

# VP-4024C

## -24 VOLT DC POWER SUPPLY

### INTRODUCTION

These instructions provide the specifications, installation and maintenance information for the VP-4024C, -24 Volt Power Supply.

### SPECIFICATIONS

The VP-4024C is a fully regulated -24VDC, 4 Amp power supply. The primary is protected by a 2 Amp 5x20 mm fuse. The output is floating with respect to ground, and the two outputs may be connected together for one 4 Amp output. The regulator will maintain -24 Volts  $\pm$  2.5 Volts over the rated range of input voltages and output loads. A greater than 4 Amp load on power up will cause the power supply to current limit. Short circuit protection is provided. Over voltage is provided to limit the output voltage to approximately -28 Volts should a failure occur within the power supply.



***“WARNING: To reduce the risk of fire or electric shock, do not expose to rain or moisture.”***

***“WARNING: Shock hazard – Do Not Open.”***

***“AVIS: Risque de choc Electrique ne pas Ouvrir.”***

***“PELIGRO: Corriente Electrica – No Abres.”***



***CAUTION: For continued protection against risk of fire, replace only with 2A, 125V SLO-BLO type fuse 5x20 mm, UL Listed.***

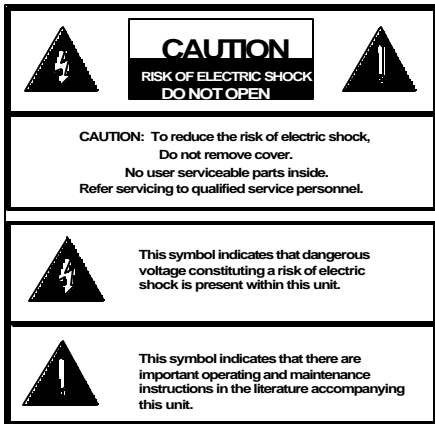
### Applications

The VP-4024C is designed to be used with:

- All Valcom page control units that require -24VDC
- Valcom one-way amplified speaker assemblies that require -24VDC
- Any application where -24VDC filtered talk battery is required

### Design Features

- Regulated -24VDC "A" battery
- Two 2 Amp outputs
- Outputs may be connected for one 4 Amp output
- Input fuse protected
- LED indication of operation
- Full current limiting
- Over voltage protection
- Floating output
- Full electronic supply



## Nominal Specifications

### Power Requirements

Input Voltage: 105-120VAC, 60Hz, 150 Watts max

Dimensions: 10.70"H x 6.35"W x 3.75"D  
(27.18cm H x 16.13cm W x 9.53cm D)

Weight: 12 lbs. (5.44 kg)

Output Characteristics: -24VDC regulated  $\pm 10\%$   
"A" battery  
Ripple 10 millivolts RMS max  
Two 2 Amp outputs

## Environmental

Operating Temperature: 0 to +40° C

Cooling: Free Air Convection

Humidity: 10 to 90% (Non-condensing)

## INSTALLATION

### Mounting

The VP-4024C is designed for **wall mounting only**.

The unit should be mounted within seven feet of an AC receptacle.

Screw mounting plate to wall and position power supply on mounting plate via the mounting slots.

### Precautionary Notes:

## Power Connections

Use a cord set consisting of a minimum 18 AWG cord and grounding type attachment plug rated a minimum of 15A, 250V. The VP-4024C is provided with a NEMA 5-15 UL Recognized cord set for North American use.

## Connections

- Connections to Valcom page control units are shown in Figure 1.
- When using the VP-4024C with Valcom page equipment, strap either of the "+" outputs to a reliable ground reference point.
- When installing Valcom one-way amplified horns, connect the white and black wires of the horn to the power supply "-" and "+" terminals respectively.
- Multiple power wire runs may be originated at the VP-4024C by utilizing a connection block.
- When installing Valcom one-way speakers, connect the 24VDC and GND terminals of the speaker to the "-" and "+" terminals respectively.
- Plug power supply into wall outlet.

