VERMONT SYSTEMS

Access Control Smart J/JX

09/04/2020

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Copyright Information

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Contents

Access Control Smart J/JX

License – Maintenance Agreement

The use of this software requires a Vermont Systems license and annual maintenance agreement. Prior to implementing any process outlined in this document, please contact the Vermont Systems Sales department at 877.883.8757 or by email (sales@vermontsystems.com) to verify that you are authorized to use this software or to obtain a quote and approval.

Pre-Installation Checklist

This checklist defines the Customer’s and Vermont Systems' respective responsibilities when installing the Vermont Systems Access Control system. Because access control hardware can vary, you must consult with an electrician that specializes in circuit design and installation. You will also need to work with your Information Technology (IT) staff to discuss running CAT5e/6 cable to the access point(s). In addition, you must decide where the access control scanners will be located and how you will mount them.

Complete the fill-able form .pdf checklist that follows, and return it to Vermont Systems.

Since access control readers are custom made, we will not order the readers until the checklist is received. The Vermont Systems section lists Vermont Systems' responsibilities; after reading and understanding each item, check the box next to that item. The Customer’s Responsibilities section lists your responsibilities; check the box next to each item to acknowledge assuming responsibility for that item.

If you have any concerns or questions, contact Vermont Systems Customer Service via phone at 877.883.8757 or open a case in the Vermont Systems Support portal.

Your Name: ____

Your Organization: ____

Date: ______________

RecTrac Version: ______________

Access Control Checklist - Vermont Systems Responsibilities

Check the box next to each item to acknowledge having read and understood it.

- Vermont Systems provides the software that interprets a scan and allows access if the scan is valid.
- Vermont Systems will provide technical assistance to your chosen electric circuit and cabling installer.
- Vermont Systems will encode the Smart JXdevice with an IP address after discussing configuration options with your IT department.
- Vermont Systems will configure the Smart JX (if using this option) to ensure that bar codes and magnetic stripes read correctly.
- Vermont Systems provides phone-assisted or on-site configuration of the RecTrac access control software as quoted.

Access Control Checklist - Customer Responsibilities

Check the box next to each item to acknowledge having read and understood it.

- The customer will install and mount all hardware for the access control system, including the following:
- Decide whether you will supply power to the door strike or if the power will be supplied by the access control reader via POE (Smart JX only).
- Order Smart JX devices a minimum of 4 weeks in advance of installation.
- Install door strike/maglock or turnstile.
- Install Smart JX near the access control point, where your customers can reach it.
- Complete the connection between the Smart JXand the door strike or turnstile. An electrical contractor must design and physically complete this connection. If the door strike or turnstile does not have a built-in MOV (metal oxide varistor), the electrical contractor will need to build one into the circuit. If not using a Power Over Ethernet (PoE) Standard Smart JX, and the power to the contacts is greater than 30VDC and or greater than 500mA, the contractor will have to design the circuit with an additional relay between the Smart JXand the door strike or turnstile.

- Obtain an updated diagram that outlines the circuit between the Smart JXand the door strike or turnstile. Go to the International Bar Code (IBC) website (www.interbar.com) and click the support link. In the wiring category, download the PDF labeled SA/STA reader wiring (with RS232 or RS422 interface).
- Provide one 120VAC power outlets. The Smart JXmust be plugged into a 120VAC power outlet. In addition, provide any power required by your turnstile or door strike.

Notes: If using a Power over Ethernet Hub/Switch and PoE Standard Smart JX or PoE Non-Standard Smart JXa power outlet is not needed for the scan devices.

100 Meters MAX distance communication using Ethernet cabling.

If using an Intelligent POE Switch device, it could extend the distance up to 200 meters.

- Connect CAT 5e/6 cable between a network hub/switch and the Smart JX.

As soon as all the connections have been made and power is supplied to the access point and the Smart JX, the customer must notify Vermont Systems so that a Connectivity Test can be performed approximately 4 weeks prior to your “live” date.

It is necessary that all access points are tested and pass the test. If you decide not to configure the software using phone training and you are planning on having a Vermont Systems installer on site, travel will not be arranged until all access points pass this test. If a Vermont Systems installer is on site for the purpose of configuring your access device(s) software and wiring is incorrect and/or the test fails, the customer is responsible for all expenses incurred by that installer (e.g., time and travel).

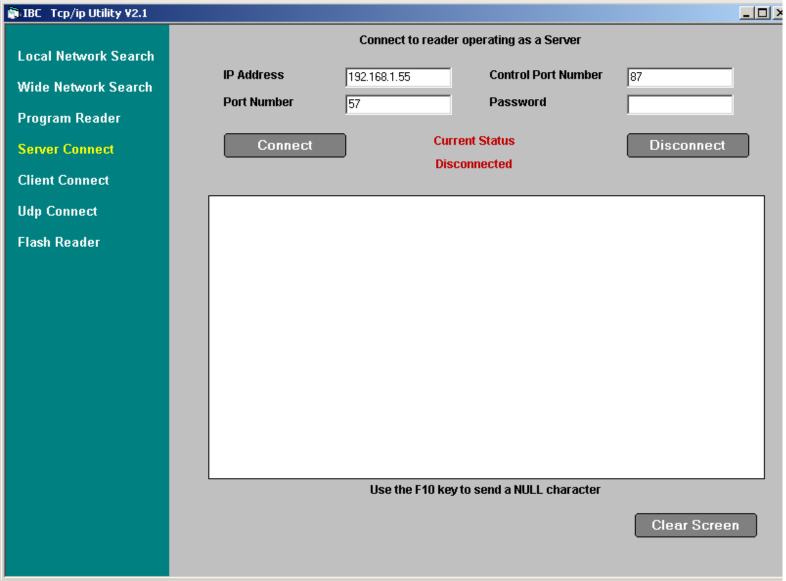
Configuring a Smart JX Sprox JX Device

1 Download the Ibctcp44 utility.

- Open a web browser and go to http://www.interbar.com. Click on the Software link.
- Click on the **Ibctcp44** link and save it to a local folder.
- When the download completes, browse to the location where you saved the Ibctcp44.zip file and unzip it. The zip file will extract a setup.exe file.
- Right-click on the setup.exe and *Run as Administrator*.
- Follow the on-screen instructions during the installation process. This will install the Ibctcp44 software on your computer.

2 If you are installing multiple devices, prepare an organized listing of IP addresses and locations that correspond to each device. After configuring each device, be sure to label each clearly.

3 To begin the configuration in Windows, go to Start • Programs • IBC. Run the Ibctcp44.exe utility program. You will see screens similar to the following screens, though IP Address, Port and other information may vary.



Connect to reader operating as a Server

IP Address 192.168.1.55

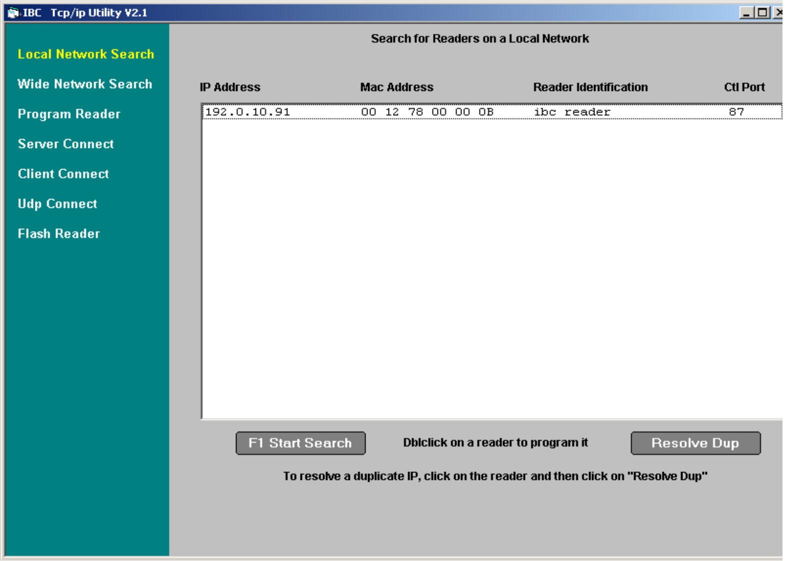
Port Number 57

Control Port Number 87

Password

Current Status
Disconnected

Use the F10 key to send a NULL character



Search for Readers on a Local Network

IP Address	Mac Address	Reader Identification	Ctl Port
192.0.10.91	00 12 78 00 00 0B	ibc reader	87

Dblclick on a reader to program it

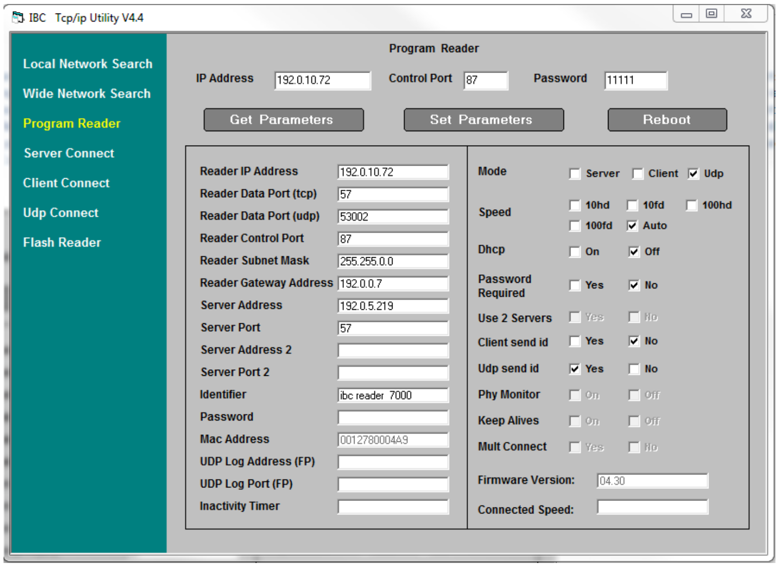
To resolve a duplicate IP, click on the reader and then click on "Resolve Dup"

4 Click **Local Network Search**. Press **F1** Start Search. You should see the default IP address of the Smart JX/Sprox JX, the MAC address of the reader, the Reader Identification and the Ctrl Port.

5 Double click on the first device listed. This will display the Program Reader screen.

- Click **Get Parameters**.

Note: If unable to connect to Qscan, go to Unable to Connect to Smart J During Setup.



Program Reader

IP Address 192.0.10.72 Control Port 87 Password 11111

Reader IP Address	192.0.10.72
Reader Data Port (tcp)	57
Reader Data Port (udp)	53002
Reader Control Port	87
Reader Subnet Mask	255.255.0.0
Reader Gateway Address	192.0.0.7
Server Address	192.0.5.219
Server Port	57
Server Address 2	
Server Port 2	
Identifier	ibc reader 7000
Password	
Mac Address	0012780004A9
UDP Log Address (FP)	
UDP Log Port (FP)	
Inactivity Timer	

Mode □ Server □ Client ☑ Udp

Speed □ 10hd □ 10fd □ 100hd □ 100fd ☑ Auto

Dhcp □ On ☑ Off

Password Required □ Yes ☑ No

Use 2 Servers □ Yes □ No

Client send id □ Yes ☑ No

Udp send id ☑ Yes □ No

Phy Monitor □ On □ Off

Keep Alives □ On □ Off

Mult Connect □ Yes □ No

Firmware Version: 04.30

Connected Speed:

6 Change the *Reader IP Address*, the R*eader Subnet Mask* and the *Reader Gateway Address* (if applicable) to values determined by your Network Administrator. Enter a unique name in the *Identifier field* to identify this specific Smart JX/Sprox JX.

7 Set the *Operating Mode* to "UDP."

8 Set the *Speed* to "Auto."

9 Set the *UDP send id* option to "Yes."

10 Ensure that the IP Address in the *Server Address* field is NOT the same as the IP Address in the *Reader IP Address* field.

- This ip should point to the server that will be running access control, whether it is the local machine or whether it is hosted in another location. It should not be the same as the reader address.

