



Remote Power Management & Monitoring System



MODEL: 1RU8126MS

USER MANUAL



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Read this manual before using this product. Failure to follow the instructions and safety precautions in this manual can result in serious injury.

Keep this manual in a safe location for future reference.

For other ITS Commander™ products, previous firmware versions and updates please go to our webpage at <http://www.ITSCOMMANDER.com>

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Table of Contents

1. Introduction	4
Package	4
Safety	5
Certifications.....	6
2. General Information	
Specifications	7
Features	8
3. Installation	
Mounting	9
Installation	10
Set Up	11
4. User Interface Tabs	
Summary	18
Names and Notifications.....	19
Scheduler	19
Live Log	25
Configuration	26
Configuration File.....	26
Security	27
Firmware.....	27
5. Technical Assistance	28
6. Warranty	29



Introduction

The ITS Commander™ is designed to improve system reliability and lower the cost of ownership through reduced maintenance costs. The system benefits both the owning agency and maintaining agency by promptly sending signals of an abnormal situation, allowing routine monitoring of critical equipment, and providing the capability to remotely control outlets to reboot equipment. These features can reduce unnecessary trips to inspect or service the cabinet thereby saving money.

Southern Manufacturing's ITS Commander™ may be integrated with ITS enclosures from the factory. Power panel and factory installed equipment are pre-wired and connected.

Package

The contents of your package are:

- (1) ITS Commander™ Unit
- (2) Adjustable rack mounting brackets
- (1) Power cord
- (1) Temperature Probe
- (1) Users Manual

MIB, frequently asked questions and support provided at www.ITSCOMMANDER.com

SAFETY

Read this manual before using this product. Failure to follow the instructions and safety precautions in this manual can result in serious injury .
Keep this manual in a safe location for future reference.

Safety Symbols

The following symbols have been placed throughout this manual to reduce the risk of serious injury or death and to ensure the continued safe operation of this product.



NOTE

Notes provide additional information when completing a specific task or procedure. Notes will be designated by a check mark inside a circle, the word NOTE and a line beneath which the information appears.



CAUTION

Caution is used to provide safety information to prevent damage to the product or connected equipment. Caution is designated by a yellow triangle with a black exclamation mark in the center, the word CAUTION and a line beneath which the information appears.

Certifications and Compliances

The ITS Commander™ is designed, tested and manufactured to meet the requirements of the following national safety standards:



FCC Part 15 Class B

This equipment has been tested and found to comply with the limits of Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures (1) Reorient or relocate the receiving antenna (2) Increase the separation between the equipment and receiver (3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected (4) Consult the dealer or an experienced radio/TV technician for help.

NEMA

NEMA TS 2-2003 v02.06 Sections 2.2.7.3—2.2.7.6 , 2.2.8.4 and 2.2.9

This equipment has been tested and found to comply with the NEMA TS 2-2003 environmental requirements as are applicable for this device. The requirements applicable are (1) Operating voltage (2) Operating Frequency (3) Temperature and Humidity (4) Ambient Temperature (5) Humidity (6) Vibration and (7) Shock.



This equipment has been and found to comply with UL requirements and standards.

Standard for Information Technology Equipment - Safety - Part 1: General Requirements, UL 60950-1 and CAN/CSA C22.2 No. 60950-1-07.

