

# INSTRUCTIONS



## **P-1488** **1080p 8x8 Component Video** **Matrix Switcher**

● CHANNEL VISION™

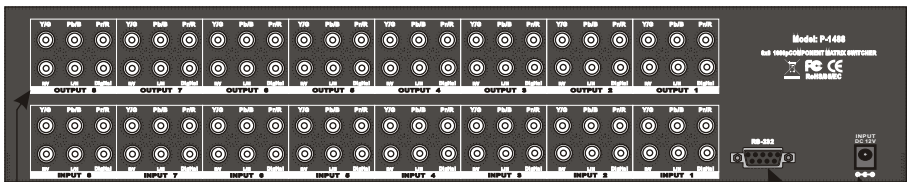
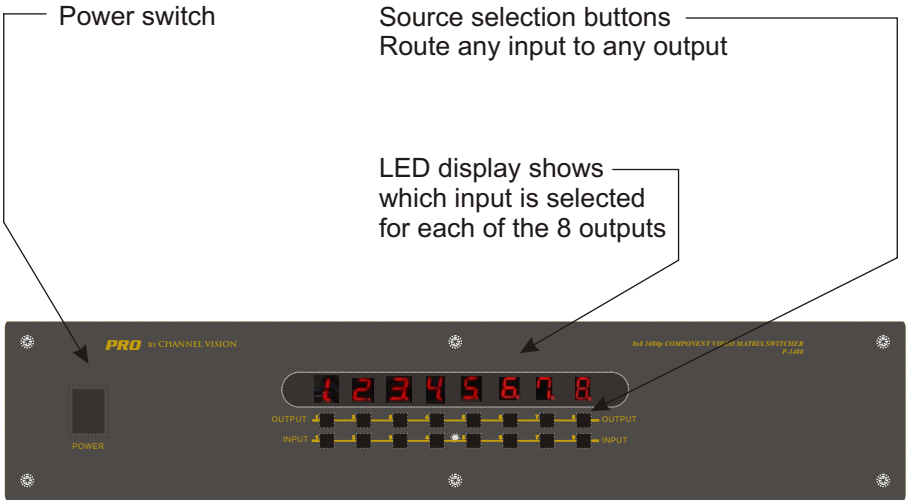
# **PRO**

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The **P-1488** is a 1080p 8x8 Matrix Switcher for HDTV video and digital audio signals that allows 8 different displays to view any of the 8 different sources independently. It can be controlled via the front panel buttons, IR remote control, or RS-232 commands.

**Features:**

- RS-232 and IR control capabilities
- Digital(PCM) & Analog Audio & Component Video switching
- Easy to read LED display



Component Video & Audio Outputs (to 8 zones)

Component Video & Audio Inputs (from 8 devices)

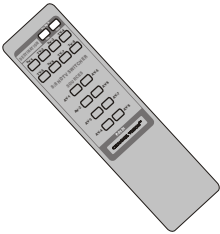
RS-232 Connector

12VDC Power Supply Connection (included)

# What is a Matrix Switcher?

Simultaneous access to multiple sources is what differentiates a matrix switch from a simple switch which would only allow one source to be viewed by multiple zones. A matrix switcher allows multiple users to access signals from multiple source components. This type of switching is ideal for whole-house application. For example, it may be necessary to view the DVD player in the bedroom while, at the same time, viewing the satellite receiver in the home theater. The P-1488 is perfect for this application, as it allows 8 sources to be accessed by 8 different users simultaneously.

## Included Accessories



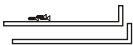
**P-0121 Remote Control** ... The hand held remote can be used to control the P-1488 from the front of the unit or from another room through the use of an IR repeating system. The IR control codes can also be downloaded from [www.channelvision.com](http://www.channelvision.com).



**Power Supply**... 12VDC@2000mA



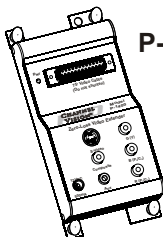
**Serial Control Cable**... Use when connecting the P-1488 to a serial control device.



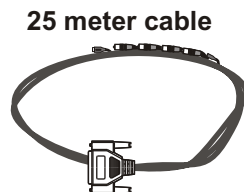
**Rack Ears**... Use when mounting the P-1488 to a 19" rack.