11 Click **Set Parameters**. Once the new parameters are saved, you will receive the following message: "New Parameters have been set – You must Reboot (or repower) the reader for the new parameters to take effect."

Click **OK**.

12 Click **Reboot**. Click **OK**.

Note: In the event this does not work, you can power-cycle the Smart JX physically by unplugging the Ethernet cable, waiting a few seconds and plugging it back in.

13 If using bar code access control configure the Smart JX by swiping the set % preamble found in the Smart Slot JX Series commands document (as well as in the Connectivity Test). An audible signal confirms that the bar code has been read and the device has been properly configured.

14 Repeat steps 6–13 for each Smart JX/Sprox JX device.

Smart J/JX/ Hardware Installation

1 All CAT 5e/6 cable and power supplies should be installed and tested prior to installing the access control hardware.

2 Install the door strike(s) or turnstile(s).

Note: Vermont Systems strongly recommends connecting and testing all devices prior to permanently securing the devices to their final positions.

3 Install the Smart J/JX near the access control point where your customers can reach it. If using a proximity head, install the Sprox JX in the access panel.

4 If using a proximity head, you will need to mount it and connect it to the Sprox JX. (Refer to the Sprox J/JX to Proximity head wiring diagram.)

5 Connect CAT 5e/6 cable between the network hub/switch and the Smart J/JX/Sprox J/JX device. If using a PoE Standard Smart J/JX or PoE Non-Standard Smart J/JX, be sure to connect the CAT5e/6 cable to the powered ports on the PoE Hub/Switch or Power Injector.

6 Connect power to the Smart J/JX/Sprox J/JX device.

Note: This step is not necessary if using a PoE Standard or a PoE Non-Standard Smart J/JX.

7 Complete the connection between the Smart J/JX/Sprox J/JX and the door strike or turnstile.

- An electrical contractor/engineer must design and physically complete this connection.
- If the door strike/turnstile doesn’t have a built-in MOV, the electrical contractor will need to build one into the circuit.

Note: If using a PoE Non-Standard or a Non-PoE Smart J/JX and if power to the contacts is greater than 30VDC and or greater than 500mA, the contractor will have to design the circuit with an additional relay between the Smart JX/Sprox J/JX and the door strike or turnstile.

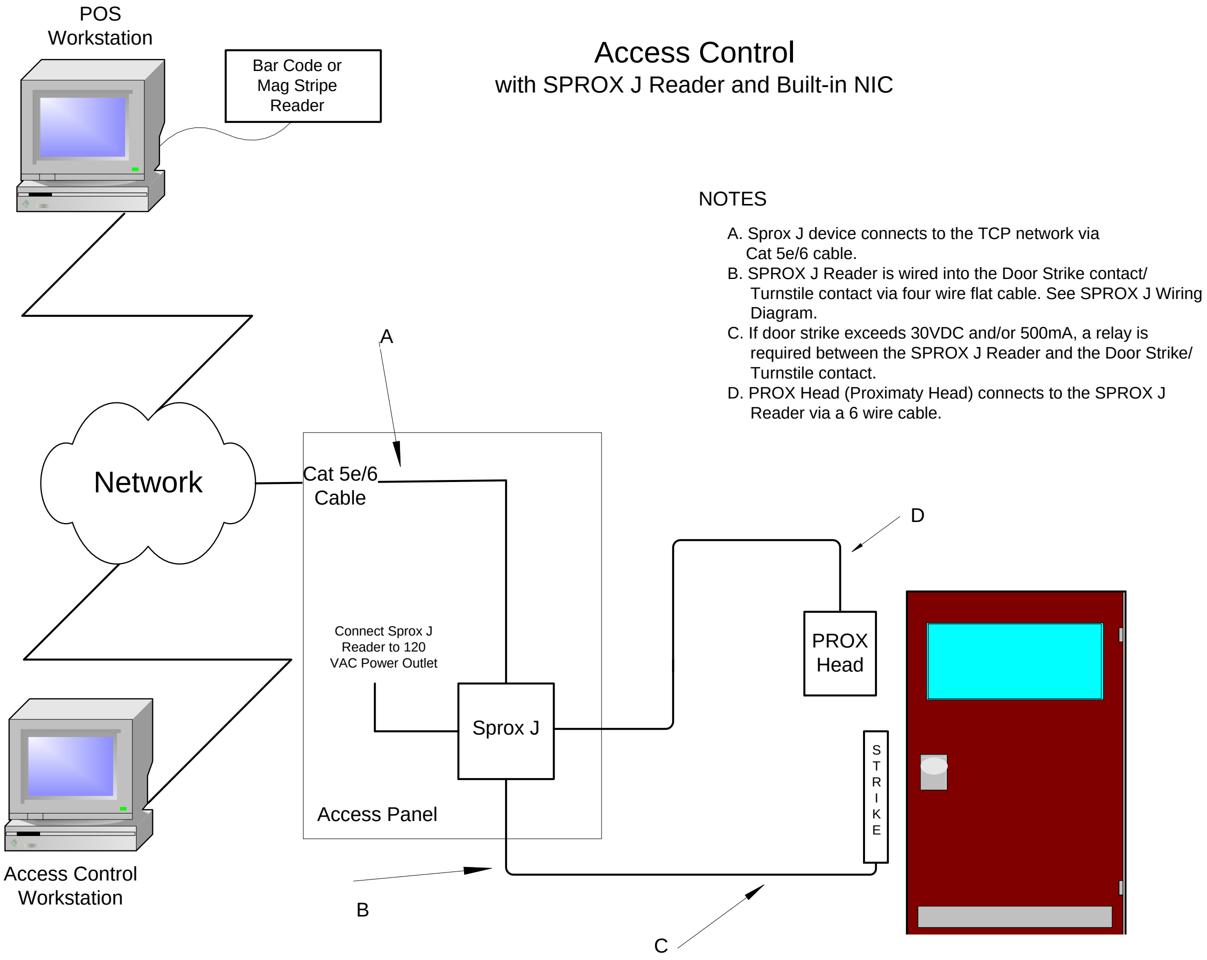
8 After all the connections have been completed and power has been supplied to the access point and the Smart J/JX/Sprox J/JX (if required), the customer must notify Vermont Systems so that the Connectivity Test can be performed.

- This test must be completed approximately four (4) weeks prior to your live operation date.

9. If you are installing weatherized units outdoors, be sure to seal the back side of the Smart JX to the mounting plate using silicon caulking, such as 3M 5200 or Life Caulk. This will ensure that water or moisture doesn’t cause damage to the internal wiring.

Access Control Diagrams

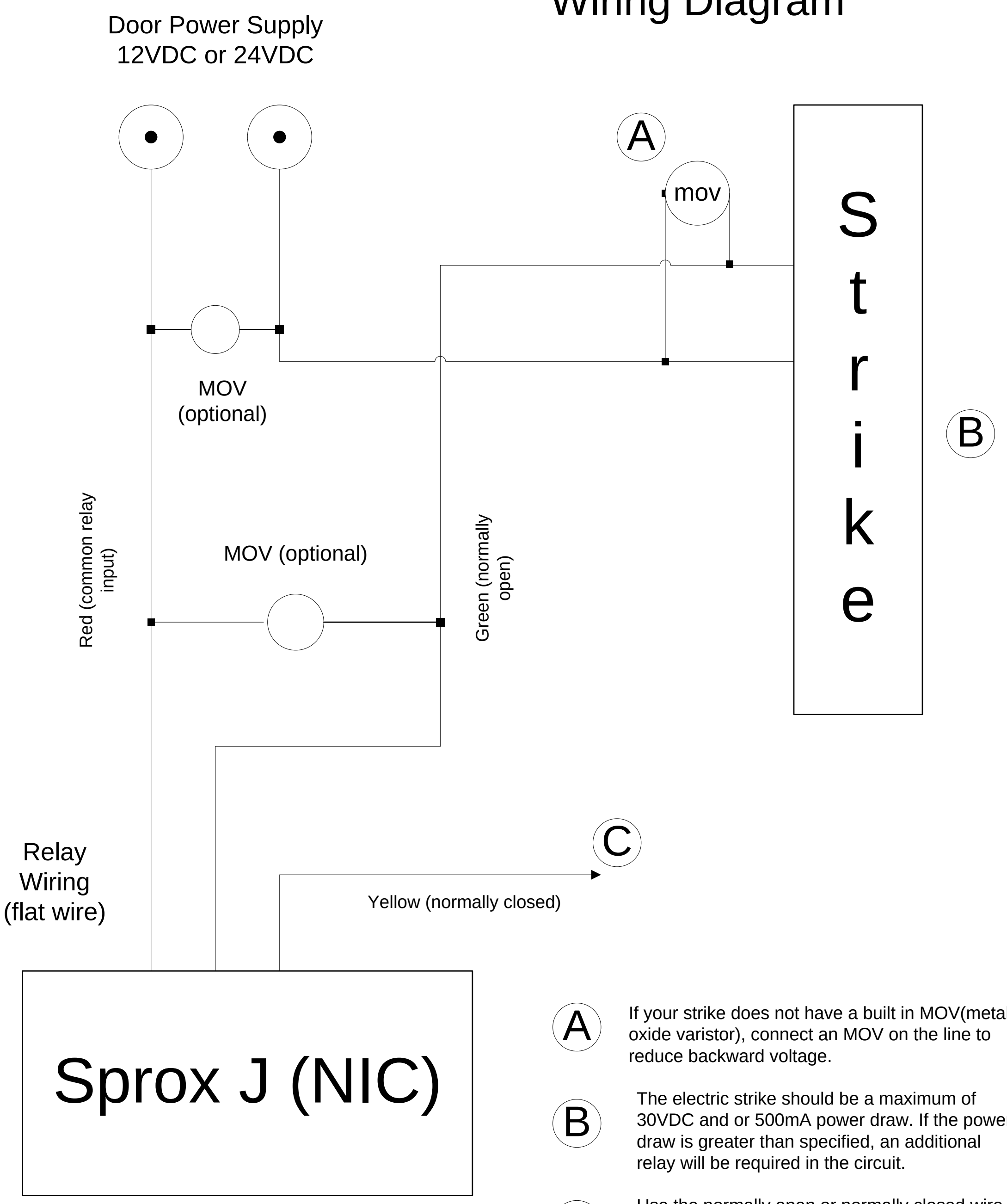
Sprox JX with Built-in NIC Diagram


POS Workstation
Bar Code or Mag Stripe Reader
Access Control
with SPROX J Reader and Built-in NIC
A
Network
Cat 5e/6 Cable
D
Connect Sprox J Reader to 120 VAC Power Outlet
PROX Head
Sprox J
S T R I K E
Access Panel
Access Control Workstation
B
C

NOTES

A. Sprox J device connects to the TCP network via Cat 5e/6 cable.
B. SPROX J Reader is wired into the Door Strike contact/ Turnstile contact via four wire flat cable. See SPROX J Wiring Diagram.
C. If door strike exceeds 30VDC and/or 500mA, a relay is required between the SPROX J Reader and the Door Strike/ Turnstile contact.
D. PROX Head (Proximaty Head) connects to the SPROX J Reader via a 6 wire cable.

