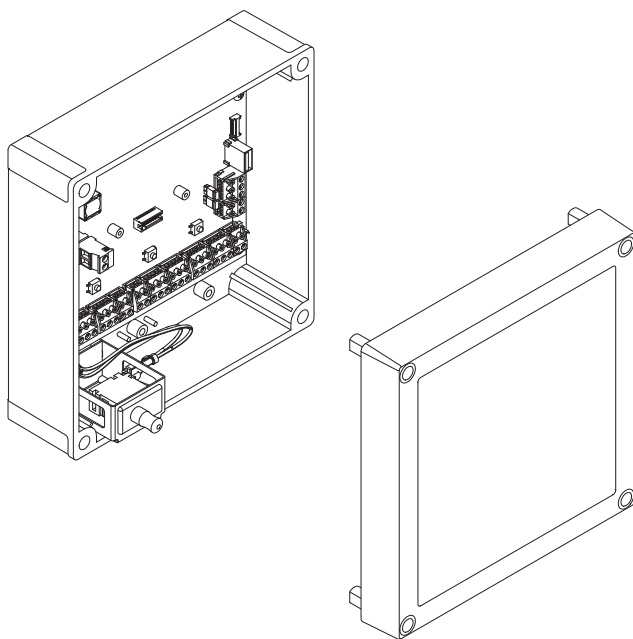




PIB300 USER GUIDE

INSTALLATION AND OPERATION INSTRUCTIONS FOR PANEL INTERFACE BOARD



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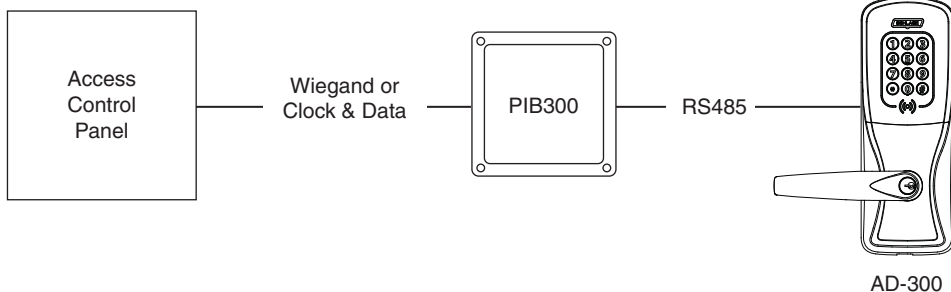
866.322.1237

OVERVIEW

The Schlage Panel Interface Board (PIB300) provides a means of connecting RS-485 based access point devices to a system requiring Wiegand or Clock and Data protocol (rather than direct RS-485 connection). This manual describes the installation and operation of the PIB300.

- Open Architecture platform
- Provides two-way communication with locks via a RS-485 connection
- Up to two Schlage AD-300 locks or up to two RS-485 based legacy locks communicating with the RSI or VIP protocol may connect to an Access Control Panel (ACP) or reader interface board.
- Legacy and AD-300 locks may not both be present on the RS-485 connection.
- The trouble signal output will change state when the Anti-Tamper Switch (ATS) signals that the PIB300 enclosure lid is open, or if an access point device indicates trouble status.

Before installing a Schlage AD-Series system, read all documentation for all products in the installation.



GETTING STARTED

The following is an overview of the steps required for setting up the PIB300.

- Install the lock. See the installation guide that came with the lock, or visit www.schlage.com/support for more information.
- Use proper wiring to the PIB300. See page 5 for more information.
- Disconnect power to the lock and Access Control Panel while connecting the PIB300.
- Familiarize yourself with the information in this user guide.

! *Save this user guide for future reference.*

HANDHELD DEVICE (HHD)

! *The Handheld Device is used for programming and setup only.*

The Handheld Device (HHD) is used to configure this device's links and outputs. For information about the HHD, see the Schlage Utility Software User Guide.

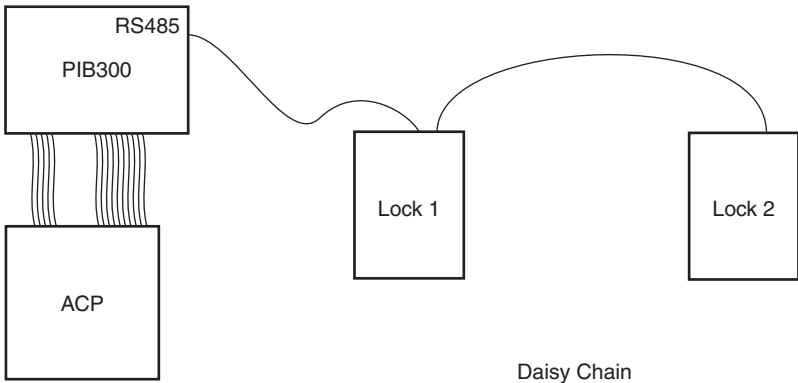
PIB300 INSTALLATION

Location

- The PIB300 should be located close to the Access Control Panel (wiring distance may be up to 500 feet).

