



CT-CATVPS60/90 Instruction Manual



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Safety Precautions

- Read and understand this manual fully before using any part of the unit as dangerous voltages are present.
- CAUTION:** To reduce the risk of electrical shock, do not remove the power supply components in this unit. No user serviceable parts are inside.
- **CAUTION:** To prevent electric shocks and risks of fire hazards, do not use anything other than the specified power source.
- All installation and use of this unit must be done by qualified personnel only.
- Refer to all local, state, federal, and other applicable codes for compliance prior to installation.
- Use proper lifting techniques when handling the unit.
- Do not allow for the connection of the AC input while the unit is being serviced or installed.
- Do not allow for the connection of the AC output while the distribution plant is being serviced or installed.
- Wear electrical insulating gloves and a face shield while working with the unit.
- Unit must be well grounded (earthed) before use. Failure to do this can result in electric shock, fire, and possible death.
- Unit must be installed vertically. The location for installation should be well ventilated and away from flammable, explosive, and corrosive materials.
- Periodic inspections are required to ensure the unit's vent slats are not obstructed by insect nests, debris, near objects, or any other obstruction.
- Unit must be installed away from other high heat emitting equipment.
- All connections and wiring of the unit must be properly secured. Failure to do this could result in fire and / or electrification of the chassis and frame causing injury or possibly death.
- Measure the AC input voltage and make sure it matches the required voltage and frequency of the unit before installation.
- Measure the AC output voltage of the unit and check that it matches the requirements of the connected equipment (load).
- Ensure proper NEC guidelines are followed.
- Consult with qualified personnel prior to performing any field maintenance.
- Unauthorized tampering, changing, or replacement of this unit is not permitted.
- Tighten lid friction screws after each use to prevent lid inadvertently opening.

-Only use generally accepted industry accessories to attach to this unit.

I.I Unpacking

- Open the box and remove the CT-CATVPS60/90 Power Supply from its packaging using extreme caution to not drop the unit as bodily injury is likely to occur.

-Examine all contents of the box, making sure that all listed parts are present.

Package should consist of the following parts:

- One (1) Power Supply
- One (1) Instruction Manual (this packet)
- One (1) installation Kit

-Inspect all parts received to check for any damaged or missing parts. If anything is missing or damaged, contact your supplier within 10 days of product receipt.

I.II Unit diagram with labels

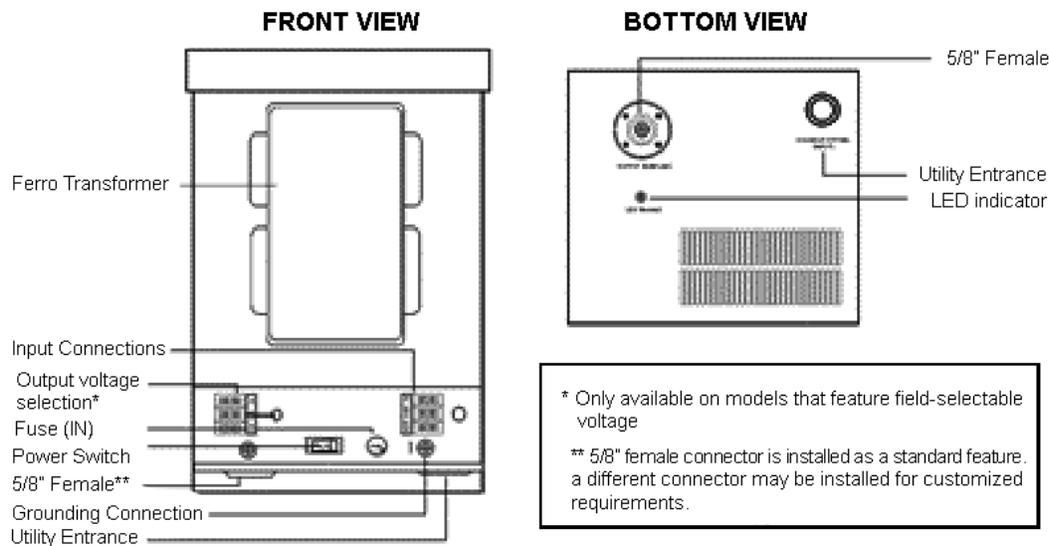


Figure 1: Unit diagram

I.III Pre-installation Inspection

- Due to potential damage in shipping, inspect the power supply and all accompanying parts immediately upon receipt. Check for any loose connections. Any parts not completely secured must be addressed and corrected before turning on the power supply.

