (ADO). To maintain the security of the locking system, the ABR functions by electrically operating the unsecure side of the lock extension, thus it cannot retract the bolt when either the combination lock or access control devices are locked. The drive unit pictured above can be used with panic exit or lever handle and on either-handed doors.

The following instruction set contains only the assembly steps that are unique to the ABR installation so refer to the S&G 2890 instruction sheets for your locking system for the remainder of the installation.

1

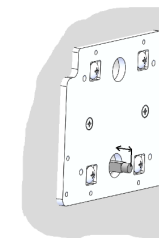
Measure door thickness. Cut exterior spindle to a length equal to the door thickness + 1-1/4"

NOTE: The exterior handle spindle for the ABR is unique and must be cut to the proper length and installed in the correct orientation or the device will not function properly.



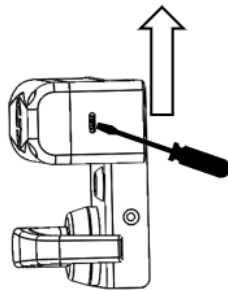
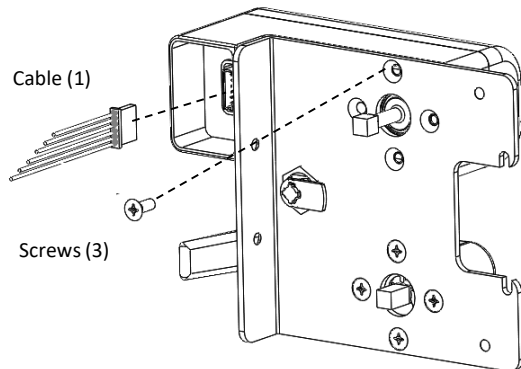
2

An additional spindle length check should be made on doors that exhibit any deformation such as compress during installation or pillowing. With the interior and exterior mounting plates secured to the door install the exterior handle spindle. Round end of the spindle should extend 9/16" from the plate.



3

- a. Check the handing of the interior lever or egress device; if it does not match the application, re-position the lever or egress device.
- b. Insert electrical cable into the connector on the ABR drive unit.
- c. Attach the ABR drive unit to the interior cover with #10-32X1/2" flat head screws.
- d. To set the handing of the ABR drive, use a small screwdriver or other tool to check that the internal switch is in the "up" position. **If this switch is not set to the up position before applying power, the ABR unit will not function properly.** If this switch position is changed after initial installation then power must be cycled off momentarily to reset the ABR handing.