## How do the signals get to other rooms?

We suggest the use of a high quality video distribution system such as Channel Vision's P-1400 zero-loss video distribution system. This unit delivers flawless video signals over a 25 meter pre-made cable. The cable has been precisely constructed to match the pre-amplification provided by the P-1400. The cable must not be shortened or the benefits of the P-1400 will be negated.



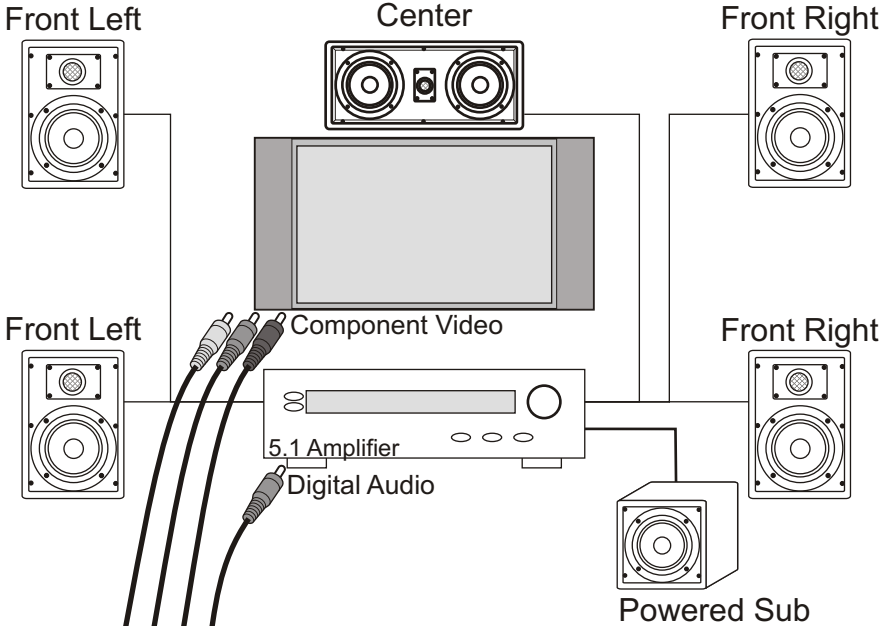
**P-1400**



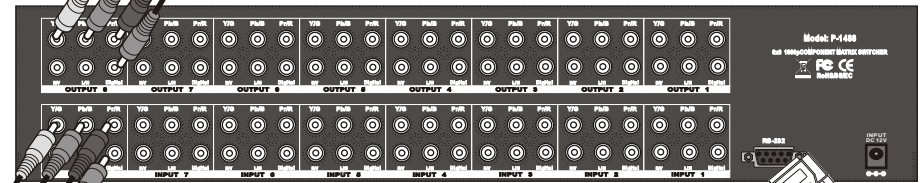
**25 meter cable**

# Connection Diagram

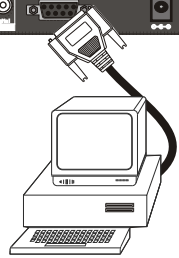
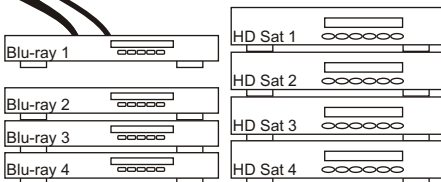
Make all connections before applying power.



The P-1488 can allow 8 High Definition sources to be distributed to 8 remote Home Theater systems. Each system will have access to any of the 8 sources. Use the digital audio connection for home theater applications. The Left/Right analog audio connections can be used if only stereo audio is needed.



Connect Component Video & Digital Audio



Connect serial controller to the RS-232 port

# Control Codes

## Using the Remote:

The model P-0120 remote control comes with the P-1488 Matrix Switcher to allow easy source selection without having to use the buttons on the front the P-1488.

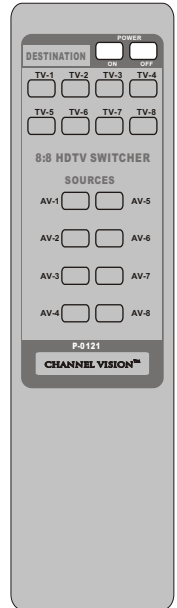
Choose a signal destination by pressing one of TV buttons, then select a source by pressing one of the AV buttons. For example, to select source 6 to be output to TV-4, press “TV-4” then press “AV-6”.