Sprox J to Door Strike Wiring Diagram



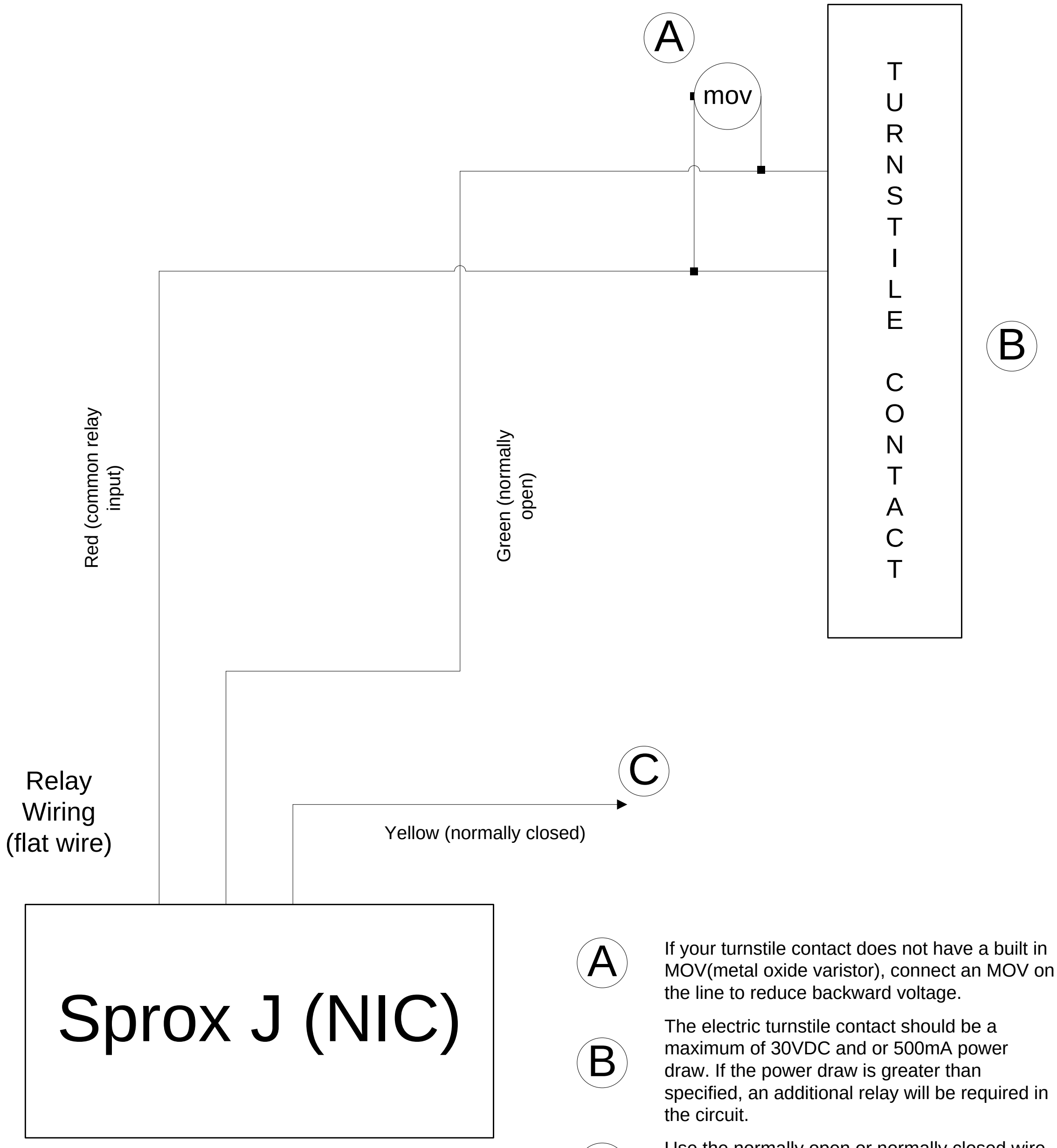
A — If your strike does not have a built in MOV(metal oxide varistor), connect an MOV on the line to reduce backward voltage.

B — The electric strike should be a maximum of 30VDC and or 500mA power draw. If the power draw is greater than specified, an additional relay will be required in the circuit.

C — Use the normally open or normally closed wire depending on the requirements of your installation.

This is a diagram for the SPROX J as of 04/10/2013. Please refer to www.interbar.com to verify wiring diagram.

Sprox J to Turnstile Contact Wiring Diagram



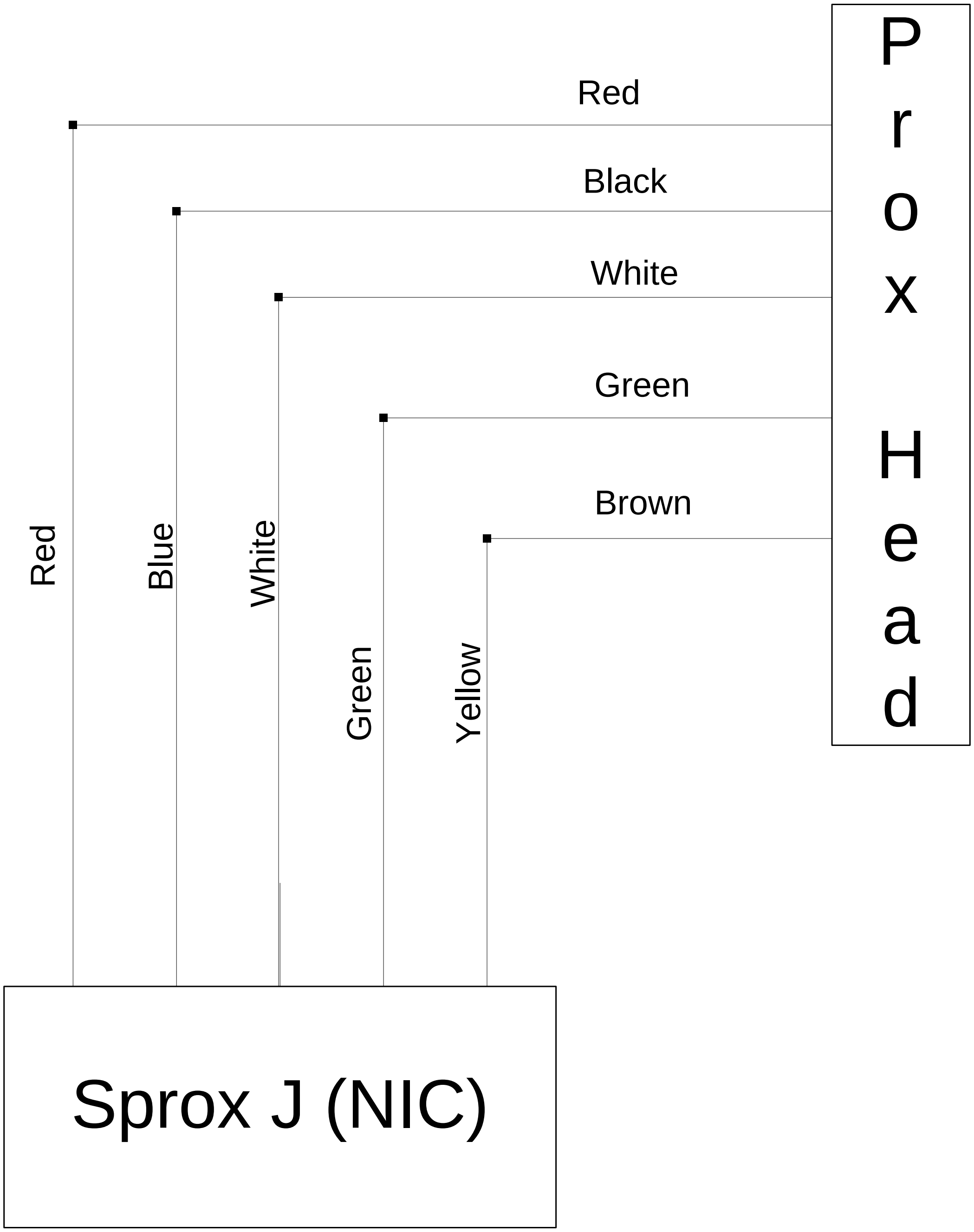
A — If your turnstile contact does not have a built in MOV(metal oxide varistor), connect an MOV on the line to reduce backward voltage.

B — The electric turnstile contact should be a maximum of 30VDC and or 500mA power draw. If the power draw is greater than specified, an additional relay will be required in the circuit.

C — Use the normally open or normally closed wire depending on the requirements of your installation.

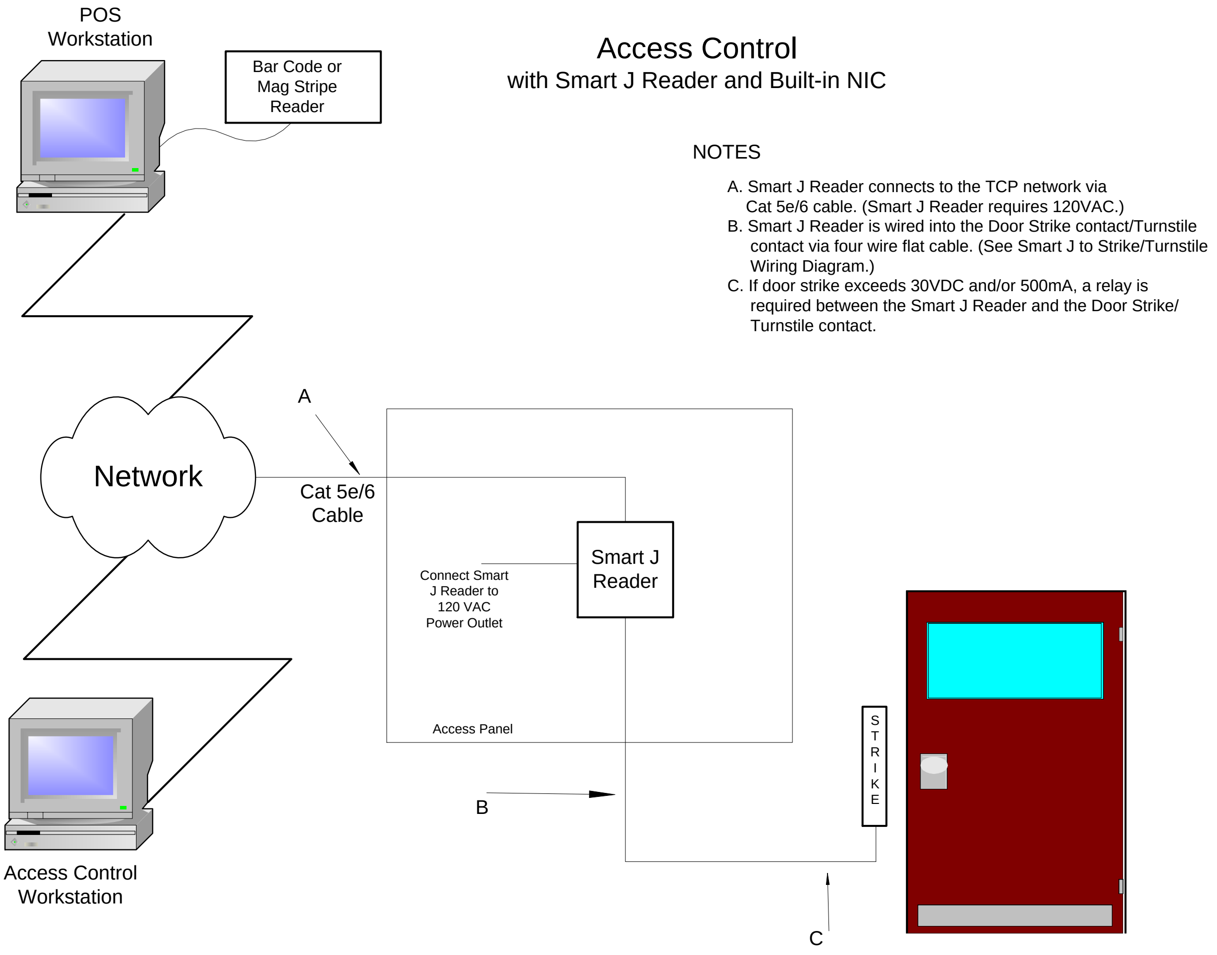
This is a diagram for the SPROX J as of 04/10/2013. Please refer to www.interbar.com to verify wiring diagram.

Sprox J to Proximity Head Wiring Diagram



This is a diagram for connecting the SPROX J to the Proximity Head as of 04/10/2013. Please refer to www.interbar.com to verify wiring diagram.