- Do not install the unit without first conducting and completing a start-up test and Pre-installation examination.

-If items must be shipped back for service or replacement be sure to use the original packaging. If the original packaging cannot be used, be sure to pack the unit with at least 3 inches (or 8 cm) of shock absorbing material on all sides of the power supply to minimize any possible shipping damage.

Cabletronix is not responsible for any damages caused by improper packing and/or shipping on any returned units.

I.IV Unit Overview

The CT-CATVPS60/90 supplies power to line driven signal amplifiers, in cable television and broadband distribution systems. The CT-CATVPS60/90 is a regulated AC input and AC output voltage power supply.

The CT-CATVPS60/90 power supply is designed to be mounted on a generally accepted solid support structure capable of holding the weight of the unit.

I.V Technical Specifications

General Specifications	
Input	
Voltage range	±15%
Power factor	>0.90 at full load
Output	
Voltage regulation	±5%
Waveform	Quasi-square wave
Protection	Current limited
Short circuit current	150% of max. current rating
Efficiency	≥90%
Mechanical	
Input connection	Terminal block (3-pin)
Output connections	5/8" female or terminal block
Finish	Powder coated
Material	Aluminum
Dimensions	335x217x190mm 13.2"x8.5"x7.5"
Environmental	
Operating temperature	-40°C to 55°C / -40°F to 131°F

II.I Installation

- Installation of this unit must be performed by qualified personnel only
- Follow all installation instructions exactly
- Read and understand all Warnings and Cautions. Failure to do so could result in injury or possible death.
- Failure to properly secure the power supply unit could result in the unit coming loose and falling, which could injure people in the surrounding area as well as those performing the installation. We do not assume any liability for damage of the unit and / or any injuries caused by failure to properly install the unit.

II.II Installation Kit

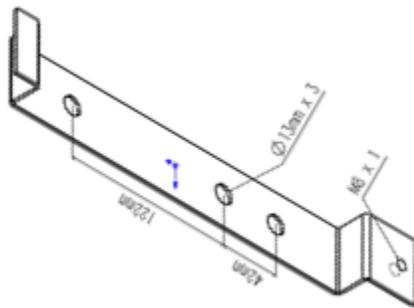
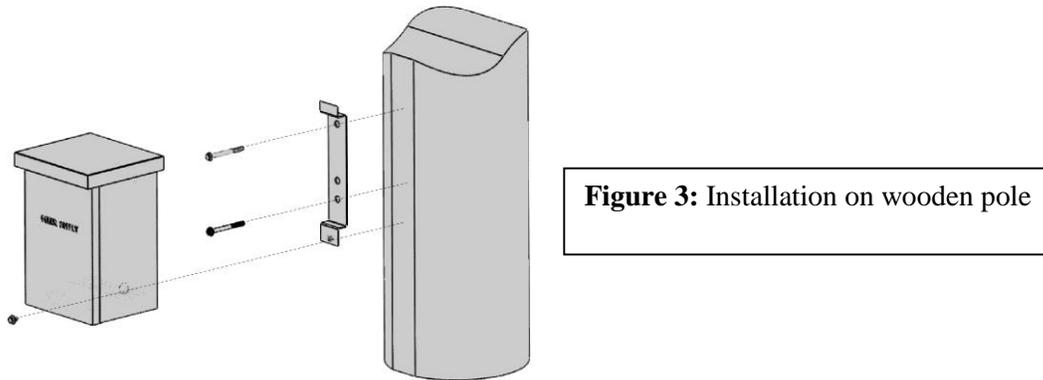


