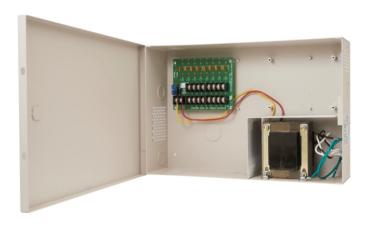


# AccuPower AQTVA Series AC Output for Video Surveillance 8 or 16 Outputs Installation Instructions



Recommended Tools & Additional Materials (Not Included)		
Drill	Wire stripper	Additional mounting hardware
Screw Driver	Cam Lock	

## **Specifications**

Mechanical	Electrical	Environmental	Regulatory
Physical Size: Height: 9" [229 mm] Depth: 3.75" [96 mm] Length: 14" [356"]	Input Voltage Operating Range 115VAC 50-60Hz	Operating Temperature 0°F to 130°F [-17 to 54°C]	UL 2044 C22.2 No.1-98 RoHS Compliant
Weight AQTVA4-(8F or 8F) 10.5 lbs AQTVA8-(8F or 8F) 12.0 lbs AQTVA8-(16F or 16F) 12.8 lbs	Total Output Voltage (@24VAC)  AQTVA4-(8F or 8C): 4 Amps AQTVA8-(8F or 8C): 7.3 Amps AQTVA8-(16F or 16C): 7.3 Amps  Individual Output Protection  AQTVA4-8F: 2A Fuses AQTVA4-8C: 1.42A PTCs AQTVA8-8F: 2A Fuses AQTVA8-16F: 2A Fuses AQTVA8-16F: 2A Fuses AQTVA8-16F: 2A Fuses	<b>Humidity</b> 10% to 95% RH For indoor use only	

**Notes:** All outputs are isolated from primary and ground. All 4A units have a 2A in-line fuse. Do not expose to rain or moisture. **Caution:** De-energize unit prior to servicing.

## **Module Options**

AccuPower	Output Amps	Output Voltage	ATO Main Fuse	Output Channels	Fuse Type	Fuse Size	Outputs Class 2 Power Limited
AQTVA4-8F	4	24VAC	5A	8	Fuse	2 A	Ν
AQTVA4-8C	4	24VAC	7.5A	8	PTC	1.42 A	Υ
AQTVA8-8F	7.3	24VAC	10A	8	Fuse	2 A	N
AQTVA8-8C	7.3	24VAC	15A	8	PTC	1.42 A	Υ
AQTVA8-16F	7.3	24VAC	10A	16	Fuse	2 A	N
AQTVA8-16C	7.3	24VAC	20A	16	PTC	1.42 A	Υ

## **Applications**

The AQTVA Series provides AC output to power cameras, electrified locks, and other devices that require 24VAC power.

# **Pre-Installation Survey**

Before installing the AQTV Power Supply, the mounting location should be determined and assessed for the following:

- Availability of AC power service
- Protection from vandalism and tampering
- Sufficient clearance for air circulation and heat dispersal

CAUTION: Check with your local code inspectors to ensure your compliance with the National Electrical Code (ANSI/NFPA 70), (Canadian Electrical Code for Canada) or equivalent and any additional licensing and wiring requirements for your jurisdiction.

# A. Installing the Enclosure

#### 1. **Mark Mounting Holes:**

Select mounting location so that AC input conduit can be aligned with one of the knock-outs on the bottom or lower right side or back of the enclosure.

IMPORTANT: AC input is not power limited. AC lines must be enclosed in approved conduit. AC Input lines must be separated by at least 1/4" from Class 2 power-limited output wires.

Mark hole locations on the mounting surface for keyholes at top/back of enclosure, ensuring marks are level. Install mounting screws appropriate for the mounting location, leaving enough hardware exposed to insert through keyholes at the back of the enclosure.

#### 2. Remove Knock-Out for AC Conduit Connection

Using a flathead screwdriver and hammer, carefully break metal tabs to detach knock-out cover from enclosure. Needle nose pliers may also be used.

#### 3. **Remove Knock-Out for Output Wires**

Identify desired routing location for output wires on right top, side, or bottom of enclosure. Ensure wires maintain at least ¼" separation from AC input. Remove knock-out cover from enclosure.

#### 4. **Optional: Install Cam Lock**

The AccuPower enclosure supports the use of a cam lock. Break metal tabs to detach cam lock knock-out from enclosure. Install cam lock according to manufacturer's directions and test to ensure cam latch engages tab on inside of enclosure.

#### 5. **Mount Enclosure**

Place keyholes over mounting screws and slide power supply downward. Ensure proper alignment between knock-out and AC conduit. Install screws through holes at bottom back and fasten all securely.