Smart JX with Built-in NIC Diagram

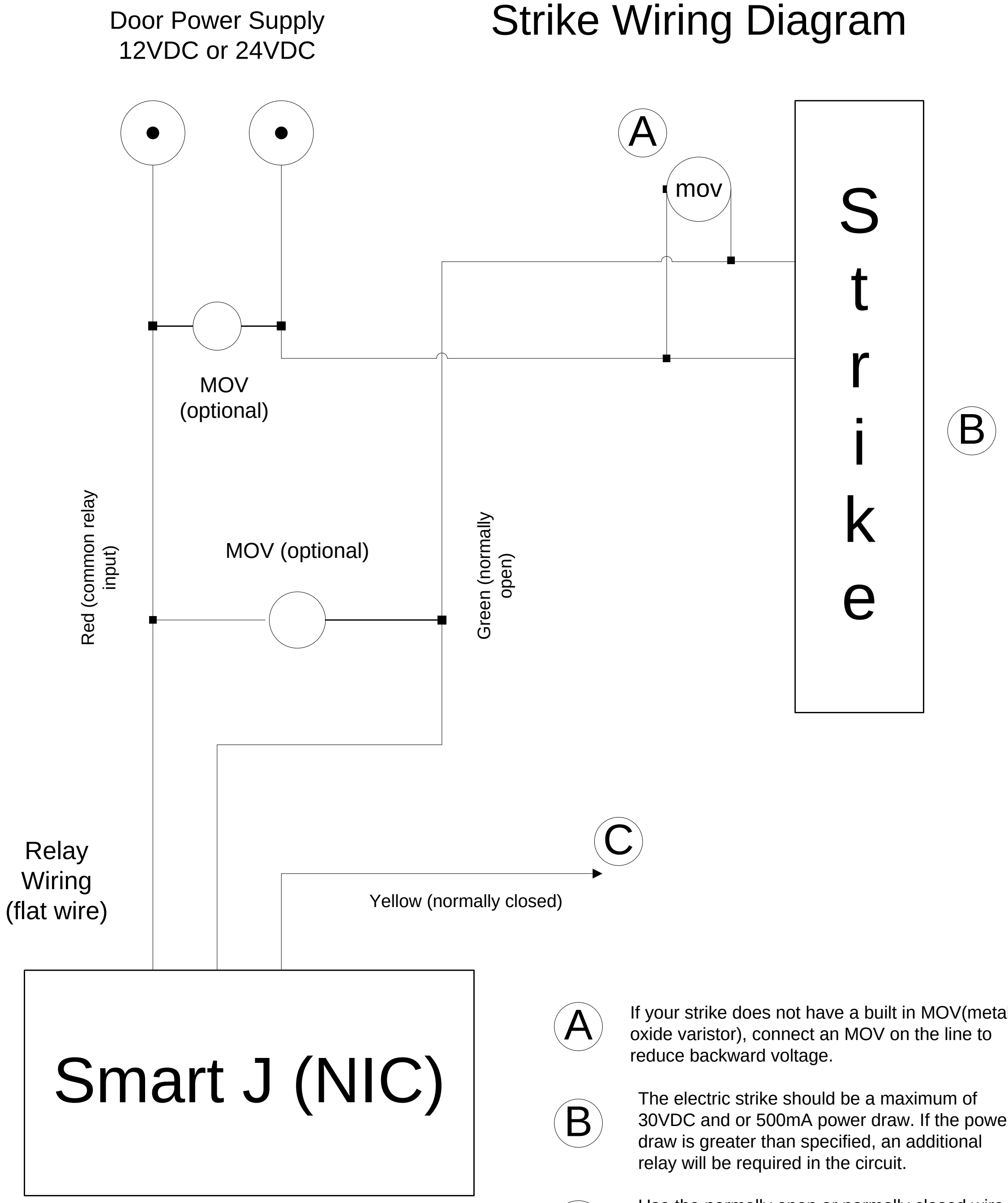


Access Control
with Smart J Reader and Built-in NIC

NOTES

A. Smart J Reader connects to the TCP network via Cat 5e/6 cable. (Smart J Reader requires 120VAC.)
B. Smart J Reader is wired into the Door Strike contact/Turnstile contact via four wire flat cable. (See Smart J to Strike/Turnstile Wiring Diagram.)
C. If door strike exceeds 30VDC and/or 500mA, a relay is required between the Smart J Reader and the Door Strike/ Turnstile contact.

Smart J (NIC) to Door Strike Wiring Diagram



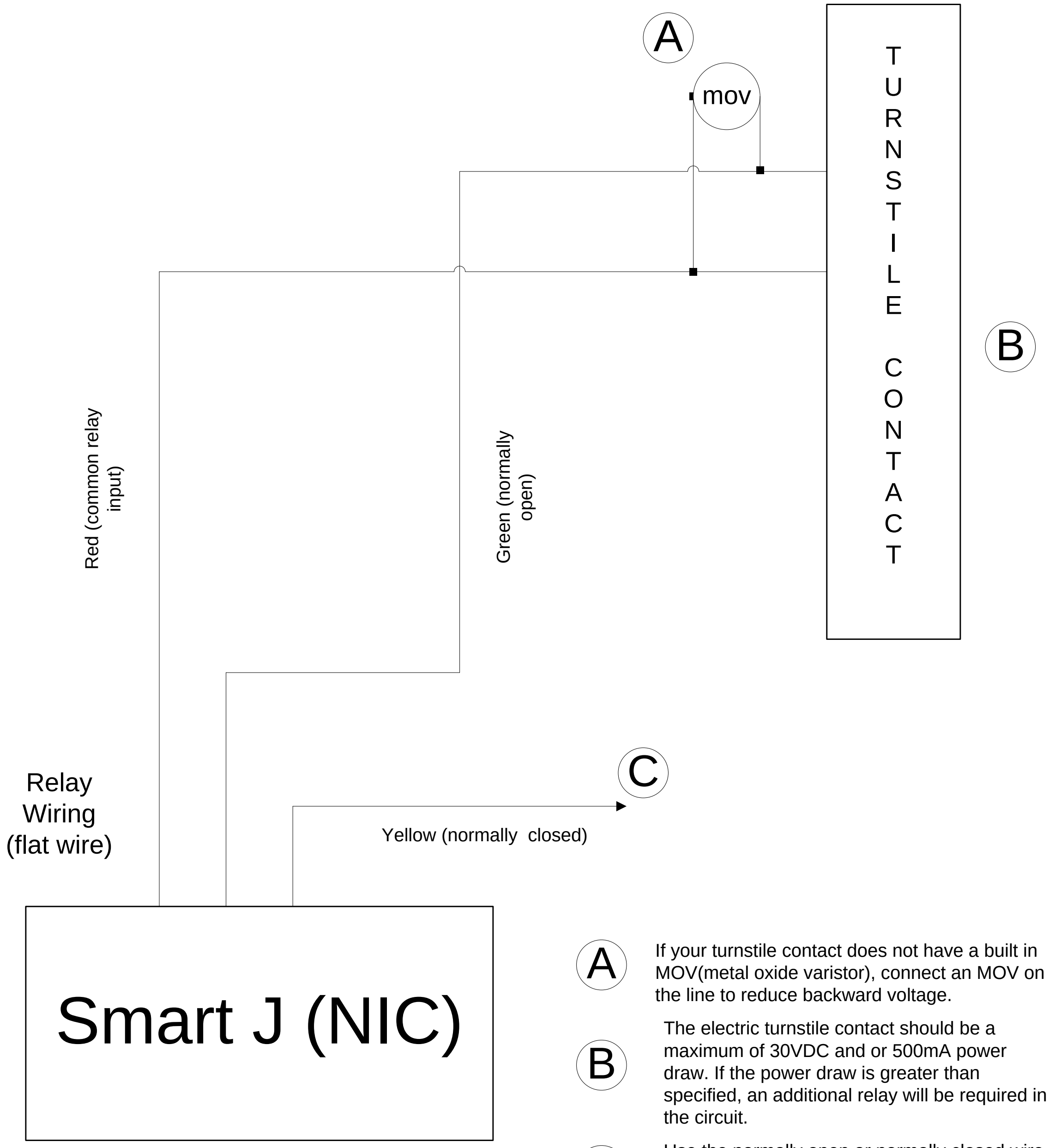
A If your strike does not have a built in MOV(metal oxide varistor), connect an MOV on the line to reduce backward voltage.

B The electric strike should be a maximum of 30VDC and or 500mA power draw. If the power draw is greater than specified, an additional relay will be required in the circuit.

C Use the normally open or normally closed wire depending on the requirements of your installation.

This is a diagram for the Smart J as of 04/10/2013 Please refer to www.interbar.com to verify wiring diagram.

Smart J (NIC) to Turnstile Contact Wiring Diagram



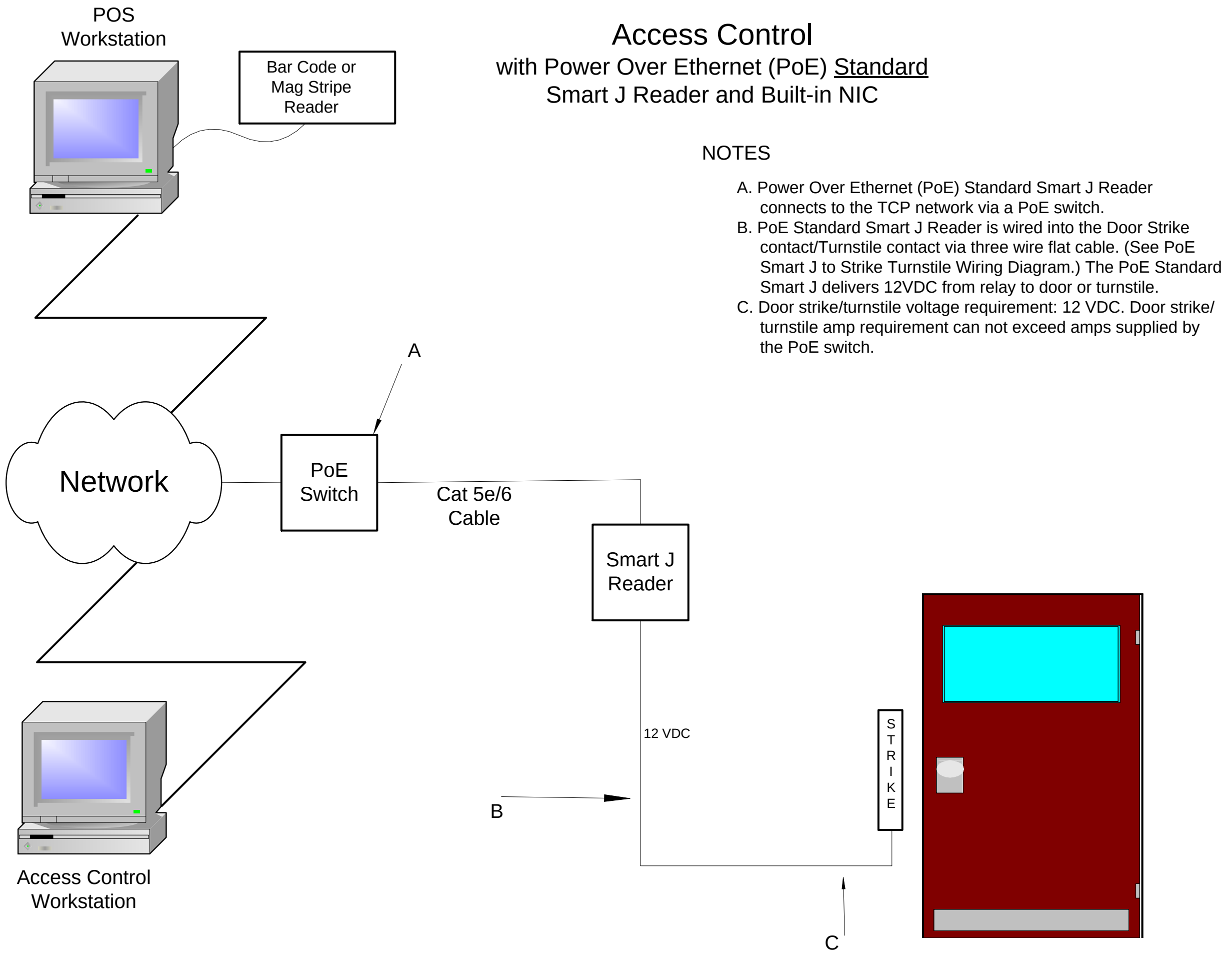
A — If your turnstile contact does not have a built in MOV(metal oxide varistor), connect an MOV on the line to reduce backward voltage.

