





PCSC RTU Guide Version 3.x

OSSI

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Intelli-Site

Security Management Software PCSC RTU Guide

PC Software RTU Interface Guide For Windows 7 SP1, 2008 R2 SP1, XP SP3 & 2003 SP2

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Section 1 – Introduction

This section describes the following:

- Overview
- Technical Support Assistance

Overview

The PCSC RTU (Receiver/Transmitter Unit) is the Intelli-Site software representation of a PCSC IQ-series, Ultimate-series, MicroLPMseries or ELV-series access control panel. For purposes of this document, the term RTU is synonymous with access control panel.

The PCSC RTU provides for user configuration of all aspects of the access control panel network including:

- Access control panel general configuration
- Communications Settings (in conjunction with Driver Services)
- Input configuration
- Output configuration
- Doors (Readers) configuration
- Alarms configuration
- PCSC RTU-specific I/O types and Actions
- PCSC RTU-specific Database (Cardholder Management) functionality
- PCSC RTU-specific Reports and Documentation
- PCSC-Specific Access Control Node functionality
- PCSC-Specific Door Control functionality

Technical Support Assistance

OSSI Headquarters

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Technical Support

Technical support is available via Telephone, Fax or Email. Contact OSSI Technical Support 8:00 AM to 5:00 PM Central Standard time. If calling after hours, please leave a detailed voice mail message, and someone will return your call as soon as possible.

E-Mail: <u>support@ossi-usa.com</u>

Fax: 262-522-1872 (Attention Technical

Support)

Local: 262-522-1870

When calling, please be at the computer prepared to provide the following information:

- Product version number, found by selecting the **About** button from the Intelli-Site Menu Application Bar.
- Product serial number used for registration.
- The type of computer being used including, operating system, processor type, speed, amount of memory, type of display, etc.
- Exact wording of any messages that appear on the screen.
- What was occurring when the problem was detected?
- What steps have been taken to reproduce the problem?

Section 2 - PCSC RTU Configuration

This section describes the following Design Mode RTU activities in Intelli-Site.

- Adding a PCSC RTU to the Intelli-Site tree
- IQ, Ultimate and MicroLPM Configuration
- ELV Panel Configuration

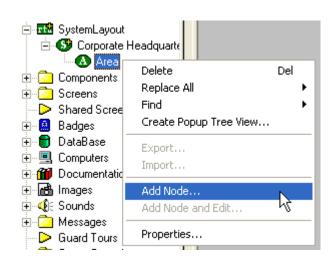
Adding a PCSC RTU to the Intelli-Site Tree



The following section will describe how to add one or more PCSC RTU nodes to the tree. All procedures described in this section are accomplished in Design Mode.

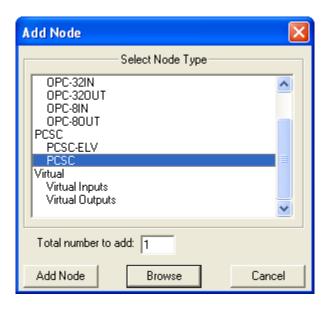
Add an RTU - Procedure

 Expand the System Layout Node and Right-Click on an Area. Select Add Node... from the Shortcut Menu as shown below:



2. Two basic PCSC RTU types can be selected from the Add Node dialog: PCSC-ELV – all ELV-type panels and PCSC – IQ-series, Ultimate-series and MicroLPM-series Panels. Select the RTU type then enter the number of panels you wish to add to the tree in the Total number to add: edit box. You may add multiple panels to an area.

Note: The total number of RTUs that may be added must not exceed 255 for a given domain.

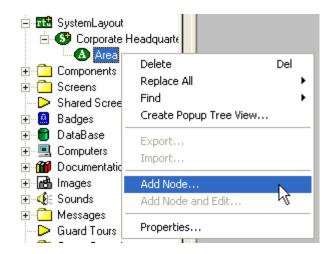




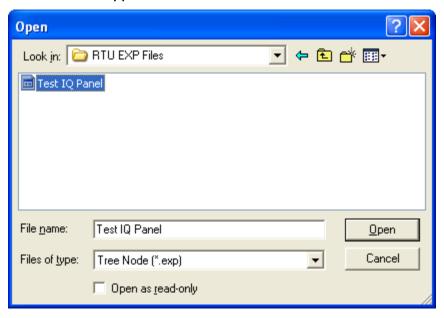
3. The RTU(s) will be added to the tree and the system level Text-To-Speech message "Node Added" will sound.

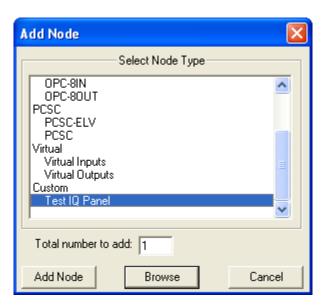
Import an RTU - Procedure

1. Expand the System Layout Node and Right-Click on an Area. Select **Add Node...** from the Shortcut Menu as shown below:



2. Select the Browse button on the Add Node dialog: A browse window will open. Browse to the appropriate location then select the RTU .exp file you wish to import and select the Open button. A new type (Custom) will be automatically added to the Add Node dialog and the imported .exp will be listed below the Custom type.





- Select the imported RTU then enter the number of panels you wish to add to the tree in the **Total number to add:** edit box. You may add multiple panels to an area.
- 4. The RTU(s) will be added to the tree and the system level Text-To-Speech message "Node Added" will sound.

IQ, Ultimate and MicroLPM Configuration

The following section describes configuration of the various elements of the non-elevator PCSC RTU.

The PCSC RTU consists of a parent (the basic panel node) and four children as follows:

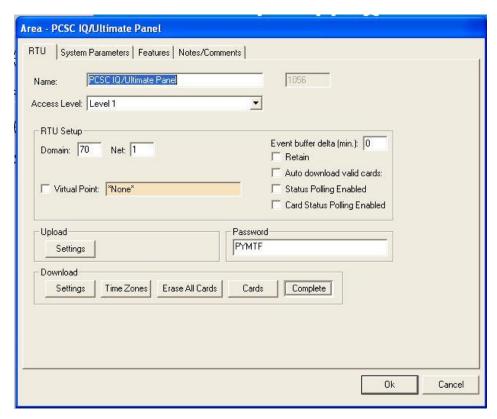
- **Inputs** a collection of all sense inputs.
- **Outputs** a collection of all control counters.
- Doors a collection of all readers.
- Alarms the collection of all alarms.

RTU Node (Parent Node)

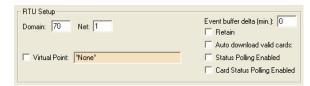
The parent (PCSC IQ/Ultimate) node is configured by **Right-Clicking** on the RTU and selecting **Properties...**

RTU Setting Tab



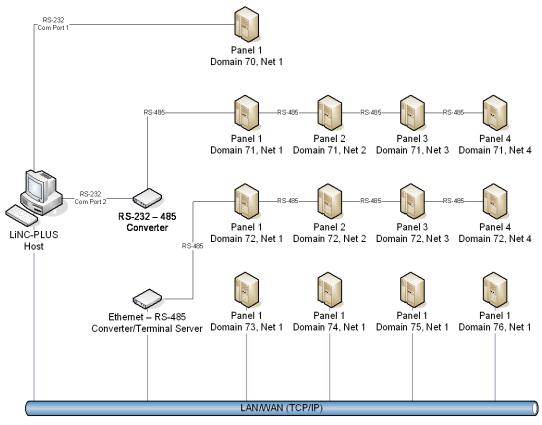


- **1. Name: -** enter a descriptive name for the panel here. Example: First Floor Mechanical Room.
- **2. Access Level –** this is the Access Level of the node object (RTU).
- **3. RTU Setup** this area is used to configure the Intelli-Site network parameters and basic functional characteristics of the node.



