

ReServ4WP - Outdoor Video Surveillance UPS

Overview:

ReServ4WP Video Surveillance UPS unit is designed to provide power for 24VAC and 12VDC cameras during normal or power outage conditions. True sine wave regulated AC outputs and/or regulated DC outputs.

Specifications:

Input:

• 115VAC 60Hz, 3.5 amp.

Output:

- Four (4) PTC protected power outputs:
 - Two (2) true sine wave regulated 24VAC @ 4 amp max.
 - Two (2) regulated 12VDC @ 1 amp max.

Battery Backup:

- Built-in charger for sealed lead acid or gel type batteries.
- Automatic switchover to stand-by battery when AC fails. Supervision:
- AC fail & low battery supervision (form "C" contacts). Visual and Audio Indicators:
- AC/DC power LED indicators.

Visual Indicators:

- Individual power output LED indicators.
- Low voltage input and Shutdown LED indicators.

Additional Features:

- True sine wave regulated AC outputs & regulated DC outputs.
- Unit maintains camera synchronization.
- Ease of installation saves time and eliminates costly labor.

Enclosure Dimensions:

NEMA4 / IP66 Rated enclosure accommodates up to two (2) 12VDC/7AH batteries.

17.375" x 12" x 6.5" (441.3mm x 304.8mm x 165.1mm).

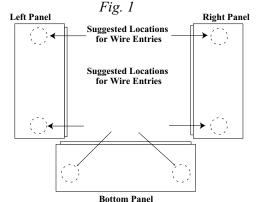
Stand-by Specifications:

Stand-by Batteries	4 amp (100VA) load at 24VAC and 1 amp load at 12VDC max.
Two (2) 12VDC/7AH	45 minutes
Two (2) 12VDC/12AH	90 minutes

Installation Instructions:

This installation should be made by qualified service personnel and should conform to all local codes and in accordance with the National Electrical Code. This product contains no serviceable parts.

- 1. Remove back plate inside the enclosure by removing four (4) mounting screws.
- 2. Mark and drill desired knockouts on the enclosure to facilitate wiring (Fig. 1, pg. 1).
 - Note: It is required to use UL Listed outdoor rated conduit hubs with a minimum outdoor rating of NEMA4X.
- 3. Secure back plate inside the enclosure with four (4) mounting screws.
- 4. Mount unit in the desired location with the appropriate fasteners utilizing the holes on the flanges (pg. 8). Secure enclosure to earth ground. **Note:** This product needs to be secured to the building/pole
- 5. Connect AC power mains to the terminals marked [L & N] (Fig. 2, pg. 3). Use 18 AWG or larger for all power connections (Battery, output) (Fig. 2, pg. 3).
 - Use 18 AWG to 22 AWG for power-limited circuits
 - (AC Fail/Low Battery reporting) (Fig. 2, pg. 3).
 - **Note:** A readily accessible disconnect device shall be incorporated in the building installation wiring.
- 6. The LEDs on the power supply board will illuminate when AC power is present.
- 7. Measure output voltage before connecting cameras/devices to outputs. This helps avoiding potential damage.
- 8. Connecting Fluidmesh Wireless Radio/Bosch Autodome:
 - Connect 12VDC Fluidmesh Wireless Radio to the terminals marked [P 1-2, N 1-2] (Fig. 2, pg. 3).
 - Connect 24VAC Bosch Autodome to the terminals marked [15-16] (Fig. 2, pg. 3).
- 9. Connect batteries to the terminals marked [- BAT +] (Fig. 2, pg. 3). Use two (2) 12VDC batteries connected in series for 24VDC operation (battery leads included).
 - Use batteries Casil CA1270 (12V/7AH), Genesis NP7-12 (12V/7AH), Ultratech UT1270 (12V/7AH).
- 10. Connect appropriate signaling notification devices to AC FAIL & BAT FAIL (Fig. 2, pg. 3) supervisory relay outputs. 11. The power LEDs on the unit for Outputs 1-2 & 15-16 will illuminate when AC power is present (Fig. 2, pg. 3).
 - **Note:** If any of the power LEDs are not illuminated, the cause may be due to the following:
 - a. AC mains and battery fail.
 - b. One (1) or more power output PTCs are tripped due to a short circuit or overload condition.
- c. Unit damaged/defective.



before operation.

To reset the PTC:

- 1. Temporarily remove wiring from output with tripped PTC (Fig. 2, pg. 3).
- 2. Eliminate the trouble condition (short circuit or overload).
- 3. Allow 1 minute for PTC to cool off (reset).
- 4. Re-attach wiring to the output (Fig. 2, pg. 3).
- 5. Power LEDs will illuminate indicating power has been restored to outputs (Fig. 2, pg. 3).

WARNING: To reduce the risk of fire or electric shock, do not expose the unit to rain or moisture. This installation should be made by qualified service personnel and should conform to all local codes and in accordance with the National Electrical Code.

LED Diagnostics:

Power Supply Board

Red (DC)	Green (AC1)	Power Supply Status
ON	ON	Normal operating condition.
ON	OFF	Loss of AC, Stand-by battery supplying power.
OFF	ON	No DC output.
OFF	OFF	Loss of AC. Discharged or no stand-by battery. No DC output.