4

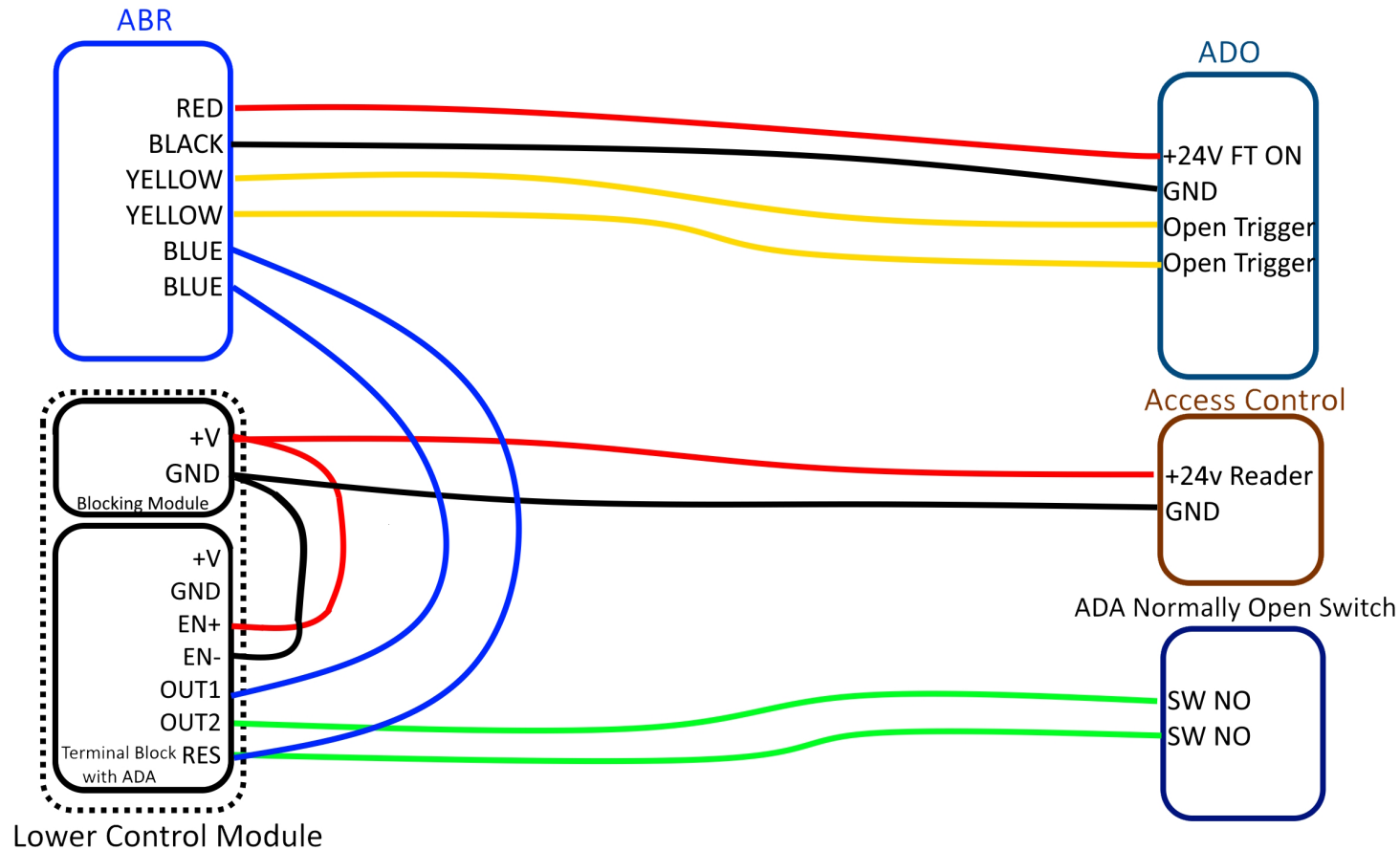
Complete installation by installing by attaching the interior cover / ABR unit assembly to the S&G 2890 lock.

When power is first applied to the ABR the device will execute an initialization operation, after that is complete the lock should be fully functional. If the lock does not function properly after the initialization, check that the switch is set properly as described in the previous step.

