

## AX-DV, AX-DVF Video Door Stations for AX Series

**DESCRIPTION:**

The AX-DV is a surface mount color video door station for the AX Series. The AX-DVF is a flush mount color video door station. Both units wire directly to the AX Central Exchange Unit using CAT-5e wire with an RJ45 jack for connection.

The AX-DV has an aluminum die cast cover. The AX-DVF has a stainless steel faceplate. Both units include a camera, microphone, speaker, and call button. Tamper resistant screws are provided for mounting.

When the call button on the door station is pushed, the master station(s) ring and the video monitor comes on with the image from the door station's camera. The master station user then pushes the "TALK" button to initiate communication. The person at the door station speaks hands-free.

The AX door stations can be located up to 980' from the AX CEU and wired with CAT-5e cable. Additional equipment is available to interface with third party hardware for transmission over fiber optic cable or an IP network.

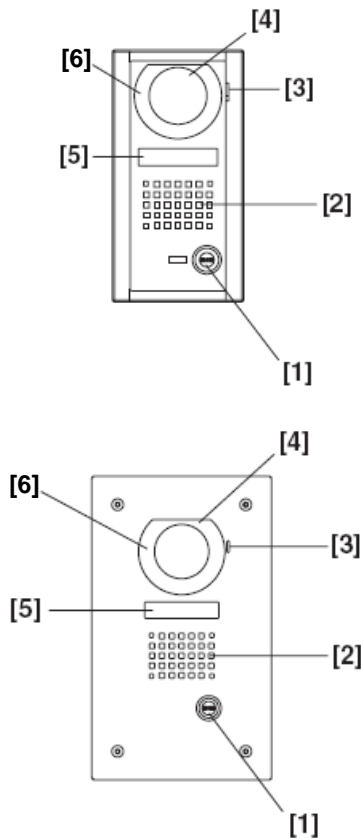
**FEATURES:**

- Color video camera with audio intercom
- 2-way hands-free voice communication with AX master station
- Call button to initiate call to master(s)
- White LED illuminator for low light conditions
- RJ45 jack for easy CAT-5e connection
- Surface (AX-DV) or flush mount (AX-DVF) styles available
- 980' wiring distance from CEU on CAT-5e cable

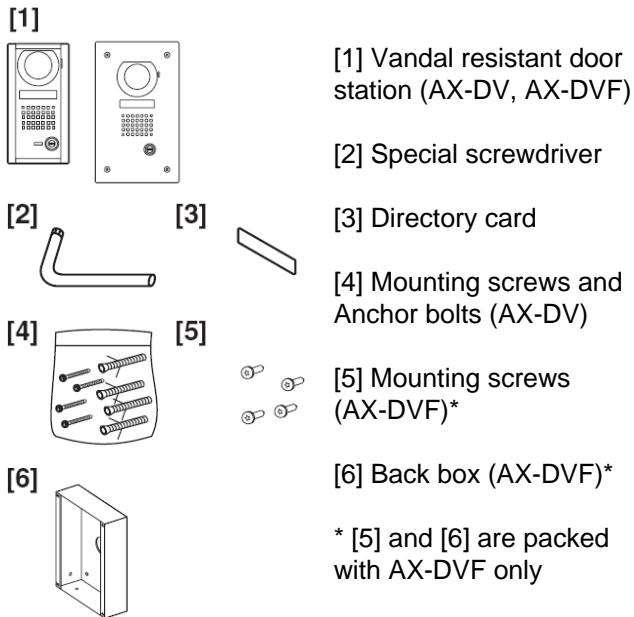
# AX-DV, AX-DVF

## Video Door Stations for AX Series

### FEATURE CALL-OUTS:



### PACKAGE CONTENTS:



### FEATURE CALL-OUT DEFINITIONS:

- [1] Call Button
- [2] Speaker
- [3] Microphone
- [4] Camera
- [5] Directory Card
- [6] White LED illuminators

### SPECIFICATIONS:

- Power Source: 24V DC Supplied from CEU
- Wiring connection: RJ45 jack (CAT-5e)
- Communication: Hands-free communication (auto-voice actuated or PTT) controlled by master station
- Camera: ¼" color CCD camera
- Pixels: 250,000 Pixels
- Minimum illumination: 5 Lux
- Operating temp: 14 – 140° F (-10 ~ 60° C)
- Mounting:
  - AX-DV Surface wall mount
  - AX-DVF Flush mount (with provided box)
- Housing:
  - AX-DV Front Panel: Aluminum die cast  
Main Unit: Resins
  - AX-DVF Front Panel: Stainless steel  
Main Unit: Resins  
Back box: Steel plate
- Color:
  - AX-DV Solid silver (metallic gray)
  - AX-DVF Stainless steel, brush-finished
- Dimensions:
  - AX-DV: 7-11/16" x 3-15/16" x 1" (195x100x25 mm)
  - AX-DVF: 9-11/16" x 5-3/4" x 1-7/8" (246x146x45 mm)
- Weight:
  - AX-DV: 0.88 lbs (400g)
  - AX-DVF: 1.45lbs (660g)

**AX-8MV****Audio Video Master Station for AX Series**

AX-8MV

**DESCRIPTION:**

The AX-8MV Master Station is the centerpiece of the AX Integrated Audio & Video Security system.

Each AX-8MV master station can initiate and answer calls from up to 7 additional master stations and up to 8 door or sub stations. The master can be expanded with AX-16SW add-on selectors for a maximum capacity of 120 door / sub stations. Its streamline design is mountable on a wall or desk.

When a video door station calls, a tremolo tone rings and the 3.5" color monitor comes on, displaying the image from the door station location. To answer the call, simply press the TALK button once and speak hands-free, or Press and Hold the TALK button to use as push-to-talk, release-to-listen. If access control is included, simply press the "key" button and the associated electric strike or magnetic lock will be activated.

Each master station connects via CAT-5e cable homerun to the AX Central Exchange Unit. Feature and operation variables are set with the system set-up software and uploaded to the CEU.

White version is available, model AX-8MV-W.

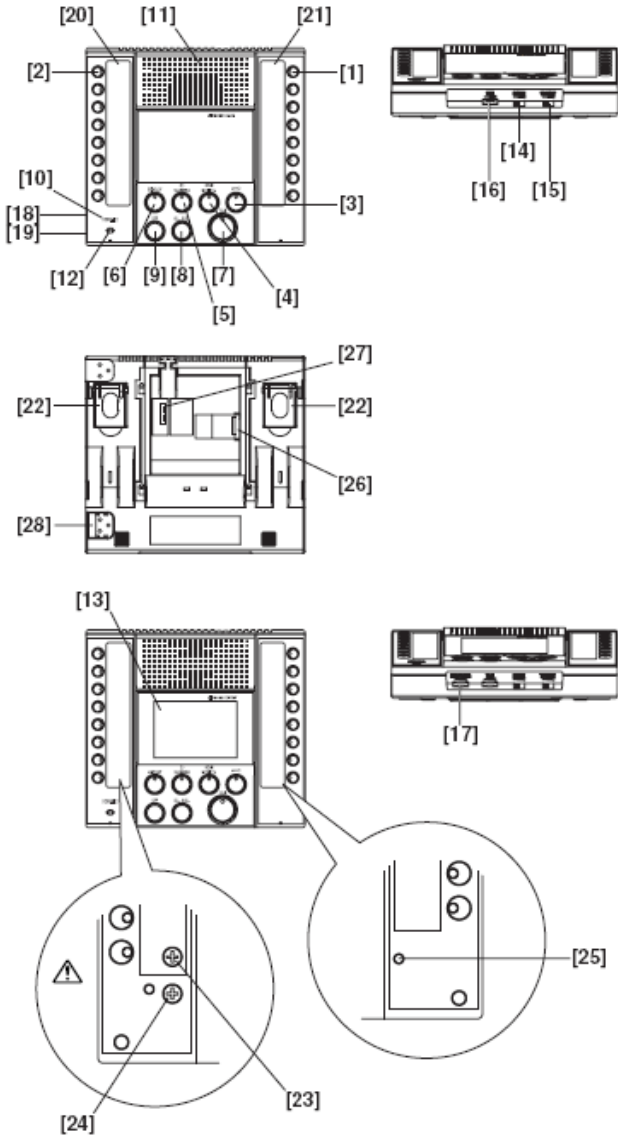
**FEATURES:**

- 3.5" TFT color video monitor
- 8 master station channels
- 8 door / sub station channels
- LED and call tone annunciation for programmable length or infinite call-in
- Hands-free VOX communication or Push-to-Talk
- All Call to other master stations
- Selective calling to any station in the system
- Add-on selectors in increments of 16 channels for max. capacity of 120 door / sub stations (CEU capacity also req'd)
- Privacy prevents other masters from listening in
- CO Transfer allows calls to transfer to a telephone number (Viking K-1900-5 required)
- Scan Monitor allows listening to door / sub stations in programmed time increments
- Door release button activates door strike or magnetic lock (selectable N/O or N/C contacts from CEU)
- 3.5mm speaker & mic jacks for computer-style headset or handset connection
- Tone and volume adjustments for open voice and headset communication
- Brightness and contrast adjustments for video
- Option connector for video output, call extension, or footswitch operation of TALK function

