



## **ENFORCER<sup>®</sup>** **Video**

**Specifications:**

**EVT-PC8-VTDQ (Video Balun Card)**

Range*	B/W: 2,000 feet (610M) Color: 1,300 feet (400M)
Video Format	RS170, NTSC, PAL, SECAM, CCIR
Maximum Input	1vpp
Insertion Loss	< 2dB per pair from DC ~ 5 Mhz
Return Loss	> -15dB from DC ~ 5 Mhz
Frequency Response	DC ~ 5 Mhz
Attenuation	DC ~ 5 Mhz, 1.5 dB max
Common Mode Rejection	60 dB, 15 KHz-5 MHz
Impedance	
Coax, Male BNC	75 Ohms @ 1 Mhz
Terminal Block	100 Ohms @ 1 Mhz
Power	No power required
Temperature Range	14°~165°F (-10°~74°C)
Humidity Range	0 ~ 95%
Wire Type	UTP ( 16 - 24 AWG)
Wire Category	CAT2 or better, CAT5 ideal
Video Input Connector	Screwless terminal block or 8-pin connector
Video Output Connector	Female VGA connector
No. of channels	8

**EVT-PC8P-JTQ (Power Card)**

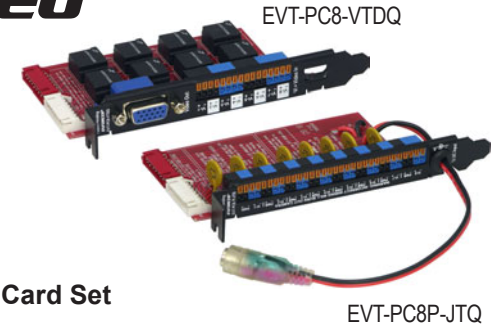
Video Input	Screwless terminal block
Video Output	8-pin connector
Power Input	Power jack (2.1mm jack)
Power Output	Screwless terminal block
Power Indicator	3-color LED
Voltage output	12VDC (inc. power adapter)
Total Supply Current	6 Amp. (inc. power adapter)
Temperature Range	14°~165°F (-10°~74°C)
Humidity Range	0 ~ 95%
Wire Type	UTP ( 16 - 24 AWG)
Wire Category	CAT2 or better, CAT5 ideal

**Table 1:**  
**12VDC Max Wiring Distance Voltage Drop Chart**

	1 pair	2 pair	3 pair
250mA	90'	220'	550'
500mA	45'	110'	285'
750mA	30'	75'	190'
1A	20'	55'	140'

Note: The above chart is based on standard Cat5 24AWG wire and an allowable 10% voltage drop.

\*Note: Shorter range may result when baluns are used with DVR.



## See the optional accessory manual for complete wiring diagrams and the use of optional accessories.



**IMPORTANT:** Users and installers of this product are responsible for ensuring this product complies with all national, state, and local laws and statutes related to monitoring and recording audio and video signals. **SECO-LARM** will not be held responsible for the use of this product in violation of any current laws or statutes.

**WARRANTY:** This SECO-LARM product is warranted against defects in material and workmanship while used in normal service for a period of one (1) year from the date of sale to the original consumer customer. SECO-LARM's obligation is limited to the repair or replacement of any defective part if the unit is returned, transportation prepaid, to SECO-LARM.

This Warranty is void if damage is caused by or attributed to acts of God, physical or electrical misuse or abuse, neglect, repair, or alteration, improper or abnormal usage, or faulty installation, or if for any other reason SECO-LARM determines that such equipment is not operating properly as a result of causes other than defects in material and workmanship.

The sole obligation of SECO-LARM, and the purchaser's exclusive remedy, shall be limited to replacement or repair only, at SECO-LARM's option. In no event shall SECO-LARM be liable for any special, collateral, incidental, or consequential personal or property damages of any kind to the purchaser or anyone else.

**NOTICE:** The information and specifications printed in this manual are current at the time of publication. However, the SECO-LARM policy is one of continual development and improvement. For this reason, SECO-LARM reserves the right to change specifications without notice. SECO-LARM is also not responsible for misprints or typographical errors.