ADO – All Types Except Exit Only

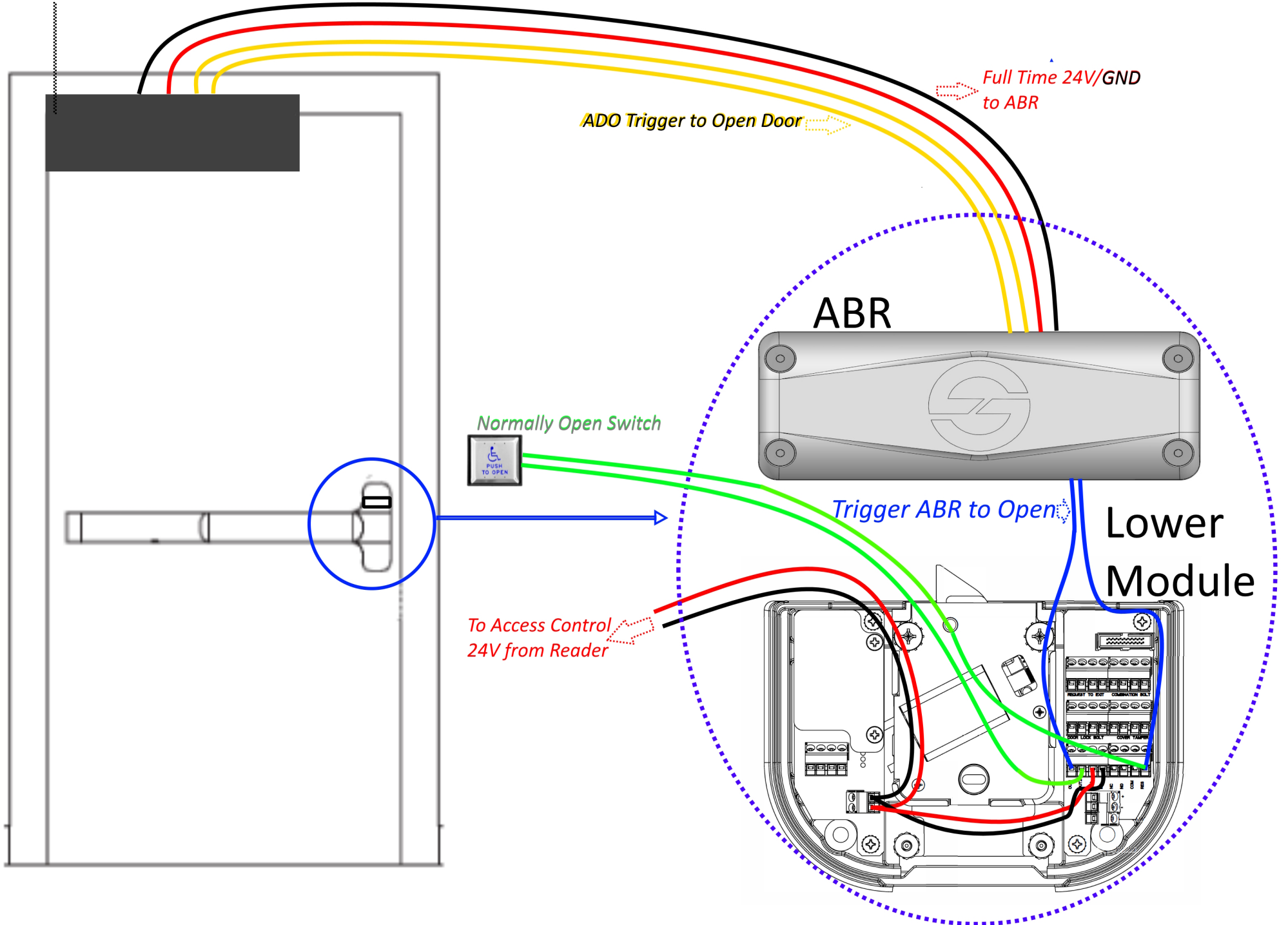
Follow the wiring guides below as well as the wiring guide for your ADO, access control system, and push plate for successful integration.

Connections below are used in conjunction with an electronic access control system. ADA Switch button is always active, but the ABR will only unlock the door when access control module is unlocked.