# AX-8MV

## Audio Video Master Station for AX Series

### FEATURE CALL-OUTS:



**AX-8MV with optional desk stand:**  
Model MCW-S/A (adjustable to 45° or 60° angle)



### FEATURE CALL-OUT DEFINITIONS:

- [1] Door station selector button w/LED
- [2] Master station selector button w/LED
- [3] Door release button
- [4] Scan monitor button w/LED
- [5] CO transfer button w/LED
- [6] Privacy button w/LED
- [7] TALK button w/LED
- [8] ALL CALL button
- [9] OFF button (standby)
- [10] Occupied LED
- [11] Speaker
- [12] Microphone
- [13] 3.5 inch color LCD monitor
- [14] Receive volume control switch (low, med, high)
- [15] Transmit volume control switch (low, med, high)
- [16] Tone volume control
- [17] LCD brightness control
- [18] Headset receiver jack
- [19] Headset microphone jack
- [20] Master station directory card / card cover
- [21] Door station directory card / card cover
- [22] Desktop stand
- [23] Headset receiver volume control
- [24] Headset microphone volume control
- [25] Reset switch
- [26] RJ45 jack for wiring to CEU
- [27] Optional connector input
- [28] Connector for AX-16SW add-on selector

### SPECIFICATIONS:

- Power Source: 24V DC Supplied from CEU
- Call Tone: Tremolo ring tone & blinking LED
- Communication: Open voice hands-free (VOX or Push-to-Talk)
- Video Monitor: 3-1/2" direct view TFT color LCD
- Scanning Lines: 525 lines
- Video Output: NTSC Standard 1Vpp (0.7-1.4Vpp)
- Headset Jack: 3.5mm mic and speaker jacks
- Calling Capacity: Up to 7 additional master stations  
Up to 120 door / sub stations
- Mounting: Desk with flip-up stands, or wall mount with provided metal bracket
- Wall mount box: 2-gang electrical box or ring
- Wiring: CAT-5e homerun to CEU
- Wiring Connection: RJ45 jack
- Housing: ABS Resin
- Color: Black
- Operating Temp: 32 – 104° F (0 ~ 40° C)
- Dimensions (HxWxD): 6-7/8" x 7-5/8" x 1-7/8"  
(175 x 194 x 48 mm)
- Weight: 1.21 lbs (550g)

## MCW-S/A Desk Mount Stand

Use with:  
**AX, JA, JF, JK, KB, KC, and GT Systems**

### -INSTRUCTIONS-

The MCW-S/A is a stand that will allow you to locate an Aiphone monitor station on a desk or tabletop. This stand has two angle settings, enabling the user to select the optimal mounting angle for the monitor station (45° or 60°).



MCW-S/A

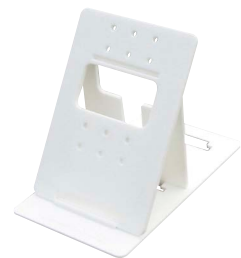


JK-1MED on MCW-S/A  
(shown at 60°)

45° Angle



60° Angle



Dimensions:  
Faceplate: 4½" W x 6½" H  
Base: 4½" W x 7⅞" D  
Height at 45°: 5⅞"  
Height at 60°: 6"

Recommended mounting  
hole position by system:

<b>Top:</b>	<b>Bottom:</b>
AX	GT
JA	JF
KB	JK
KC	

### MOUNTING:

1. Attach the intercom's mounting bracket to the MCW-S/A utilizing the appropriate set of mounting holes  
(*Mounting hardware is not provided by Aiphone. Use 8/32" machine thread screw with flat washer and nut.*)
2. Set the angle of the MCW-S/A by adjusting the rear support arm for either a 45° or 60° angle.
3. Lock the rear support arm into position to prevent the MCW-S/A from collapsing.
4. Feed the wires through the back of the MCW-S/A and attach to the intercom unit.
5. Mount the station onto the mounting bracket.



AX-8MV on MCW-S/A  
(shown at 45°)



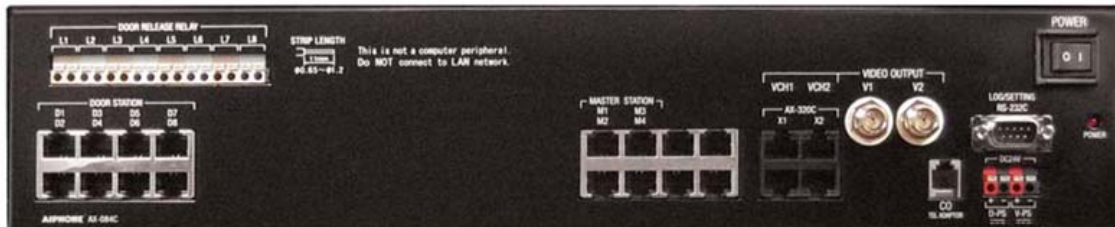
GT-2C on MCW-S/A  
(shown at 60°)



KB-3MRD on MCW-S/A  
(shown at 60°)

# AX-084C

## Central Exchange Unit for AX Series



### DESCRIPTION:

The AX-084C is a Central Exchange Unit for the AX Integrated Audio & Video Security system. Audio/Video and/or Audio-only Master or Door Stations connect directly to this unit via homerun CAT-5e wiring and RJ45 jacks.

The AX-084C supports up to 4 Master Stations and up to 8 Door/Sub stations. The AX-084C can be expanded in increments of 32 for up to 104 Door/Sub stations with the use of AX-320C add-on CEU's.

The CEU handles the calling and communication signals for the system, as well as providing selective door release outputs, video outputs, DVR trigger outputs, and CO line transfer output. System set-up and a variety of functions are programmed in the CEU with the use of the supplied software. Power is applied directly to the CEU via two PS-2420UL power supplies. The serial connection is for uploading the system programming, for raw RS232 data output, or for system monitoring via the supplied program.

The unit can be surface mounted to a wall, desk mounted, or mounted in a standard 19" EIA rack using the supplied mounting brackets.

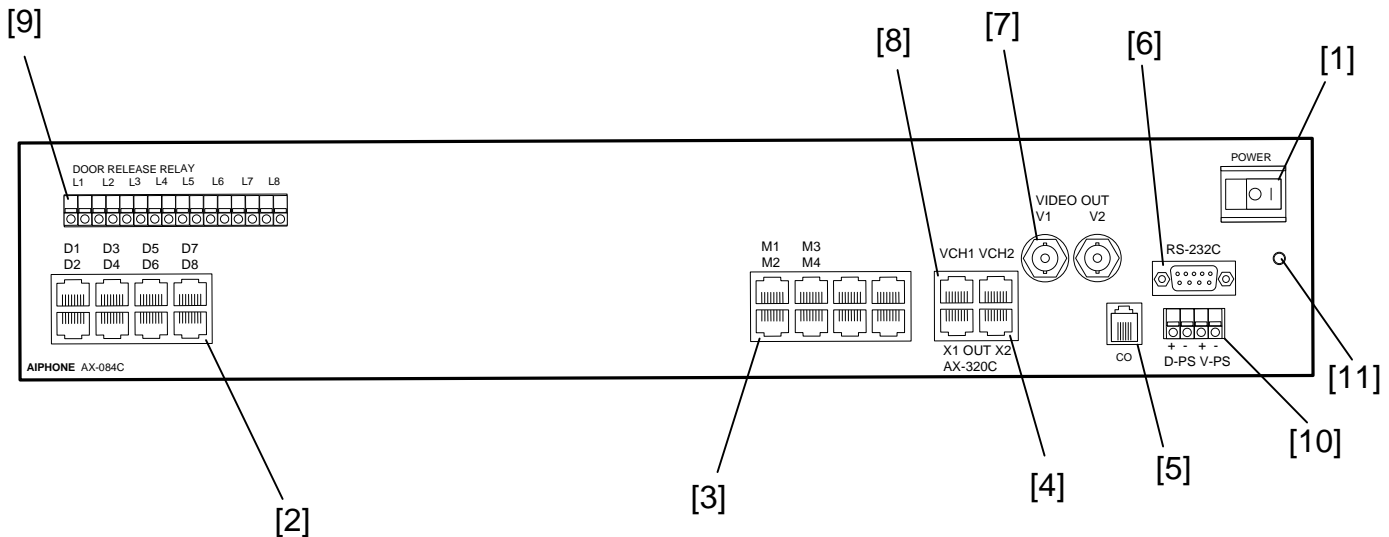
### FEATURES:

- Wiring hub for AX system using CAT-5e cable
- Controls all functionality of AX system
- 4 Master station ports (RJ45)
- 8 Door / sub station ports (RJ45)
- 2 24V DC power supply input terminals
- 8 Door release dry contacts (24V AC/DC 500mA)
- 2 BNC composite video outputs and video switching triggers
- Outputs for AX-320C add-on exchanges to support the maximum capacity of 104 doors (3 AX-320C's max.)
- CO Line transfer output to Viking K-1900-5 programmable auto-dialer
- Rack mountable
- Programmable functionality via supplied software
- Includes USB to serial adaptor and gender changer, software program and Installation & Operation Manual on CD, and QuikStart Guide