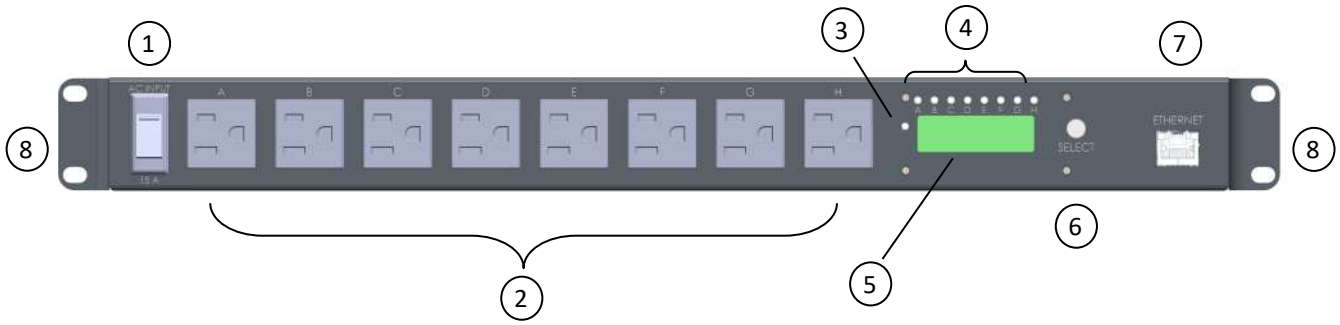
Certificate Number 20150410-E469794

Report Reference E469794-A1-UL

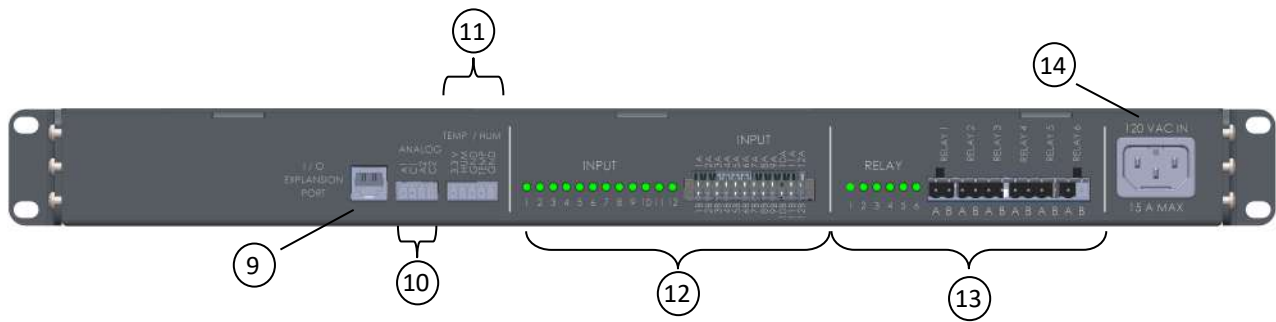
Issue Date 2015-APRIL-10

Specifications		
MODEL	1RU8126MS	
INPUT	Voltage Range	89 VAC- 135 VAC, 120 VAC (Nominal) ¹
	Rated Current	12 Amps
	Circuit Breaker	15 Amps
	Frequency Range	60 hertz ± 3 Hz
	AC Inlet	IEC C16, 15A, 250 VAC, 60 Hz
	Power Cord	NEMA 5-15P to IEC-C15, 15 A / 125 V
	Surge Suppression	10 kA, L-N
OUTPUT	Outlet Quantity	8
	Outlet Type	NEMA 5-15R, 15A / 125 VAC, 60 Hz
	Dry Contact Input Quantity	12
	Dry Contact Input Connector	24 Position, Screw-less Push-In terminal, 16-24 AWG
	Relay Quantity	6
	Relay Switching Voltage	250 VAC, 125 VDC Max
	Relay Contact Form	SPST-NO (1 Form A)
	Relay Contact Rating (Current)	10 A
	Relay Connector	12 Position, Screw Terminal, 12-22 AWG
	Temperature Sensor	Thermistor, R @ 25°C = 10k Ω, ± 1 % (4.1 feet /1.25m)
	Humidity Sensor	26mV / % RH ±3% RH, Linear, 3.3 V Supply
	Temperature / Humidity Connector	5 Position, Screw terminal, 16-30 AWG
	Analog Inputs	2
	Analog Input Connector	4 Position, Screw terminal, 16-30 AWG
ENVIRONMENTAL	Operating Temperature	-34°C (-30°F) to +74°C (+165°F) ¹
	Operating Humidity	0—95 % Relative Humidity ¹
	Storage Temperature, Humidity	-45°C (-50°F) to +85°C (+185°F) / 0-100% ¹
OTHER	Dimensions	1.7" x 5.5" x 19"
	Rack Space	1 RU (Rack Unit)
	Network	10/100/1000 Base-T Ethernet Port, Auto MDI-X
	Alert Types	Email / SMS / User Interface / SNMP
	Clock	NTP
	Scheduling	100 events, ON—OFF—RESET
NOTES	1. Per NEMA TS2-2003v02.06	

Features



FRONT



REAR

ITEM	DESCRIPTION
1	Input circuit breaker, 15A
2	Outlets, 15 A, Labeled A trough H
3	Unit Status indicator, Green
4	Outlet Status indicator, Green, labeled A through H
5	LCD Screen
6	Select Button
7	Ethernet Port

ITEM	DESCRIPTION
8	Adjustable rack mounting ears
9	I/O Expansion Port
10	Analog Inputs
11	Temperature and Humidity Inputs
12	Dry Contact inputs 1-12
13	Relay contacts 1-6
14	AC Power In, IEC C16 Inlet

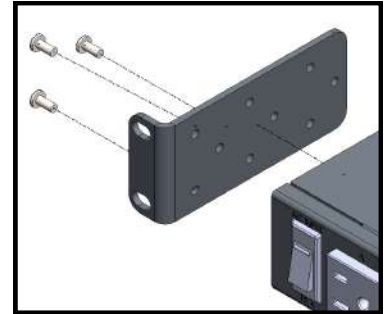
Mounting

Choose the desired mounting bracket location.

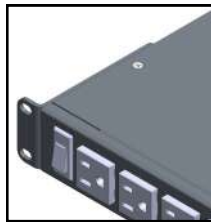
Procedure

The ITS Commander is provided with mounting brackets for a standard 19-inch rack. Each mounting ear is removable and adjustable towards the rear or the front.

1. Remove retaining screws from unit body
2. Choose the location of the bracket, by aligning the mounting bracket holes to the unit body.
3. Secure using retaining screws
4. Repeat for the other side.



Bracket Location Options



Front
Flush



Front
Recessed



Front
Deep Recessed



Rear
Flush



Rear
Recessed



Rear
Deep Recessed



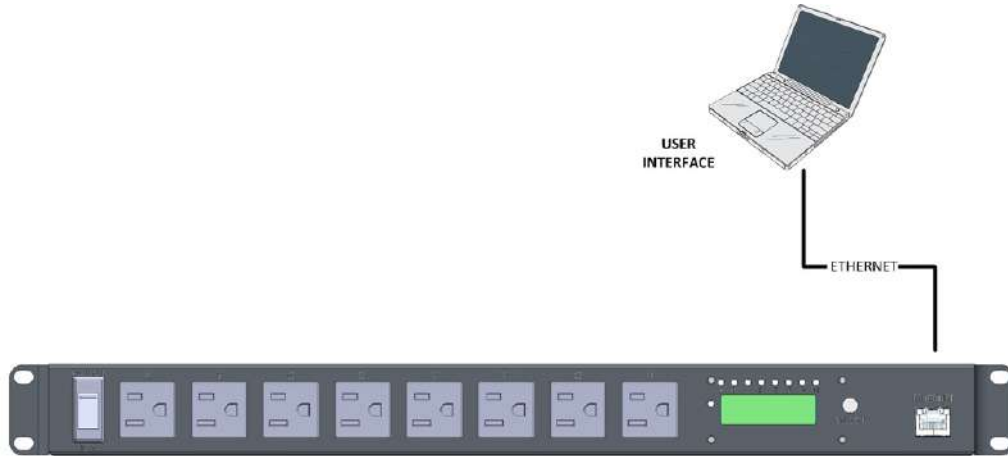
NOTE

Ensure to replace all screws in the mounting holes. Empty screw holes should be filled.

5. Mount in a standard EIA 19" Rack with (4) #10 screws.

Installation

Stand Alone Configuration



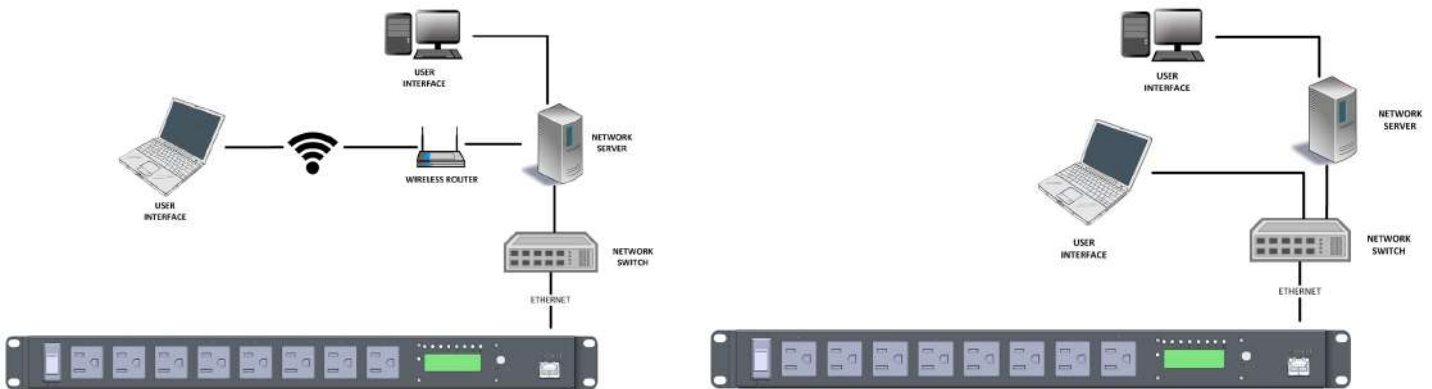
1. Connect an Category 5 (CAT 5) patch cable to the ITS Commander Ethernet port. A straight-through or crossover cable may be used.
2. Connect the other end of the RJ45 patch cable to the user interface (Laptop, PC, etc.).