Copyright © 2008 SECO-LARM U.S.A., Inc. All rights reserved. This material may not be reproduced or copied, in whole or in part, without the written permission of SECO-LARM.

**SECO-LARM<sup>®</sup> U.S.A., Inc.**

16842 Millikan Avenue, Irvine, CA 92606  
Tel: 800-662-0800 / 949-261-2999 Fax: 949-261-7326

Website: [www.seco-larm.com](http://www.seco-larm.com)  
E-mail: [sales@seco-larm.com](mailto:sales@seco-larm.com)

FILE: DIDTP\MANUAL\MEVT-PC8\_series\_0810.pmd  
Order Part # 764-030#  
PITSW1

### **EVT-PC8-VTDQ**

**8-port PCI Passive Video Balun Hub**  
Range: Up to 2,000' (610m)

### **EVT-PC8P-JTQ**

**8-port PCI Power Distributor Card**  
Range: See chart on page 4.

### **EVT-PC8KQ**

**8-port PCI Video Balun Hub & Power Card Set**  
(Includes 6 Amp 12VDC Adapter)

### What It Is

The ENFORCER EVT-PC8-VTDQ is a 8-port PCI Video Balun Hub specifically designed for PC based DVR cards. The EVT-PC8-VTDQ is the most practical and cost efficient way of connecting video signals from CCTV cameras to PC based DVR cards via Cat5 cables. It eliminates the need to install individual video baluns on the DVR card side, and is equipped with a screwless terminal block for convenient and organized wiring installations.

The EVT-PC8P-JTQ is an add-on power distribution card for EVT-PC8-VTDQ. When installed with EVT-PC8-VTDQ it will allow power to be transmitted from the PC side to CCTV camera side over the same UTP cables used by the video signal. It centralizes the power supply of CCTV cameras.

### Installation

#### Installing the EVT-PC8-VTDQ and EVT-PC8P-JTQ

1. Shut down the computer, disconnect the power and remove the computer cover from its chassis. See Fig. 2.
2. Determine the location of the available card slots at the back panel of the computer, and remove the metal covering of the desired slot.
3. Securely mount the EVT-PC8-VTDQ and/or EVT-PC8P-JTQ in their respective slots with the provided screw at the back panel of the computer. Please note that the EVT-PC8-VTDQ and EVT-PC8P-JTQ boards do not need to be inserted into the PCI (Peripheral Component Interconnect) slots of the computer motherboard. Then replace the cover of the computer.

**NOTE:** For convenient wiring it is recommended that the DVR cards, EVT-PC8-VTDQ and EVT-PC8P-JTQ, be installed adjacent to each other as shown on Fig. 2.

#### EVT-PC8-VTDQ Wiring (see Fig. 3) - Video Balun Card

1. Make sure the maximum distance between the CCTV camera and the DVR card does not exceed 1,950 feet for monochrome or 1,300 feet for color.
2. Run the UTP cable from the DVR card to where it will be connected to the CCTV camera. Follow the CCTV camera's wiring instructions for information on how to safely run and hide this wire.

- NOTE:**
- a. Individual separate passive video baluns such as SECO-LARM's EVT-PB1Q are required for each camera on the camera side (not included).
  - b. The video baluns are polarity-sensitive. Take note of the colors of the positive & negative wires of the video signal cables as this will be needed when connecting the other end of the UTP cables at the DVR card side.
  - c. Use the orange/orange-white color wire pair of the UTP cable for the video signal. Connect the UTP cables to the passive video baluns on the camera side and plug the video baluns into the BNC connector of the CCTV cameras. The EVT-PC8-VTDQ can accommodate a maximum of 8 cameras.
  - d. Connect the other ends of the UTP cables of the respective cameras into the screwless terminal block on the EVT-PC8-VTDQ side, see Fig. 3. Each video signal from the CCTV camera requires one positive and one negative wire, so observe correct polarity when connecting the UTP cables. "Vi-1" represents the video input of channel 1.