# AX-084C

## Central Exchange Unit for AX Series

### FEATURE CALL-OUTS:



### FEATURE CALL-OUT DEFINITIONS:

- [1] Power switch
- [2] Door station ports
- [3] Master station ports
- [4] Add-on exchange unit port
- [5] CO line port (Viking K-1900-5 auto dialer required)
- [6] Setting/log port
- [7] Video output ports
- [8] Video output trigger ports
- [9] Door release relay ports (L1 corresponds to door station D1, L2 to door station D2, etc.)
- [10] Power supply ports
- [11] Power/Communications error display LE

### PACKAGE CONTENTS:

- [1] AX-084C Exchange Unit
- [2] Mounting screws
- [3] Rack/Wall mounting brackets
- [4] Installation CD, including set-up software program and instruction manual
- [5] Mounting screws (for 19-inch rack mounting)
- [6] USB to serial programming cable with driver
- [7] QuikStart guide

### SPECIFICATIONS:

- Power Source: 24V DC, 2A. PS-2420UL (x2)  
(1 for audio-only system, 2 for audio/video system)
- Current Consumption: Video(Max) 0.62A, Audio(Max) 0.65A
- Door Release Contact: 24V AC/DC, 500mA
- Mounting: Desk, wall, or 19: EIA rack with supplied brackets
- Wiring: RJ45 plugs for CAT-5e homerun wire runs from each master and door/sub 2 Conductor wire from PS-2420UL to power input terminals
- CO Line Port: RJ11 for Viking K-1900-5 programmable auto-dialer
- Housing: Metal
- Color: Black
- Operating Temp: 32 – 104° F (0 ~ 40° C)
- Dimensions: 3-7/16" x 1' 6-7/8" x 1' 1-3/16"  
(88 x 480 x 335 mm)
- Weight: 10.35 lbs (4,700g)



AL400ULPD4

### **Overview**

AL400ULPD4 is a multi-output power supply/charger which converts a 115VAC/60Hz input into four (4) Class 2 Rated 12VDC or 24VDC power limited outputs.

### **Specifications**

#### ***Input:***

- Input 115VAC, 60Hz, 1.45 amp.
- Input fuse rated @ 3.5 amp/250V.

#### ***Output:***

- 12VDC or 24VDC selectable output.
- 12VDC @ 4 amp or 24VDC @ 3 amp supply current.
- Four (4) Class 2 Rated fuse protected power limited outputs.
- Outputs are rated @ 3.5 amp.
- Filtered and electronically regulated outputs.
- Short circuit and thermal overload protection.

#### ***Battery Backup:***

- Built-in charger for sealed lead acid or gel type batteries.
- Automatic switch over to stand-by battery when AC fails.
- Maximum charge current 0.7 amp.

#### ***Supervision:***

- AC fail supervision (form “C” contacts).
- Low battery supervision (form “C” contacts).
- Battery presence supervision (form “C” contacts).

#### ***Visual Indicators:***

- AC input and DC output LED indicators.

#### ***Electrical:***

- Operating temperature: 0° C to 49° C ambient.
- 18-27 BTU/Hr.
- System AC input VA requirement: 166.75VA.

#### ***Mechanical:***

- Enclosure Dimensions (H x W x D approx.):  
13.5” (342.9mm) x 13” (330.2mm) x 3.25” (82.55mm)  
- Accommodates up to two (2)12VDC/7AH batteries.
- Product weight (approx.): 8.65 lbs. (3.86 kg.).
- Shipping weight (approx.): 9.55 lbs. (4.26 kg.).

### **Agency Approvals**



- UL 294 UL Listed for Access Control System Units.
- UL 603 UL Listed Standard for Power Supplies for Use with Burglar-Alarm Systems.
- UL 1069 UL Listed Hospital Signaling and Nurse Call Equipment.
- UL 1481 UL Listed Standard for Safety for Fire Protective Signaling Systems.

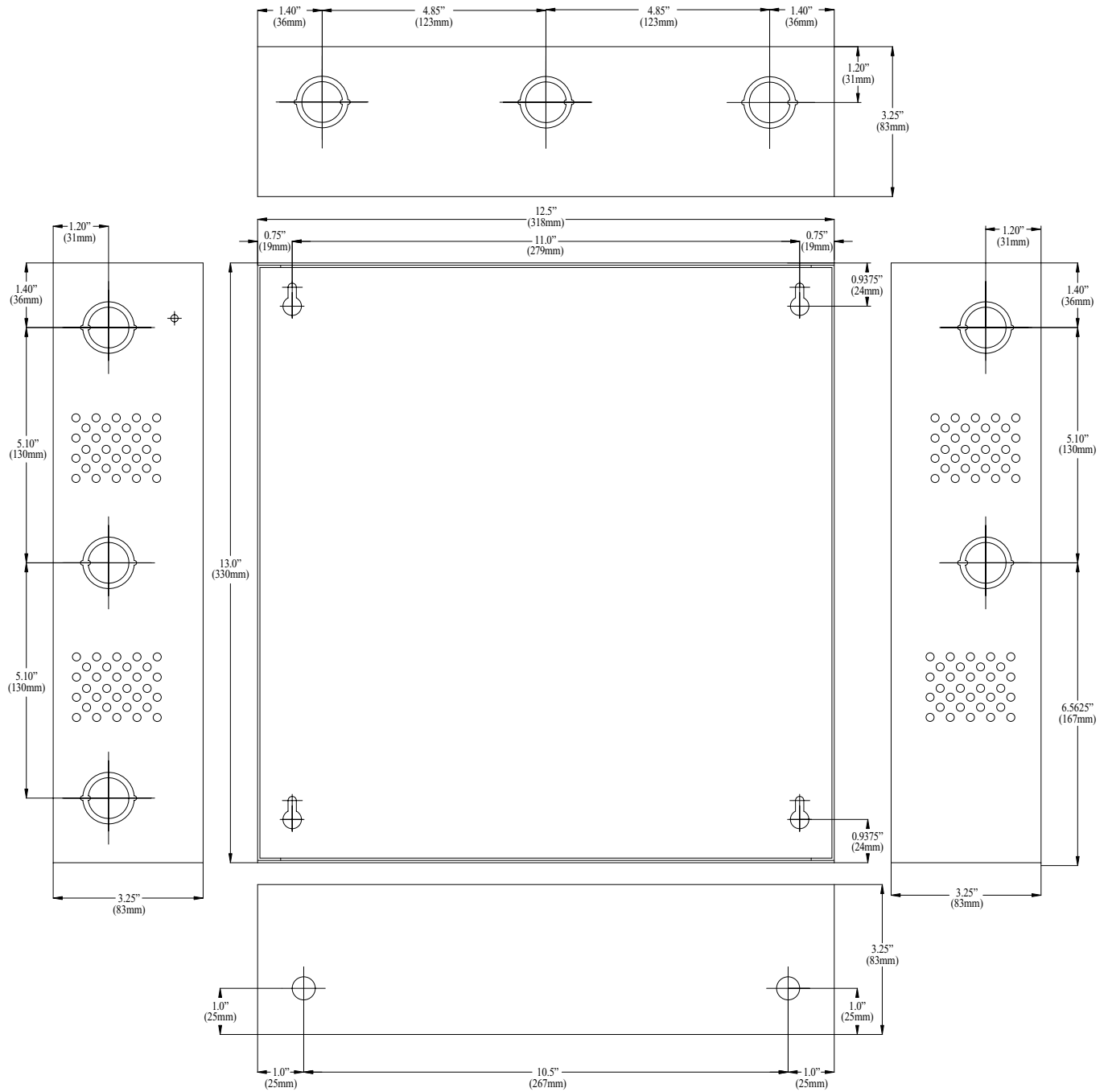


- CUL Listed - CSA Standard C22.2 No.205-M1983, Signal Equipment.



**Enclosure Dimensions (H x W x D) (approximate):**

13.5" (342.9mm) x 13" (330.2mm) x 3.25" (82.55mm)



# RY-24L

## Form C Door Release Relay for AX, KB, KC, and JA Color Video Systems

### - INSTRUCTIONS -

The RY-24L Door Release Relay Module is an interface between the door release contact on the Aiphone monitor and the actual release mechanism. The contact closure directly out of the monitor is rated at 12V AC with a low current capacity. If your strike or maglock requires more voltage or current, the RY-24L is required. It provides either a Normally Open contact for an electric strike, or a Normally Closed contact for a magnetic lock. The contact rating supports a majority of door release hardware available on the market. The RY-24L relay is recommended with all AX, KC, KB, and JA video systems when using the door release feature. This will protect the built-in contact from possible surge damage.

*(Note: For more than one door release on the KB system, use the RY-3DL.)*

### INSTALLATION:

1. Install in a suitable location, either near the power source for the door release mechanism, or behind the monitor.
2. Secure wire connections with proper termination, such as wire nuts or crimp connectors.
3. Trim the wires to the desired length.
4. Trim the unused contact wire so the bare strands are not exposed.