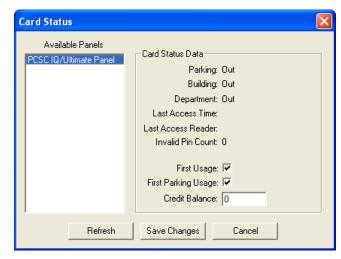
a. Domain and Net – the Domain identifies the panel chain (in an RS-232/RS-485 network) and the Net identifies the panel number. See the illustration below for various connection options and how they relate to Domain and Net settings.

Note: The Domain of an Ethernetbased (TCP/IP) panel will be unique for each panel. It is recommended that the net (and panel number) for Ethernet panels be set to 1.



- b. Event buffer delta (min): Enter a number (in minutes) that will determine if an event is outside of the buffered range for host action. For example: if this field is set to 5, any event received from the panel that has a time stamp that is 5-minutes or older (than the system time) will be logged as a "buffered" event. The host will take no action for this event.
- c. Retain Reserved has no function at this time.

- d. Auto Download valid cards: When a card is presented to a
 reader on this panel the host will
 check to see if the card is valid in
 the host database. If the card is
 valid the host will download the
 card record to the panel
 immediately.
- e. Status Polling Enabled Will enable additional polling of the panel for Door Position Switch (DPS) and Request-to-Exit (REX) point status.
- f. Card Status Polling Enabled Enables additional polling (on demand from Card Management Mode) for card status as shown below:



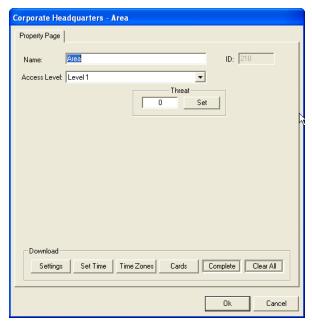
g. Virtual Point: - Check this box to "virtualize" the panel. When an RTU has been virtualized all serverto-driver services communications stop and will not be reinitiated until the RTU has been un-virtualized. Drag-and-drop a virtual I/O point into the drop field. This I/O point will be set high whenever the panel is virtualized. **4. Upload** – Allows the user to upload data from the panel. The user may upload Settings only. Card information will not be included in the collected data.

Note: Upload function is not supported on all panels (pre version 7.010 firmware). Confirm firmware version before attempting the upload.

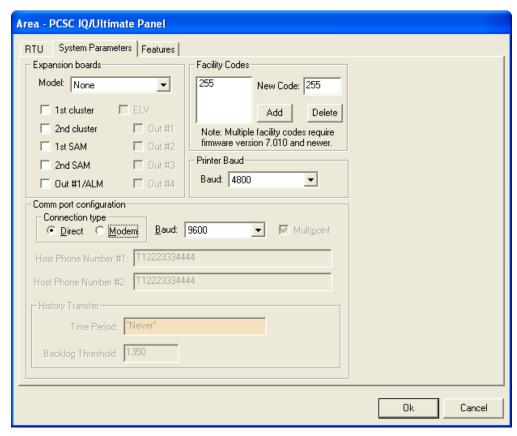
5. Password – Allows the user to set the panel password (default is PYMTF).

Note: Default password must be used for initial logon to any new panel.

6. Download – Allows the user to download data to the panel. The user may download Settings, Time Zones, Cards, or Complete (Time Zones, Cards and Settings). Downloads to multiple panels can also be accomplished from the Area property page as shown below:



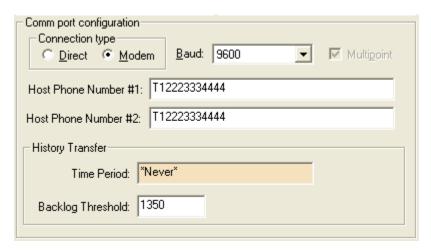
System Parameters Tab



- **1. Expansion Boards** Allows the user to select the panel model and optional expansion boards.
- **2. Facility Codes** Allows the user to add facility codes for download to the panel.

Note: Multiple facility codes are not supported on all panels (post version 7.10.00 firmware). Confirm firmware version before attempting to enter multiple facility codes.

- **3. Printer Baud** Allows the user to select the baud rate of the optional event printer (attached to the panel).
- **4. Comm port configuration** Allows the user to set communication parameters between the panel and the Intelli-Site host.

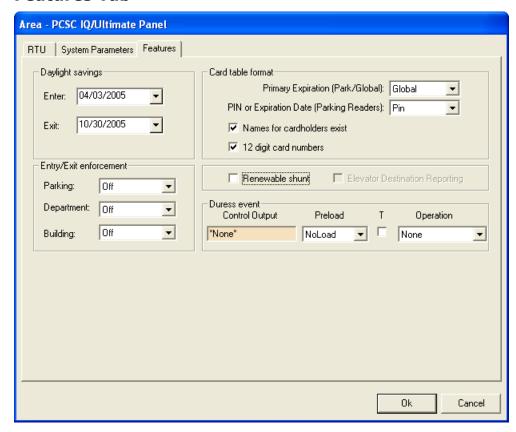


- a. Connection type Direct or Modem
- **b. Baud: -** Select the baud rate for this connection.
- c. Multipoint Reserved (Not supported at this time)
- **d. Host Phone Number #1: -** Enter the Intelli-Site host modem's primary telephone number. This is the first telephone number the panel will autodial to report events.
- e. Host Phone Number #2: Enter the Intelli-Site host modem's secondary telephone number. This is the telephone number the panel autodials to report events in case the primary number is not in service (busy, disconnected, etc.).

Note: Since it is possible to install and run the Intelli-Site Driver Services application on a separate computer from the Server it is **important** that the numbers entered in this field are the modem numbers for the modems connected to the proper computer.

f. History Transfer – Drag-and-drop a time period into the drop field to program the panel to transfer off-line history events to the Intelli-Site host. Enter a number in the Backlog Threshold field in order to program the panel to automatically dial the host with an off-line history transfer when the number of buffered events reaches the threshold regardless of the current time.

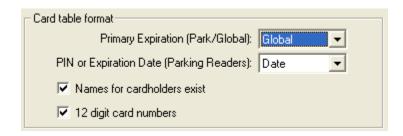
Features Tab



1. Daylight savings – Enter: Enter the date of the official start of Daylight Savings. In the US it the first Sunday in April. Enter the date that daylight savings begins in month, day, year format (e.g., 04/01/2001). Exit: Enter the date of the official end of Daylight Savings. In the US it is the last Sunday in

October. Enter the ending date in the same format (e.g. 10/04/2001).

2. Card Table Format



- a. Primary Expiration (Park/Global): If you select Global, the system automatically selects the Primary expiration date for all types of readers. You must select Global, if user-select PIN is to be used. If you select Park-Only (Secondary Expiration), each cardholder has 2 card expiration dates
- **b. PIN or Expiration Date (Parking Readers): -**, with the parking expiration date automatically set to Date. One date controls the access privilege for "parking" type readers and the other for all other types of readers. This unique function allows the system administrator to automatically deny access to cardholders at parking readers, yet allow them to pass through facility related readers.
- Names for cardholders exist –
 Cardholder names will be downloaded to the panel.
- **d. 12 digit card numbers** The panel will accept 12-digit card numbers.