CAUTION

Stand alone configuration does not provide network time synchronization (NTP). Logging, Scheduling and Notification features will not be available

Network Configuration



Network Configuration 1

Network Configuration 2

1. Connect an RJ45 patch cable to the ITS Commander Ethernet Port.
2. Connect the other end of the RJ45 Patch cable to the network switch.
3. User interface may be accessed using a wireless router or direct connection to the network.

Set Up



CAUTION

Ensure input circuit breaker is in the OFF position before applying power to the unit.



CAUTION

Do not remove the MALE end of the power cord in order to “hardwire” the unit. Ensure proper safety standards are followed by using only listed or recognized power cords.

Power

1. Ensure the input circuit breaker is in the OFF position before proceeding.
2. Connect the IEC-C13 (FEMALE) end of the power cord to the rear of the unit.
3. Connect the NEMA 5-15P (MALE) end of the power cord to the desired power source (receptacle).

The desired power source may be a PDA (Power distribution assembly) receptacle, or other appropriate power source.

1. The 15 A circuit breaker, located on the front of the unit, may also serve as an ON / OFF switch.



NOTE

If power or connectivity is lost to the unit, the below message will appear on the summary page.

ERROR: Connection to ITS Commander was lost.



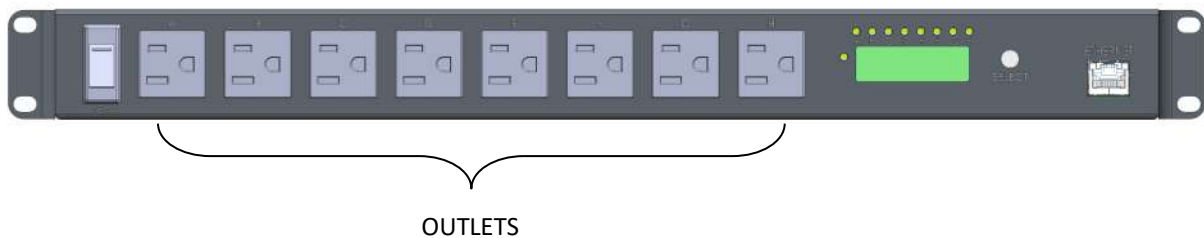
NOTE

This unit has a safe shutdown feature. This feature provides a few seconds of back up power within the unit to safely shut down and send one last “packet” of information to the server.

Set Up

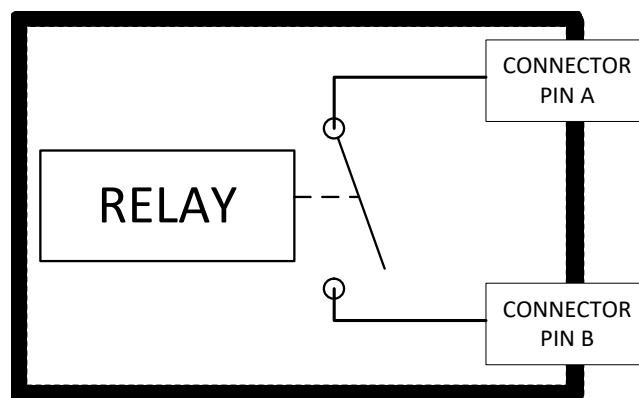
Outlets

1. Connect desired equipment to the outlet position using a NEMA 5-15P Plug.
2. Outlet labels may be changed in the [Names and Notifications] tab.
3. LEDs on the front of the unit labeled A—H indicate the ON / OFF status of each outlet. An illuminated LED means ON.



Relays

1. Connect desired equipment to the relay position using 12—22 AWG wire.
2. Relay labels may be changed in the [Names and Notifications] tab.
3. LEDs on the rear of the unit labeled Relay 1-6 indicate the OPEN / CLOSED status of each relay. An illuminated LED means CLOSED (current is allowed to flow)



NOTE

Relay contact rating is 10 A max. Relay switching voltage is 250 VAC / 125 VDC max.

Set Up



CAUTION

Inputs (Dry Contacts) provide their own voltage. DO NOT connect live power to Input (Dry Contact) terminals. Connecting live power to Input (Dry Contact) terminals will result in severe damage to the unit.

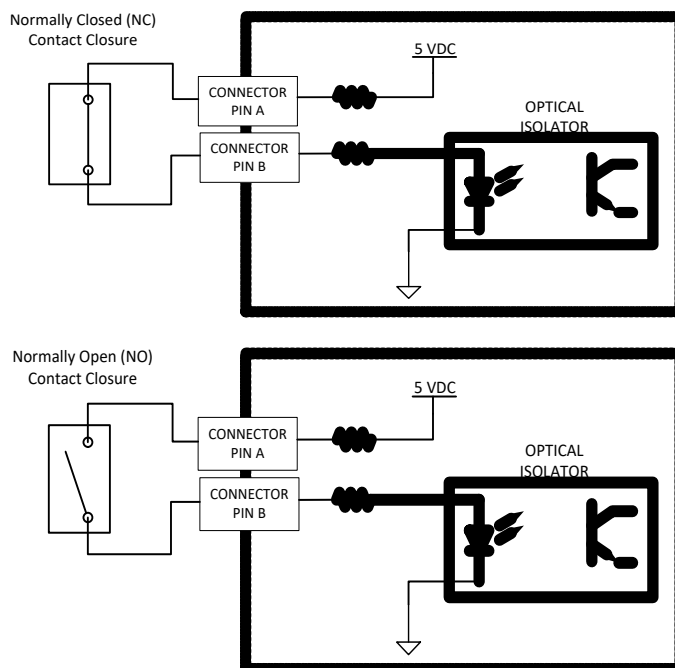
Input (Dry Contacts)

1. Ensure the input circuit breaker is in the OFF position before proceeding.
2. Connect the desired switch/equipment terminal to the Input position using 16—24 AWG wire. Do not connect live power to the input (dry contact) terminal. Connecting live power will result in severe damage to the unit
3. Input labels may be changed in the [Names and Notifications] tab.
4. Alarm status for normally open (NO) and normally closed (NC) contact closures may be changed in the [Names and Notifications] tab.
5. LEDs on the rear of the unit labeled Input 1-12 indicate the OPEN / CLOSED status of each input . An illuminated LED means a CLOSED input.



NOTE

The LEDs indicating input status are not linked to the ALARM status in the [Names and Notifications] tab. An illuminated LED means the contact is closed. A closed contact may be the normal condition for that contact. Illumination of an Input LED does not indicate an ALARM condition.