### WIRING DIAGRAMS:

#### JA System Wiring



#### RY-24L COLOR CODE:

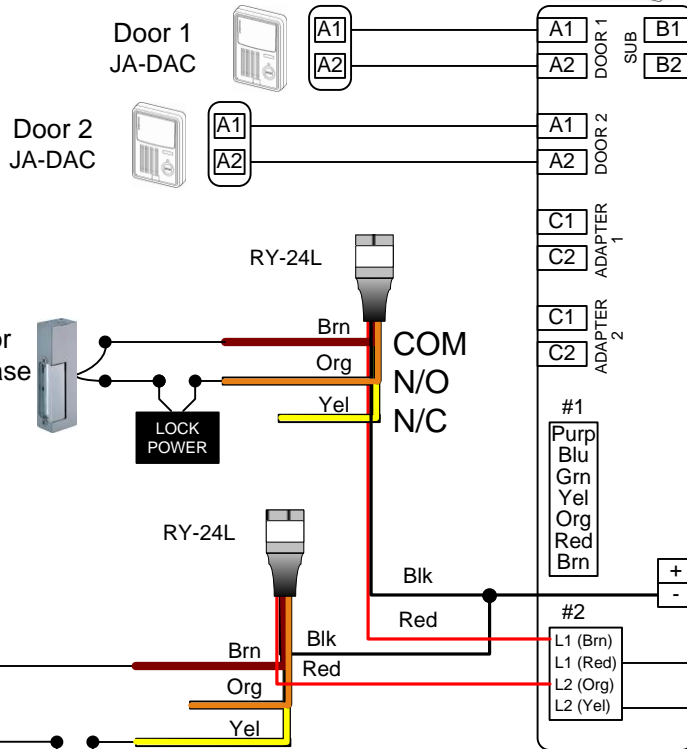
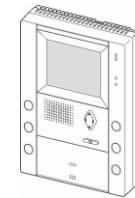
##### Input of Relay:

Red: L/ORG, Postive trigger  
Black: (-) NEGATIVE

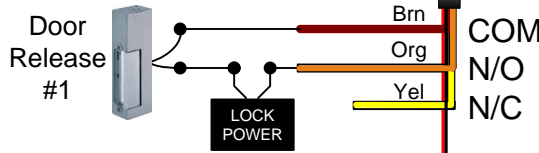
##### Output of Relay:

Brown: COMMON  
Orange: N/O Contact  
Yellow: N/C Contact  
*(See contact rating specs on back page)*

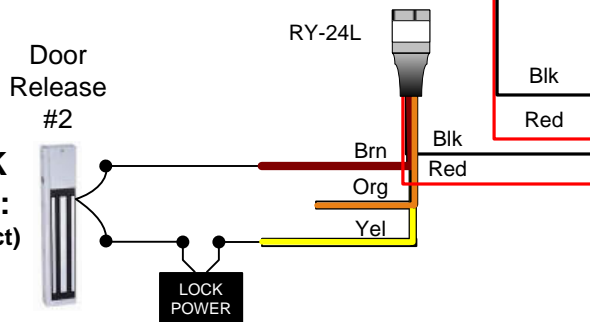
JA-2MECD  
JA-2MCD



#### ELECTRIC STRIKE WIRING METHOD: (Normally Open contact)



#### MAGNETIC LOCK WIRING METHOD: (Normally Closed contact)

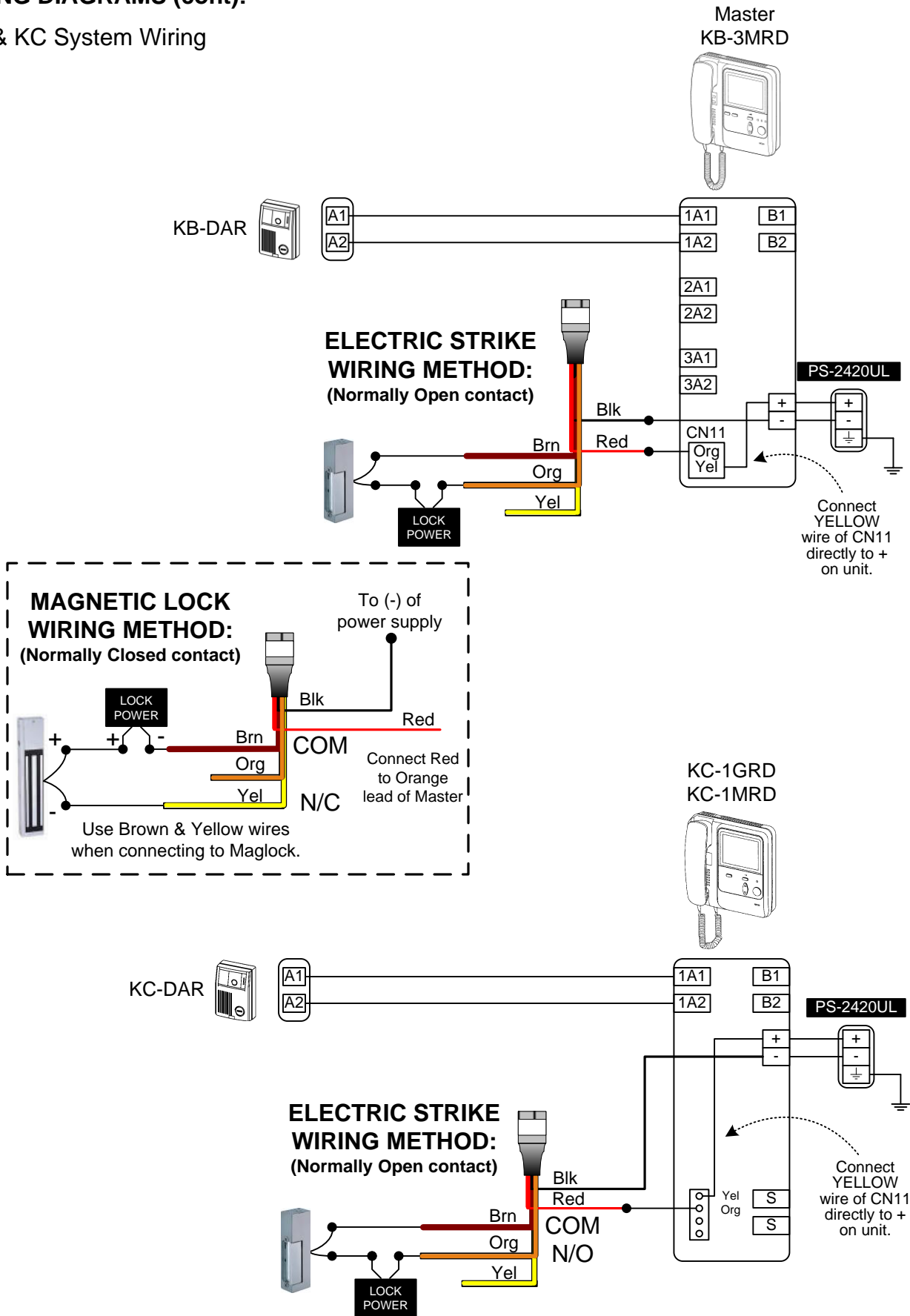


Connect RED and YELLOW wire on JA-2MCD/-2MECD directly to +

**NOTE:** The door release contacts are rated at 24V AC, 500mA. The RY-24L should be used in any application where the strike or maglock has a higher voltage or draws more current. Otherwise, internal damage to the JA monitor could result.