3. Entry/Exit Enforcement

Each panel supports three separate entry/exit enforcement levels: **Strict**, **Lenient**, and **Soft**. Each enforcement level can be individually assigned to **Parking**, **Building**, or **Department** readers, but is enforced (under normal circumstances) when the Entry function and the corresponding Exit function readers are on the same panel. In order to broaden the use of Entry/Exit enforcement, an administrator can use **Global Anti-Passback**. For more information, see the **Intelli-Site Reference Guide**.

NOTE Entry/Exit enforcement cannot be done (at any of the 3 levels) if the entry readers are on one panel and the corresponding exit readers are on a different panel.

NOTE These panel firmware versions require the door to be opened before changing the card status. Repeated accesses will be granted (regardless of the anti-passback level of enforcement) if the door is not opened:

Standard MicroLPM- Version 1.9.7 and above

Plus 2 MicroLPM- Version 3.9.7 and above

Plus 4 MicroLPM- Version 7.9.7

NOTE All IQ and SIM panels require that the door be opened prior to updating the card status.

Strict Entry/Exit

The cardholder's entry/exit status must be synchronized with the system, otherwise an

entry/exit error will be announced. In other words, the cardholder must have the proper status (building, department, or parking) before he uses an entry/exit reader. The card status must be as follows:

If the cardholder's Building Status is **IN** then Department Status can be **IN** or **OUT**. If the cardholder's Building Status is **OUT**, the Department Status must be **OUT**. If the cardholder's Department Status is **IN** then Building Status must be **IN**.

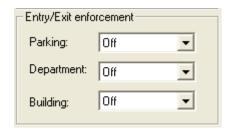
If the cardholder's status does not comply with the reader's entry/exit definition, then the system will deny access. In other words, when a cardholder attempts to enter a building **IN** reader, the cardholder's building and department status must be **OUT**.

Lenient Entry/Exit

This level is the same as **Strict** except on the first use of the card, in which case the system will automatically reset the building and department status to proper synchronization. The cardholder's second attempt at the reader will then grant him access.

Soft Entry/Exit

This level follows the same rules as **Strict** except that an error transaction is recorded, all status levels are synchronized, and access is **GRANTED**.



a. Parking: - May be set to Off, Lenient,Soft or Strict.

- **b. Department**: May be set to **Off**, **Lenient**, **Soft** or **Strict**.
- **c. Building:** May be set to Off, Lenient, Soft or Strict.
- **4. Renewable Shunt: -** The Renewable Shunt renews the access time if a second card swipe occurs before the previous completed transaction. The access time must be set equal to, or longer, than the shunt time. (See Reader Configuration).
- **5. Duress Event -** A control counter can be activated when a duress code is entered by the cardholder. Once a sense input has been selected, an output must be assigned for an alarm.



- **a. Control Output -** Drag-and-drop a Control Counter (CC) that will enable an output for duress into the drop field (CC1-CC40).
- **b. Preload** Select the Preload action from the following options:

NoLoad - No preload action (CC value is unchanged)

LoadZero - Load CC with zero

LoadLow - Load CC with low threshold value

LoadHigh - Load CC with high threshold value

LoadMax - Load CC with maximum value

AddPreset - Add preset value to CC

FlipOutput - Load CC with zero or high threshold to flip output

C. T - Overrides any other CC action and gives priority to the time period's control operations. To do so, you must define whether or not time period has priority.

NOTE Duress can only be initiated from a card reader WITH PIN pad, NOT from a PIN pad only terminal.

d. Operation – Select the operation to be performed on the control counter from the following list:

None - No Operation

Decrement - Decrement CC

DecrementSec - Start auto-decrement on second **DecrementMin -** Start auto-decrement on minute

Clear - Clear auto increment/decrement

Increment - Increment CC

IncrementSec - Start auto-increment on second **IncrementMin -** Start auto-increment on minute

OverrideTp - Override time period control

TpSuspend - Suspend time period control (one ON cycle) restore)

TpResume - Resume time period control

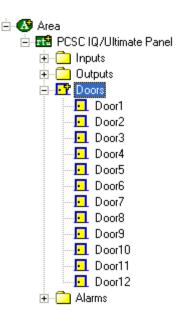
Note: The duress code is the Normal PIN code, except that the first and second digits are incremented by one. If the first or second Regular PIN digit is 9, the duress code digit is calculated as a 0.

Example of Duress PIN code Assignment:

Regular	DURESS
3129	4229
1999	2099

Do NOT assign user-defined PIN codes 0000, 0911 and 9811, as they are reserved by the system.

NOTE User-defined pin codes are programmed in Card Management Mode.



Doors (Readers)

A Door (Reader) node is configured by expanding the **Doors** folder then **Right-Clicking** on the Door and selecting **Properties...**

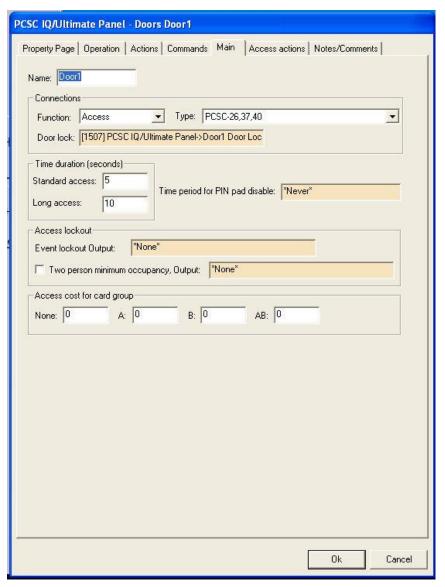
Rename Door (Properties Tab)

When a Door node name is changed a rename dialog function appears. The rename function automatically changes the names of all reader-associated inputs, outputs and alarms if accepted by the user.



Main Tab

The main tab allows the user to modify readerrelated properties such as: Name (panelstored), Connections parameters, Time Duration parameters, Access Lockout parameters and Access cost parameters.



- **1. Name: -** enter the reader name here. This name may, or may not, match the name entered on the 1st properties tab.
- **2. Connections** this area allows the user to set reader function, reader type and assign door lock output point.



a. Function – select the reader function from the following list:

Reader Function Options

Access IN only BldgIn

Building IN only

AccessOut Access OUT only BldgOut Building OUT

only

Access Standard Access BldgInOut

Building IN and OUT

ParkIn Parking IN Only DeptIn

Department IN only

ParkOut Parking OUT Only DeptOut Department OUT

only

ParkInOut Parking IN and OUT DeptInOut Department IN and

OUT

Elevator Elevator Access

b. Type – Type refers to the card data format that will be accepted by the reader. Only one format per reader is available. Select the card data format that will be accepted by the reader from the following list:

Reader Type Options

PIN_PAD BP250 or BP270

ProTech (Hughes ID) BR350, BR370, VR670 (40-bit), PCSC

Protech, All Hughes ID Proximity readers

(except 26-bit cards)

ProTech (I) PCSC ProTech Insert readers: BR371,

BR351, and BR352

ProTech/PIN_PAD ProTech readers with PIN_Pad (swipe

readers)