## Using advanced control systems:

For installations that require more sophistication the P-1488 also supports RS-232 making it well suited for use with Creston, AMX, and other automation systems that support RS-232.

## RS-232 Control Code:

Baud Rate: 9600, No Parity, 8Bit Data, 1 Start bit, 1 Stop bit.  
Each transmission = 8 ASCII bytes



Note: When the P-1488 receives a command it will respond to the controller with a confirmation code.

Command	Function	Description	Response
SBSYSMON	Power on	System power on	SBALONAK
SBSYSMOF	Power off	System power off	SBALOFAK
SBlxxO01	Channel 1 setting	Changes the 1st output signal. xx is the selected source. xx=(01,02, ..., 06).	SBUDxxO1
SBlxxO02	Channel 2 setting	Changes the 2nd output signal. xx is the selected source. xx=(01,02, ..., 06).	SBUDxxO2
SBlxxO03	Channel 3 setting	Changes the 3rd output signal. xx is the selected source. xx=(01,02, ..., 06).	SBUDxxO3
SBlxxO04	Channel 4 setting	Changes the 4th output signal. xx is the selected source. xx=(01,02, ..., 06).	SBUDxxO4
SBlxxO05	Channel 5 setting	Changes the 5th output signal. xx is the selected source. xx=(01,02, ..., 06).	SBUDxxO5
SBlxxO06	Channel 6 setting	Changes the 6th output signal. xx is the selected source. xx=(01,02, ..., 06).	SBUDxxO6
SBlxxO07	Channel 7 setting	Changes the 7rd output signal. xx is the selected source. xx=(01,02, ..., 06).	SBUDxxO7
SBlxxO08	Channel 8 setting	Changes the 8th output signal. xx is the selected source. xx=(01,02, ..., 06).	SBUDxxO8
SBSYSMLK	Locked toggle on	When locked on, only RS232 control is enabled (front panel buttons are disabled)	SBSYSLOK
SBSYSMUK	Locked toggle off	When locked off, RS232, IR, and front panel buttons are enabled	SBSYSULK
SBALLRST	reset	Unit is reset and every output comes from the 1st input	SBRSTACK
SBASKSTA	Ask status	Request status information.	SBSTATAK

# Parsing the Status Response

Many advanced control systems may require status feedback from the matrix switcher. When the switcher responds to a status request, it will show all of the current input and output settings.

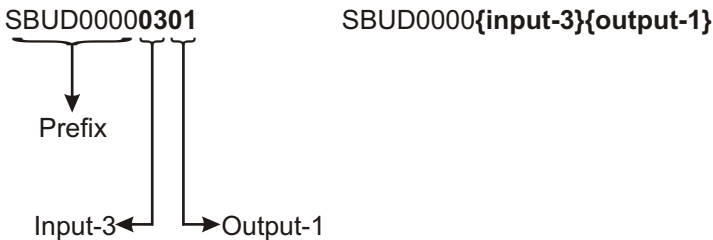
The following example is a response to the status request command:  
SBASKSTA

Example:

<u>Response</u>	<u>Meaning</u>
SBSTATAK	Acknowledge the request for status
SBALONAK	System Power On
SBUD0000 <b>0301</b>	SBUD0000{input-3}{output-1}
SBUD0000 <b>0102</b>	SBUD0000{input-1}{output-2}
SBUD0000 <b>0103</b>	SBUD0000{input-1}{output-3}
SBUD0000 <b>0104</b>	SBUD0000{input-1}{output-4}
SBUD0000 <b>0105</b>	SBUD0000{input-1}{output-5}
SBUD0000 <b>0806</b>	SBUD0000{input-8}{output-6}
SBUD0000 <b>0507</b>	SBUD0000{input-5}{output-7}
SBUD0000 <b>0408</b>	SBUD0000{input-4}{output-8}
SBSYSULK	System control is unlocked

## Parsing the Response

Each of the channels will report back their input/output settings. The input/output data will be preceded by the prefix: SBUD0000. Programmers can store the 4 characters that follow the prefix. The first two characters indicate the input and the last two characters indicate the output.



Note: Some controllers may not accept ASCII strings. The HEX equivalents for each command are listed below.