# WIRING DIAGRAMS (cont):

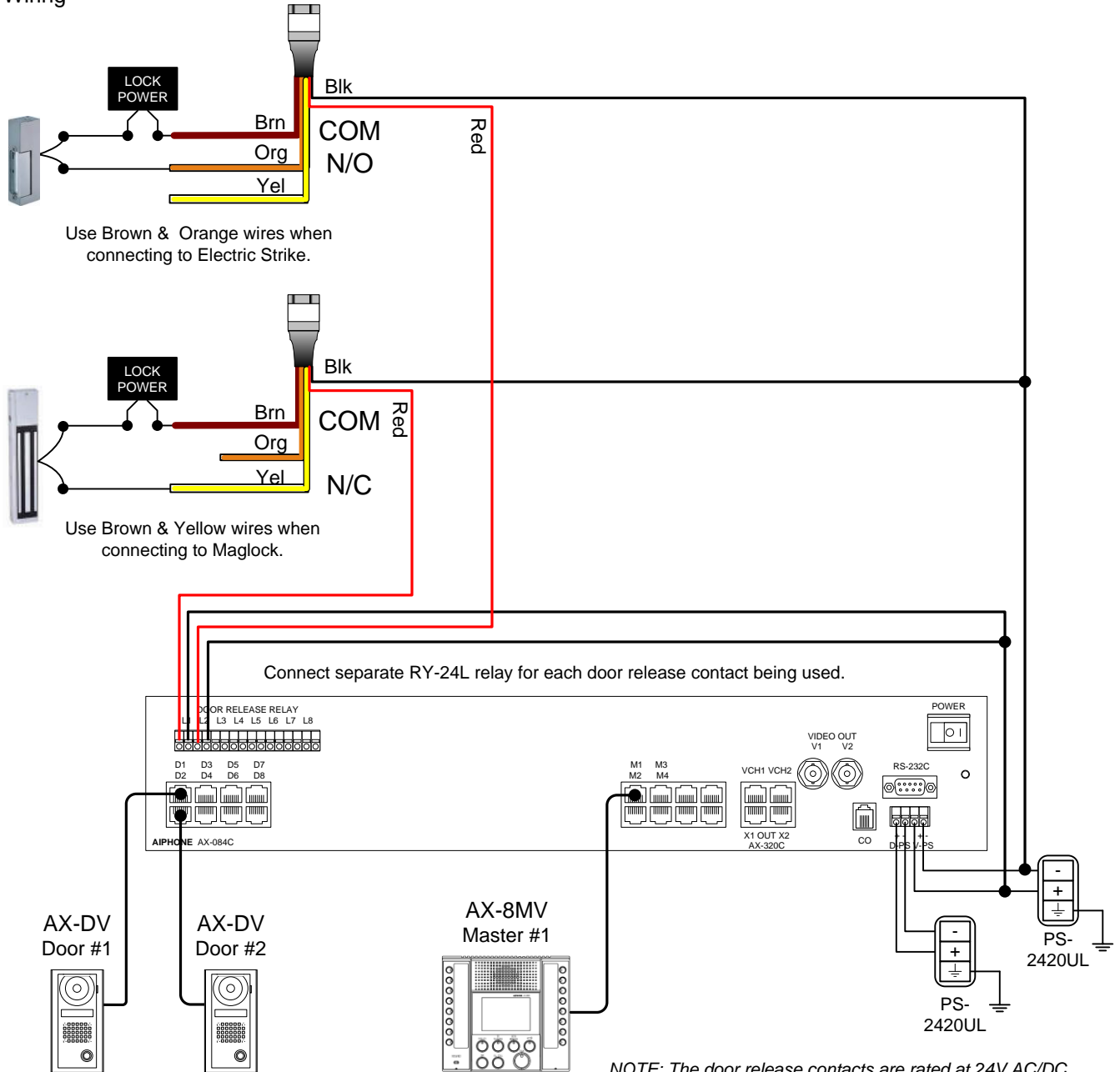
## KB & KC System Wiring



NOTE: The door release contacts are rated at 12V AC, 400mA. The RY-24L should be used in any application where the strike or maglock has a higher voltage or draws more current. Otherwise, internal damage to the KB/KC monitor could result.

# WIRING DIAGRAMS (cont):

## AX System Wiring



### SPECIFICATIONS:

- Power Source: Supplied by master station or CEU
- Mounting: No mounting required
- Terminations: Color-coded prewired pigtails
- Relay Input: 24V DC, Red and Black wires, 22AWG
- Relay Output: Brown, Red, Orange wires, 18AWG
- N/O Output rating: 5A at 30V DC or 125V AC
- N/C Output rating: 3A at 30V DC or 125V AC
- Wiring: 2 conductors from unit's door release contacts to RY-24L.  
2 conductors from RY-24L to release mechanism, with power wired in series.
- Dimensions (HxWxD): 1-3/4" x 7/8" x 7/16", with wires extending approx. 7-1/2"

**Overview-** Corby Programmable Keypads can use up to 165 different user operating codes. These codes can be 3-6 digits in length, and must be entered in exact order. Codes and operating parameters are stored in non-volatile EEPROM memory.

**Keypad Operation** - After a valid code is entered, the microprocessor will operate specific outputs.

For Access Control applications, a Request-To-Exit button can be added and programmed to activate any output(s). Add a magnetic door switch and the Door Ajar and Time Cancel features become usable.

For alarm control applications, enter a valid user code to arm or disarm the security system, or use a different code to shunt or bypass an alarm zone. If enabled, you can press the # and \* simultaneously to trigger a panic condition which can be programmed to any output(s).

A security lockout feature can be programmed to disable the keypad after three invalid code attempts.

**Programmable Outputs** - Any combination of the four outputs may be activated by a valid code or input condition. The two input conditions are Request-To-Exit and Door Ajar/Forced Entry. Select which output(s) to associate with every code or input condition. Different user codes and input conditions can have their own distinct output(s). Individual codes and inputs can be used to accomplish multiple tasks, and can function independently of each other.

The Main Relay, output #1, can control almost any kind of device including door locks, office machines, industrial equipment, or security systems.

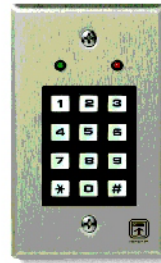
Use the Auxiliary Relay, output #2, to trigger a dialer, buzzer, shunt an alarm zone, or illuminate an LED, depending on your application.

Use Voltage Outputs #3 and #4 to indicate Duress, Panic, Door Ajar, and Forced Entry.

**Types of Codes - Operating Codes:** Any one of 165 operating codes can be programmed to activate any or all of the four available outputs. **Duress:** Caused by entering a special code that opens the door or disarms an alarm, as well as activating additional silent alarm outputs. This code can activate any or all of the four available outputs. **Panic:** Triggered when the # and \* are pressed simultaneously. This special code can be programmed to activate any or all of the four available outputs. **Programming Code:** This is a user-selectable six digit code. It must be entered before any programming may be accomplished. This prevents the tampering of codes by unauthorized personnel.

**Auxiliary Inputs** - Program the following inputs to activate any or all of the four outputs.

**Door Ajar:** If the door is open 30 seconds longer than the programmed time of relay #1, any or all of the other outputs can be programmed to activate. **Forced Entry:** If the door is opened and it is *not* preceded by a valid code or Request-To-Exit, any or all of the outputs can be programmed to activate. **Time Cancel:** When a door is opened and then closed, any remaining programmed door strike activation time will be canceled preventing unauthorized "follow throughs". **Request-To-Exit:** A simple "normally open" (N.O.) Request-To-Exit button can be used to allow a timed exit from a protected area.



6520

Just one of six indoor styles available that include single or double gang versions.



6566

Rugged outdoor unit with heavy-duty metal keys. Suitable for all environments.



6564

Stand-alone or attached to a pedestal for gate control.

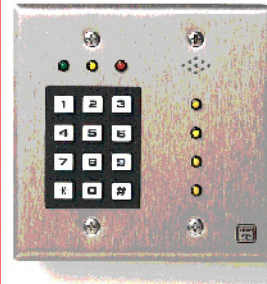


6522

Mounted in a vandal resistant, weatherproof aluminum covered housing that conceals the keypad from sight.

6571

Just one of two double gang indoor styles available.

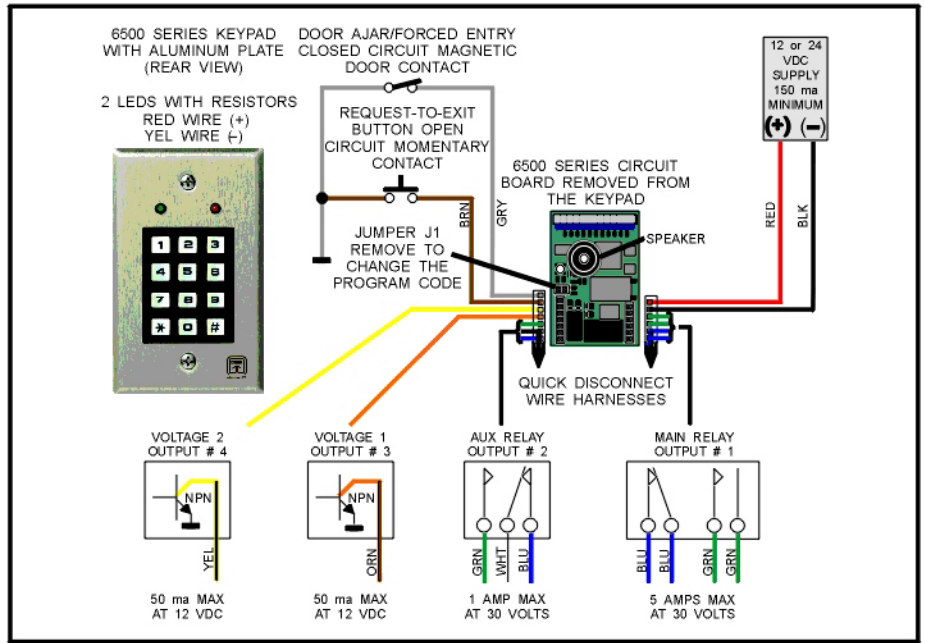
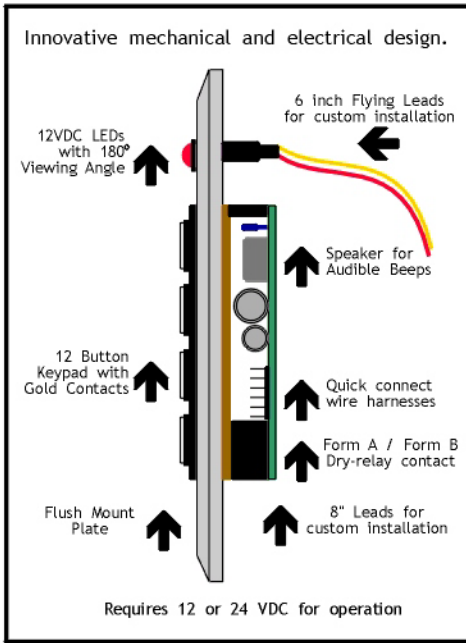


6524

Interior, surface mount, hidden view spy-proof design helps keep digital codes secure.