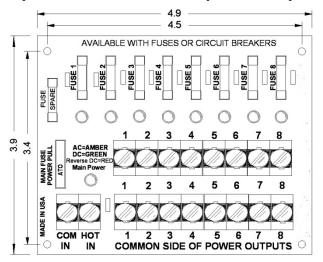
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# **B. Making Electrical Connections**

# 1. Transformer

Component	Component Name	Function
Transformer	AC Input	3-wire AC input Connect AC input power wires as follows: Black = Positive White = Neutral Green = Ground
	AC Output	2-wire AC output connects to Power Distribution Boards.  Red = Positive  Yellow = Neutral
Fuse Assembly (only of 4A Models)	Fuse Assembly	Black fuse holder mounted on AC guard. Removable cover allows glass 2 ACG fuse to be replaced.

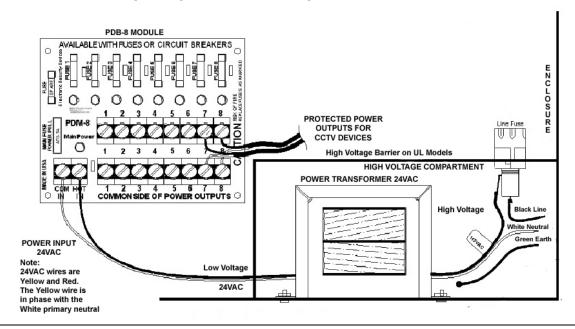
# 2. Power Distribution Board (Two are used for 16 output Models)



Component	Component Name	Function	
ATO Main Fuse	MAIN FUSE	Main Fuse and Power Pull protects output side from voltage surges. Removing fuse disconnects all outputs from input.	
AC Input Terminal Block	COM HOT IN IN	2-wire AC input terminal block rated to 40A accepts 10-28 AWG wire.	
AC Input Status LED	D9	LED indicator for board AC input status. Lit indicates power.	
		A 2-wire AC outputs provide separate channels to support wire runs to device.	
Output Terminal Blocks	Upper & Lower	Upper Block Channels 1-8 = Hot Lower Block Channels 1-8(Common Side of Power Outputs)=Neutral	
Output Power Status LED	D1 - D8	Green LED indicators labeled by channel indicate output channel power status. Lit indicates powered. Unlit indicates blown fuse or no AC input.	

Output Fuses or PTCs	F1-F4 or PTC1-PTC-4	2 ACG glass fuses or self-resetting Positive Temperature Coefficient (PTC) circuit breakers protecting each channel from high current. PTCs will self-reset upon cool down.
Spare Fuse	SPARE FUSE	Extra 2ACG glass fuse for blown fuse replacement. (Note: This slot is empty on boards with PTCs)

# 3. Electrical Connections (8 Output Model shown)



# 4. Make AC Power Output Connections to Devices\*

Route wires through knock-out opening created in step A3. Maintain separation from input wires.

Connect the positive wire from device to "+" terminal on distribution board and the neutral wire from device to the "-".

Repeat steps for all channels.

\*Use wire gauge appropriate for application.

## 5. Turn AC Power On

	C. Testing		
1.	Test Input and Outputs		
	AC Input: Turn on AC power to power supply. Confirm LED on front of enclosure is lit.		
	AC Output: Confirm LED is lit on each channel used.		
2.	Replacing AC Line Fuse (2A Models Only)		
	Turn off AC Power. Grasp fuse holder cap above AC guard. Push down while twisting. Replace fuse.		
3.	Replacing ATO Main Fuse		
	Remove ATI Main Fuse from Power Distribution Board to replace or to disconnect all outputs from input.		
	Note for all units with replaceable fuses: For continued protection against the risk of electrical shock or fire, replace fuse with the same type and rating.		
4.	Replacing Power Distribution Board fuses:		
	Remove ATI Main Fuse from Power Distribution Board or remove main power. Replace blown fuse with same type and rating. Apply main power.		

Troubleshooting			
ISSUE	TROUBLESHOOTING TIPS		
	Confirm input branch power is ON		
AC Power indicator does not light	Check Main Fuse/Power Pull		
	Check AC output		
Channel LED not lit	Swap out fuse for (F) models or disconnect load from main power for 2 minutes for (C) models		
All LEDs no lit	Check power		
Maintenance	To disconnect load, remove main fuse		

**Problems with installation?** Call Securitron: **1-800-MAG-LOCK** 

For warranty information: www.securitron.com/en/site/securitron/About/MagnaCare-Warranty