Wiring to the Lock

- Power wire for locks must be appropriately sized for the distance and voltage.
- Communication wire should be suitable for use on RS-485 type networks.
- The maximum length of the RS-485 wiring from the PIB300 to Lock 2 is 4000 feet.
- Wiring of locks requires one connector via the RS-485 connector (J5).
- Connections from lock to lock should be daisy-chained (see diagram below).
- The power supply is located at or near the PIB300 for short wire runs, or local to locks if located far from the panel.



Connecting the PIB300 to the Access Control Panel (ACP)

! **CAUTION:** Disconnect the ACP power and batteries while wiring the PIB300 to the panel.

! **WARNING:** Because every Access Control Panel is different, always check the panel's instruction manual for appropriate interface wiring.

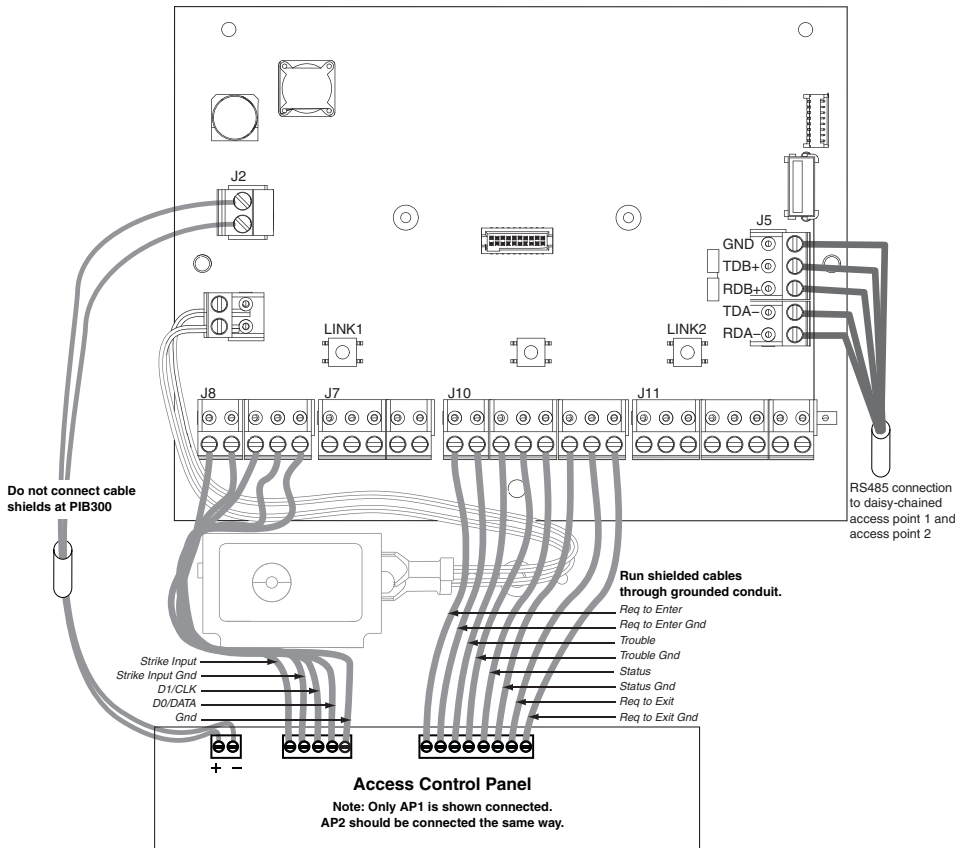
- Must be used with a UL 294 Listed Power Supply capable of sourcing at least 250mA @ 12 to 24 VDC. Refer to *Typical Wiring to the Access Control Panel* below for how to connect DC power to the PIB300.

Use shielded cables for the signal wiring between the PIB300 and the Access Control Panel. For maximum wire lengths and cable specifications, see *Cable/Wire Specifications* below.

