# CONTROLLER

**FALCONXT to CLOUDCONTROLLER** 

SECURITY SYSTEMS



# CONTROLLER

# MIGRATION MANUAL

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#### > Overview

The CloudController offers the access control industry the most comprehensive hardware and software package to the access control industry. It's revolutionary design integrates surveillance, access control, intrusion, lighting, custom scripting, and elevator controls all in one package.

- 4 inputs on the main board for door alarms, motion sensors, beams, or almost any other type of alarm switch
- 4 output relays on the main board to open gates or doors, activate lights, control elevators, shunt alarms, act as secure interior relays, or perform custom function switching
- A built-in 12VDC 2A power supply with 5Ah battery backup
- Supports up to 127 Access Interface (AI) devices.

Input Power:			
Input Voltage:	24 VAC - 40 VA 24 VDC - 2.5 A		
Output Power:			
Output Voltage:	13.8VCD nominal 2A max load		
Relay Specifications:			
Maximum Switching Voltage*:	30VAC / 30VDC		
Maximum Switching Current*:	AC: 10A (NO) / 3A (NC) DC: 5A (NO) / 3A (NC)		
* Resistive load			
Inputs:			
Dry contact supervised inputs.			
Environmental:			
Ambient Temperature:	-40°C to +85°C (-40°F to 185°F)		
Ambient Humidity:	0% to 85%, non condensing		
Note: The CloudController is not intended for outdoor installation.			

See "Computer System Requirements" on page 3 for computers, components, and peripherals used with the controller.

### > Computer System Requirements

PTI recommends that installation and setup of any PTI Security Systems equipment is done by a certified, licensed, qualified technician. PTI can recommend local dealers and installers, but it is the customers' responsibility to verify qualifications and negotiate any pricing or contracts (unless PTI Security Systems has been specifically contracted in writing to do so on behalf of the customer).

All hardware running any PTI Security Systems software or utilities must meet specific requirements. These requirements are intended as a minimum guideline for operating our access control system and are subject to change without notice.

With any setup or configuration, some troubleshooting and adjustment of the configuration may be required. This will differ with every setup depending on operating system, software installed on it, quality of components, Internet connection, modem connection, or any other variable introduced into the setup.

Troubleshooting and configuration may include the purchase of additional equipment. Under no circumstances is PTI Security Systems responsible for any damages, either incidental or consequential, based on these recommendations. If a customer intends to add third party peripherals to the system, they are responsible for ensuring that the products are compatible with the access control system they have installed.

#### **Power**

Electrical outlet providing 120VAC (United States) or 240VAC (Europe or Australia)

#### Proximity Cards / Photo ID Badges / Swipe Cards

The following items are recommended for the operation of peripheral devices.

• Any 4-line magnetic stripe card for use with swipe reader devices

#### Site Graphics™ Additional Requirements (optional)

If you have purchased the Site Graphics™ software the computer running the software must include these computer requirements as well as those previously listed.

- PTI Graphics Serial Adapter (Part # PGRASIA)
- 16 MB Video Card or higher
- 1024 x 768 resolution minimum (Large screen monitor recommended)

#### Wire and Cable Specifications

The following wire specifications are recommended for installing PTI Security Systems' products. Planning and installing the wiring of a site is a process that requires a high degree of technical knowledge; we recommend that this be done by a trained professional.

## > Wire and Cable Specifications

## Al Device Power & Data Wire Recommendation (from Controller to Al Devices)

PTI Part #	Belden Wire Code	Description	
wwir1804s*	9418	18 AWG, 4-conductor stranded copper wire with overall shield and common ground (PVC Insulation)	
wwir1804spl	89418	18 AWG, 4-conductor stranded copper wire with overall shield and common ground (Plenum Insulation)	
wwir1804sdb	9552	18 AWG, 4-conductor stranded copper wire with overall shield and common ground (Direct Burial)	

<sup>\*</sup> Denotes standard recommended wire.

- ☑ Never use wire smaller than 18 AWG for installing power to AI devices.
- ☑ Never use any unshielded wire for installing power and data to AI devices.
- ☑ Data wire length should never exceed 4000 feet in a single linear distance.
- ☑ Maximum length for power will vary significantly because of voltage drop due to current draw, number of devices, splices, and other factors.

#### Door Alarm Wire Recommendation (from Multiplexer to Door Switch)

PTI Part #	Belden Wire Code	Description
wwir2450*	9585	24 AWG, 50-conductor solid copper wire (PVC Insulation)
wwir2450pl	N/A	24 AWG, 50-conductor solid copper wire (Plenum Insulation)
wwir2450db	165185110	24 AWG, 50-conductor solid copper wire (Direct Burial)

Denotes standard recommended wire.