## Additional Benefits & Features

- Codes and operating parameters are stored in a non-volatile EEPROM.
- Program the outputs for either a momentary (1-99 seconds) or latching time.
- All programming is performed using the keypad.
- Quick-connect wire harnesses for easy installation.
- Program an audible "key beep" during code entry.
- Two programmable voltage outputs.
- LED's are installed for visual feedback.
- Automatic keypad timeout from program mode.
- 12 or 24VDC Operation.
- Duress and auxiliary codes.
- Invalid Code Attempt Lockout
- Silent panic code is active 24 hrs. a day.



## Typical Applications

- ◆ Office Buildings
- ◆ Computer Rooms
- ◆ Business Offices
- ◆ Household Garage Doors
- ◆ Restaurant Liquor Storage Areas
- ◆ Laboratory & Pharmacy Facilities
- ◆ Apartment & Condominium Entrances
- ◆ Manufacturing Facilities
- ◆ Mini-Storage Facilities
- ◆ Police Evidence Rooms
- ◆ Employee Entrances
- ◆ Parking Gates

## Programming Options

- ◆ Add/Delete Users
- ◆ Change Programming Code
- ◆ Assign Outputs to Door Ajar
- ◆ Assign Outputs to Forced Entry
- ◆ Assign Outputs to Panic
- ◆ Assign Outputs to Request-To-Exit
- ◆ Enable/Disable Key Beep
- ◆ Set Code Length
- ◆ Set Main Relay Time
- ◆ Set Auxiliary Relay Time
- ◆ Set Both Voltage Output Time
- ◆ Enable/Disable Keypad Lockout
- ◆ Erase Everything
- ◆ Erase Codes Only

## Specifications:

**Input Voltage:** 12 or 24 Volts DC.

**Power Consumption:** 20ma @ idle 120ma maximum.

### Outputs:

Main Relay: Form A and B, 5 Amp, 30 Volt.

Auxiliary Relay: Form C, 1 Amp, 30 Volt.

Voltage Outputs (2): Switches to (-) 50ma.

**Operating Temperature:** -18±C to 55±C (0±F to 131±F)

### Dimensions:

Single Gang: 2.75" X 4.5" (53mm X 40mm)

Double Gang: 4.56" X 4.5" (115mm X 40mm)

Heavy Duty Plate: 3.23" X 5.0" (84mm X 127mm)

## Ordering Information:

### Programmable Keypads

#### Indoor

- 6520 Single-gang, flush mount with one green and red LED.
- 6521 Double-gang, flush mount with one green and red LED.
- 6524 Hidden view with tamper switch, one green and red LED.
- 6530 Single-gang, flush mount w/ one green, yellow and red LED.
- 6540 Single-gang, flush mount w/ one green, two yellow and one red LED.
- 6571 Double-gang, flush mount w/ one green, five yellow and one red LED.

#### Outdoor

- 6522 Aluminum cover, outdoor, surface mount w/ one green and red LED. Also includes 12VDC night light.
- 6562 Cast metal, heavy-duty mounted in a lock box & on a pedestal.
- 6564 Cast metal, heavy-duty mounted in a lock box.
- 6566 Cast metal, heavy-duty, flush mount with one green and red LED.

### Back Boxes

- 11 Tamper box, flush mount with SPDT tamper switch.
- 12 Tamper box, surface mount with front and rear CC tamper.
- 14 Surface mount. Use with 6566 keypads.

### Electronic Relays - Timer Modules

- 78 Electronic relay module. SPDT momentary relay. 1 Amp, 28 VDC contacts, 6-14 VDC.
- 86 Digital timer-controller module. Panic, latching, timer and zone control. 5 Amp, 30 VDC contacts. 6-14 VDC.

### Relays

- 22 Latching 12 VDC SPST with 6" wires.
- 25 Momentary 6-12 VDC SPST with 6" wires.

*These specifications, product features and product information are subject to change without notice or obligation. Before purchasing or specifying this equipment, be sure to call Corby Customer Service to verify the current status of intended products, software, or firmware features to ensure the product(s) will meet or exceed your requirements. Corby Industries, Inc. is not responsible for typographical errors.*



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## Architectural Specifications:

The keypad will be a Corby 6500 Series or approved equal. Keypads will consist of a 12-button keypad and mounting plate. A removable and replaceable self-contained electronics module with a microprocessor will be attached to the rear of the keypad. Electronics module will contain four separate outputs which include a Form A/B main relay rated 5amp, Form C aux relay rated lamp and two voltage switch outputs rated 50ma. Keypads will operate from 12 VDC or 24 VDC and consume 20ma. @ idle and 120ma. maximum. Connections will be made to wire "pigtailed" of two removable pin type connectors.

Keypads will be programmable through the same 12 button keypad used to activate outputs. Keypads will accept 165 unique codes for operation of any or all of the outputs. Code and all programmable settings will be stored in non-volatile EEPROM memory and will not be lost when power is removed. Operating code length will be selectable from three to six digits. Keypads will return "on-line," in 60 seconds, if no data is entered while in program mode. Keypads will "timeout" when a partial code is entered and not completed within ten seconds. Keypad will be disabled for a user selectable time upon three consecutive invalid code entries.

Keypads will be available in a weatherproof version, with spring loaded cover to conceal the keypad, and without a cover. Keypads will be flush or surface mountable to a single gang electrical type box. Keypads will be 2.75" wide X 4.5" high X 1" deep. Weatherproof keypads without cover will be 3.23" wide X 5.0" high X 1" deep.


**BOSCH**

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## DS150i Series Request-to-exit Detectors



- ▶ Single or double door use
- ▶ Wall or ceiling mountable
- ▶ Internal vertical pointability
- ▶ Wrap-around coverage pattern
- ▶ Selectable relay trigger mode
- ▶ Selectable fail safe/fail secure modes

The DS150i Series consists of the DS150i Detector (light gray) and the DS151i Detector (black). They are specifically designed for Request-to-exit (REX) applications. The DS150i and DS151i detect motion in their coverage area and signal an access control system or door control device.

### Functions

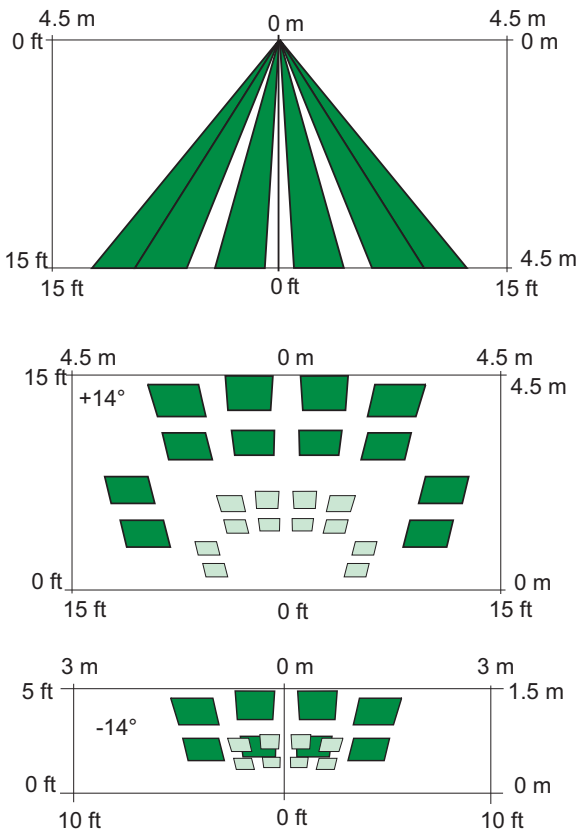
#### Test Features

Externally visible activation LED.

### Certifications and Approvals

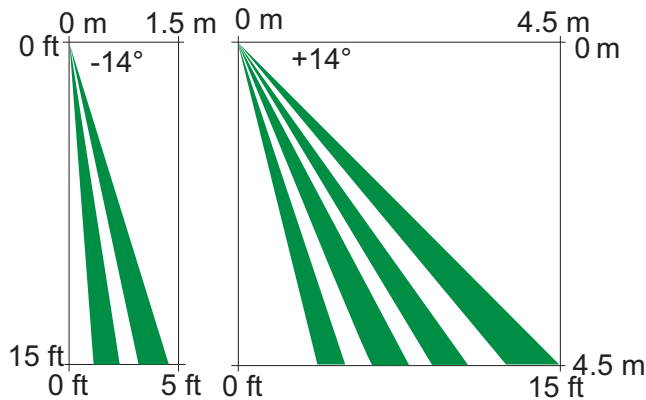
Region	Certification	
Europe	CE	2004/108/EC EMC Directive; 2006/95/EC Low-Voltage Directive
USA	UL	ALVY: Access Control Systems Units (UL294)

**Installation/Configuration Notes**



**Front View and Top Views**

A front view of the DS150i and DS151i coverage, as well as top views of the coverage pattern on the floor. The typical coverage measurements are 2.4 m x 3 m (8 ft x 10 ft).



**Side View**

A side view of the DS150i and DS151i coverage pattern.