B — The electric turnstile contact should be a maximum of 30VDC and or 500mA power draw. If the power draw is greater than specified, an additional relay will be required in the circuit.

C — Use the normally open or normally closed wire depending on the requirements of your installation.

This is a diagram for the Smart J as of 04/10/2013. Please refer to www.interbar.com to verify wiring diagram.

PoE Standard Smart JX with Built in NIC Diagram

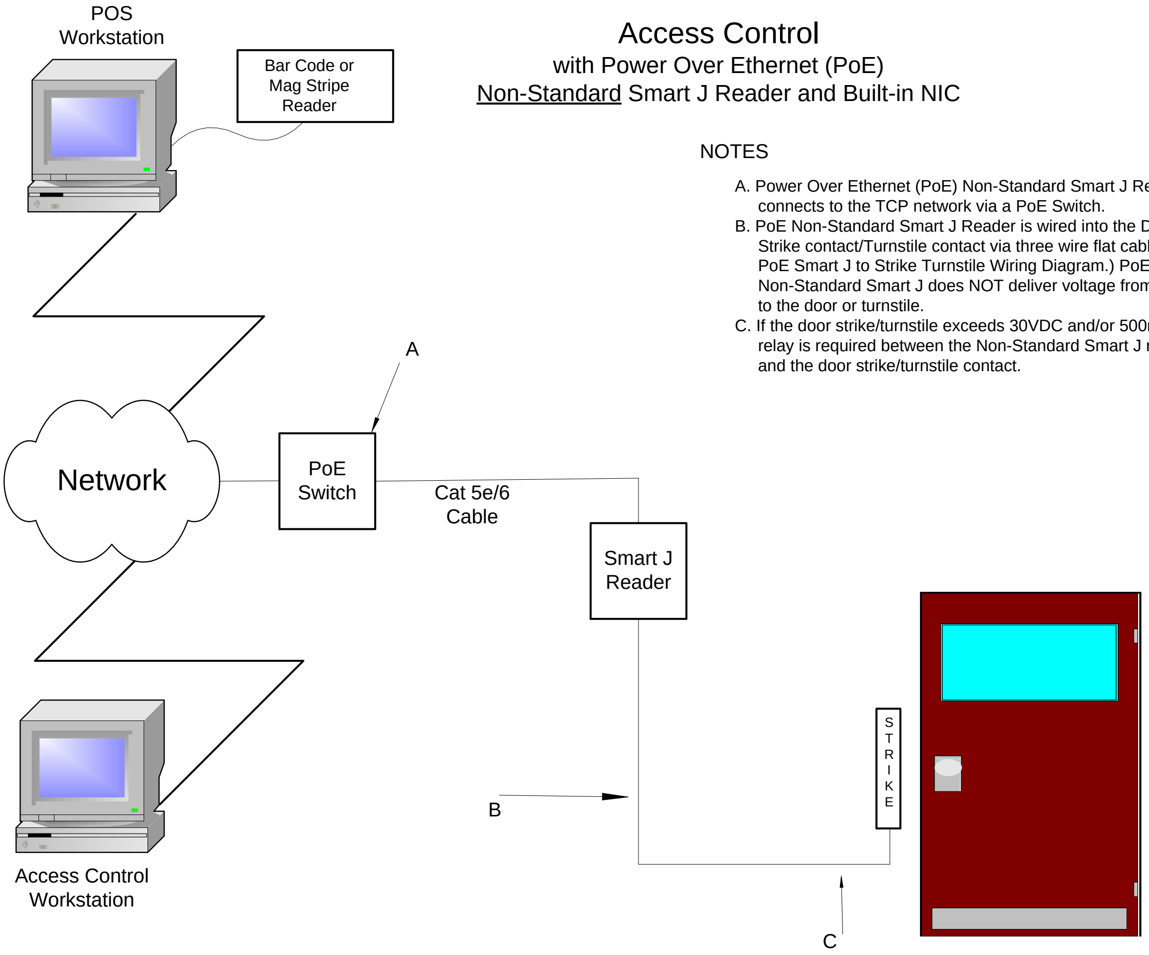


Access Control
with Power Over Ethernet (PoE) Standard
Smart J Reader and Built-in NIC

NOTES

A. Power Over Ethernet (PoE) Standard Smart J Reader connects to the TCP network via a PoE switch.
B. PoE Standard Smart J Reader is wired into the Door Strike contact/Turnstile contact via three wire flat cable. (See PoE Smart J to Strike Turnstile Wiring Diagram.) The PoE Standard Smart J delivers 12VDC from relay to door or turnstile.
C. Door strike/turnstile voltage requirement: 12 VDC. Door strike/ turnstile amp requirement can not exceed amps supplied by the PoE switch.

PoE Non-Standard Smart JX with Built in NIC Diagram



Access Control

with Power Over Ethernet (PoE)
Non-Standard Smart J Reader and Built-in NIC

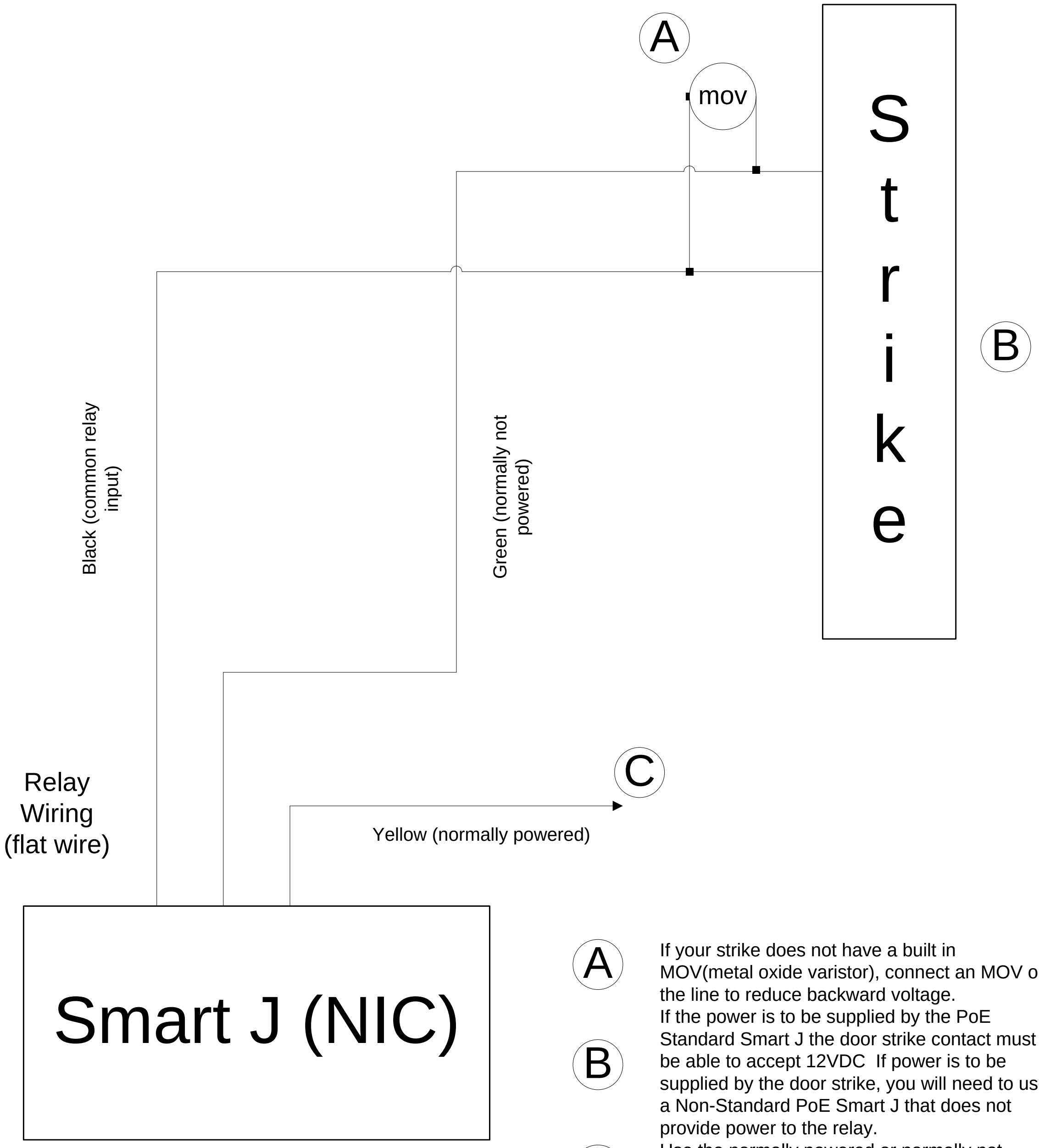
NOTES

A. Power Over Ethernet (PoE) Non-Standard Smart J Reader connects to the TCP network via a PoE Switch.

B. PoE Non-Standard Smart J Reader is wired into the Door Strike contact/Turnstile contact via three wire flat cable. (See PoE Smart J to Strike Turnstile Wiring Diagram.) PoE Non-Standard Smart J does NOT deliver voltage from the relay to the door or turnstile.

C. If the door strike/turnstile exceeds 30VDC and/or 500mA, a relay is required between the Non-Standard Smart J reader and the door strike/turnstile contact.

PoE Smart J (NIC) to Door Strike Wiring Diagram


A
mov
Strike
B
Black (common relay input)
Green (normally not powered)
Relay Wiring (flat wire)
C
Yellow (normally powered)
Smart J (NIC)

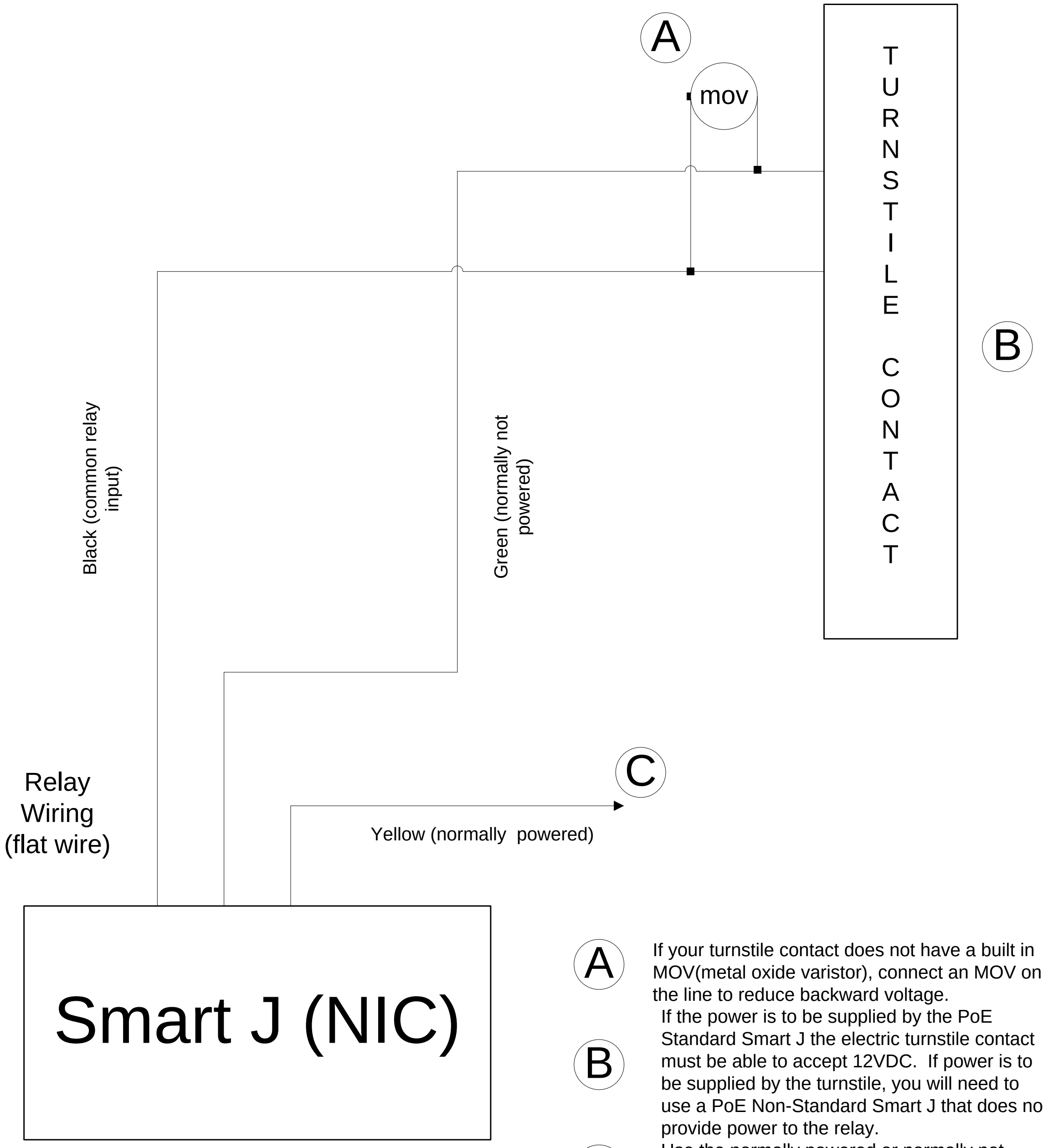
A If your strike does not have a built in MOV(metal oxide varistor), connect an MOV on the line to reduce backward voltage.