Figure 2: Installation Bracket

- The installation kit consists of a bracket and an M8 hex bolt. To install, users must have all necessary tools and appropriate hardware at their disposal to mount the bracket to a suitable structure.
- Adhere to all building codes and generally accepted construction principles when mounting.
- Each bracket has 3 holes used for mounting to a suitable structure. Use machine bolts, nuts, washers, and lock washers to install the bracket on a wooden surface. If on a concrete surface, mounting straps should be used.
- To finish installation, hang the unit securely onto the bracket and fasten the hex bolts at the bottom of the unit. Be sure that the power supply is secure and stable before finishing installation.
- Read sections II.III and II.IV for exact installation instructions relating to wooden, steel, or concrete poles respectively.

WARNING: Be sure to check that the bracket was installed correctly and is reliable and steady. Failure to do so could result in the dropping of the unit from the point of installation.

II.III Installation on a Wooden Pole



-Install the bracket on the wooden pole using M12 machine bolts. Be sure that the non-threaded side of the bracket is facing up.

-When attaching the bracket a wooden pole, drill a hole completely through the pole and use nuts, washers, lock washers, and a M12 machine screw.

-After making sure the bracket is secure, hang the power supply on the bracket and tighten the M8 hex bolt into the bottom of the bracket.

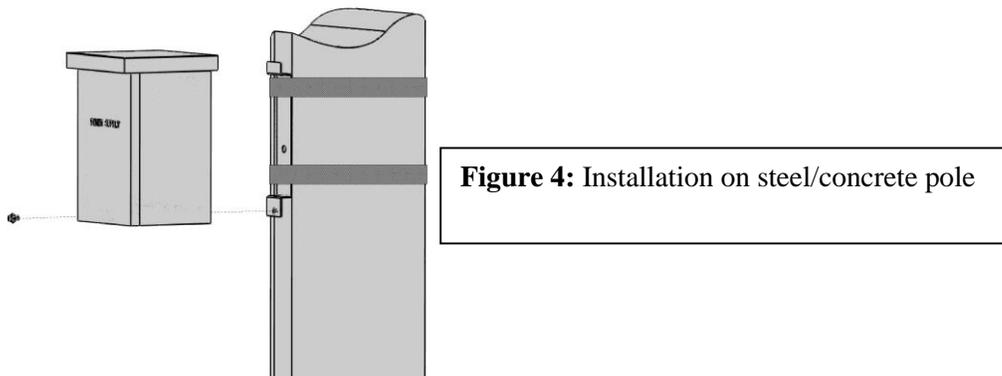
-To hang the power supply, carefully tilt the unit towards the top of the bracket and carefully interlock to secure the top of the power supply to the top of the bracket.

-Then carefully release some supporting pressure to ensure the bracket can sustain the weight of the power supply.

-Carefully align the bottom of the bracket and power supply. Then secure the power supply unit to the bracket by fastening the included 8x1 mounting bolt to secure the bracket to the power supply.

-Make sure that the power supply is hanging securely and properly at a vertical position.

II.IV Installation on Steel/Concrete Pole



-Use a mounting strap to secure the bracket onto the pole

-To hang the power supply, carefully tilt the unit towards the top of the bracket and carefully interlock to secure the top of the power supply to the top of the bracket.