Set Up

Humidity Probe (sold separately)

1. Ensure the input circuit breaker is in the OFF position before proceeding.
2. Connect the humidity probe to the following pins:
 - Pin 1—3.3 V
 - Pin 2—HUM
 - Pin 3—GND
3. Humidity threshold levels may be changed in the [Names and Notifications] tab.



NOTE

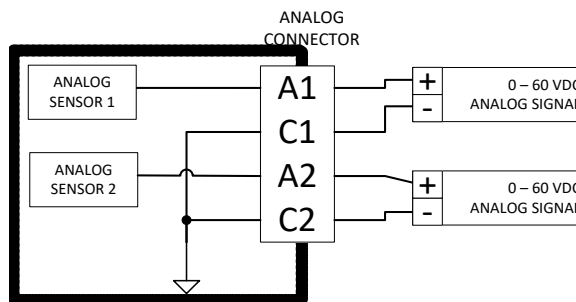
Please visit www.ITSCOMMANDER.com to order a compatible humidity probe for this unit.

Temperature Probe

1. Connect the temperature probe to the following pins:
 - Pin 4—TEMP
 - Pin 5—GND
2. Temperature threshold levels may be changed in the [Names and Notifications] tab.

Analog Input

1. Connect desired equipment to the analog position using 16—30 AWG wire.
2. Analog threshold levels may be changed in the [Names and Notifications] tab.



NOTE

Analog inputs have an isolated ground. Please do not connect chassis ground to this connector.

I / O Expansion Port

The I/O Expansion Port is not implemented in this model.

Set Up

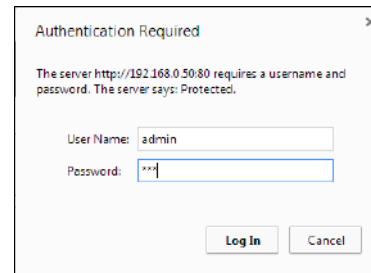
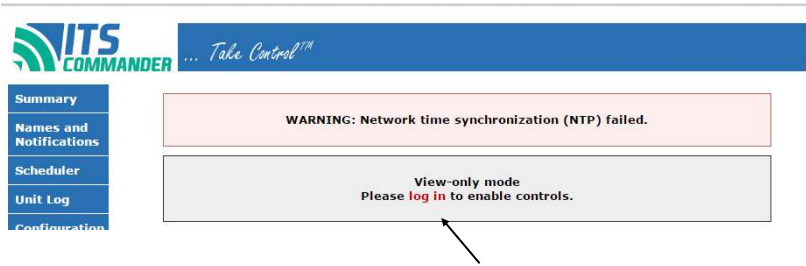
The ITS Commander™ can be configured using a web browser. To set up the unit:

1. Enter the following URL in the address bar.

http://192.168.0.50



2. When first accessing the user interface, log in to the unit using the default log in information.



User name: *admin*

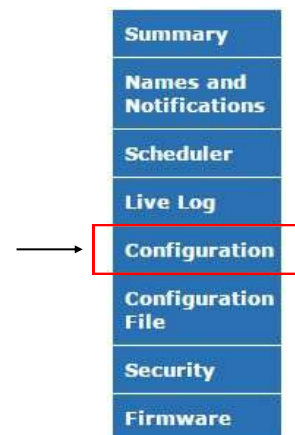
Password: *its*

3. To configure the unit, select the [Configuration]

System

Enter the desired system values

- System name (30 Characters)
- System location (30 Characters)
- System contact (30 Characters)
- Temperature Units (°F / °C)
- Time zone
- Reset Interval (in seconds) [1– 254 seconds]



Set Up



CAUTION

Incorrect settings may cause the unit to lose network connectivity. If connectivity is lost, hold down the front panel button to restore the unit to its default settings.

Network

Network

CAUTION: Incorrect settings may cause the unit to lose network connectivity. Hold down front panel button to restore defaults.

IP Address:	<input type="text" value="172.24.1.165"/>
Gateway:	<input type="text" value="172.24.1.1"/>
Subnet Mask:	<input type="text" value="255.255.252.0"/>
Primary DNS:	<input type="text" value="172.24.1.121"/>
Secondary DNS:	<input type="text" value="0.0.0.0"/>
NTP Server:	<input type="text" value="0.0.0.0"/> (0.0.0.0 means use a public NTP server)
Host Name:	<input type="text" value="ITSCOMMANDER"/>

Enter the desired network and system parameters for the unit. [Save Configuration] at the bottom of the page to save changes.



NOTE

Once the default IP address is changed, navigate to the new IP address by entering the following URL in the address bar of the web browser.

http://{new IP address}

Email / SMS

1. Enter the desired Email address in the recipient fields (1– 5)
2. For SMS text messaging use the cellphone carrier SMS gateway for email to SMS.
3. Enter the SMTP Server
4. If required by the SMTP server, enter the Username and Password
5. Select SSL if applicable.
6. Enter the Port



NOTE

Your SMTP server may not require a user name or password.



NOTE

Contact your cell provider for the correct SMS gateway address.

Set Up

SNMP

1. Enter up to 3 Read and Write Communities as desired.
2. Select {Notifications Enabled} if notifications (traps) are desired.
3. Enter the Receiver IP address
4. Enter the community name.

SNMP Communities

Read/Write Community String configuration for SNMPv2c Agent.

Configure multiple community names if you want the SNMP agent to respond to the NMS/SNMP manager with different read and write community names. If less than three communities are needed, leave extra fields blank to disable them.

Read Community 1:	<input type="text" value="public"/>
Read Community 2:	<input type="text"/>
Read Community 3:	<input type="text"/>
Write Community 1:	<input type="text"/>
Write Community 2:	<input type="text"/>
Write Community 3:	<input type="text"/>

SNMP Notifications (Traps)

Notifications Enabled:	<input type="checkbox"/>
Receiver IP Address:	<input type="text" value="0.0.0.0"/>
Community:	<input type="text" value="public"/>



NOTE

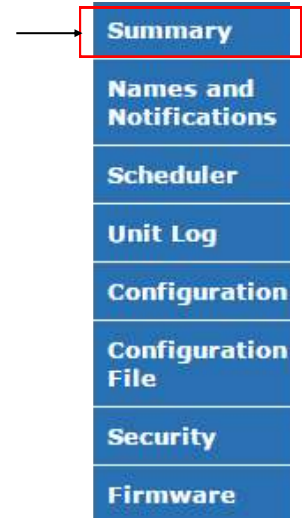
Please visit www.ITSCOMMANDER.com to download the MIB for the SNMP traps.

5. Click Save Configuration to save changes

Save Configuration

User Interface Tabs

Summary Tab



The [Summary] tab contains a live status of the following items:

- Dry Contact Inputs
- Power Outlets
- Relays
- Current
- Voltage
- Temperature
- Humidity
- Analog Inputs
- System Parameters

Name: ITS Commander #2060017
Location:
Contact:

Unit Information

Can be changed in the [Configuration] tab.