Function	HEX Command	Description	HEX Response
Power On	53,42,53,59,53,4D,4F,4E	System power on	53,42,41,4C,4F,4E,41,4B
Power Off	53,42,53,59,53,4D,4F,46	System power off	53,42,41,4C,4F,46,41,48
Channel 1 Setting	53,42,49,30,xx,4F,30,31	Set output 1. Input is xx. xx=(31,32, 33, 34, ..., 38).	53,42,55,44,30,xx,30,31
Channel 2 Setting	53,42,49,30,xx,4F,30,32	Set output 2. Input is xx. xx=(31,32, 33, 34, ..., 38).	53,42,55,44,30,xx,30,32
Channel 3 Setting	53,42,49,30,xx,4F,30,33	Set output 3. Input is xx. xx=(31,32, 33, 34, ..., 38).	53,42,55,44,30,xx,30,33
Channel 4 Setting	53,42,49,30,xx,4F,30,34	Set output 4. Input is xx. xx=(31,32, 33, 34, ..., 38).	53,42,55,44,30,xx,30,34
Channel 5 Setting	53,42,49,30,xx,4F,30,35	Set output 5. Input is xx. xx=(31,32, 33, 34, ..., 38).	53,42,55,44,30,xx,30,35
Channel 6 Setting	53,42,49,30,xx,4F,30,36	Set output 6. Input is xx. xx=(31,32, 33, 34, ..., 38).	53,42,55,44,30,xx,30,36
Channel 7 Setting	53,42,49,30,xx,4F,30,37	Set output 7. Input is xx. xx=(31,32, 33, 34, ..., 38).	53,42,55,44,30,xx,30,37
Channel 8 Setting	53,42,49,30,xx,4F,30,38	Set output 8. Input is xx. xx=(31,32, 33, 34, ..., 38).	53,42,55,44,30,xx,30,38
Locked Toggle On	53,42,53,59,53,4D,4C,4B	When locked on, (disables buttons) only RS232 works	53,42,53,59,53,4C,4F,4B
Locked Toggle Off	53,42,53,59,53,4D,55,4B	When locked off, RS232, IR & front buttons are enabled	53,42,53,59,53,55,4C,4B
Reset	53,4241,4C,4C,52,53,54	Sets all outputs to input 1	53,42,52,53,54,41,43,4B
Ask Status	53,42,41,53,4B,53,54,41	Request status information.	53,42,53,54,41,54,41,4B

**Specifications:** (typical)

- Video Supported:** 480i/p, 720p, & 1080i/p
- Video Bandwidth:** 325MHz (-3dB), 200mVp-p
- Video Crosstalk:** <80dB @ 5MHz
- Audio Supported:** Digital(PCM) & Analog Audio, 20Hz~20kHz
- Control Method:** RS-232 and hand held remote
- Power Supply:** 12VDC @ 2A
- Power Consumption (max):** 1.6A
- Safety Approvals:** CE, FCC, RoHS(2002/95/EC)
- Dimensions:** 3.46"H x 17.37"W x 7.87"D
- Shipping Weight** 3.25Kgs / 5.42lbs.

Specifications subject to change without notice.

# CHANNEL VISION™

## **1 Year Limited Warranty**

Channel Vision Technology will repair or replace any defect in material or workmanship which occurs during normal use of this product with new or rebuilt parts, free of charge in the USA, for one year from the date of original purchase. This is a no hassle warranty with no mail in warranty card needed. This warranty does not cover damages in shipment, failures caused by other products not supplied by Channel Vision Technology, or failures due to accident, misuse, abuse, or alteration of the equipment. This warranty is extended only to the original purchaser, and a purchase receipt, invoice, or other proof of original purchase date will be required before warranty repairs are provided.

Mail in service can be obtained during the warranty period by calling (800) 840-0288 toll free. A Return Authorization number must be obtained in advance and can be marked on the outside of the shipping carton.

This warranty gives you specific legal rights and you may have other rights (which vary from state to state). If a problem with this product develops during or after the warranty period, please contact Channel Vision Technology, your dealer or any factory-authorized service center.

Channel Vision products are not intended for use in medical, lifesaving, life sustaining or critical environment applications. Channel Vision customers using or selling Channel Vision products for use in such applications do so at their own risk and agree to fully indemnify Channel Vision for any damages resulting from such improper use or sale.

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