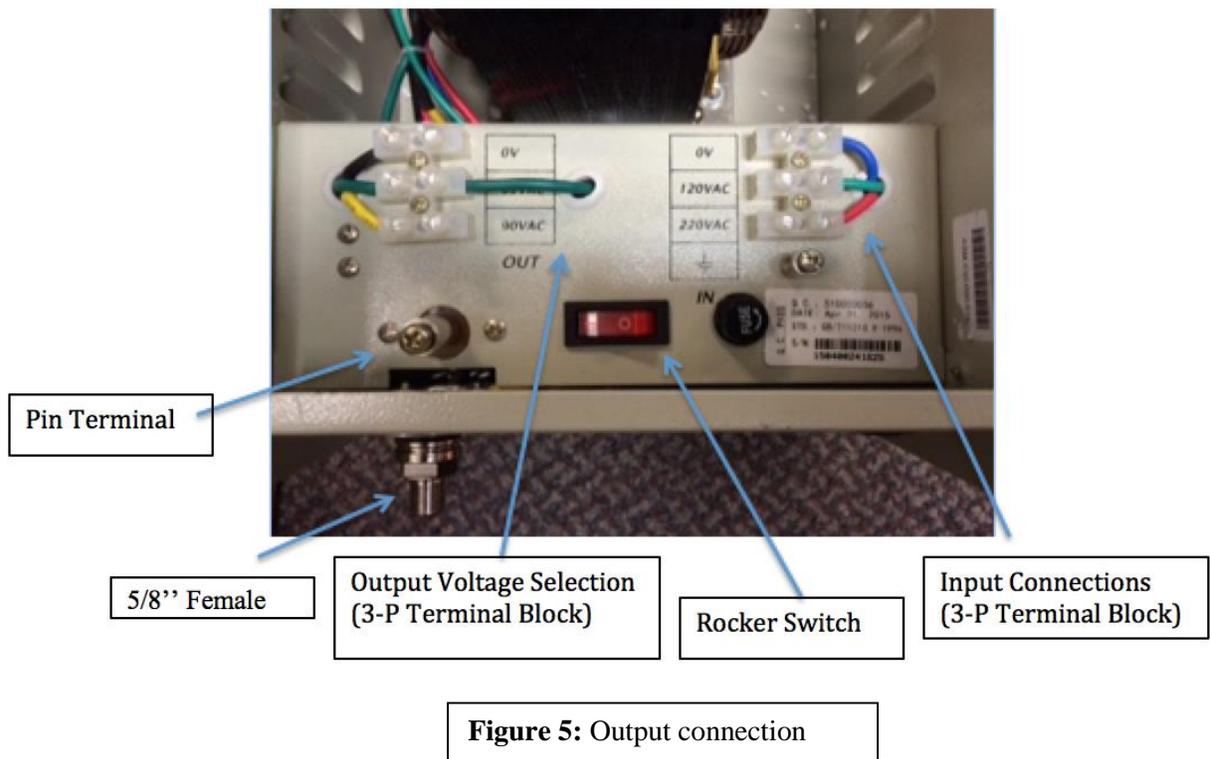
-Then carefully release some supporting pressure to ensure the bracket can sustain the weight of the power supply.

-Carefully align the bottom of the bracket and power supply. Then then secure the power supply unit to the bracket by fastening the included 8x1 mounting bolt to secure the bracket to the power supply.

-Make sure that the power supply is hanging securely and properly at a vertical position.

II. V AC Output Connection

NOTE: Output connection for the CT-CATVPS60/90 is made via a 5/8" female connector, and the pin is secured in the pin terminal.



-Turn off the power supply by ensuring that the rocker switch is in the off position. The switch is off when the minus side (-) is up and the "o" side is down. Also make sure to disconnect it from any possible sources of power or voltage.

-Prepare the incoming coaxial cable used for the dissemination of power by removing all extraneous material up to about 4 cm. long to insure that the connection is not shorted.

-Loosen each screw on the pin terminal.

-Screw the cable connector into the 5/8" female connector.

-Using the coaxial cable previously prepared, pass the center core through the 5/8" female connection as well as the pin terminal previously loosened. Once this is completed, the seizure screws should be tightened to a recommended torque of 12 inch / lb.'s.

II.VI Output Voltage Configuration

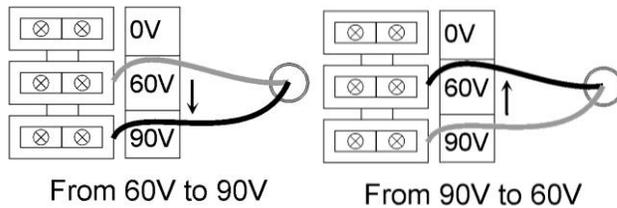


Figure 6: Output Configuration

Ensure that the rocker switch to turn the unit on and off is in the off position. The switch is off when the minus side (-) is up and the “o” side is down.