B If the power is to be supplied by the PoE Standard Smart J the door strike contact must be able to accept 12VDC If power is to be supplied by the door strike, you will need to use a Non-Standard PoE Smart J that does not provide power to the relay.

C Use the normally powered or normally not powered wire depending on the requirements of your installation.

This is a diagram for the Smart J as of 04/10/2013. Please refer to www.interbar.com to verify wiring diagram.

PoE Smart J (NIC) to Turnstile Contact Wiring Diagram


A
mov
TURNSTILE CONTACT
B
Black (common relay input)
Green (normally not powered)
C
Relay Wiring (flat wire)
Yellow (normally powered)
Smart J (NIC)

A If your turnstile contact does not have a built in MOV(metal oxide varistor), connect an MOV on the line to reduce backward voltage.

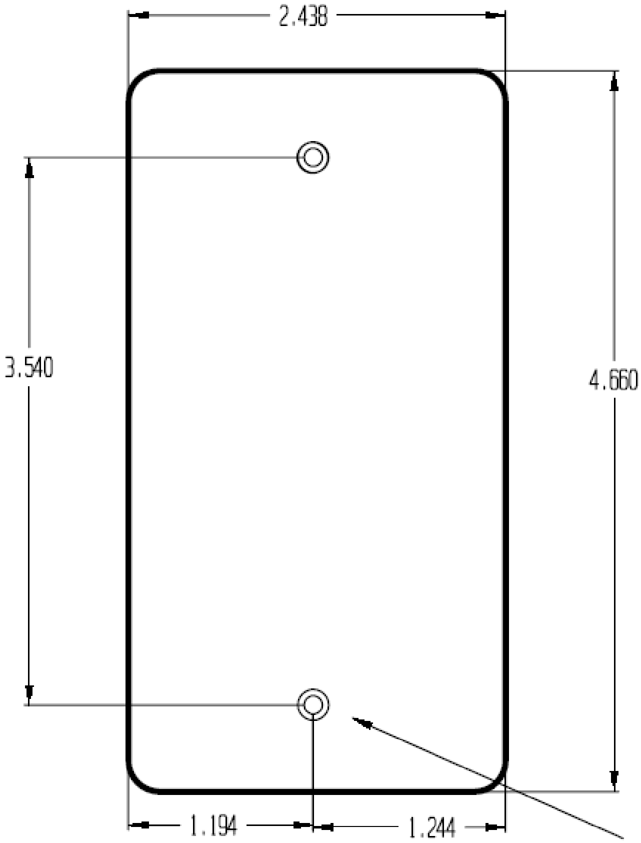
B If the power is to be supplied by the PoE Standard Smart J the electric turnstile contact must be able to accept 12VDC. If power is to be supplied by the turnstile, you will need to use a PoE Non-Standard Smart J that does not provide power to the relay.

C Use the normally powered or normally not powered wire depending on the requirements of your installation.

This is a diagram for the Smart J as of 04/10/2013. Please refer to www.interbar.com to verify wiring diagram.

Smart JX Mounting Template

IBC READER MOUNTING TEMPLATE



Screw Insert

6-32 or 3mm size
155 mil depth max

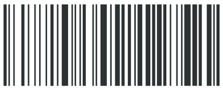
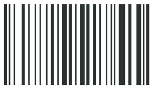
Note.. screw inserts are off center by
approximately 50 mils

Series Commands

Smart Slot 'J' Series Commands

If using bar code access control, configure the Smart J by swiping the set % preamble found below. To do so, fold the paper so that the bar code will be read as it is swiped through the slot reader. (Note: Vermont Systems recommends a buffer of ½" around the ends of the barcode.) An audible signal confirms that the bar code has been read and the device has been properly configured.

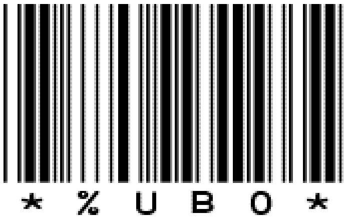
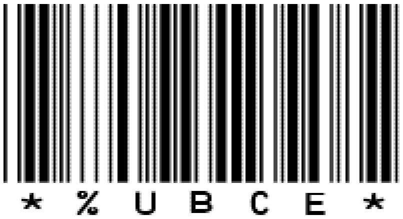
Optionally, you can print a Smart J Configuration Card directly to a PVC card using the Template at the very end of this document, if desired.

Set % Preamble 
Factory Default 

SmartJ Readers Cannot Read IDAutomation128 Barcodes

In the event your SmartJ cannot read the IDAutomation128 barcodes, perform the following steps. Generally speaking, you will know the unit is not reading the barcode because nothing will happen when you scan the card; it likely will not even emit a 'beep.;

Scan the barcodes below. In the event scanning the barcodes fails, perform the steps listed.

To Enable Barcode 128 Reading 
To Enable Check Digit in Barcode 128 

1. Launch IBC 4.4.
2. Search for the Rreader and double click on it.
3. Click **Get Parameters**.
4. Change the *Mode* to "Server."
5. Click **Set Parameters**.
6. Click **Reboot**.
7. Click on **Server Connect** on the left.
8. Enter in the readers IP address in the *IP Address* field, *Control Port Number* of "87" and a *Port Number* of "57." Click **Connect.**
9. Current Status should change to "Connected."
10. In the middle of the screen, there is a white box, click on it once to make sure the window is in focus and do the following:
    - (F10 key)BO(enter Key)
    - (F10 Key)BCE(enter key)
11. Then click **Disconnect**.

12 Go back to the search and double click on the reader again.

13 Click **Get Parameters**.

14 Change the *Mode* back to "UDP."

15 Click **Set Parameters**.

16 Click **Reboot**.

SmartJx - UDP Mode Returns OK and Flashes Red

Vermont Systems has found that some SmartJx units, when set to UDP mode, will start flashing red at seemingly random intervals. The units will read a card (you will see the visit in RecTrac), but the SmartJx will flash green only for an instant. If you experience this:

1 Launch IBC 4.4.

2 Search for the Reader and double click on it.

3 Click **Get Parameters**.

4 Change the *Mode* to "Server."

5 Click **Set Parameters**.

6 Click **Reboot**.

7 Click on **Server Connect** on the left.

8 Enter in the readers IP address in the *IP Address* field, *Control Port Number* of "87" and a *Port Number* of "57." Click **Connect**.

9 Current Status should change to "Connected."

10 In the middle of the screen, there is a white box, click on it once to make sure the window is in focus and do the following (these are zero's):

- X1070(Enter Key)

11 There should be no response at all when you press <Enter>.

- If there is then something is wrong. Make sure the "X" is a capital and that there are no spaces in the command.
- Repeat until there is no response then go to Step 12.

12 Click Disconnect.

13 Go back to the search and double click on the Reader again.

14 Click Get Parameters.

15 Change the *Mode* back to "UDP."

16 Click Set Parameters.

17 Click Reboot.

Connectivity Test

This test is required to ensure connectivity has been established outside of the RecTrac application prior to implementing Access Control from within it

IBC TCP Utility V4.4

Run the test using the IBC TCP Utility.

1 In Windows, go to Start • Programs • IBC, to run the IBC TCP Utilit V4.4. It will open to the UDP Connect page.

2 Change the IP Address to match the Qscan device you are testing.

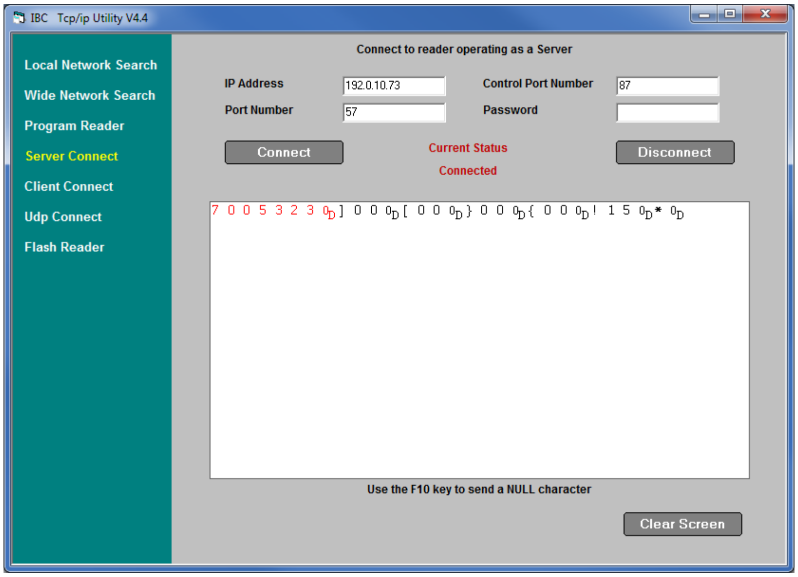
3 Ensure the Receive Port Number is "57" and Data Port Number is "53002" at the defaults, unless you changed them during initial set up. Click **Listen**. The Current Status should change to "Connected."

4 You should be able to swipe or scan your access card at the device location. The card number will display in the white box below in red, followed a carriage return (hex 0d).

5 Send commands directly to the device by typing the commands on the left into the white screen. The results on the right should occur.

Command	Result
]00<carriage return>	Green Light On
[00<carriage return>	Green Light Off
}00<carriage return>	Red Light On
{00<carriage return>	Red Light Off
!15<carriage return>	Relay On
*<carriage return>	Relay Off

6 The commands will show in black as you type. You can enter them one after the other or use the Clear Screen button at the bottom to start fresh before each one.



Connect to reader operating as a Server

IP Address: 192.0.10.73
Control Port Number: 87
Port Number: 57
Password:

Current Status
Connected

```
7 0 0 5 3 2 3 0D] 0 0 0D[ 0 0 0D} 0 0 0D{ 0 0 0D! 1 5 0D* 0D
```

Use the F10 key to send a NULL character

Access Control Setup in RecTrac

Perform all steps in this section on the workstation from which you will be processing Access Control.

Note: All file paths and screen/tab locations in this document refer to file paths and screen/tab locations as they appear in the standard, default Vermont Systems Design. Your setup and Design may vary.