Dry Contact Inputs

<input checked="" type="checkbox"/>	SURGE PROTECTIVE DEVICE 120V
<input checked="" type="checkbox"/>	POWER SUPPLY DC 24V
<input checked="" type="checkbox"/>	INPUT 3
<input checked="" type="checkbox"/>	INPUT 4
<input checked="" type="checkbox"/>	INPUT 5
<input checked="" type="checkbox"/>	INPUT 6
<input checked="" type="checkbox"/>	INPUT 7
<input checked="" type="checkbox"/>	INPUT 8
<input checked="" type="checkbox"/>	INPUT 9
<input checked="" type="checkbox"/>	INPUT 10
<input checked="" type="checkbox"/>	INPUT 11
<input checked="" type="checkbox"/>	INPUT 12

Dry Contact Inputs

Labels can be changed in the [Names and Notifications] tab

Alarm status can be changed in the [Names and Notifications] tab

Dry contact inputs are green when in a non-Alarm status. Default Alarm status is a closed contact.

Dry contact inputs will turn red when in an Alarm status as set in the [Names and Notifications] tab.

Any state change will be reflected in the [Unit Log] tab.

Power Outlets

<input checked="" type="checkbox"/>	ON	RESET	FAN Outlet
<input checked="" type="checkbox"/>	ON	RESET	OUTLET B
<input checked="" type="checkbox"/>	ON	RESET	OUTLET C
<input type="checkbox"/>	OFF	RESET	OUTLET D
<input type="checkbox"/>	OFF	RESET	OUTLET E
<input checked="" type="checkbox"/>	ON	RESET	OUTLET F
<input checked="" type="checkbox"/>	ON	RESET	OUTLET G
<input checked="" type="checkbox"/>	ON	RESET	OUTLET H

Power Outlets

Labels can be changed in the [Names and Notifications] tab

Outlets are green when on, they are grey when off

Clicking the [ON] / [OFF] slider, will turn the outlet ON or OFF

Outlets that are grayed out have been set to "Always On" and cannot be toggled on/off or reset (see [Names and Notifications] on page 20)

The reset button turns the outlet off for a specified reset interval then back on. Default reset interval is 10 seconds, and can be changed in the [Configuration] tab, in the system section. The reset button will Flash while resetting.

User Interface Tabs

Summary Tab (continued)

Relays			
<input checked="" type="checkbox"/>	CLOSED	RESET	RELAY 1
<input checked="" type="checkbox"/>	CLOSED	RESET	RELAY 2
<input type="checkbox"/>	OPEN	RESET	RELAY 3
<input type="checkbox"/>	OPEN	RESET	RELAY 4
<input type="checkbox"/>	OPEN	RESET	RELAY 5
<input type="checkbox"/>	OPEN	RESET	RELAY 6

Operating Parameters

Current: 0.0 A
Voltage: 114 VAC
External Temperature: not enabled
External Humidity: not enabled
ANALOG 1: 0.0 VDC
ANALOG 2: 0.0 VDC
Time: 1:47PM 4/9/2020 (EDT)

System Parameters

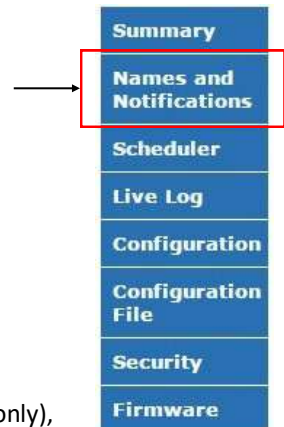
Firmware Version: v2.4.330
Serial Number: 2060017
IP Address: 192.168.5.10
Config IP Address: 192.168.5.10
Config Subnet Mask: 255.255.255.0
Config Gateway: 192.168.5.1
DNS #1: 8.8.8.8
DNS #2: 0.0.0.0
MAC: D8:80:39:31:F7:D7

Relays
Labels can be changed in the [Names and Notifications] tab Relays are grey when open, they are green when closed Clicking the [OPEN] / [CLOSE] slider, will open or close the relay. The reset button turns the relay off for a specified reset interval then back on. Default reset interval is 10 seconds, and can be changed in the [Configuration] tab, in the system section. The reset button will Flash while resetting.
Operating Parameters
Current and Voltage are displayed for the unit Temperature and Humidity are displayed when sensors are connected, units of measurement can be changed in the [Configuration] tab. Will turn red when upper threshold is exceeded, and blue when lower thresholds are exceeded. Thresholds may be changed in the [Names and Notifications] tab. Analog 1 and Analog 2 voltages are displayed when connected Network time and date are displayed when configured in a network
System Parameters
Displays all system parameters. Can be changed in the [Configuration] tab

Names and Notifications Tab

The [Names and Notifications] tab allows the user to provide meaningful names for:

- Outlets
- Relays
- Inputs
- Analog Inputs
- Power



This tab also allows the user to set the types of notification requested (for all), alarm state (inputs only), and Lower / Upper Limits (Analog and Environmental inputs).

- Email
- SNMP

User Interface Tabs

Names and Notifications Tab (continued)

Outlets
This allows you to assign meaningful names to outlets and indicate which outlets, when toggled, will trigger a notification.

Port	Name	Notification		Always On	Ping			
		Email	SNMP		Enable	Freq	Retry	IP Addr
A	OUTLET A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	60	4	0.0.0.0
B	OUTLET B	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
C	OUTLET C	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
D	OUTLET D	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
E	OUTLET E	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
F	OUTLET F	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
G	OUTLET G	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
H	OUTLET H	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			

Relays
This allows you to assign meaningful names to relays and indicate which relays, when toggled, will trigger a notification.

Port	Name	Notification		Ping Enable	Freq	Retry	IP Addr
		Email	SNMP				
1	RELAY 1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	60	4	0.0.0.0
2	RELAY 2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
3	RELAY 3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
4	RELAY 4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
5	RELAY 5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
6	RELAY 6	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			

Outlets

Outlet Labels can be changed for each outlet (max 30 characters)
 Select Email to receive an email notification (all state changes)
 Select SNMP to receive a “trap” notification (all state changes)
 Select Always On to prevent accidental power-cycle or outlet reset from the [Summary] page
 The Ping feature is an automatic system for rebooting IP equipment without human intervention. Ping works by cycling power when a device becomes unresponsive to IP pings. To use the Ping, first check the Ping Enable box, then add an IP address for the device connected to Outlet. Enter Freq (in seconds) to specify the time between pings. In the Retry field enter the number of unresponsive pings before the ITS Commander cycles power to the outlet.

Relays

Relay Labels can be changed for each outlet (max 30 characters)
 Select Email to receive an email notification (all state changes)
 Select SNMP to receive a “trap” notification (all state changes)
 Select Ping Enable to enable ping feature for specified relay. See Outlet Ping feature described above for further operational details.