-Turn off the unit and any power or voltage connected to it before making any changes to the output voltage. On the left hand side of the terminal block there are three pins marked as 0V, 60VAC, and 90VAC. A wire coming through the power transfer plate is preconfigured and attached to the 60 VAC port. To change the voltage, disconnect the wire from the 60 volt port and move it to the 90 volt port. Once this is done, tighten the seizure screws in the pin to keep it in place.

WARNING:

- Be sure that the unit is turned off before reconfiguration of the output voltage.
- All connections and wiring of the unit must be properly secured. Failure to do this could result in fire and / or electrification of the chassis and frame causing injury or possibly death.

II.VII Connecting the Input Voltage

Please Note: A UL listed external service disconnect should be installed between the CT-CATVPS60/90 and the utility power. This device is not included with the power supply. Before installation, please consult with a properly licensed electrical contractor and adhere to all electric codes.

CAUTION: Make sure that the incoming voltage matches the voltage that is desired. Always use a grounded power chord.

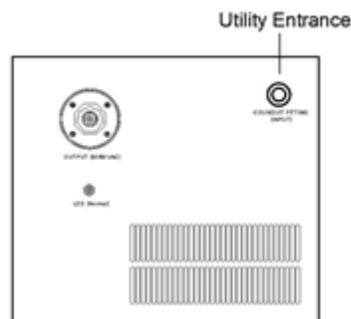


Figure 7: Utility Entrance

-Locate the incoming power supply entrance on the bottom of the power supply (marked Utility entrance). Use a properly sized power cable that fits the entrance when supplying input power to the unit

-Locate the 3 position utility power connection on the right hand side of the terminal block. Note that there should be three positions marked 0V, 120VAC, and 220VAC.

*See Section I.II for labeled diagram.

-Make the appropriate connection for the input voltage being used between the input connection and the terminal block through the utility entrance. Be sure to adhere to all local electric codes.

- Ground the power supply using the pin terminal under the 3 position input terminal. The pin terminal has a seizure screw for securing the grounding line.

II.VIII Input Voltage Configuration

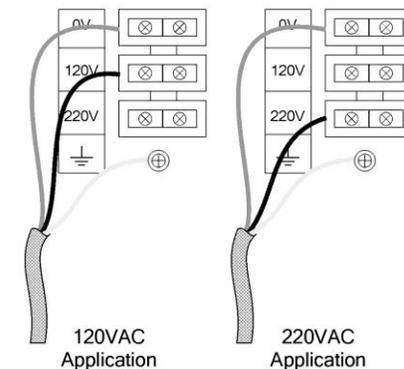


Figure 8: Input Configuration

-Ensure that the rocker switch to turn the unit on and off is in the off position. The switch is off when the minus side (-) is up and the “o” side is down.

-Turn off the power supply and disconnect it from any possible sources of power or voltage before changing any wire configuration.

-Locate the 3 - pin terminal block on the right-hand side of the wiring panel (the 3 positions are marked by 0V, 120VAC, and 220VAC).

-This unit can be used with either 120 VAC or 220 VAC input power

-Before connecting, read and follow all applicable electric codes.

-Ensure the ground wire is still attached to the grounding pin (see section II.VI).

-The neutral wire should be connected to the 0V position for either 120VAC or 220VAC.

-For 120VAC application, connect the hot wire to the terminal labeled 120VAC.

-For 220VAC application, connect the hot wire to the terminal labeled 220VAC

CAUTION: Check the input voltage to make sure it is as desired before turning on the power supply.

WARNING:

- The power supply must be off and disconnected before configuring the input voltage.
- Poor connection between the cable and the connectors and failure to follow this instruction manual is hazardous and can cause a fire and personal injury including possible death.

III. Startup and Testing

- Disconnect all output loads before starting any testing.
- Check that all connections are secure.
- Make sure that the AC input voltage matches the voltage and frequency required.
- Use a correctly calibrated voltage meter to take readings for the output voltage of the unit.
- For any problems, such as no output power, please consult the trouble shooting guidelines in the next section.