**NOTE:** Bare wires must not be exposed outside of the EVT-PC8-VTDQ's terminal block.

- e. Connect the included cable assembly ( 1-VGA male connector to 8 -BNC male) into the VGA female connector of the EVT-PC8-VTDQ. The 8-BNC male connectors have been marked "1" to "8," where "1" represents the corresponding video output of channel 1 ("Vi-1").
- f. Test the connection by powering up the CCTV camera and DVR card to make sure they operate as expected.

**EVT-PC8P-JTQ Wiring - Power Distribution Card**

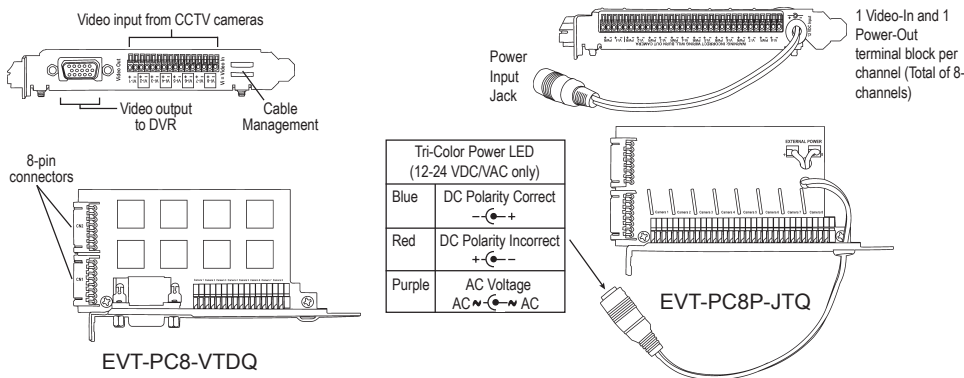
1. When using EVT-PC8P-JTQ, the supplied two 8-pin wire assemblies must be first connected to the 8-pin connectors of both EVT-PC8-VTDQ and EVT-PC8P-JTQ (one side of the wire assembly connected to the EVT-PCB-VTDQ and the other end is connected to the EVT-PC8P-JTQ), which are located on their respective PC boards, before securing them with the included screw to the computer chassis. Please see Fig. 1 & Fig. 5.

**IMPORTANT** – When using the EVT-PC8P-JTQ, the video signals from the CCTV cameras **MUST** be connected on the terminal blocks of the EVT-PC8P-JTQ side and the video input terminal blocks of the EVT-PC8-VTDQ must not be connected to any video signal. This means that when the EVT-PC8P-JTQ is used the video input must be connected on the EVT-PC8P-JTQ side.

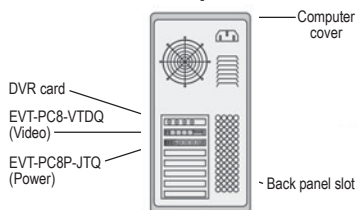
2. To minimized voltage drop, use two UTP wire pairs for power transmission. Use the blue and brown wires for (-) and blue/white and brown/white for (+) for 12 VDC power transmission. Connect one end of the UTP cable to the EVT-PC8P-JTQ's terminal block with "PWR" marking. **CORRECT POLARITY MUST BE OBSERVED.**
3. Plug the included power adaptor into the power jack of the EVT-PC8P-JTQ and plug the power adaptor's power cord into the electrical outlet. Use on-board LED to verify polarity. See Fig. 1.
4. Check the voltage reading at the end of the power line (camera side) to verify it is correct before connecting it to the CCTV cameras.

- WARNING:**
1. Using a voltage output in excess of the specified voltage level of a camera may cause damage.
  2. Maximum current per channel must not exceed 1 Amp.
  3. Maximum total current connected to all terminals must not exceed EVT-PC8P-JTQ's total current capacity of 6 Amp.