## TECHNICAL ASSISTANCE

When trouble is reported, verify the unit is properly connected and there are no broken connections leading to this unit.

Assistance in troubleshooting is available from the factory. When calling, you should have a VOM and a test set and be calling from the job site. Call (540) 563-2000 and ask for Technical Support, or call (540) 767-1555 for Valcom 24-hour Faxback System or visit our website at <http://www.valcom.com>.

Valcom equipment is not field repairable. Valcom, Inc. maintains service facilities in Roanoke, VA. Should repairs be necessary, attach a tag to the unit clearly stating company name, address, phone number, contact person and the nature of the problem. Send the unit to:

**Valcom, Inc.**  
**Repair and Return Dept.**  
**5614 Hollins Road**  
**Roanoke, VA 24019-5056**

## TROUBLESHOOTING CHART

Problem	Solution
1. No output.	a. Verify AC present at receptacle. b. Check for blown fuse.
2. Blows fuses.	a. Verify total equipment power consumption does not exceed 2 Amps on each -24V output. b. Disconnect AC while making power connections.

### VALCOM LIMITED WARRANTY

Valcom, Inc. warrants its products to be free from defects in materials and workmanship under conditions of normal use and service for a period of one year from the date of shipment. The obligation under this warranty shall be limited to the replacement, repair or refund of any such defective device within the warranty period, provided that:

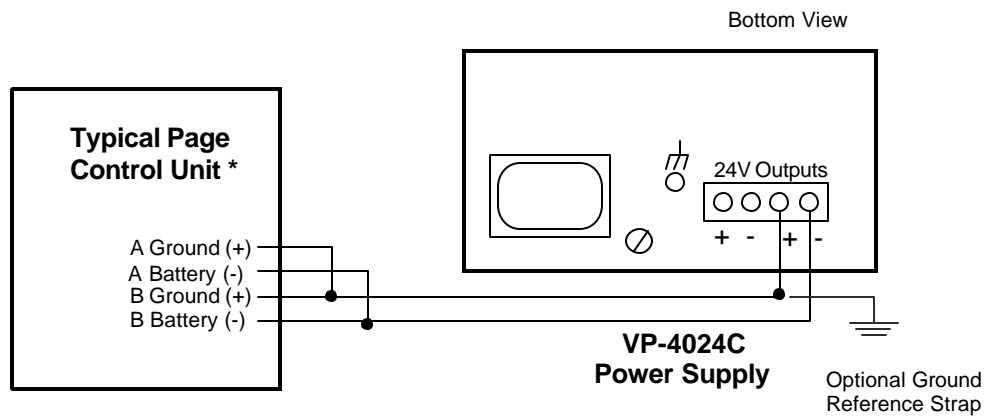
1. inspection by Valcom, Inc. indicates the validity of the claim;
2. the defect is not the result of damage, misuse or negligence after the original shipment;
3. the product has not been altered in any way or repaired by others and that factory sealed units are unopened (A service charge plus parts and labor will be applied to units defaced or physically damaged);
4. freight charges for the return of products to Valcom are prepaid;
5. all units 'out of warranty' are subject to a service charge. The service charge will cover minor repairs (Major repairs will be subject to additional charges for parts and labor).

**This warranty is in lieu of and excludes all other warranties, expressed or implied, and in no event shall Valcom, Inc. be liable for any anticipated profits, consequential damages, loss of time or other losses incurred by the buyer in connection with the purchase, operation or use of the product.**

This warranty specifically excludes damage incurred in shipment. In the event a product is received in damaged condition, the carrier should be notified immediately. Claims for such damage should be filed with the carrier involved in accordance with the F.O.B. point.

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**FIGURE 1 - CONNECTIONS TO VALCOM PAGE CONTROL UNITS**

\* The 2000 Series, the V-2920 and the V-2924A Control Units do not require an external power supply. When using these units, external power supplies will be connected to ancillary equipment.