WARNING: Prior to conducting any service, disconnect the unit and allow it to cool before servicing. Discharge all capacitors.

IV. Trouble Shooting

The below table has been made to show typical symptoms, possible causes, and then possible solutions. If any of the units need to be repaired please contact the supplier for recommendations. If you are experiencing unlisted symptoms, or the solutions do not seem to be helping, please contact the supplier for additional help and technical support.

Symptoms	Probable Causes	Solution
No output	Utility power failure	Verify proper utility power is present.
	Broken fuse	Check for any input and output fuses that may need replacement.
	Poor connection output at 5/8" female connector	Verify the connection is tight.

v. CABLETRONIX 1-Year Limited Warranty

CABLETRONIX. (the "Company") warrants to the Original Purchaser that the item purchased is free from defects in workmanship or material under normal use. This warranty starts on the date of shipment of the hardware to the Original Purchaser.

During the warranty period, the Company agrees to repair or replace, at its sole option, without charge to Original Purchaser, any defective component. To obtain service, the Original Purchaser must return the item to the Company properly packaged for shipping. All defective products must be returned to the Company within thirty (30) days of failure. Products must be returned with a description of the failure and Return Merchandise Authorization (RMA) number supplied by the Company. To receive a RMA number and a return shipping address on where to deliver

the hardware, call 610-429-1821. The shipping, and insurance charges incurred in shipping to the Company will be paid by Original Purchaser, and all risk for the hardware shall remain with the Original Purchaser until such time as Company takes receipt of the hardware. Upon receipt, the Company will promptly repair or replace the defective unit, and then return said unit to Original Purchaser, shipping prepaid. The Company may use reconditioned or like-new parts or units, at its sole option, when repairing any hardware. Repaired products shall carry the same amount of outstanding warranty as from original purchase. Any claim under the warranty must include dated proof of purchase or invoice. In any event, the Company's liability for defective hardware is limited to repairing or replacing the hardware.

This warranty is contingent upon proper use of the hardware by Original Purchaser and does not cover: if damage is due to Acts of God (including fire, flood, earthquake, storm, hurricane or other natural disaster), accident, unusual physical, electrical, or electromechanical stress, modifications, neglect, misuse, operation with media not approved by the Company, tampering with or altering of the hardware, riot, war, invasion, act of foreign enemies, hostilities (regardless of whether war is declared), civil war, rebellion, revolution, insurrection, military or usurped power or confiscation, terrorist activities, nationalization, government sanction, blockage, embargo, labor dispute, strike, lockout or interruption or failure of electricity, air conditioning, or humidity control, internet, network, or telephone service

The warranties given herein, together with any implied warranties covering the hardware, including any warranties of merchantability or fitness for a particular purpose, are limited in duration to one year from the date of shipment to the Original Purchaser. Jurisdictions vary with regard to the enforceability of warranty limitations, and you should check the laws of your local jurisdiction to find out whether the above limitation applies to you.

The Company shall not be liable to you for loss of data, loss of profits, lost savings, special, incidental, consequential, indirect, or other similar damages arising from breach of warranty, breach of contract, negligence, or other legal action even if the Company or its agent has been advised of the possibility of such damages, or for any claim brought against your by another party. Jurisdictions vary with regard to the enforceability of provisions excluding or limiting liability for incidental or consequential damages. You should check the laws of your local jurisdiction to find out whether the above exclusion applies to you.

This warranty allocates risks of product failure between Original Purchaser and the Company. The Company's hardware pricing reflects this allocation of risk and the limitations of liability contained in this warranty. The warranty set forth above is in lieu of all other express warranties, whether oral or written. The agents, employees, distributors, and dealers of the Company are not authorized to make modification to this warranty, or additional warranties binding on the Company. Accordingly, additional statements such as dealer advertising or presentations, whether oral or written, do not constitute warranties by the Company and should not be relied upon.

This warranty gives you specific legal rights. You may also have other rights which vary from one jurisdiction to another.