

7700-PCO Manual

Power Changeover Unit

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REVISION HISTORY

REVISION

DESCRIPTION

<u>DATE</u>

1.0 1.1 Original Version DC specifications correction

Oct 2, 2002 Nov 4, 02

1. OVERVIEW

The 7700-PCO is a 1 rack-unit high rack frame designed to fit into a standard 19-inch rack. Special care was taken during the design process to ensure that the unit meets the demanding needs of professional video users and applications. It is intended to be used only with Evertz's line of 7700 Multiframes to provide reliable and high quality back-up power switching. This is ideal for remote applications where mains power can be intermittent or where a program feed must be guaranteed available at all times.

Features:

- 1 Rack Unit case
- Seamless, automatic switchover to battery power in case of AC loss
- Auto-ranging 95-264 VAC input
- 10-18 VDC input
- Direct connection to 7700 frame
- Dual power outlets to 7700 frame
- Front panel LEDs reflect the state of the unit

1.1. SPECIFICATIONS

1.1.1. Electrical

Power Supply Configuration:	Input A: Auto ranging, 95 ⇔264 VAC, 47-63 Hz Input B: 10 ⇔18 VDC
Output:	115 ⇔ 370 VDC
Maximum Output Power Dissipation:	300 W
Fuse:	DC input fuse – rated for 32V min at 40 amps
Status Indicators:	AC Input Present LED (green) DC Present LED (green) DC Operate LED (green) DC/DC OK LED (green)
Temperature:	0 ⇔ 55°C ambient

1.1.2. Physical

Height:		
Width:		
Depth:		
Weight:		

1.75" (44.5 mm)
19" (483 mm)
11.2" (285 mm)
Approx 7 lbs (3.2 Kg)

1.2. COOLING

No special cooling considerations need to be taken provided that the unit is operated within its stated temperature range (see section 1.1.1 above).



Operate the unit only within its stated temperature range.

1.3. MOUNTING

The frame requires 1 rack unit, i.e. 1.75 inches (44.5 mm) of standard 19 inch (483 mm) wide rack space. Depth requirement is 11.2" (285 mm). To securely fasten the unit to the equipment rack, make sure that all four mounting screws are tightened securely.

1.4. CONNECTION

The PCO automatically senses the AC input voltage provided that it is in the range indicated in section 1.1.1. AC Power should be applied by connecting a 3-wire grounding type power supply cord to the standard male IEC power inlet connector on the rear panel. The power cord should be minimum 18 AWG wire size; type SST marked VW-1, maximum 2.5 m in length.



Figure 1: AC Input Connector

DC power is applied via the terminal block connectors from a suitable battery source in the 10-18 VDC range. Observe the battery polarity when connecting as the DC input connector is marked for + and -. Sources of power may be portable battery packs such as Anton Bauer or PAG etc. Alternatively, automotive batteries or any other rechargeable battery source may be used. The battery is trickle charged from the PCO when it is not being used as the source of power.



Figure 2: DC Input Connector and Fuse



DO NOT use non-rechargeable battery sources as DC inputs. Damage to equipment may result.

Two adapter cords (3 wire male to female IEC type) are provided to connect the DC output of the PCO to the 7700 frame power supplies. Connect directly to the 7700 power supply inlet power connectors. Even though the PCO supplies a DC output, the 7700 frame power supplies will operate perfectly with this at their power inputs.



Figure 3: DC Output Connectors



CAUTION - The female "AC-type" receptacle carries a 110-370 VDC output. DO NOT attempt to power any other device other than Evertz 7700 frame from this output. Shock, damage to equipment or fire hazard may occur if you do so.

1.4.1. Changing the DC Input Fuse

The DC input fuse holder is located on the back panel above the DC input connector (see Figure 3). Pull out the blown fuse and place a fuse of the correct value in its place. Use MAXI or blade automotive type fuses rated for 32 Volts minimum with a current rating of 40 amps.



Check that the fuse is rated for the correct value. Never replace with a fuse of greater value.

1.4.2. Power Supply Indicators

The AC Input Present LED indicates that an appropriate AC voltage is present. The DC Present LED indicates that a battery in the range of 10-18 V is present at the DC input. DC Operate LED indicates that the PCO has now switched to battery and is powering the 7700 frame if connected. The DC/DC OK LED indicates that the internal DC to DC converter circuit is functioning normally.



Figure 4: Front Panel LEDs

1.5. SERVICE

There are no user-serviceable parts inside the unit. Obtain an RMA number from Evertz Technical Support and return the unit to Evertz for repair. Write the RMA number on the outside of the box and ship to:

Evertz Microsystems Ltd. 5288 John Lucas Drive Burlington, Ontario, Canada L7L 5Z9

Telephone: (905) 335-3700 Monday to Friday, 9 am to 5 pm Eastern Standard Time Toll Free: 1-877-995-3700 http://www.evertz.com This page left intentionally blank