ProTech/PIN_PAD (I) ProTech Insert readers with

PIN Pad

MagStripe BR450, BR470

MagStripe (I) BR451, BR452, BR47

Magstripe/PIN_PAD BR450/BP250, BR470/BR270
Magstripe/PIN_PAD (I) BR450/BP250, BR450/BP250
Watermark Any Watermark card with the 12-digit

format

Watermark (I) Custom Watermark card Watermark/PIN_PAD Custom Watermark card

Watermark/PIN_PAD (I) Custom Watermark card

PCSC Wiegand 34-bit PCSC Wiegand format. All

Sensor Proximity

readers

Wiegand/PIN_PAD 34-bit PCSC Wiegand format with BP270

PIN PAD

Indala All Indala readers (32-bit)
Indala/PIN_PAD All Indala readers w/PIN Pad

12-DigitNO Site code; Magnetic stripe,

BR450, BR470

12-Digit (I) 12-Digit/PIN_PAD 12-Digit/PIN_PAD (I) BR451, BR452, BR470, BR471
BR470/BR270, BR450/BP250
BR451/BP270, BR471/BP270,
BR452/BP250, BR472,/BP270

Sensor-26 Standard Sensor 26-bit format, VR670 26-

bit, HID 26-bit, BR700 BARCODE

Sensor-26/PIN_PAD BR200/BP270, BR202,/BP270, PRK234,

PR235/BP270, PR232/BP270,

PR234/BP270

Sensor-34 Standard Sensor 34-bit format, BR200, BR202

Sensor-34/PIN_PAD BR-200/BP270, BR202/BP270

Proprietary

Special/PIN_PAD Proprietary

PCSC-26, 37, 40 37-bit format (PCSC), Sensor 26, PCSC 40-bit Protech (HID Prox Reader)

PCSC-26, 37, 40/PIN_PAD PCSC 37-bit Prox/BP270, Protech

40-bit/BR270 (HID Prox Reader)
Fortune 500 format, PR732, PR733.

Corp-1000 Fortune 500 format, PR732, PR733,

PR735, PR736

Corp-1000/PIN_PAD Fortune 500 format w/PIN Pad, HID Prox

Reader/BP270

Motorola-32 Corporate Secure format, Motorola Prox

Readers

Special

Motorola-32/PIN_PAD Corporate Secure format w/PIN

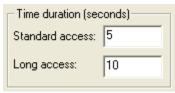
Pad, Motorola Prox

Readers w/Bulletin PIN_PAD

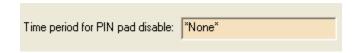
NOTE A letter or additional reference description that describes the reader type can follow the card technology: PIN-PAD indicates a PIN Pad with reader. (I) indicates Insert Reader. Not all reader/card interfaces are current. Check card data sheet for compatibility options

- c. Door Lock Drag-and-drop field identifies the assigned door lock output (CC) point.
- 3. **Time Duration** This area allows the user to set time durations for standard access and long access. Time duration is the length of time that the door lock is to be energized. The actual length of time is 1/2 second less than

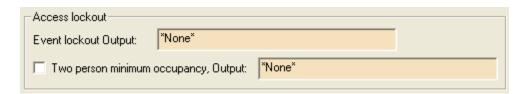
the number of seconds specified. For example, access time value of 1 denotes 1/2 second of access and time value of 5 denotes 4 1/2 seconds. Value of 1 is generally used for turnstiles.



- **a. Standard Access** is the normal door lock energize time. Select an access time from 1-253 seconds (2-253 seconds for elevator readers).
- **b. Long Access** is the door lock energize time for cardholders that require a longer access time (i.e. an individual with a disability). Select an access time from 2-254 seconds (3-254 seconds for elevator readers).
- 4. Time Period for PIN Pad Disable The PIN Pad may be automatically disabled during these periods by defining the Time Period to disable the use of the PIN Pad. The user will only be required to use the card reader during this time period. To select the Time Period for PIN Pad disable, Drag-and-Drop the desired Time Zone (from the Access Control node) into the drop field.



 Access Lockout – This area allows the user to set lockout parameters for Event Lockout and Two-Person-Minimum-Occupancy Rule (TPMOR).



a. Event Lockout - Event Lockout is a feature that automatically denies access upon an event condition. If **Event**

Lockout is in effect, a cardholder that normally would be able to gain access is denied. A reader can be set into Event Lockout automatically through a card access, sense input, or by time of day. These conditions adjust the Event Lockout counter value and when the value is equal to or greater than the High Threshold, the reader is in Event Lockout. Drag-and-drop an output into this drop field. This output, however it is set to its high threshold, will initiate the Event Lockout condition.

NOTE: Event Lockout only affects readers. Egress operations are not defeated during an event lockout condition

b. Two person minimum occupancy, Output: - The panel can restrict access to a secured area by monitoring the number of people within that area. If no one is in the monitored area, the twoperson minimum occupancy rule (TPMOR) feature requires two valid cardholders in order to gain access to that area.

Once the area has the required two people, other valid cardholders will gain access without the need to enter or exit in pairs.

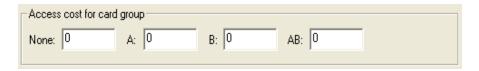
The last two people are also required to exit together. This feature requires an **IN** and an **OUT** reader. When no one is in the area, and the first card is presented, the card reader LED will flash red/green for up to 6 seconds. During this time, the second card must be presented for **TPMOR** processing to be lifted.

The user must check the **TPMOR** box and assign a **TPMOR** output to the drop field by **Drag-and Drop**. This option is used to count the number of people or cars within a room, area, or parking lot. If **TPMOR** is selected, the control counter number must be entered. When using the **Room Occupancy** counter, be sure to have at least one reader counting entries and another counting exits. This control counter should **NOT** be used for any other functions.

Note: Outputs used by the TPMOR system must be configured with Low $= \emptyset$ and High = 2.

6. Access Cost for Card Group – This feature debits units from a cardholder's record. Debit can be determined by a reader and by a card group. Enter the number of units (0-999) to debit for each card group at this reader. Depending upon the number of credits issued to a card group; the Access cost for a card group will be subtracted from that balance. The system will subtract the value that was assigned for the card group as access cost for every valid transaction at a specified reader or readers (only designated readers) debits the card (account) status. The Card Status dialog in Card Management Mode is used to

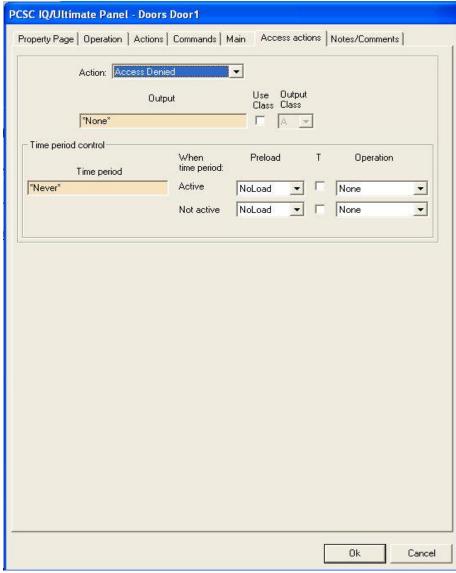
allocate credits to a card account on a panelby-panel basis.



Note: Card Status Polling must be enabled on the RTU node.

Access Actions Tab

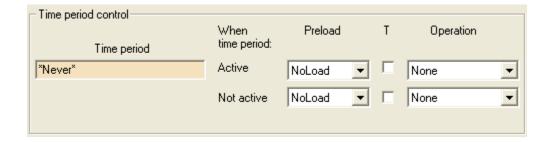
Intelli-Site provides output control via a card access or denial. Up to four outputs (control counters) may be operated by a card transaction: three for Access Granted and one for Access Denied. Card Group assignments (this is done in Card Management Mode) determines the action performed when the card transaction takes place. For each possible card group, control may be determined by whether the card transaction occurs during an active or inactive time period schedule. The output operation is determined by the card being authorized (access granted) or unauthorized (access denied) when presented to the reader. In the case of Access Granted actions the card group (A, B, All, or Escorted) will determine the output that is affected. In the case of Access Denied actions all Card Groups are affected.