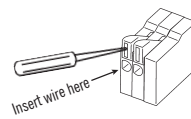
**Fig. 1: EVT-PC8-VTDQ and EVT-PC8P-JTQ product overview.**



**Fig. 2: Installing EVT-PC8-VTDQ and EVT-PC8P-JTQ into the back panel of PC.**

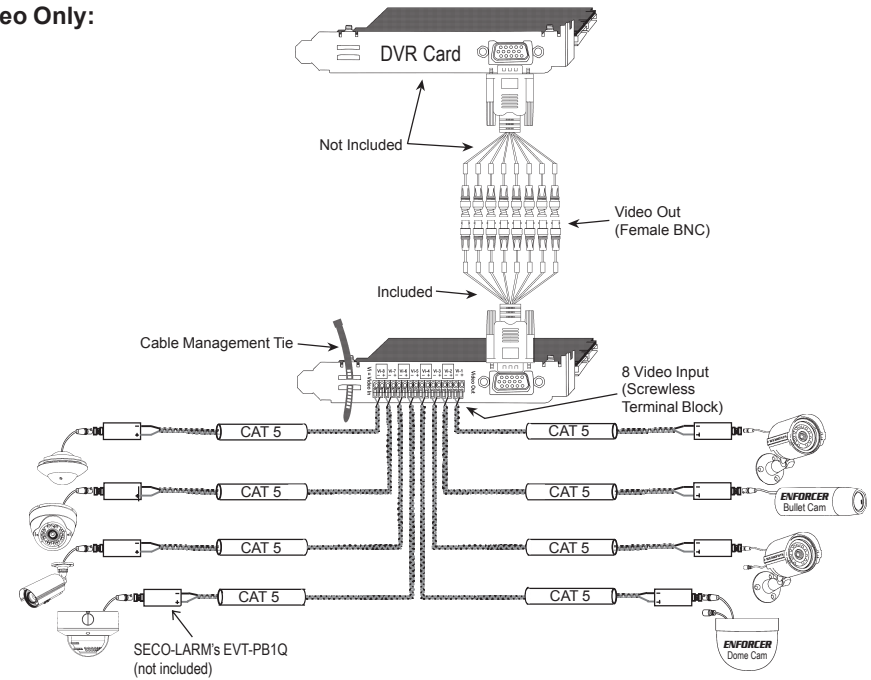


**Fig. 3: Wiring the EVT-PC8-VTDQ's screwless terminal block.**



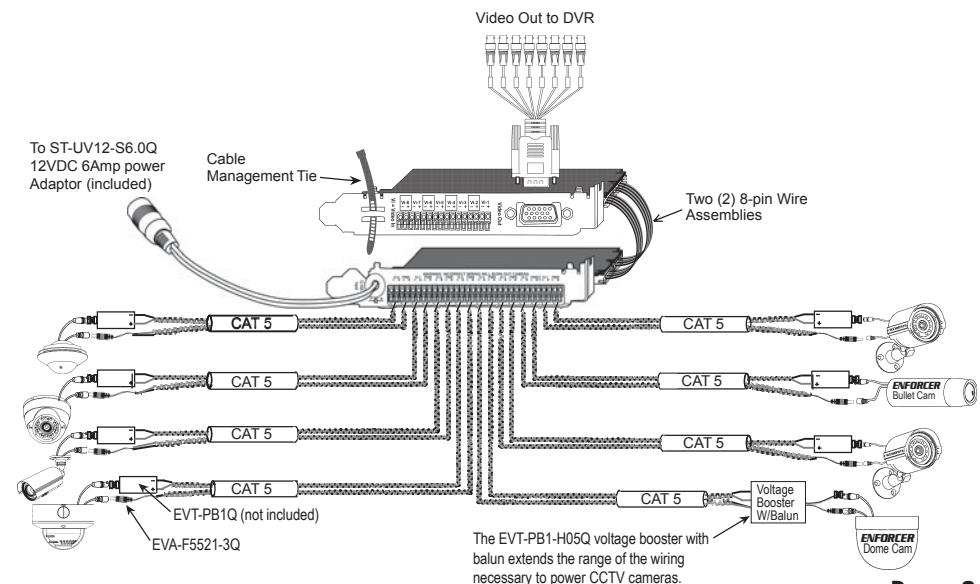
**Figure 4: EVT-PC8-VTDQ wiring diagram.**

**Video Only:**



**Figure 5: EVT-PC8-VTDQ and EVT-PC8P-JTQ wiring diagram.**

**Video and Power:**



The EVT-PB1-H05Q voltage booster with balun extends the range of the wiring necessary to power CCTV cameras.