ReServ Board

LED	LED State		Unit Status
Output LEDs	ON		Normal operating condition.
		OFF	Loss of 24VAC and/or 12VDC output power.
Low Battery	ON		Stand-by batteries are low.
		OFF	Normal operating condition.
Shutdown	ON		Loss of 24VAC and/or 12VDC output power. Discharged stand-by battery.
		OFF	Normal operating condition.

Terminal Identification:

Power Supply Board

Terminal Legend	Function/Description
L, G, N	Connect 115VAC 60Hz to these terminals: L to hot, N to neutral.
- DC +	24VDC output.
AC FAIL NO, C, NC	Form "C" dry contacts used to instantaneously signal the loss AC to local annunciation devices, with AC present terminals marked NO and C are open, NC and C are closed. When loss of AC occurs terminals marked NO and C are closed, NC and C are open.
BAT FAIL NO, C, NC	Form "C" dry contacts used to signal low battery voltage or loss of battery voltage. Under normal conditions terminals marked NO and C are open, NC and C are closed. During a trouble condition terminals marked NO and C are closed, and NC and C are open.
BAT +	Stand-by battery connections. Maximum charge current 0.7 amp.

ReServ Board

Terminal Legend	Function/Description	
Input - 24VDC +	24VDC input from power supply board.	
N, P 1-2	12VDC outputs. N = Negative, P = Positive (Fig. 1, pg. 3).	
N, P 15-16	24VAC outputs.	

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The lightning flash with arrow head symbol within an equilateral triangle is intended to alert the user to the presence of an insulated DANGEROUS VOLTAGE within the product's enclosure that may be of sufficient magnitude to constitute an electric shock.



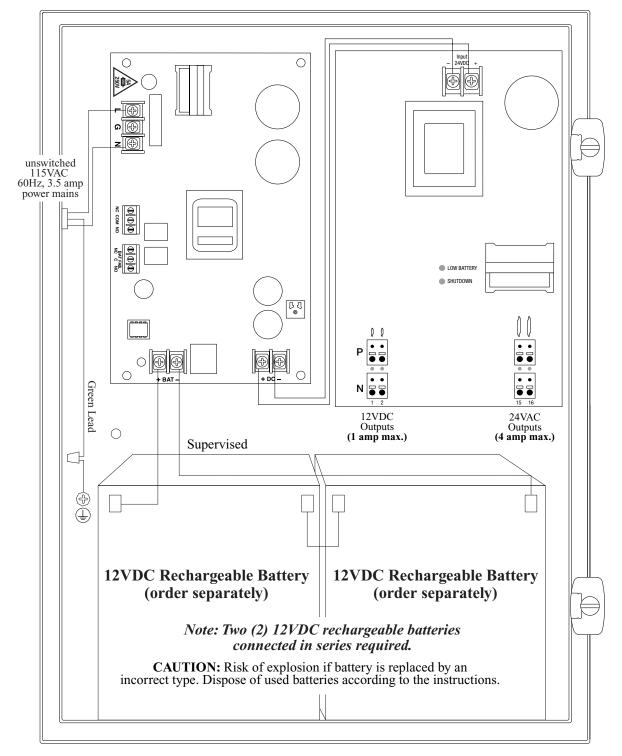
The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.





CAUTION: To reduce the risk of electric shock do not open enclosure. There are no user serviceable parts inside. Refer servicing to qualified service personnel.

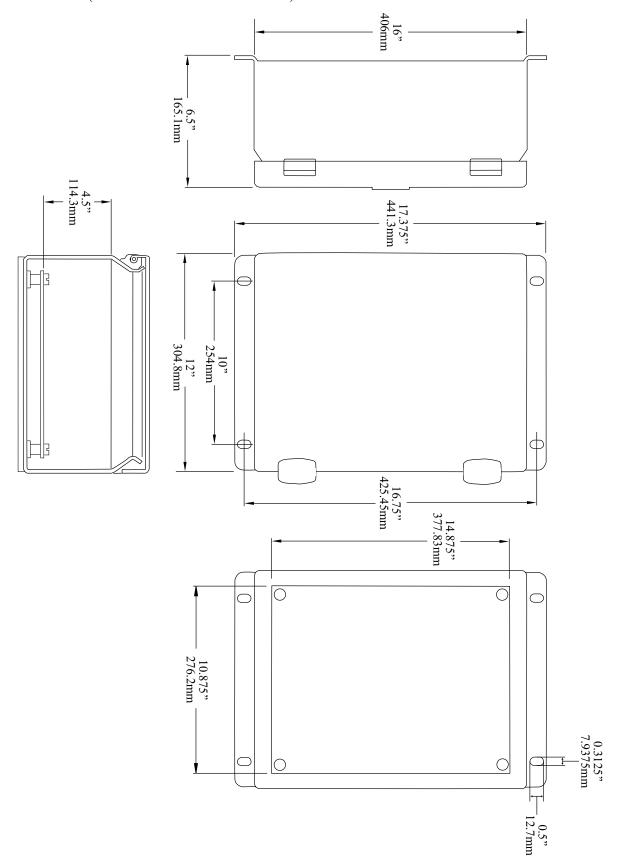
Fig. 2 - ReServ4WP



- 3 - ReServ

Enclosure Dimensions:

17.375" x 12" x 6.5" (441.3mm x 304.8mm x 165.1mm).



Altronix is not responsible for any typographical errors. Product specifications are subject to change without notice.