- 7. Action: allows the user to select the Access Action from a combo box:
 - a. Access Granted 1st Action
 - b. Access Granted 2nd Action
 - c. Access Granted 3rd Action
 - d. Access Denied
- 8. Card Group allows the user to select which Card Groups are to be affected by the Access Action selected from the Access Action combo box:
 - a. All
 - b. A
 - c. B
 - d. Escorted (Visitor cards)

Note: Access Denied Access Actions apply to all Card Groups.

- **9. Output: Drag-and-drop** an output (control counter) into this drop field. A different output can be assigned to each **Access Action**.
- Use Class: if selected this will set all outputs of a certain class for this Access Action.
- 11. Output Class: allows the user to select the output class (in conjunction with the Use Class: checkbox) to set for this Access Action. The user may select A, B, C, D or Hclass control counters.
- **12. Time Period Control** The user must assign a valid time zone for **Access Actions** to take effect.



- a. Time Period Drag-and-drop a TimeZone into the drop field.
- b. When time period: select the control counter activities associated with Active and Not Active time period (Time Zone).
- **c. Preload** Select the Preload action from the following options:

NoLoad - No preload action (CC value is unchanged)

LoadZero - Load CC with zero

LoadLow - Load CC with low threshold value

LoadHigh - Load CC with high threshold value

LoadMax - Load CC with maximum value

AddPreset - Add preset value to CC
FlipOutput - Load CC with zero or high threshold to flip output

- **d. T O**verrides any other CC action and gives priority to the time period's control operations. To do so, you must define whether or not time period has priority.
- **e. Operation** Select the operation to be performed on the control counter from the following list:

None - No Operation

Decrement - Decrement CC

DecrementSec - Start auto-decrement on second

DecrementMin - Start auto-decrement on minute

Clear - Clear auto increment/decrement

Increment - Increment CC

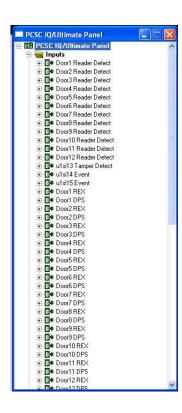
IncrementSec - Start auto-increment on second

IncrementMin - Start auto-increment on minute

OverrideTp - Override time period control

TpSuspend - Suspend time period control (one ON cycle) restore)

TpResume - Resume time period control

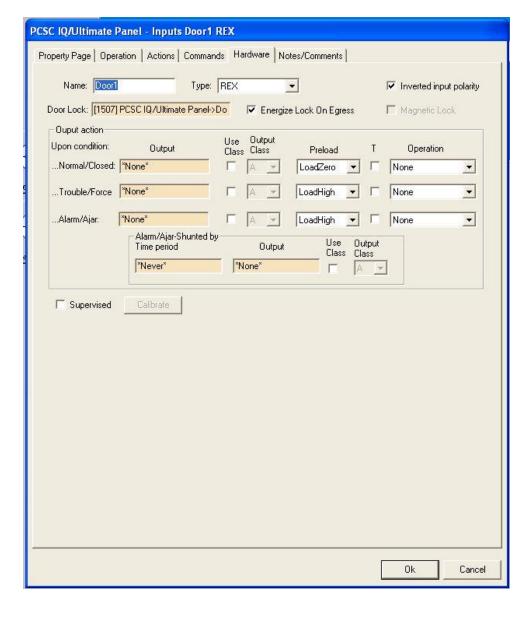


Inputs

An Input node is configured by expanding the **Inputs** folder then **Right-Clicking** on the Input and selecting **Properties...**

Hardware Tab

The hardware tab allows the user to modify reader-related properties such as: Name (panel-stored), Polarity parameters, Door lock associations (if applicable), Output action parameters and Supervision parameters (if applicable).



- 1. Name: enter the input name here. This name may, or may not, match the name entered on the 1st properties tab.
- 2. Type this area allows the user to select input type from a combo box. Types available and their purposes are:

Sense reader detect points for Doors (Readers) 1 **Inputs 1-12** - 12

Sense Input

39

Tamper Detect for the panel **13** other purposes

(In the IQ series panel, Sense Input 14 is Sense Inputs 14 and 15

used as an alarm point).

(default) Request-to-exit (REX) and door position switch (DPS) for Doors (Readers) Sense Inputs 16-

1-12

Sense Inputs 40-71

other purposes

-Not in Use Not being used

Door position switch -DPS

(associated with a Door

[Reader])

Request-to-exit switch -REX

(associated with a Door

[Reader])

-Alarm Used to generate alarms

Egress Sense -Events

-Input Switch Used when counting or using

the input to trigger outputs without generating an alarm or real time transaction.

-Elevator Control The card will be able to access floors defined by the floor groups during the

corresponding Time Periods.

Enter the time period (0-999) which will enable the cardholder to access the corresponding floor group.

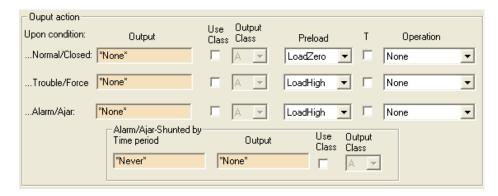
NOTE: In the elevator series panels, sense inputs 72-119 are setup as Button Sense Inputs.

- **3. Inverted input polarity** allows the user to switch from normally open (N.O.) to normally closed (N.C.) sense
- 4. Door Lock When the Type is set to DPS or REX, the user may Drag-and-Drop a door lock output into this drop field.

Note: Door Lock outputs are assigned to these points by default if the Type is set to DPS or REX. If the user deletes the Door Lock point in this field, the Type automatically reverts to Not In Use. Deleting the Door Lock point also removes the input's association to any Door (Reader).

- 5. Energize Lock On Egress This checkbox is only available if the Type is set to REX. If checked, the REX will energize the Door Lock (for the long access duration as configured in the Door properties) when active.
- 6. Magnetic Lock This checkbox is only available if the Type is set to DPS. If checked, the lock point will remain deenergized for a short time-delay when the door is sensed open following a card read. This prevents the door from immediately relocking when magnetic locks are used.
- 7. Output Action allows the user to define control counter actions to be initiated upon up to three sense input conditions. The user may either Drag-and-Drop an output (control

counter) into the drop field(s), or (by checking **Use Class**), activate all outputs of a particular class for each of three sense input conditions:



...Normal/Closed

If defined as a dry contact alarm point, supervisory alarm point, or event. Control counter action will be performed upon going into normal status after an alarm condition. If defined as a door sense, control counter action will be executed upon detecting a door closure after a door alarm.

...Alarm/Ajar

If defined as an alarm point, event, or egress, the control counter action will be performed upon an alarm. If defined as a door sense, control counter action will be performed when the door is left open longer than shunt time. This action may be itself be shunted by either an active time period (Time Zone) or by another active output (control counter).