Inputs
This allows you to assign meaningful names to inputs and indicate which inputs, when toggled, will trigger a notification.

Port	Name	Alarm State	Notification		Email	SNMP
			Re-notification Interval	Interval		
1	SURGE PROTECTIVE DEVICE 120V	closed ▼			<input type="checkbox"/>	<input type="checkbox"/>
2	POWER SUPPLY DC 24V	open ▼	0.25	hours	<input type="checkbox"/>	<input type="checkbox"/>
3	INPUT 3	closed ▼		hours	<input type="checkbox"/>	<input type="checkbox"/>
4	INPUT 4	closed ▼		hours	<input type="checkbox"/>	<input type="checkbox"/>
5	INPUT 5	closed ▼		hours	<input type="checkbox"/>	<input type="checkbox"/>
6	INPUT 6	closed ▼		hours	<input type="checkbox"/>	<input type="checkbox"/>
7	INPUT 7	closed ▼		hours	<input type="checkbox"/>	<input type="checkbox"/>
8	INPUT 8	closed ▼		hours	<input type="checkbox"/>	<input type="checkbox"/>
9	INPUT 9	closed ▼		hours	<input type="checkbox"/>	<input type="checkbox"/>
10	INPUT 10	closed ▼		hours	<input type="checkbox"/>	<input type="checkbox"/>
11	INPUT 11	closed ▼		hours	<input type="checkbox"/>	<input type="checkbox"/>
12	INPUT 12	closed ▼		hours	<input type="checkbox"/>	<input type="checkbox"/>

Inputs

Input Labels can be changed for each outlet (max 30 characters)
 Select the Alarm State of Closed or Open
 - Closed (Alarm status is when the contact is closed)
 - Open (Alarm status is when the contact is open)
 Re-Notification Interval can be set if re-notification is desired after the original alarm notification was sent.
 Select Email to receive an email notification (Alarm Status)
 Select SNMP to receive a “trap” notification (all state changes)

User Interface Tabs

Names and Notifications Tab (continued)

Analog Inputs

Port	Name	Limits		volts	Notification	
		Lower	Upper		Email	SNMP
A1	ANALOG 1	<input type="text"/>	<input type="text"/>	volts	<input type="checkbox"/>	<input type="checkbox"/>
A2	ANALOG 2	<input type="text"/>	<input type="text"/>	volts	<input type="checkbox"/>	<input type="checkbox"/>

Analog input voltage hysteresis: volts

Analog Inputs

Analog Input Labels can be changed for each outlet (max 30 characters)

Set Lower and Upper threshold limits

Select Email to receive an email notification (threshold limits)

Select SNMP to receive a “trap” notification (threshold limits)

Enter the desired voltage hysteresis (default 1 volt)

Environmental

Name	Limits		°F	Notification		Sensor Input Enable
	Lower	Upper		Email	SNMP	
Temperature	<input type="text" value="32"/>	<input type="text" value="125"/>	°F	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Relative Humidity	<input type="text" value="20"/>	<input type="text" value="85"/>	%	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental

Set Lower and Upper threshold limits

Temperature units may be changed in the [configuration] tab.

Select Email to receive an email notification (threshold limits)

Select SNMP to receive a “trap” notification (threshold limits)

Select “Sensor Input Enable” to activate environmental reporting

Power

Name	Notification	
	Email	SNMP
Power Up	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Power Down	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Power

Select Email to receive an email notification on Power up or down

Select SNMP to receive a “trap” notification

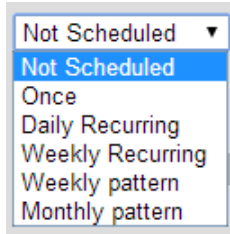
Click Submit to save changes

User Interface Tabs

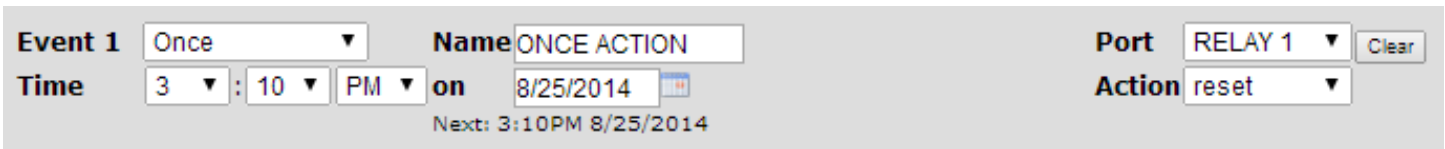
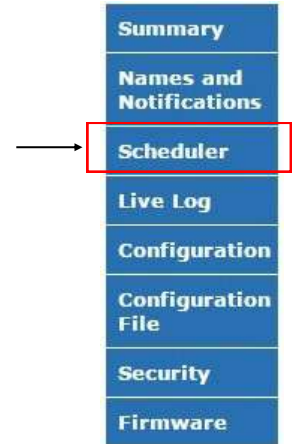
Scheduler Tab

The [Scheduler] tab allows the user to schedule up to 100 events.

For each event, there are several options:



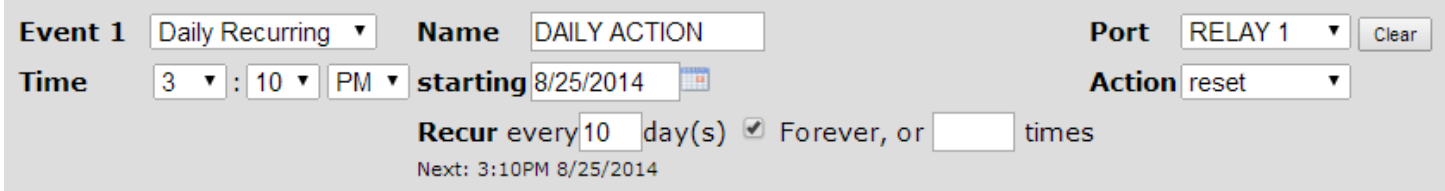
A dropdown menu with the following options: Not Scheduled (selected), Not Scheduled, Once, Daily Recurring, Weekly Recurring, Weekly pattern, and Monthly pattern.