**Technical Specifications**

**Electrical**

Current Draw:	26 mA at 12 VDC
Voltage:	12 VAC or VDC; 24 VAC or VDC

**Mechanical**

Alarm Output:	Two Form C relay contacts
Indicators:	One activation LED
Relay Latch Time:	Adjustable to 60 sec
Enclosure Dimensions:	3.8 cm x 15.9 cm x 3.8 cm (1.5 in. x 6.25 in. x 1.5 in.)
Enclosure Material:	High impact ABS plastic enclosure
Power Loss Default Mode:	Programmable fail-safe or fail-secure modes.
Timer Mode:	Programmable reset (accumulative) or non-reset (counting) mode.
Mounting Location:	Surface mount on wall or ceiling

**Environmental**

Operating Temperature: -29°C to +49°C (-20°F to +120°F)

Radio Frequency Interference (RFI) Immunity: No alarm or setup on critical frequencies in the range from 26 MHz to 1000 MHz at 50 V/m.

**Ordering Information**

<b>DS150i Request-to-exit PIR Detector</b> Gray enclosure. For use in request-to-exit (REX) applications. Provides 2.4 m x 3 m (8 ft x 10 ft) coverage.	<b>DS150i</b>
<b>DS151i Request-to-exit PIR Detector</b> Black enclosure. For use in request-to-exit (REX) applications. Provides 2.4 m x 3 m (8 ft x 10 ft) coverage.	<b>DS151i</b>

**Accessories**

<b>TP161 Trim Plate</b> A black trim plate used when mounting the sensor over a standard single-gang box.	<b>TP161</b>
<b>TP160 Trim Plate</b> A light gray trim plate used when mounting the detector over a standard single-gang box.	<b>TP160</b>

**Americas:**  
Bosch Security Systems, Inc.  
130 Perinton Parkway  
Fairport, New York, 14450, USA  
Phone: +1 800 289 0096  
Fax: +1 585 223 9180  
security.sales@us.bosch.com  
www.boschsecurity.us

**Europe, Middle East, Africa:**  
Bosch Security Systems B.V.  
P.O. Box 80002  
5600 JB Eindhoven, The Netherlands  
Phone: + 31 40 2577 284  
Fax: +31 40 2577 330  
emea.securitysystems@bosch.com  
www.boschsecurity.com

**Asia-Pacific:**  
Robert Bosch (SEA) Pte Ltd, Security Systems  
11 Bishan Street 21  
Singapore 573943  
Phone: +65 6258 5511  
Fax: +65 6571 2698  
apr.securitysystems@bosch.com  
www.boschsecurity.asia

**Represented by**



# MODEL TS-2T



## SPECIFICATIONS

- GREEN 2 INCH SQUARE PUSHBUTTON
- LABELED "*PUSH TO EXIT*"
- MOMENTARY ACTION SWITCH
- S.P.D.T. TIMED CONTACTS RATED 2A.@35 VDC
- TIME DELAY ADJUSTABLE FROM 2 TO 45 SECONDS
- TIMER INPUT VOLTAGE 12 TO 24 VDC OR VAC
- SWITCH ILLUMINATED WITH HI-BRIGHTNESS LED, OPERATES ON 12 OR 24 VOLTS AC/DC
- SWITCH MOUNTED ON SINGLE GANG S.S. PLATE
- CONFORMS TO U.L. STANDARD 294 FOR ACCESS CONTROL, U.L. FILE NUMBER SA32686



**ALARM CONTROLS CORPORATION**  
19 BRANDYWINE DRIVE DEER PARK, NY 11729

1 631 586-4220 1 800 645-5538

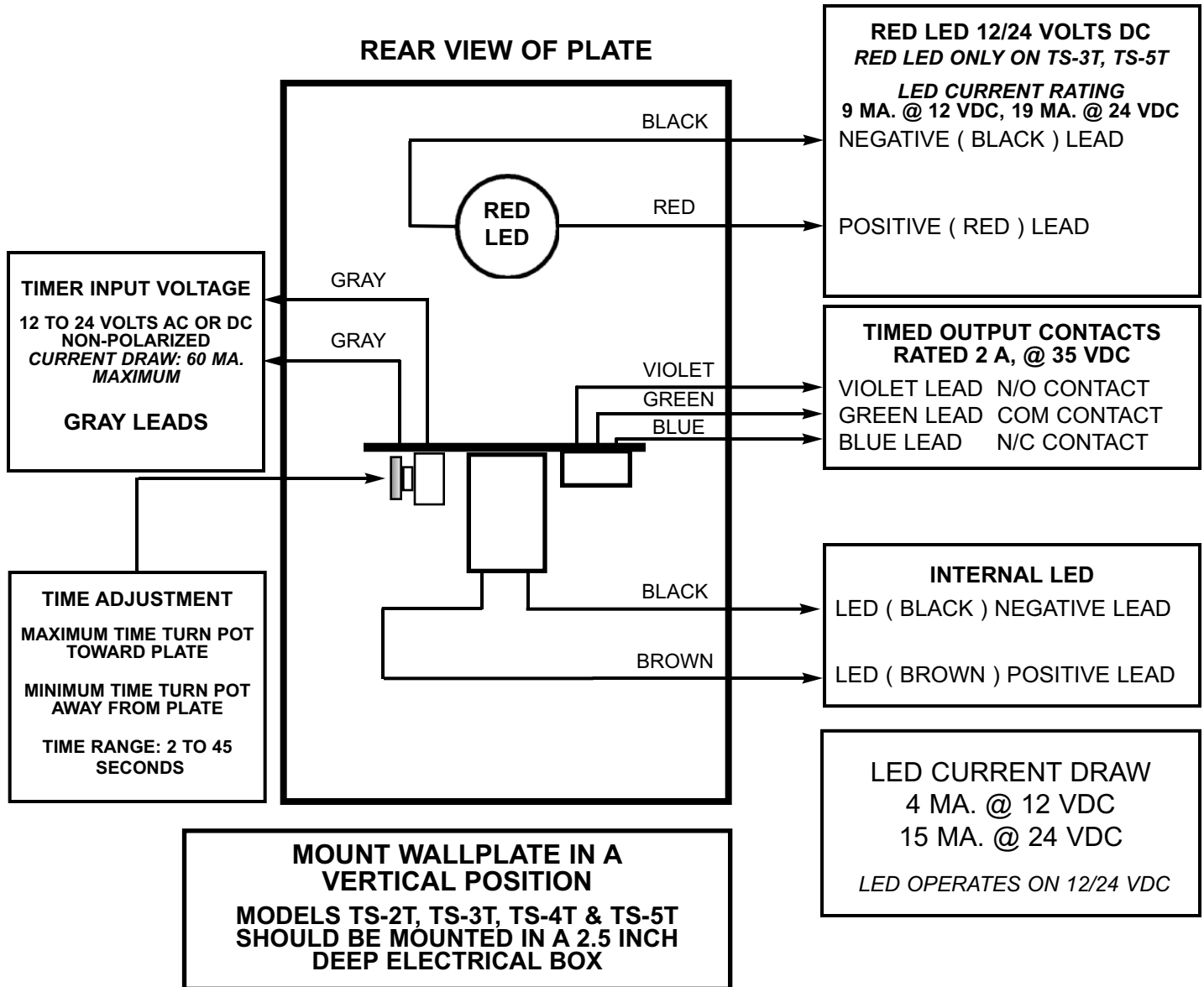
WWW.ALARMCONTROLS.COM EMAIL INFO@ALARMCONTROLS.COM

# INSTALLATION INSTRUCTIONS

## MODELS TS-2T, TS-3T, TS-4T, TS-5T



U.L. FILE SA32686



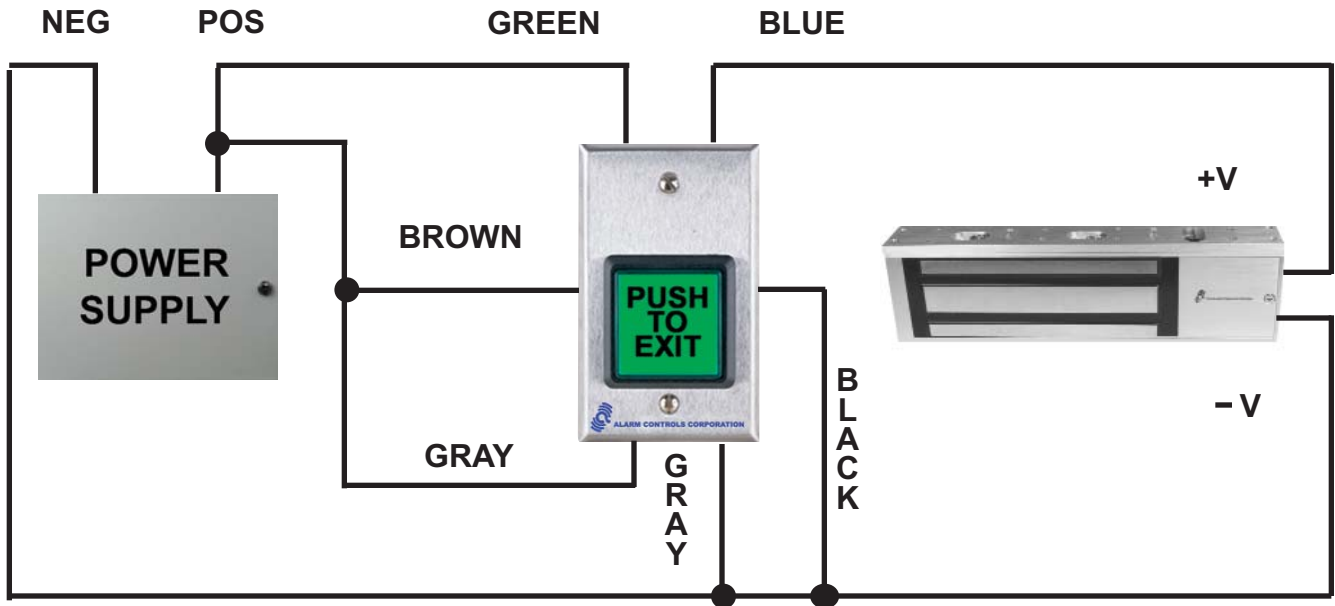
NOTE: TIMER WILL ACTIVATE WHEN **PUSH TO EXIT** SWITCH IS DEPRESSED.  
SUBSEQUENT DEPRESSIONS OF THE SWITCH WILL RE-START THE TIMER.