ADO - All Types Except Exit Only

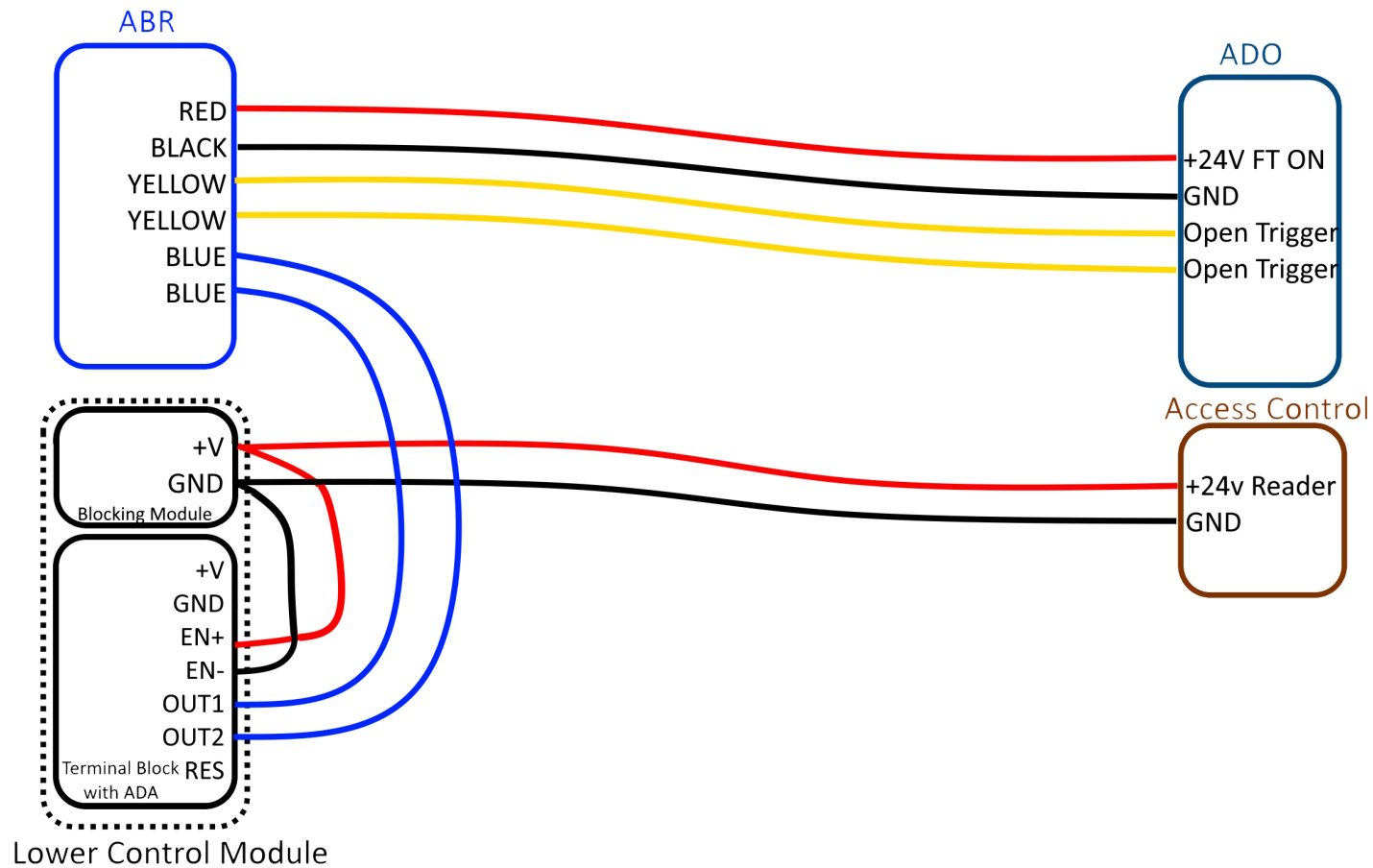
ADO



ADO – Access Control Trigger

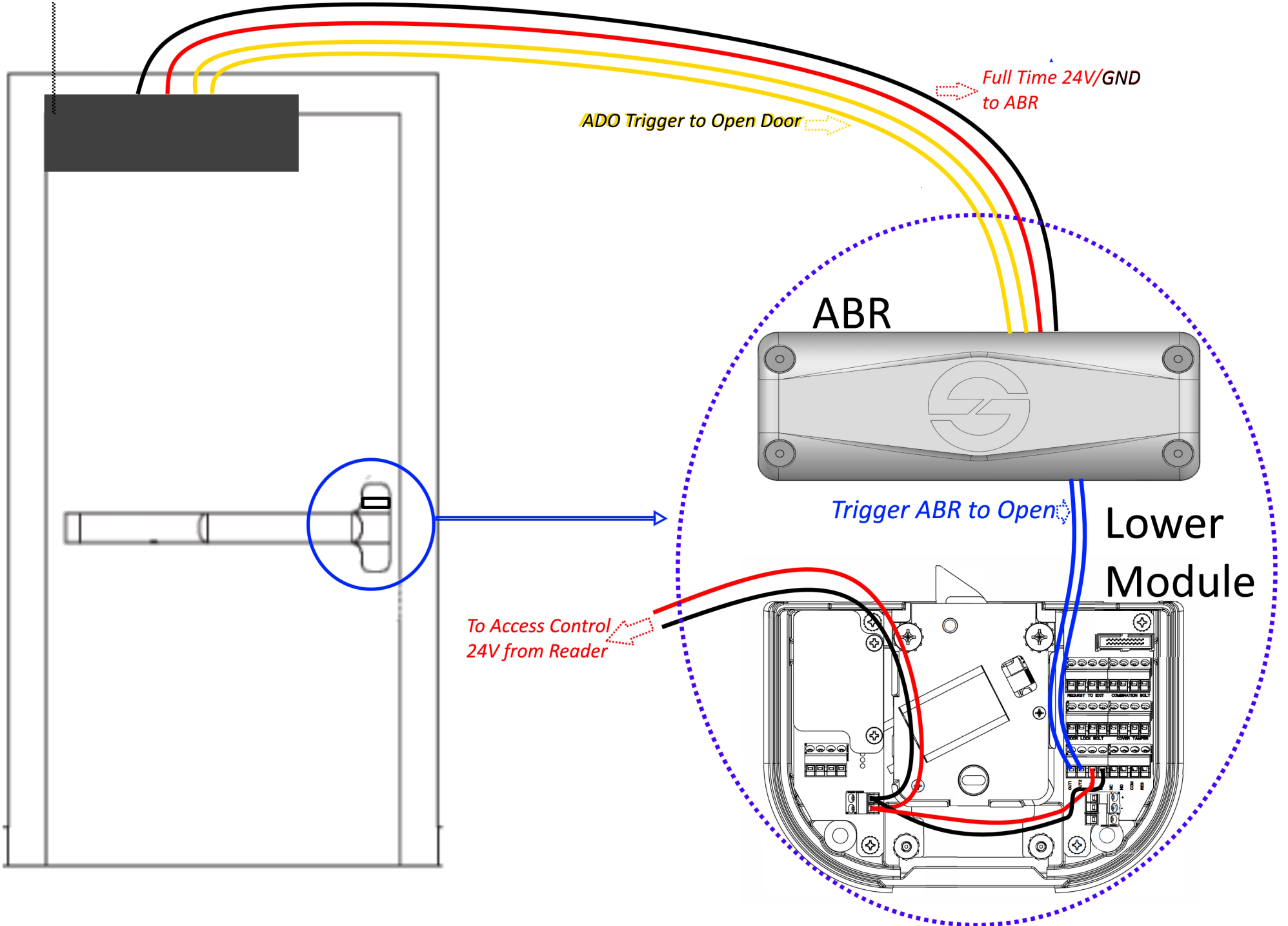
Follow the wiring guides below as well as the wiring guide for your ADO, access control system, and push plate for successful integration.

Connections below are used in conjunction with an electronic access control system. Every time a valid credential is entered, the access control system will unlock the 2890 and trigger the ADO.