...Trouble/Forced

If defined as a supervisory alarm, the control counter action will be performed upon detecting a short or open circuit trouble. If defined as a door sense, the control counter action will be performed upon an illegal entry through a doorway without first using an exit

button or a card reader (Door forced open).

a. Preload – Select the Preload action from the following options:

NoLoad - No preload action (CC value is unchanged)

LoadZero - Load CC with zero

LoadLow - Load CC with low threshold value

LoadHigh - Load CC with high threshold value

LoadMax - Load CC with maximum value

AddPreset - Add preset value to CC

FlipOutput - Load CC with zero or high threshold to flip output

- **b. T O**verrides any other CC action and gives priority to the time period's control operations. To do so, you must define whether or not time period has priority.
- **c. Operation –** Select the operation to be performed on the control counter from the following list:

None - No Operation

Decrement - Decrement CC

DecrementSec - Start auto-decrement on second

DecrementMin - Start auto-decrement on minute

Clear - Clear auto increment/decrement

Increment - Increment CC

IncrementSec - Start auto-increment on second

IncrementMin - Start auto-increment on minute

OverrideTp - Override time period control

TpSuspend - Suspend time period control (one ON cycle) restore)

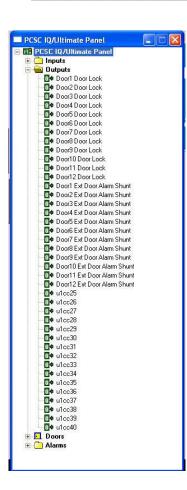
TpResume - Resume time period control

d. Alarm/Ajar Shunted by: - allows the user to assign either a time period (Time Zone) or another output (control counter) or output class to shunt the output action.



- **8. Supervised** allows the user to select whether the Input is supervised or not.
- **9. Calibrate** if an Input is supervised this button allows the user to perform calibration. Panel settings must first be downloaded in order to perform calibration.



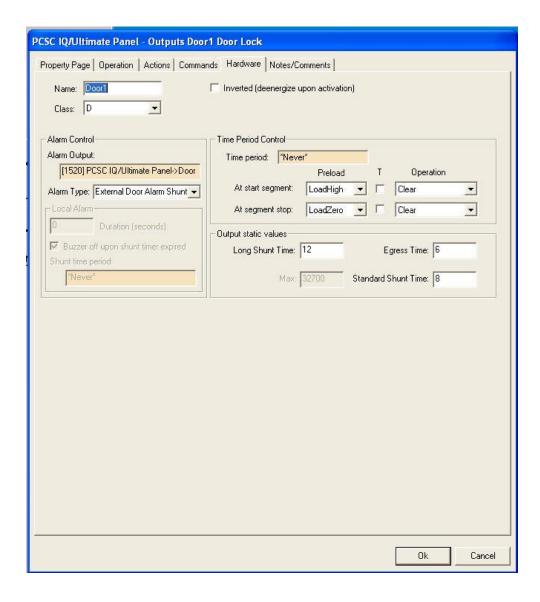


Outputs

An Output node is configured by expanding the **Outputs** folder then **Right-Clicking** on the Output and selecting **Properties...**

Hardware Tab

The hardware tab allows the user to modify reader-related properties such as: Name (panel-stored), Polarity parameters, Class, Alarm Control action parameters, Time Period Control parameters and Output static values.



- 1. **Name:** enter the input name here. This name may, or may not, match the name entered on the 1st properties tab.
- Inverted (de-energize upon activation) select this checkbox if you want the output (control counter) to set off upon activation.
- 3. Class allows the user to select the output (control counter) class from a list.

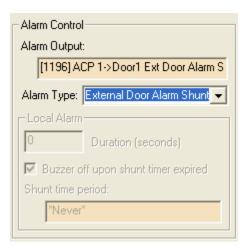
Control counters can be classified A through E. Class D and E are defined for lock and external door shunt, respectively. Counters are programmed as Class D and E from within the Door Overview hardware screen, Door Lock Alarm Control output fields and CLASSES A through C is respectively. user-assigned. They permit a single occurrence (sense-input violation or time period control) to actuate more than one counter at a time. Assign from the following options:

For Non-Door Outputs For Door Outputs

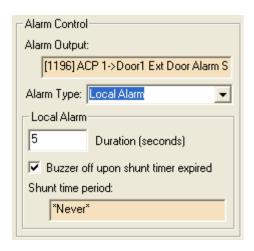
None	D
Α	AD
В	BD
AB	ABD
C	CD
AC	ACD
BC	BCD
ABC	ABCD

Note: Outputs 1 through 12 are assigned, by default, as Door Locks 1 through 12. Outputs 13 through 24 are assigned, by default, as External Door Alarm Shunts 1 through 12. These may be re-assigned by the user: however, Outputs 1 through 12 may only be classed as shown (above) for Door Outputs.

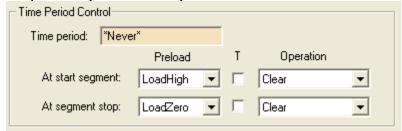
- 4. Alarm Control allows the user to assign an Output as an External Door Alarm Shunt or a Local Alarm. Local Alarm time duration and other parameters are set here as well.
 - a. External Door Alarm Shunt point will go active whenever the Door Lock point is energized and will stay active for the duration of the access time as configured for the Door (reader).



b. Local Alarm – point will go high during door ajar (at the expiration of shunt time). Local alarm timer determines the duration of the alarm. Shunt time period is a time period (Time Zone) during which the local alarm will be shunted.



5. **Time Period Control** – allows the user to set up parameters that govern output point activation as it may relate to a given time period (Time Zone).



- a. Time Period Drag-and-drop a time period (Time Zone) into the drop field to determine when the Output will be energized.
- b. At start/stop segment: these fields are used to determine the behavior of the Output.
 - i. Preload Select the Preload action from the following options:

NoLoad - No preload action (CC value is unchanged)

LoadZero - Load CC with zero

LoadLow - Load CC with low threshold value

LoadHigh - Load CC with high threshold value

LoadMax - Load CC with maximum value

AddPreset - Add preset value to CC

FlipOutput - Load CC with zero or high threshold to flip output

- **ii. T O**verrides any other CC action and gives priority to the time period's control operations. To do so, you must define whether or not time period has priority.
- **iii. Operation** Select the operation to be performed on the control counter from the following list:

None - No Operation

Decrement - Decrement CC

DecrementSec - Start auto-decrement on second

DecrementMin - Start auto-decrement on minute

Clear - Clear auto increment/decrement

Increment - Increment CC

IncrementSec - Start auto-increment on second

IncrementMin - Start auto-increment on minute

OverrideTp - Override time period control

TpSuspend - Suspend time period control (one ON cycle) restore)

TpResume - Resume time period control

- 6. Output Static Values The configuration parameters available to the user in this are vary depending on whether the Output is a Door Lock or not:
- a. Door Lock Output Static Values



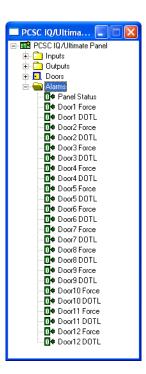
- i. Long Shunt Time: The length of time to disable the door status when a cardholder with the Long Access feature presents a card is the long shunt time. The default time is 12 seconds. Enter a different amount of time if necessary.
- **ii. Egress Time:** (Request to Exit) time has a range of 1-253 seconds. Enter the time length desired

- **iii. Max:** For display only user cannot change.
- iv. Standard Shunt Time: The length of time to disable the door status alarm during normal egress is the standard shunt time. The default time is 8 seconds. Enter a different amount of time if necessary. Shunt time is always at least 1 second longer than the corresponding access time.

b. Non-Door Output Static Values



- **i. Low: -** sets the low threshold of the control counter (default is 12).
- **ii. High: -** sets the high threshold of the control counter (default is 18).
- **iii. Max:** sets the maximum value of the control counter (default is 32700).
- **iv. Preset:** sets the preset value of the control counter (default is 8).