Event 1 **Name** **Port**
Time : **on**
Action
Next: 3:10PM 8/25/2014

Once

NAME: Event label can be changed (max 30 characters)
TIME: Time for the desired event
ON: Date for the desired event
PORT: Outlet / Relay to be affected
ACTION: Action taken during the event
NEXT: Lets the user know (after changes have been saved) when the next scheduled action is to take place for that event



Event 1 **Name** **Port**
Time : **starting**
Recur every day(s) Forever, or times
Next: 3:10PM 8/25/2014

Daily Recurring

NAME: Event label can be changed (max 30 characters)
TIME: Time for the desired event
STARTING: Date for the first occurrence of the desired event
PORT: Outlet / Relay to be affected
ACTION: Action taken during the event
RECUR: Every [#] days, forever or for a specified # of times required
NEXT: Lets the user know (after changes have been saved) when the next scheduled action is to take place for that event

User Interface Tabs

Scheduler Tab (continued)

Item 1 **Name** **Outlet**

Time : **starting**

Next: 4:00PM 8/26/2014

Recur every week(s) Forever, or times

Weekly Recurring

NAME: Event label can be changed (max 30 characters)

TIME: Time for the desired event

STARTING: Date for the first occurrence of the desired event

OUTLET / RELAY : Outlet / Relay to affected

ACTION: Action taken during the event

RECUR: Every [#] weeks, forever or for a specified # of times required

NEXT: Lets the user know (after changes have been saved) when the next scheduled action is to take place for that event

Item 1 **Name** **Outlet**

Time : **on** Sun Mon Tue Wed Thu Fri Sat

Next: 3:10PM 10/28/2014

Action

Weekly Pattern

NAME: Event label can be changed (max 30 characters)

TIME: Time for the desired event

ON: Days of the week when the event is to occur

OUTLET / RELAY : Outlet / Relay to affected

ACTION: Action taken during the event

NEXT: Lets the user know (after changes have been saved) when the next scheduled action is to take place for that event

User Interface Tabs

Scheduler Tab (continued)

Item 1 Monthly pattern ▾ **Name** MONTHLY PATTERN **Outlet** RELAY 1 ▾

Time 3 ▾ : 10 ▾ PM ▾ **on** Days of month (e.g. 1,6,15) 2,4,5 **Action** reset ▾

Next: 3:10PM 10/28/2014

Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec

Monthly Pattern

NAME: Event label can be changed (max 30 characters)

TIME: Time for the desired event

ON: Days of the month when the event is to occur (multiple may be separated by a coma)

OUTLET / RELAY : Outlet / Relay to affected

ACTION: Action taken during the event

MONTHS: Select months in which the event is to occur

NEXT: Lets the user know (after changes have been saved) when the next scheduled action is to take place for that event



NOTE

Ensure to click SAVE after making the desired changes.



NOTE

The first screen always shows the first 10 events, to see more events click NEXT at the bottom of the page.



NOTE

Up to 100 events may be scheduled

User Interface Tabs

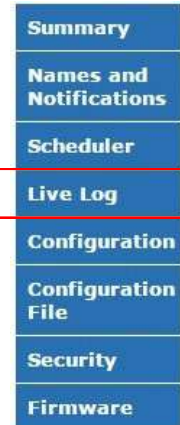
Live Log

The [Unit Log] tab allows the user to view, download and set the interval for system status log.

Following a device restart, the last 100 events are pre-loaded into view, allowing events prior to power cycle to be viewed.

Select a records start date and click {Retrieve Log}, the first 10 log entries are displayed. Click {NEXT} to navigate through further entries.

To download the log file. Select the records start and stop date and click {Retrieve Log}



Time	Event
2/16/2016 8:56:53AM EST	Line power restored
2/16/2016 8:56:54AM EST	Temperature (67 F) above upper limit
2/16/2016 9:00:00AM EST	Humidity (19%) below lower limit
2/16/2016 9:10:25AM EST	Network time synchronized
2/16/2016 9:10:25AM EST	Line power restored
2/16/2016 9:10:26AM EST	Temperature (67 F) above upper limit
2/16/2016 9:48:18AM EST	POWER SUPPLY INPUT 120V closed
2/16/2016 9:48:19AM EST	POWER SUPPLY INPUT 120V opened
2/16/2016 9:48:21AM EST	POWER SUPPLY INPUT 120V closed
2/16/2016 9:48:21AM EST	RELAY 2 closed
2/16/2016 9:48:22AM EST	RELAY 3 closed
2/16/2016 9:48:22AM EST	RELAY 4 closed
2/16/2016 9:48:24AM EST	RELAY 5 closed
2/16/2016 9:48:24AM EST	RELAY 6 closed
2/16/2016 9:48:28AM EST	POWER SUPPLY INPUT 120V opened
2/16/2016 9:48:28AM EST	RELAY 2 opened
2/16/2016 9:48:29AM EST	RELAY 3 opened
2/16/2016 9:48:29AM EST	RELAY 4 opened
2/16/2016 9:48:31AM EST	RELAY 5 opened
2/16/2016 9:48:32AM EST	RELAY 2 closed
2/16/2016 9:48:32AM EST	RELAY 4 closed
2/16/2016 9:48:35AM EST	POWER SUPPLY INPUT 120V closed
2/16/2016 9:48:36AM EST	RELAY 2 opened
2/16/2016 9:48:36AM EST	RELAY 3 closed
2/16/2016 9:48:37AM EST	RELAY 4 opened
2/16/2016 9:48:37AM EST	RELAY 5 closed
2/16/2016 9:48:38AM EST	RELAY 6 opened
2/16/2016 10:02:08AM EST	POWER SUPPLY INPUT 120V opened
2/16/2016 11:00:28AM EST	POWER SUPPLY INPUT 120V closed

Record system status every hours

Log records Start Date: Stop Date:
Note: Start Date precedes Stop Date in time



NOTE

The unit is able to save thousands of records. When the unit reaches the end of the allocated log memory, the oldest record will be over written. Download the log periodically in order to avoid losing data.

User Interface Tabs

Configuration

The [Configuration] tab allows the user to configure the unit as desired.

This tab is covered in the SET UP section of this manual

Configuration File

The [Configuration File] tab allows the user to download and upload saved configurations.

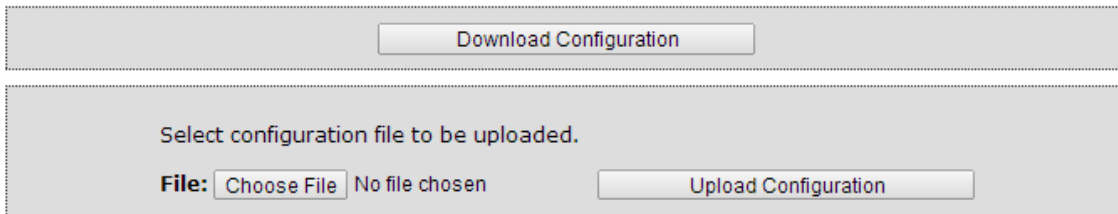
In order to ease the set up of multiple units, the configuration may be downloaded and saved in a user defined location.

The configuration file may also be uploaded into a unit.

Items covered in the configuration file:

Schedule

Names and Notifications



To download a configuration file

1. Click {Download Configuration}
2. File will automatically download
3. Move file to desired location

To specify file name and file save location

1. Right-click {Download Configuration}
2. Select “Save Link As” or “Save As”
3. Select location in which to save file and choose file name
4. Click “Save”



NOTE

Different internet browsers require permissions to download this type of file. Contact your systems administrator for assistance in downloading the configuration file.