- ☑ Never use wire smaller than 24 AWG for installing door switches.
- ☑ Never use stranded wire for installing door switches.
- ✓ Applications that require shielded trunk line, use direct burial cable.

#### Intercom Wire Recommendation: from LEF or NEM Base Station to intercoms

PTI Part #	Belden Wire Code	Description	
wwir1810s*	5345FE	18 AWG, 10-conductor stranded copper wire with overall shield and common ground (PVC Insulation)	
wwir1804s*	9418	18 AWG, 4-conductor stranded copper wire with overall shield and common ground (PVC Insulation)	
wwir1802s	8760	18 AWG, 2-conductor stranded copper wire with overall shield and common ground (PVC Insulation)	
wwir2210s	9946	22 AWG, 10-conductor stranded copper wire with overall shield and common ground (PVC Insulation)	

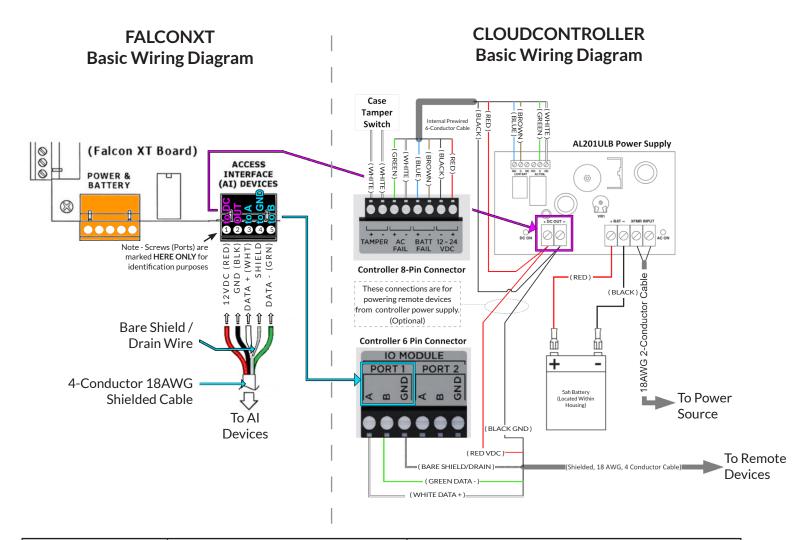
Denotes standard recommended wire.

<sup>☑</sup> Never use wire smaller than 22 AWG for installing LEF or NEM intercoms. We recommend that 18 AWG be used in most installations for best results. Do not exceed 1600 feet in linear distance when using 18 AWG or 600 feet in linear distance using 22 AWG.

**MIGRATION MANUAL** > Wire and Cable Specifications

## > Wire and Cable Specifications

These recommendations should provide protection against most common power surges, power fluctuations, indirect lightning strikes, and general electrical storm activity. Unfortunately, due to the naturally destructive nature of lightning and electrical storms, there is only so much protection that can be provided to any hard-wired electronic system. Any local or direct strike may damage one or more pieces of electronic equipment in the vicinity and may damage or destroy the surge protectors or even, in some cases, the entire system.



From AI Devices	Falcon ACCESS INTERFACE (AI) DEVICES module (Port 1-5)	Move to CloudController
Red 12VDC	Port 1: DC	DC + Out on Power Supply Board
Black GND	Port 2: DC OUT	DC - on Power Supply Board
White Data +	Port 3: White Data +	A on IO Module
Shield	Port 4: <b>Shield</b>	GND on IO Module
Green Data -	Port 5: <b>Green Data</b> -	B on IO Module

# **SECURITY** SYSTEMS With CloudController, operators can easily customize all

of their facility's access areas, review site activity, and monitor zones and alarms from one cloud-based account. Create a world-class operation with the most advanced enterprise access control solution from the trusted industry leader with over 40 years of experience.

Since 1979, PTI Security Systems<sup>™</sup> has provided the self-storage industry with proven security and access control systems. Known for our complete and innovative solutions that deliver advanced and cost-effective security systems, self-storage owners and operators can efficiently manage their facility from anywhere, lower operating costs, and enhance the tenant experience.

For more information about PTI Security Systems or CloudController, please contact a PTI representative or visit our website.

DUSTRY

PTI is a trademark of Preferred Technology Systems, LLC