Ensure VIC is Installed

To operate Access Control, Vermont Integration Client (VIC) must be installed on the workstation from which you will run Access Control.

By default, a VIC profile should be linked at the Default Level of Hierarchy in RecTrac. To utilize this profile, you would install VIC as a Service on the Access Control Workstation.

Optionally, you can use the VIC.exe installation and link a separate VIC profile at the Workstation Level of Hierarchy on the workstation running Access Control. Running Access Control as both an executable and a service. The IBC 7000 is configured to send data to the Workstation that has the server address that was entered in parameters using the TCP/IP Utility.

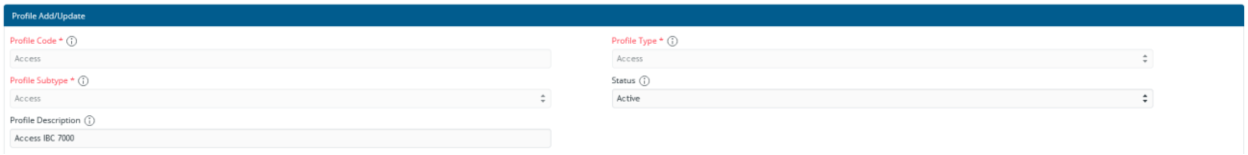
Refer to VIC Installation with Windows Installer for step-by-step installation instructions for VIC, if necessary.

Create an Access Control Workstation

1. In RecTrac, search for and go to Workstation Management. Click **Add** to add a new workstation. You will continue to the Workstation Update • Core Settings screen.
2. In the *Workstation Name* field, enter the workstation name exactly as it is identified in the Ttcp/ip Utility. Vermont Systems suggests copying the identifier field into the workstation name in RecTrac.
3. Enter a *Description.*
4. Click **Save**. Exit back to the main RecTrac menu.

Create and Link an Access Profile

1. Search for and go to Profile Assignments. Click **Add** to add a new profile.



Profile Add/Update

Profile Code * ⓘ: Access

Profile Type * ⓘ: Access

Profile Subtype * ⓘ: Access

Status ⓘ: Active

Profile Description ⓘ: Access IBC 7000

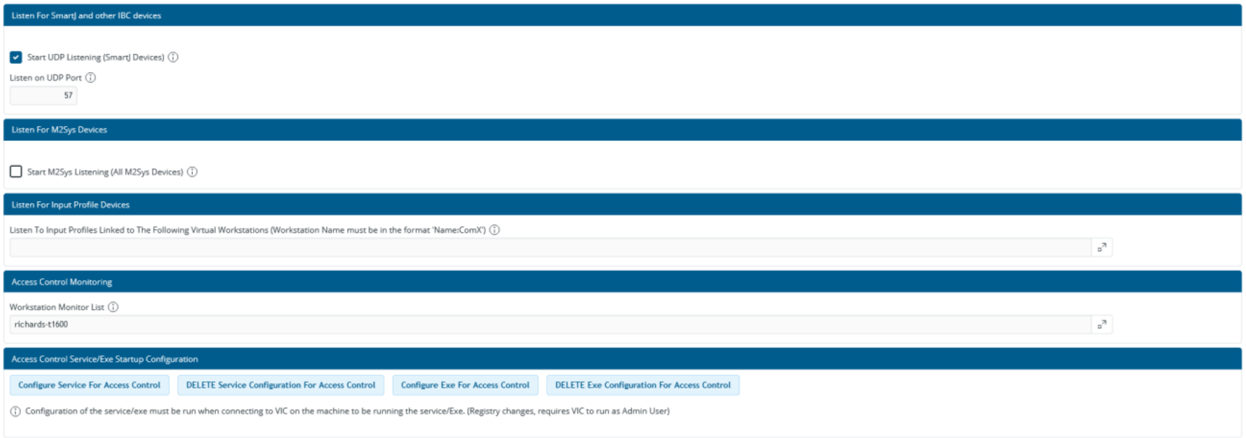
2. Enter a *Profile Code* to describe the profile that is being configured with Access Control.

3. Expand *Profile Type* and select "Access."

4. Select the Default Subtype.

5. Enter a *Description*.

6. Click **Create**. You will continue to the Profile Update screen.



Listen For SmartJ and other IBC devices

☑ Start UDP Listening (SmartJ Devices) ⓘ

Listen on UDP Port ⓘ: 57

Listen For M2Sys Devices

☐ Start M2Sys Listening (All M2Sys Devices) ⓘ

Listen For Input Profile Devices

Listen To Input Profiles Linked to The Following Virtual Workstations (Workstation Name must be in the format 'Name:ComX') ⓘ

Access Control Monitoring

Workstation Monitor List ⓘ: richards-t1600

Access Control Service/Exe Startup Configuration

Configure Service For Access Control
DELETE Service Configuration For Access Control
Configure Exe For Access Control
DELETE Exe Configuration For Access Control

ⓘ Configuration of the service/exe must be run when connecting to VIC on the machine to be running the service/Exe. (Registry changes, requires VIC to run as Admin User)

7. Enable the *Start UDP Listening* option.

8. Accept the default entry for *Listen on UPD Port* (57) or overwrite as needed. This is the server port on the TCP/IP Utility.

9. On the **Access Control Monitoring** group, select the workstations that will be viewed in the Access Control Monitor program. Traffic from workstations not in this list will not appear in the Visits DataGrid in the Access Control Monitor.

10. Click **Save**. You will be returned to Profile Assignments.

11 In Profile Assignments, link this Access profile at the Workstation Level of Profile Hierarchy, to the workstation from which Access Control will be run. This should be the workstation on which you just performed these steps.

12 While logged into RecTrac on the machine designated to run Access Control, and while successfully connected to VIC, select the Access profile and click **Update**.

13 Click the "Configure" button at the bottom of the screen that matches your VIC installation (**Configure Service for Access Control** or **Configure EXE for Access Control**). The process will run automatically.

14 Click **Continue** when prompted.

15 Exit completely out of RecTrac. Do NOT save the session.

16 Close your web browser.

17 Exit the VIC and restart it.

18 Log back into RecTrac on the workstation.

Create and Link an AccessRelay Profile

1 In RecTrac, search for and go to Profile Assignments. Click **Add** to add a new profile.

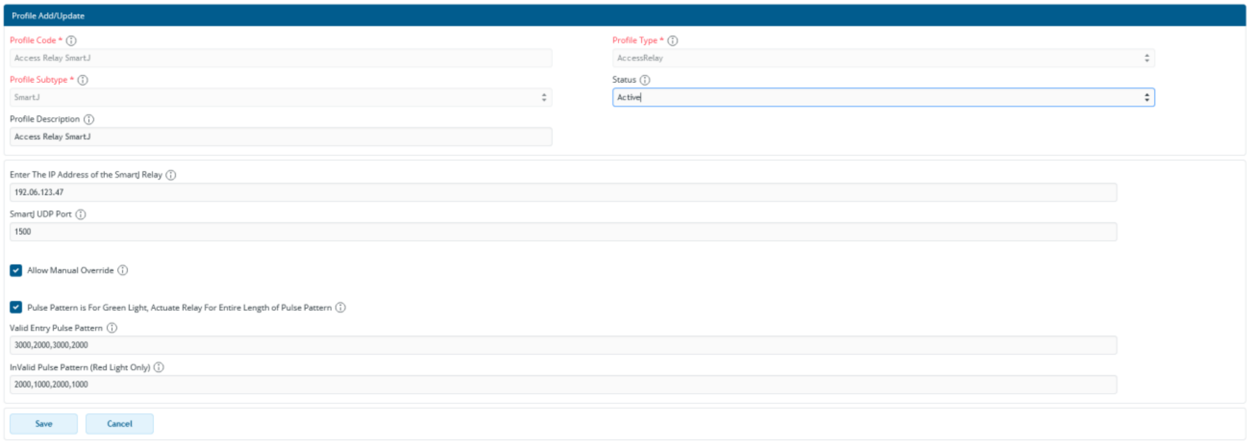
2 Enter a *Profile Code* for your Access Relay profile.

3 Expand *Profile Type* and select "AccessRelay."

4 Expand *SubType* and select "SmartJ."

5 Enter a *Description*.

6 Click **Create**. You will continue to the Profile Update screen.



Profile Add/Update

Profile Code *: Access Relay SmartJ

Profile Type *: AccessRelay

Profile Subtype *: SmartJ

Status: Active

Profile Description: Access Relay SmartJ

Enter The IP Address of the SmartJ Relay: 192.06.123.47

SmartJ UDP Port: 1500

☑ Allow Manual Override

☑ Pulse Pattern is For Green Light, Actuate Relay For Entire Length of Pulse Pattern

Valid Entry Pulse Pattern: 3000,2000,3000,2000

InValid Pulse Pattern (Red Light Only): 2000,1000,2000,1000

7 Enter the *IP Address* of the Smart J relay. This is the IP address that you assigned to the Reader using the TCP/IP Utility.

8 Enter the *UDP Port* that you assigned to the Reader in the *Smart J Reader Data Port (UDP) Port* field.

9 Select the *Allow Manuel Override* option if users will be allowed to manually open the Access Point via the Access Control Monitor program.

10 Select the *Pulse Pattern is for Green Light, Actuate Relay for Entire Length of Pulse Pattern* option.

11 Enter your *Valid Entry Pulse Pattern* and *Invalid Pulse Pattern* values.

- This is the time value in milliseconds for which you wish the Relay to toggle "on." For example, a flashing pattern 1000, 2000,1000,2000,1000; would equate to 1 second on, 2 seconds off , 1 second on, 2 seconds off, 1 second on

12 Click **Save**. You will return to Profile Assignments.

13 Link the AccessRelay profile at the Workstation Level of Hierarchy to the Access Control Workstation you created above. Repeat this step for each Access Point being setup

Create and Link a Visit Profile

Starting at Step 7, these steps need to be updated to reflect the new Visit Profile with the Access Control group. We'll need two (2) screen shots: One for the Core group (like the old one below) and one for the Access Control group. Please be sure to use the Next Gen UI.

1 In RecTrac, search for and go to Profile Assignments. Click **Add** to add a new profile.

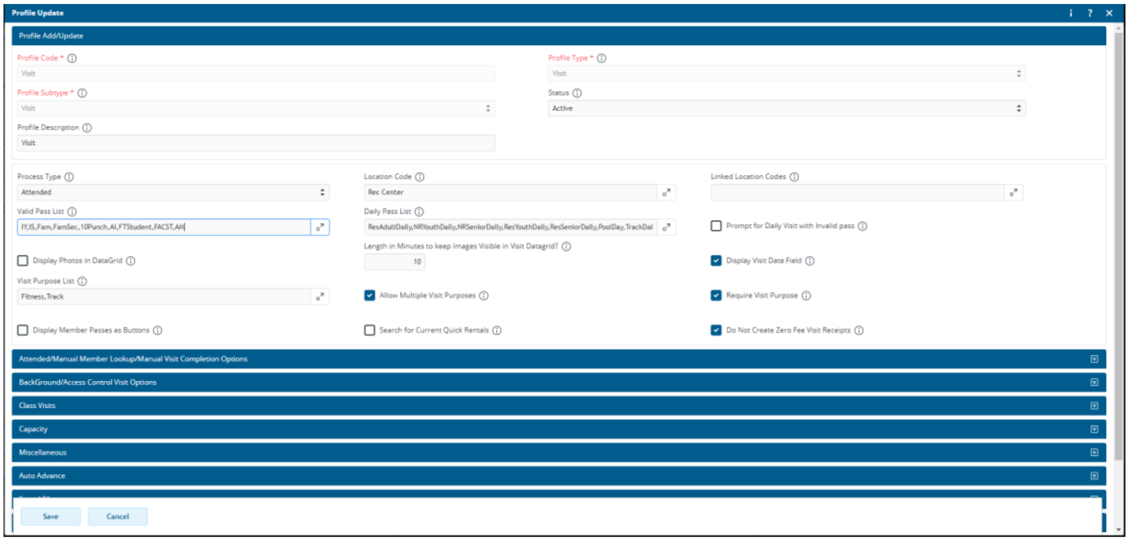
2 Enter a *Profile Code* for your Visit profile.