ADO

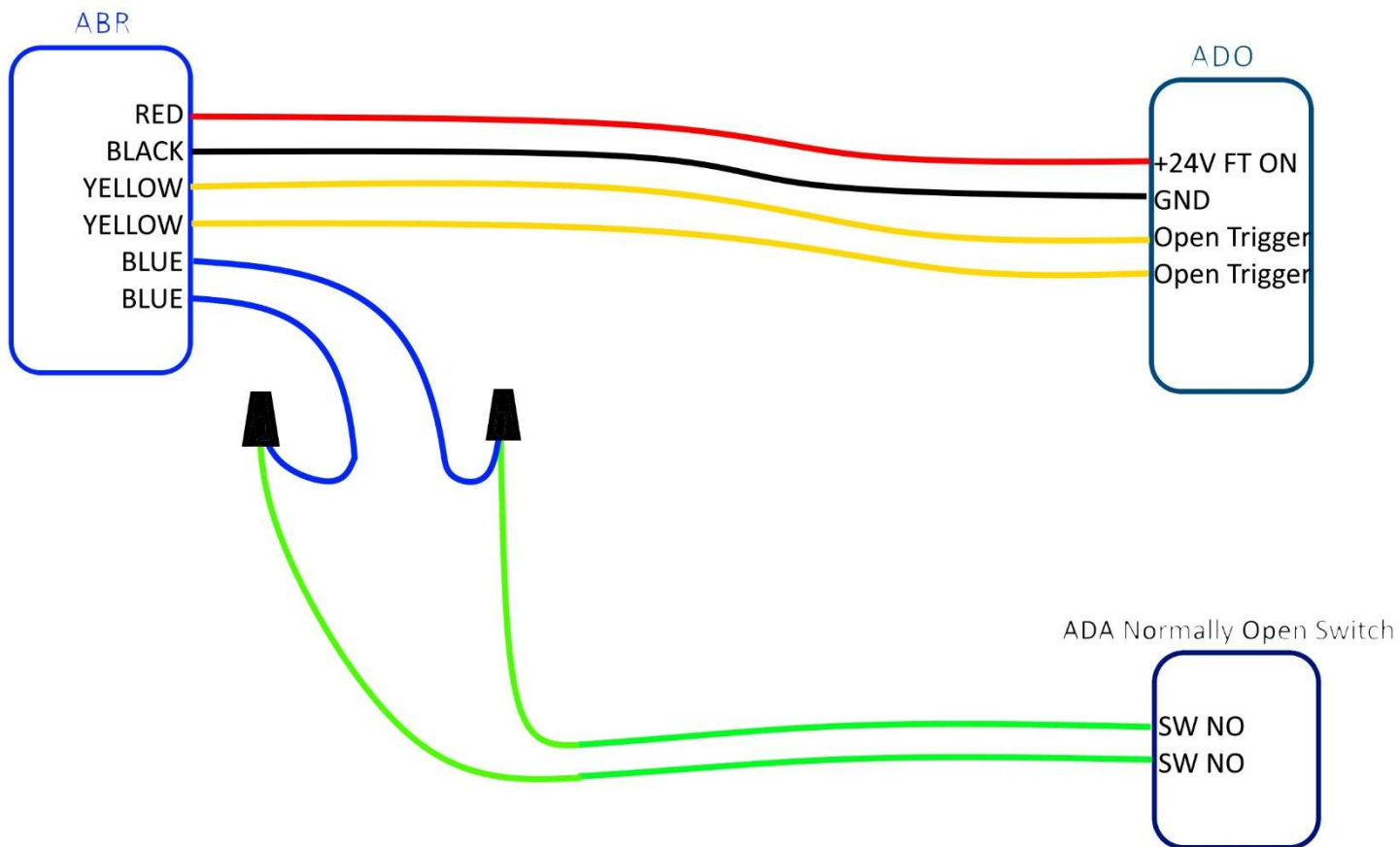
ADO – Access Control Trigger



ADO – Exit Only

Follow the wiring guides below as well as the wiring guide for your ADO, access control system, and push plate for successful integration.

Connections below are used in conjunction with exit only system with no combination lock and no electronic access control system.



ADO

ADO – Exit Only

Full Time 24V/GND
to ABR

ADO Trigger to Open Door

ABR

Normally Open Switch

Trigger ABR to Open