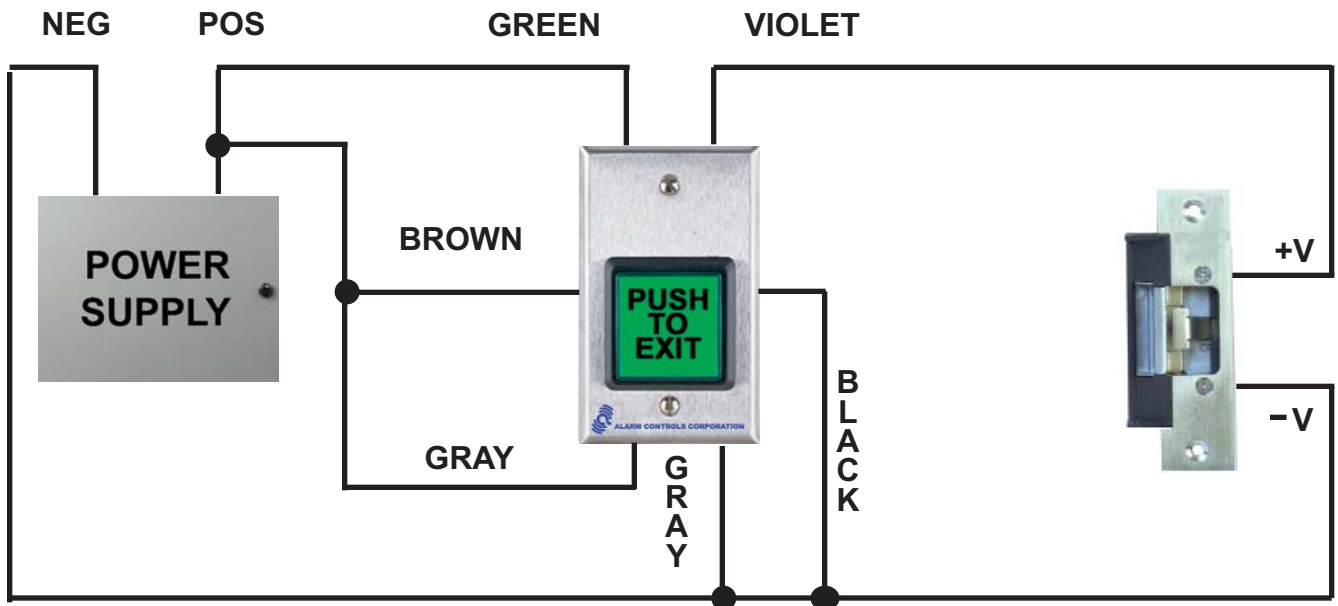
**ALARM CONTROLS CORPORATION**  
19 BRANDYWINE DRIVE P.O. BOX 280  
DEER PARK, NY 11729

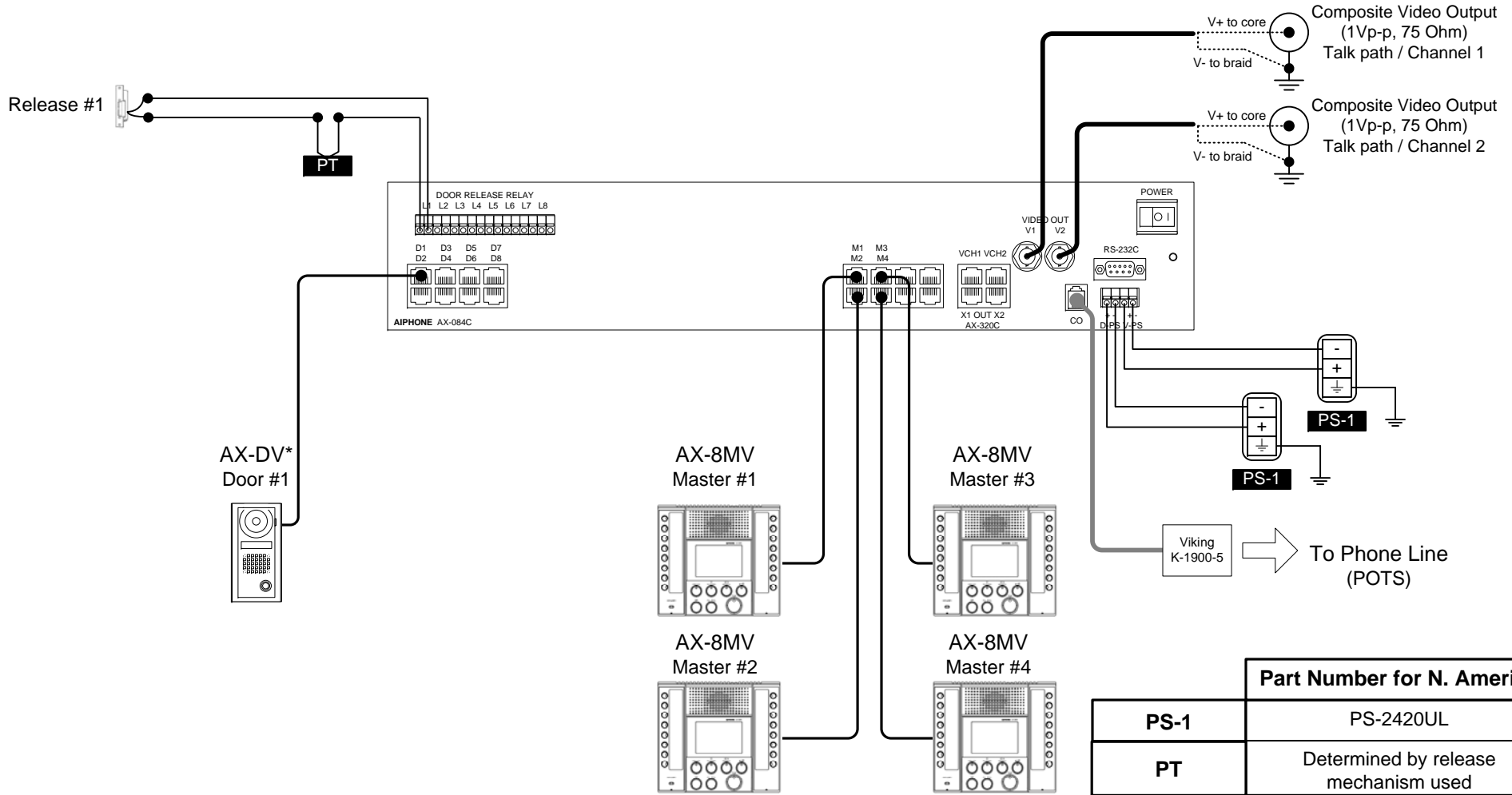
PH: 1 800 645-5538 1 631 586-4220 FAX ; 1 631 586-6500  
WWW.ALARMCONTROLS.COM EMAIL: INFO@ALARMCONTROLS.COM

# TYPICAL WIRING DIAGRAMS FOR MODEL TS-2T



## ELECTRIC DOOR STRIKE FAIL SECURE MODE





**NOTES:**

1. Wire specification: CAT-5e for all AX sub stations, and masters.
2. AX-DV\* shown can be replaced by any AX series sub station, or IE series door station.
3. Door stations with embedded card readers must have additional wire run from the card reader to its own control panel.
4. Door release contacts can be programmed for either NO or NC operation.
5. Composite video output available on V1, V2 output of AX-084C.
6. See Product Installation Manual for complete system information and specifications.

**Wire Distance Specifications:**

Components	Wire	Distance	Notes:
AX-8MV to AX-084C	CAT-5e	980'	Each master is homerun to the exchange.
AX-Sub Station to AX-084C	CAT-5e	980'	Each substation is homerun to the exchange. Sub stations include; AX-A, AX-B, AX-DM, AX-DV, AX-DV-P, AX-DVF, AX-DV-P, and IE series door stations.

**Disclaimer:** This diagram is provided as a service only, based on standard system configurations. Actual installation parameters may vary. Aiphone Corporation does not warrant or assume any legal liability for this information, nor is Aiphone responsible for installation accuracy or costs incurred involving on-site service.