To upload a configuration file

1. Click {Choose File}
2. Navigate to the configuration file desired
3. Click {Upload Configuration}
4. Configuration is not loaded into the unit

User Interface Tabs

Security

The [Security] tab allows the user to change the password assigned to the unit

To change the password:

1. Enter the old password (Default: its)
2. Enter the new password
3. Click {Change Password} to enact changes.



Firmware

The [Firmware] tab allows the user to change the download firmware updates. Please visit www.ITSCOMMANDER.com to download firmware updates for this unit.

To download a firmware update:

1. Click {Choose File}
2. Navigate to the downloaded firmware file
3. Click {Upload}
4. Once the file has uploaded, verify that the new firmware version appears as a Staged firmware version, to un-do the staging simply click {unstage}
5. Click {Reset} to apply the new firmware



NOTE

Please visit www.ITSCOMMANDER.com for firmware updates

Technical Assistance



NOTE

Please visit www.ITSCOMMANDER.com for Q & A and Technical Assistance. You may also email us at support@ITSCOMMANDER.com or phone us at (800) 866-5699



ITS COMMANDER Three Year Limited Warranty

Earnest Products, Inc., (EP) warrants the ITS Commander, when properly installed and operated as outlined in the user's manual, against faulty materials or workmanship for a period of three (3) years from the earlier of the date it is placed in service or 120 days from shipment. Extended Warranties are available for additional fee at time of purchase.

This device is intended to be installed after the appropriate primary surge device and is not intended to replace or preform the function of primary surge protection. In addition, it is recommended that secondary surge protection be used on the relays if they are connected to external devices such as cameras. The unit is intended to be used powered from a properly wired and grounded outlet with the cord that is supplied with the unit. EP warranty is limited to replacement of the device with a new or remanufactured device at the sole discretion of EP.

THIS WARRANTY SPECIFICALLY EXCLUDES DAMAGE CAUSED BY IMPROPER INSTALLATION, DAMAGE CAUSED BY A THE INSTALLER, DAMAGE CAUSED BY ROADWAY TRAFFIC, ACTS OF VANDALISM, ACTS OF GOD, NORMAL WEAR AND TEAR, MODIFICATIONS OR ALTERATION OTHER THAN NORMAL MAINTENANCE, OR OTHER OCCURANCES OUTSIDE OF THE SELLERS CONTROL. THIS WARRANTY DOES NOT OBLIGATE EARNEST PRODUCTS, INC. TO BEAR ANY TRANSPORTATION, REMOVAL OR INSTALLATION CHARGES IN CONNECTION WITH THE INSPECTION, REPAIR, OR REPLACEMENT OF DEFECTIVE PARTS. EARNEST PRODUCTS, INC. OBLIGATION UNDER THIS WARRANTY SHALL NOT INCLUDE ANY LIABILITY FOR DIRECT, INDIRECT OR CONSEQUENTIAL DAMAGES OR DELAYS.

The purchaser assumes the responsibility for properly completing, installing, and grounding the enclosure in accordance with applicable industry standards, local electrical and safety codes, and any other applicable standards.

THIS WARRANTY CONSTITUTES THE ENTIRE WARRANTY WITH RESPECT TO THIS PRODUCT AND IS IN LIEU OF ALL OTHERS, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OR OF MERCHANTABILITY AND WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE AND IN NO EVENT IS EARNEST PRODUCTS, INC. RESPONSIBLE FOR ANY CONSEQUENTIAL DAMAGES OF ANY NATURE WHATSOEVER.

To obtain warranty service contact Customer Service at Earnest Products, Inc. in Sanford, Florida by phone, email, or mail to obtain a return material authorization (RMA) number. The email address is contactus@itscommander.com and the phone number is 407-831-1588 or 800-866-5699.

Warranty Repairs

- All returns require an RMA number whether it is for warranty or non-warranty repair, damage, inspection, or any other reason. Returns without an RMA number may be refused.

- The following information should be provided when requesting an RMA:
 - Original customer
 - Purchase order and date.
 - Date product was installed if known.
 - Number of items or parts to be returned.
 - Model and serial number (these are contained on a label permanently affixed to the back of each unit).
 - Reason for return.
 - Action requested.
 - Contact name, telephone number and email address.

- Package the item or items in appropriate packaging. The shipping address is
 - Earnest Products, Inc.
 - 2000 E Lake Mary Blvd.
 - Sanford, FL 32773

- Mark the box prominently with Earnest Products Return Goods Authorization Number.

- Freight charges on all products returned to Earnest Products, Inc. shall be paid by the customer unless authorized in writing by Earnest Products, Inc. Collect shipments will be refused.

Earnest Products, Inc. will repair or replace any parts that it determines to be covered by warranty at its sole discretion. Earnest Products shall contact the customer with an estimated cost prior to making any repairs not covered by warranty.

Non-Warranty Repairs

Earnest Products offers repairs of your ITS Commander for units that are out of the warranted time frame at the customer's expense. To obtain a non-warranty service contact Customer Service at Earnest Products, Inc. in Sanford, Florida by phone, email, or mail to obtain a return materials authorization (RMA) number. The email address is contactus@itscommander.com and the phone number is 407-831-1588 or 800-866-5699.

- All non-warranty repairs must be accompanied by a Purchase order for \$200. This fee will cover diagnostics and be applied to the cost of the approved repairs.
- All returns require an RMA number whether it is for warranty or non-warranty repair, damage, inspection, or any other reason. Returns without an RMA number may be refused.
- The following information should be provided when requesting an RMA:
 - Original customer
 - Purchase order and date.
 - Date product was installed if known.
 - The number of items or parts to be returned.
 - Model and serial number (these are contained on a label permanently affixed to the back of each unit).
 - Reason for return.
 - Action requested.
 - Contact name, telephone number, and email address.

Earnest Products will provide an order acknowledgment for the cost of repairs to the ITS Commander if said costs exceed the \$200 diagnostic fee. If the repairs are covered by the \$200 diagnostic fee the unit will be repaired. If the repair exceeds the \$200 diagnostic fee the customer will be contacted and given the option to revise their P.O. or deny the repairs. Once the revised purchase order is received the unit will be repaired. If repairs are not approved by the customer a \$50 charge will be applied and a refund of \$150 will be sent back to the customer.

- Package the item or items in appropriate packaging. The shipping address is
Earnest Products, Inc.
2000 E Lake Mary Blvd.
Sanford, FL 32773

Mark the box prominently with Earnest Products Return Materials Authorization Number.

- Freight charges on all products returned to Earnest Products, Inc. shall be paid by the customer unless authorized in writing by Earnest Products, Inc. Collect shipments will be refused.

Repaired units not covered under the original manufacturer's warranty will have a 30-day warranty on repairs made to the unit.