3 Expand *Profile Type* and select "Visit."

4 Expand *SubType* and select "Visit."

5 Enter a *Description*.

6 Click **Create**. You will continue to the Profile Update screen.



Profile Update

Profile Add/Update

Profile Code * Visit

Profile Type * Visit

Profile Subtype * Visit

Status Active

Profile Description Visit

Process Type Attended

Location Code Rec Center

Linked Location Codes

Valid Pass List IY,IS,Fam,FamSec,10Punch,AI,FTStudent,FACST,AM

Daily Pass List ResAdultDaily,NRYouthDaily,NRSeniorDaily,ResYouthDaily,ResSeniorDaily,PoolDay,TrackDai

☐ Prompt for Daily Visit with Invalid pass

Length in Minutes to keep Images Visible in Visit Datagrid? 10

☐ Display Photos in DataGrid

☑ Display Visit Date Field

Visit Purpose List Fitness,Track

☑ Allow Multiple Visit Purposes

☑ Require Visit Purpose

☐ Display Member Passes as Buttons

☐ Search for Current Quick Rentals

☑ Do Not Create Zero Fee Visit Receipts

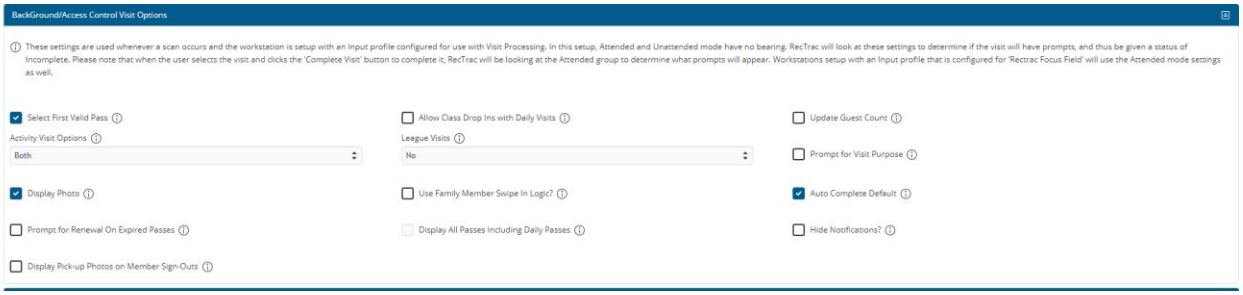
Attended/Manual Member Lookup/Manual Visit Completion Options
BackGround/Access Control Visit Options
Class Visits
Capacity
Miscellaneous
Auto Advance
Save
Cancel

7 Open the *Visit Pass List* and select the Pass Codes that will be valid for this location.

8 Open the *Daily Pass List* and select the Daily Pass Code(s) that will be valid for this location:

9 Open the *Location Code* and select the Facility Location at which you will be processing Access Control.

10 Expand the **BackGround/Access Control Visit Options** group and enable the *Select First Valid Pass* option.



BackGround/Access Control Visit Options

These settings are used whenever a scan occurs and the workstation is setup with an Input profile configured for use with Visit Processing. In this setup, Attended and Unattended mode have no bearing. RecTrac will look at these settings to determine if the visit will have prompts, and thus be given a status of Incomplete. Please note that when the user selects the visit and clicks the 'Complete Visit' button to complete it, RecTrac will be looking at the Attended group to determine what prompts will appear. Workstations setup with an Input profile that is configured for 'Rectrac Focus Field' will use the Attended mode settings as well.

☑ Select First Valid Pass

☐ Allow Class Drop Ins with Daily Visits

☐ Update Guest Count

Activity Visit Options Both

League Visits No

☐ Prompt for Visit Purpose

☑ Display Photo

☐ Use Family Member Swipe In Logic?

☑ Auto Complete Default

☐ Prompt for Renewal On Expired Passes

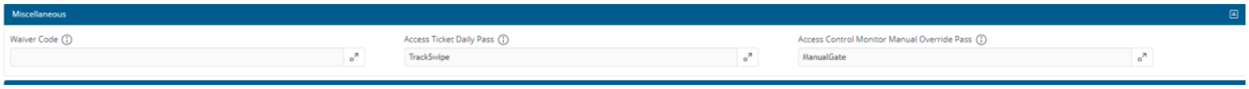
☐ Display All Passes Including Daily Passes

☐ Hide Notifications?

☐ Display Pick-up Photos on Member Sign-Outs

11 Expand the **Miscellaneous** Group, and open *Access Ticket Daily Pass List*. Select the Pass Codes that will be valid for this location. Likely this will be the same list of passes as you entered in the *Daily Pass List* above.

12 Open *Access Control Monitor Manual Override Pass List* and select the Pass Code that will be used when you click the manual override buttons in the Access Control Monitor. If you do not have a generic Daily Pass for this function, you can create one.



Miscellaneous

Waiver Code:

Access Ticket Daily Pass: TrackSwipe

Access Control Monitor Manual Override Pass: ManualGate

13 Fill in the remaining fields as necessary. Generally speaking, options for Prompts should be disabled. Use the Help icon for field level definitions, if needed.

14Click **Save** when ready. You will be returned to Profile Assignments.

15 Link the Visit profile at the Workstation Level of Hierarchy to the Access Control Workstation you created above.

Assigning Profiles

1 **Access Relay** and **Visit** profiles should be linked to the **Access Control Workstation** you created above.

2 **Access** and **VIC** profiles should be linked to the **workstation on which you are processing**.

Access Control Daily Processing in RecTrac 3.1

Note: Access Control does not require a login to function. So long as VIC is running on the designated machine, Access Control will function.

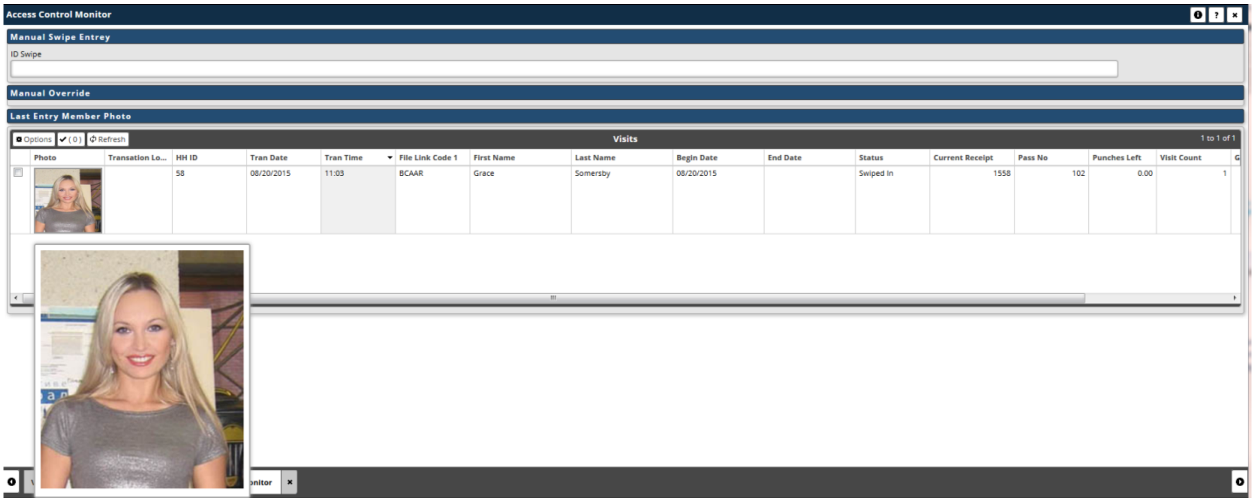
1 To monitor swipes at the Access Points, log into RecTrac on the workstation that Access Control is using to process requests. This is the workstation to which you linked the Access and VIC profiles.

2 To view Access Visits, search for and go to Access Control Monitor.

3 Manual override for the profiles linked in the Access Profile should be displayed, as well as a DataGrid that displays recent Visits.

Verify that 3.1 Displays the Photo

If selected, the *Display Photos* option on the Access device will display an individual's photo (if a photo has been captured) for the person swiping into the access control point. Y


Access Control Monitor

Manual Swipe Entrey

ID Swipe

Manual Override

Last Entry Member Photo

Visits

1 to 1 of 1

	Photo	Transation Lo...	HH ID	Tran Date	Tran Time	File Link Code 1	First Name	Last Name	Begin Date	End Date	Status	Current Receipt	Pass No	Punches Left	Visit Count	G
□			58	08/20/2015	11:03	BCAAR	Grace	Somersby	08/20/2015		Swiped In	1558	102	0.00	1	

Troubleshooting

No Success with Connectivity Test

If you are unable to connect to your Smart JX via the IBC TCP Utility V4.4, check the following setup configurations. You should not be connected to your turnstile or door strike while performing the following steps.

1. From a DOS command prompt, attempt PINGing the device. If you are successful, unplug the CAT5e/6 cable from the Smart Jdevice and PING again. If you are still able to PING the IP, that specific IP is in use elsewhere on your network. You must configure the device with a different IP address.
2. Via the Ibctcp44 configuration software, verify that the correct IP addresses are assigned to each device.
3. Ensure the IP of the device and the IP of your machine are in the same Subnet mask.
4. If you are using a firewall client software, it must be disabled when attempting to connect to the device.
5. You cannot have an open connection to the Smart JX device within RecTrac. Make certain all other connections to this device are closed.
6. Once you can connect to the device, verify the connection with the test text files as explained in the Connectivity Test section. Also, make sure the card is read when swiping. If these tests do not work, there is a problem with the physical setup.

Other Problems

If you still cannot connect to the Smart JXdevice, below are more items to check.

1. Test the power to the Smart JX.
2. Test CAT5e/6 cable to ensure it is working and functional. To test this, bypass the installed CAT5e/6 cable and run a temporary CAT5e/6 cable from the switch/hub to the Smart JX. Test again. If this works, your installed cable is bad. If it does not work, the problem lies elsewhere.

Unable to Connect to Smart J During Setup

1. Highlight the Qscan you are trying to configure and click the Resolve Dupe button.
2. Enter the Qscan's new IP address and click **Next**.

3 Enter the Qscan's new subnet mask and click **Next**.

4 Enter the Qscan's password: 11111 and click **Next**.

5 The Qscan will reboot.

6 Return to Configuring a Smart JX Sprox JX Device.

Electric Strikes vs. Magnetic Locks

Magnetic Locks

All magnetic locks (aka: mag locks) will work with DC current only, usually 12 to 24 volts, so never connect a magnetic lock to AC current at any voltage.

All magnetic locks are fail-safe, which means that they need a constant source of power to remain locked. If power is removed, the lock will open.

All mag locks are silent even when powered and locked. Electricians recommend at least 1200 pound pull magnetic locks for normal sized doors.

Caution is recommended regarding use of magnetic locks with respect to fire and smoke safety. Always check Local Authority Having Jurisdiction (LAHJ) during installation planning.

Electric Strikes

Electric strikes are often used for “buzz in” type systems. They can be 12, 24, or even higher voltage and they can take AC or DC current or some both.

They may be fail-safe or fail-secure. A fail-safe electric strike needs power to keep it locked, whereas, a fail-secure strike remains locked even without power.

Fail-secure is the most common type used. A fail-secure strike remains locked from the outside even if no power. For egress or getting out, a door knob or lever on the lock allows for safe exit.

If you need the “buzzer” sound, select an AC strike and AC power source or transformer. If you do not want the “buzzer” sound, select a DC power source or transformer. The DC strike is almost silent when it releases, except for a slight “click” sound.

If you want to use a DC strike or magnetic lock, but still want the “buzzer” sound, you can connect a tiny buzzer in parallel between the power supply and the electric strike or magnetic lock to make buzzer sound when the lock releases.

Source: The Keyless Lock Store.