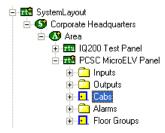
Alarms

An Alarm node is configured by expanding the **Alarms** folder then **Right-Clicking** on the Output and selecting **Properties...**. Alarms do not have PCSC-specific properties pages. For property page configuration, refer to the Intelli-Site Reference Guide Section 2.

Alarm Types

There are three alarm types:

- Panel Status The Panel Status point is high when the panel is online with the Intelli-Site host.
- 2. Force Door Force alarms occur when a door has been opened without an authorizing card action or request-to-exit (REX).
- 3. DOTL Door Open Too Long (DOTL) alarms occur when a door has been left open after an authorizing card action or request-to-exit (REX), in excess of the door's configured access time duration.



ELV Panel Configuration

The following section describes configuration of the various elements of the Elevator PCSC RTU.

Elevator control is defined as restricting access to specific floors in a building. The typical floor select panel interfaces to the elevator panel through a common ground system. Each push-button has a wire connected to the panel that carries the signal alerting the panel which floor was selected. The purpose of the ELV is to interrupt the signal from the push-button and the panel. When an authorized cardholder uses the system, the ELV allows the signal from the push-button to be received by the panel. The ELV restricts access by limiting a cardholder's choice of floors in the elevator cab. The ELV is placed between the floor selection panel (push-button) in the elevator cab and the elevator panel. The ELV allows the elevator panel to receive only those floor selections from the floor selection panel which the cardholder is authorized to access.

Typical operation of an ELV system is as follows:

- 1. The cardholder swipes/presents a card to the system via a card reader (and/or PIN Pad).
- 2. The system determines which floors that the cardholder can access.
- 3. If the cardholder is authorized, the ELV allows the signals from the push-button to be processed.
- 4. The cardholder then selects the floor.
- 5. The elevator panel receives the message, controlling the cab to the desired (and authorized) floor.

NOTE The cardholder is responsible for selecting only one floor. In addition, the panel can only monitor which floors a cardholder may select. It is not able to determine what floor was

selected. Single floor latching with destination reporting is under development. This will prohibit multiple floors from being selected by a single card presentation.

An ELV system will activate all associated relays on command from the Intelli-Site host computer. A predefined access time may be specified with a command. Relays are automatically deactivated after the access time has elapsed.

The ELV operates in a fail-safe mode. The "secure" state of the relay is energized. If the ELV malfunctions or loses power, the relays de-energize and control is reverted to the push-button panel.

The PCSC-ELV RTU consists of a parent (the basic panel node) and five children as follows:

- **Inputs** a collection of all sense inputs.
- **Outputs** a collection of all control counters.
- Cabs a collection of all Cabs (in-carreaders).
- **Alarms** the collection of all alarms.
- **Floor Groups** the collection of all floor group relays.

RTU Node (Parent Node)

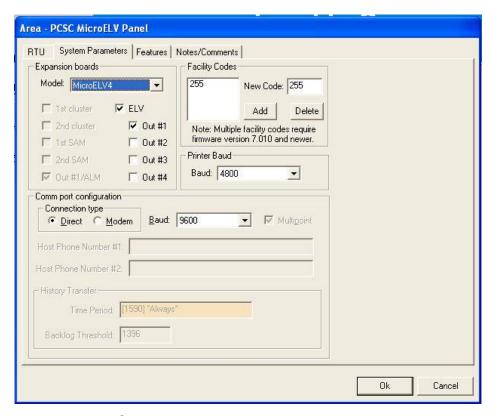
The parent (PCSC MicroELV Panel) node is configured by **Right-Clicking** on the RTU and selecting **Properties...**

RTU Tab

Configuration of this tab is identical to that of the non-elevator panel.

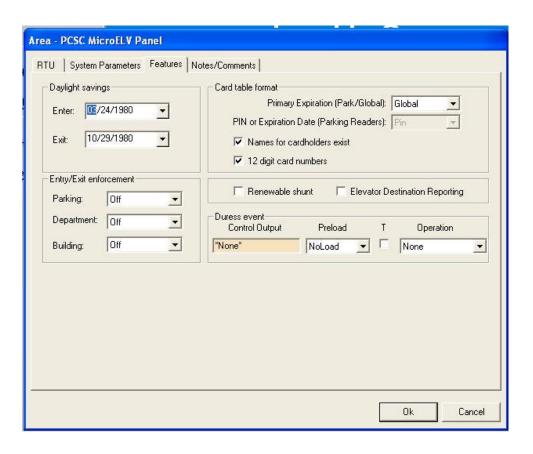
System Parameters Tab

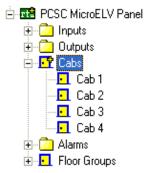
Configuration of this tab is identical to that of the non-elevator panel. The ELV expansion board selections will be available for configuration.



Features Tab

Configuration of this tab is similar to that of the non-elevator panel. The only exception is that **Elevator Destination Reporting** may be selected.





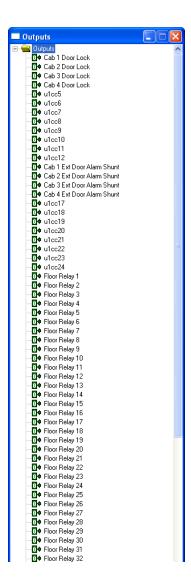
Cabs (Readers)

A Cab (Reader) node is configured by expanding the **Cabs** folder then **Right-Clicking** on the Cab and selecting **Properties...**

Cab configuration is identical to the configuration of a non-elevator-type **Door** node. The ELV-type panel supports a maximum of four (4) elevator cabs.

The reader type: **Elevator** must be selected on the Main Tab. This is the default selection when an ELV-type panel is added to the tree.





Outputs

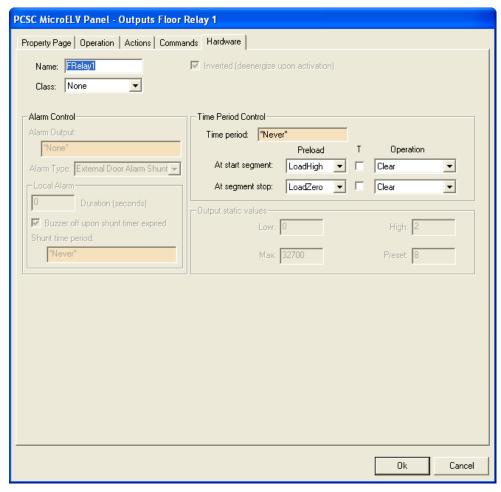
An Output node is configured by expanding the **Outputs** folder then **Right-Clicking** on the Input and selecting **Properties...**

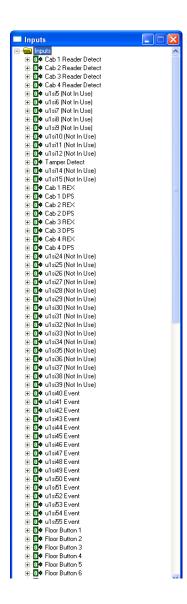
Output configuration is identical to nonelevator Outputs configuration with the exception of the **Floor Relays**.

Hardware Tab

The **Floor Relay** hardware tab differs from other outputs as shown below.

