USER MANUAL

Model:

CVG-FW81

8 Port FireWire Switcher

CVG

For maximum results, use Comprehensive Brand Premium High Resolution cables and connectors.

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1   Introduction

Congratulations on purchasing your **CVG-FW81** *8 Port FireWire Switcher*, which is ideal for digital video editing systems and data switching systems.

The package includes the following items:

- **CVG-FW81** *8 Port FireWire Switcher*
- This user manual

2   Getting Started

We recommend that you:

- Unpack the equipment carefully and save the original box and packaging materials for possible future shipment
- Review the contents of this user manual

3   Overview

FireWire is a serial bus standard[1] that enables quick universal interfacing between video and computer hardware items[2]. FireWire is simple to use and operates independently of the host system. In addition, FireWire supports Plug and Play[3], hot swapping[4], and isochronous[5] as well as asynchronous applications.

Achieving the best performance means:

- Connecting only good quality connection cables, thus avoiding interference, deterioration in signal quality due to poor matching, and elevated noise levels (often associated with low quality cables)
- Avoiding interference from neighboring electrical appliances that may adversely influence signal quality and positioning your **CVG-FW81** unit in a location free from moisture and away from excessive sunlight and dust

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1 Originally developed by AppleTM and published as IEEE 1394 by the Institute of Electrical and Electronics Engineers

2 Hardware items include digital cameras, computers, printers, VCRs, CD-ROMs, hard disks, scanners and graphic cards

3 Configures automatically. Whenever a device is added or removed the 1394 bus re-enumerates

4 You can connect and disconnect inputs and outputs dynamically, without having to restart the PC or cycle power

5 Video / audio applications require constant transfer rates, which the serial bus provides by supporting isochronous transfers

4 Your FireWire Switcher

The high quality **CVG-FW81** *8 Port FireWire Switcher* is an intelligent[1], passive[2] 8x1 mechanical switcher for *FireWire* signals, using 6-pin *FireWire* connectors. The **CVG-FW81** can also be configured as part of a distribution amplifier (DA) system.

In addition, the **CVG-FW81**:

- Is ideal for high speed data signals up to 400 MB/s

- With its unpowered design is advantageous for applications in which various regulatory compliances would otherwise be required

- Lets you interconnect up to 8 bi-directional devices (each device can be a receiver and transmitter), with 2 devices able to function at the same time

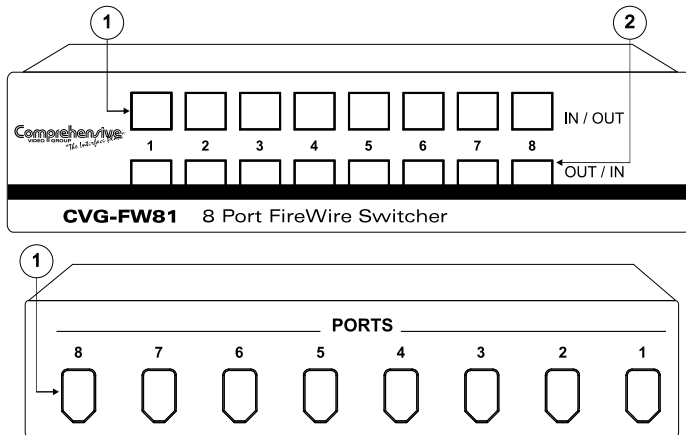Figure 1 and Table 1 define the **CVG-FW81** *8 Port FireWire Switcher*:

Figure 1: CVG-FW81 8 Port FireWire Switcher

Table 1: Front Panel CVG-FW81 8 Port FireWire Switcher Features

#	Feature	Function
1	IN / OUT SELECTOR Buttons	Selects a device from 1 to 8
2	OUT / IN SELECTOR Buttons	Selects a device from 1 to 8

Table 2: Rear Panel CVG-FW81 8 Port FireWire Switcher Features

#	Feature	Function
1	6-pin PORTS	Connect to the devices from 1 to 8

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1 The FireWire protocol is a computer-based protocol used for video, which allows more flexibility than running 2 cables (one from the source and one from the acceptor)

2 Allows power to be transferred if the other device has no power

5   Using the FireWire Switcher

This section describes how to connect and how to operate your **CVG-FW81**.

You can connect the **CVG-FW81** 8 *Port FireWire Switcher* to up to 8 devices[1], using 1394 cables with 6 pin connectors. However, only 2 devices can be selected (one per line) at the same time, as the example in Figure 2 illustrates.

To connect the **CVG-FW81** to 2 devices, do the following:

1. Connect one device (for example, a digital VCR) to PORT 8 and another device (for example, also a digital VCR) to PORT 4.

2. Push in the IN / OUT button 8.
   The IN / OUT button 8 changes color, and the other buttons on that line pop out.

3. Push in the OUT / IN button 4.
   The OUT / IN button 4 changes color, and the other buttons on that line pop out.

4. Set the digital VCR that is connected to PORT 8 to record, and the digital VCR that is connected to PORT 4 to play back.
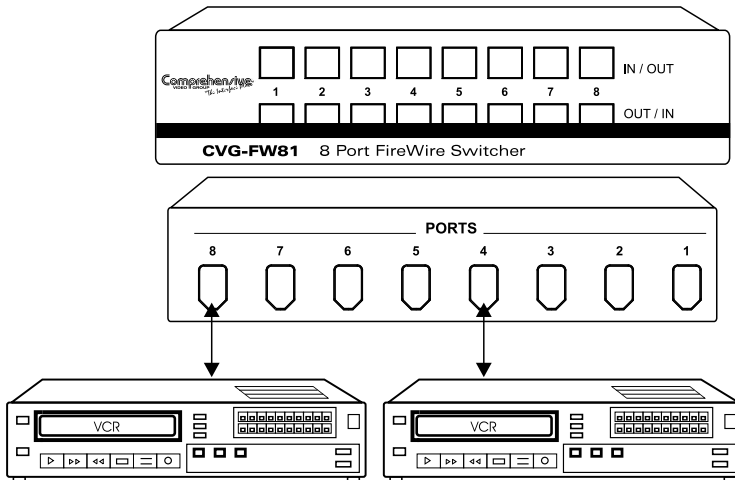

Figure 2: Connecting the FireWire Switcher

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1 Each device that is connected to a port can simultaneously constitute a transmitter or receiver (source or acceptor). If the digital FireWire data stream for video and audio is embedded, it identifies if a connected device is a transmitter or receiver communicating with each other in 2 directions, on one line

6   Technical Specifications

Table 3: Technical Specifications[1] of the CVG-FW81 8 Port FireWire Switcher

PORTS:	Eight 6-pin connectors
SWITCHING SYSTEM:	Mechanical, break-before-make
COMPATIBILITY:	Up to 400 MB/s
STANDARDS:	Compliant with IEEE 1394 - 1995 for high performance serial bus and the P1394a draft 2.0 standard
DIMENSIONS:	18.8cm x 10.2cm x 4.4cm (7.4" x 4" x 1.7"), W, D, H.
WEIGHT:	0.70 kg. (1.55 lbs.) approx.
OPTIONS:	19" rack adapter RK-81

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1 Specifications are subject to change without notice