Cable/Wire Specifications

| Application | Part Number | AWG | Description | Max Run Length |
|--------------------------------|-----------------------------------|-----|---------------------------|----------------|
| DC Power Input | Belden 8760 or equivalent | 18 | 2 Conductor | 1000 Feet |
| RS-485 | Belden 9841 or 9842 or equivalent | 24 | 2 or 4 Conductor shielded | 4000 Feet |
| PIB300 to Access Control Panel | Alpha 1298C or equivalent | 22 | 8 Conductor shielded | 500 Feet |

Typical Wiring to the Access Control Panel



PIB300 TO ACP CONNECTION

| ACCESS CONTROL PANEL CONNECTION | | | |
|--|---------------|---------------------|--|
| Connector | PIB300 Signal | Access Panel Signal | Description/Explanation |
| J2 | 12V+ | 12 to 24 VDC | <p>PIB300 inputs for 12 to 24 VDC power.</p> <p>If the Access Control Panel (ACP) reader power outputs do not source enough current for the PIB300, use the ACP main regulated 12 VDC power supply or a separate UL 294 Listed 12 to 24 VDC power supply.</p> <p>Power input is non polarized.</p> |
| J10 for Access Point A J11 for Access Point B | J10/J11 (1) | REQ TO ENTER | Request to Enter Input Signal |
| | J10/J11 (2) | | Request to Enter Common Contact (GND) |
| | J10/J11 (3) | TROUBLE | General Purpose Alarm Input Signal |
| | J10/J11 (4) | | General Purpose Alarm Common Contact (GND) |
| | J10/J11 (5) | DOOR 1/2 STATUS | Door Status Input Signal |
| | J10/J11 (6) | | Door Status Input Common Contact (GND) |

| ACCESS CONTROL PANEL CONNECTION | | | | |
|--|----------------------|----------------------------|--|---|
| Connector | PIB300 Signal | Access Panel Signal | Description/Explanation | |
| J10 for Access Point A J11 for Access Point B | J10/J11 (7) | REQ TO EXIT | Request to Exit Input | PIB300 output indicating when the Access Point interior door handle is making a request to exit. Connect to the Access Control Panel Request to Exit input. |
| | J10/J11 (8) | | Request to Exit Common Contact (GND) | Connect only if the Access Point needs to have Request to Exit function. Output is Pulled-up to 5 VDC and can sink 50mA. |
| | J11 (9) | +5V | 5 VDC | RESERVED 5 VDC power supply pin for the RLBD, dry contact relay board. |
| J8 for Access Point A J7 for Access Point B | J8/J7 (1) | STRIKE INPUT | Normally Open Strike Relay Contact | Strike input monitors the access panel strike relay. Connect the STRIKE signal to the normally open or normally closed terminal of the strike relay. The active signal state of the PIB300 is programmable with the HHD. |
| | J8/J7 (2) | | Common Strike Relay Contact | Connect the GROUND signal to the common terminal of the strike relay. Connect only if the access point needs to be unlocked (door) or raised (gate). |
| | J8/J7 (3) | D1/CLK | Clock or Data 1 Output | PIB300 outputs used to present card data to the Access Control Panel (ACP). For an access point with a magnetic reader, will present Clock and Data signals to the Access Control Panel. |
| | J8/J7 (4) | DATA | Data or Data 0 Input | For an access point with a Wiegand or Proximity reader, will present Data1 and Data0 signals to the ACP. If initial hookup fails to operate, switch wires at these terminals. Output is Pulled-up to 3.6 VDC and can sink 50mA. |
| J8/J7 (5) | GND | Signal Ground | Common signal ground for the EXIT REQ, DOOR STAT, TROUBLE, DATA/D0 and CLK/D1 signals. | |

COMPLETING INSTALLATION

After all required connections have been made, connect the power and ACP standby batteries to the panel.

Access Point ACP Connections to a RS-485 Device Address

The PIB300 Access Point to ACP connections are each associated with a RS-485 device address. This association is set using the Schlage Utility Software. Please see the SUS user manual for further information.

The PIB300 defaults to Access Point 1 connections associated with RS-485 device address 0x00 and Access Point 2 connections associated with RS-485 device address 0x01.

RESETTING TO FACTORY DEFAULTS

! All configuration information will be deleted and the PIB300 will be reset to factory defaults!

1. Remove the main cover.
2. Press and hold both link buttons for over 3 seconds.
3. Release both link buttons. The PIB300 will blink the red lights beside each link button while configuration reset takes place.
4. The two green lights beside the link buttons will blink 3 times when the reset is complete.
5. Replace the main cover.