NOTE When using Elevator Control, the Low counter value is always set to 0 and the High counter is always set to 2. These values cannot be modified in an elevator panel





Inputs

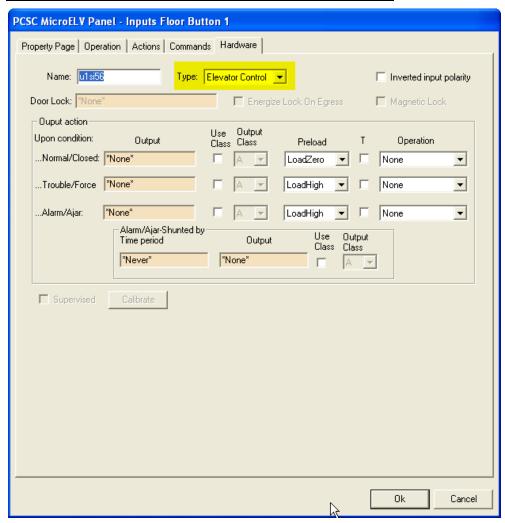
An Input node is configured by expanding the **Inputs** folder then **Right-Clicking** on the Input and selecting **Properties...**

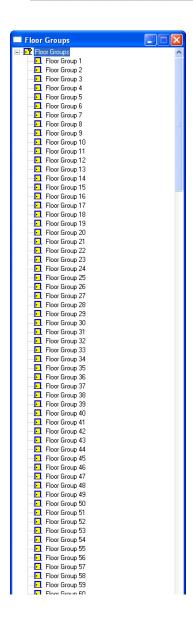
Input configuration is identical to non-elevator Inputs configuration with the exception of the **Floor Buttons** (beginning with sense input 56).

Hardware Tab

The **Floor Button** hardware tab differs from other inputs in that the type must be set to **Elevator Control**.

Note: Floor Buttons 19 and above are not configurable.



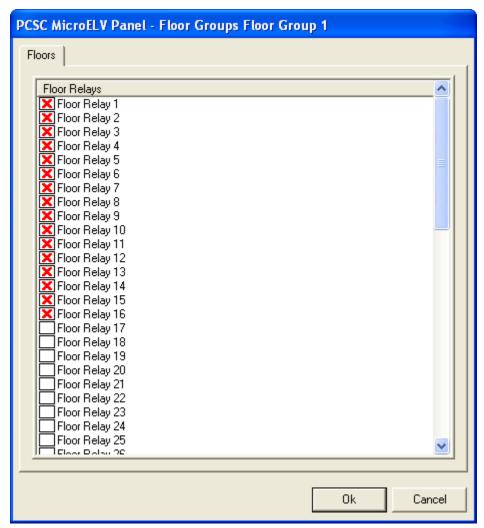


Floor Groups

A Floor Group node is configured by expanding the **Floor Groups** folder then **Right-Clicking** on the Floor Group and selecting **Properties...**

Floors Tab

Select the Floor Relays assigned to the **Floor Group**. This controls the destination of an elevator cab based on a card's authorization attributes. When a card is swiped at a reader inside a cab, the time period/floor group pairs assigned to the card are evaluated to determine which relays the card can activate at the current time. Of those relays, the ones that are assigned to the reader engage the floor buttons from which the cardholder can make a selection.



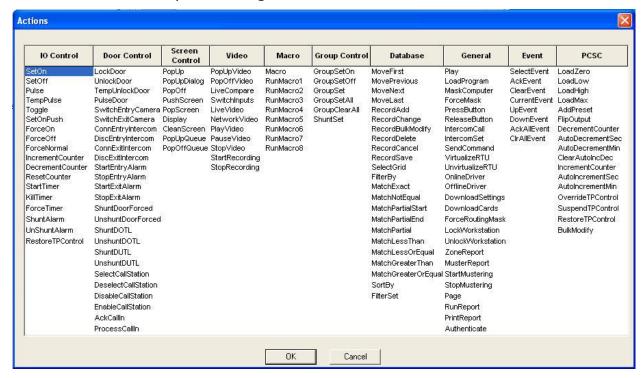
PCSC RTU Guide Ver 3.x

Section 3 - Action PopUp Grid

This section describes the following **Design Mode** RTU specific software support functions in Intelli-Site.

The Action Popup Grid is a list of available actions that can be performed by Intelli-Site. Actions are triggered either through screen object control when operating in Run Mode or when the state of I/O Points change. The actions performed on any given event are completely customizable, though the focus of this discussion is the Actions themselves.

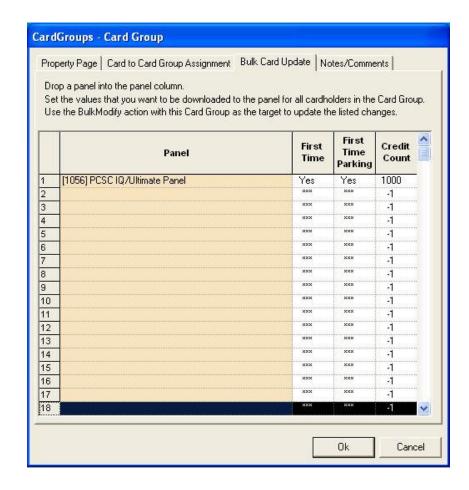
Many actions require a target, though some do not. Each action as defined below will identify expected targets.



- **LoadZero** loads the Control Counter (cc output) to 0. The target of this action must be a Control Counter (output).
- LoadLow loads the Control Counter (cc output) to its low threshold value. The target of this action must be a Control Counter (output).

- **LoadHigh** loads the Control Counter (cc output) to its high threshold value (default is 18). The target of this action must be a Control Counter (output).
- **LoadMax** loads the Control Counter (cc output) to it maximum value (default is 32700). The target of this action must be a Control Counter (output).
- AddPreset loads the Control Counter (cc output) with its preset value (default is 8).
 The target of this action must be a Control Counter (output).
- **FlipOutput** high or max-loaded Control Counters (cc outputs) will flip to low threshold value. Low-loaded Control Counters will flip to high threshold values. The target of this action must be a Control Counter (output).
- DecrementCounter decrements a Control Counter (cc output) with any value other than 0 by a step value of 1 for each instance of this action. The target of this action must be a Control Counter (output).
- AutoDecrementSec automatically decrements a Control Counter (cc output) with any value other than 0 by a step value of 1 (per second) until the Control Counter value reaches 0 or until cleared by a ClearAutoIncDec action. The target of this action must be a Control Counter (output).
- AutoDecrementMin automatically decrements a Control Counter (cc output) with any value other than 0 by a step value of 1 (per minute) until the Control Counter value reaches 0 or until cleared by a ClearAutoIncDec action. The target of this action must be a Control Counter (output).
- ClearAutoIncDec stops an AutoIncrementSec/Min or AutoDecrementSec/Min action. The target of this action must be a Control Counter (output).

- **IncrementCounter** increments a Control Counter (cc output) with any value other than max (default is 32700) by a step value of 1 for each instance of this action. The target of this action must be a Control Counter (output).
- AutoIncrementSec automatically increments a Control Counter (cc output) by a step value of 1 (per second) until the Control Counter value reaches either: max (default is 32700) or high threshold (default is 18), or until cleared by a ClearAutoIncDec action. The target of this action must be a Control Counter (output).
- AutoIncrementMin automatically increments a Control Counter (cc output) by a step value of 1 (per minute) until the Control Counter value reaches either: max (default is 32700) or high threshold (default is 18), or until cleared by a ClearAutoIncDec action. The target of this action must be a Control Counter (output).
- **OverrideTPControl** overrides any actions to be executed based upon a time period control (for one cycle). The target of this action must be a Control Counter (output).
- SuspendTPControl cancels any actions to be executed based upon a time period control until restored by a RestoreTPControl action. The target of this action must be a Control Counter (output).
- **BulkModify** downloads parking account information for cardholders defined in the targeted CardGroup.



NOTE: The targeted panel needs to be both online and set up for 'Card Status Polling Enabled for BulkModify to function correctly.