



CVG-FW4X4

4X4 Firewire Switcher

USER MANUAL

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1 Introduction

Congratulations on purchasing your **CVG-FW4x4 4x4 FireWire Switcher**.

This product is ideal for:

- Small digital video editing systems
- Data switching systems

The package includes the following items:

- **CVG-FW4x4 4x4 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 standard¹ that enables quick universal interfacing between video and computer hardware items². *FireWire* hubs let you:

- Connect more items than you otherwise could³
- Extend the distances

FireWire is simple to use and operates independently of the host system. In addition, *FireWire* supports:

- Plug and Play⁴
- Hot swapping⁵
- Isochronous⁶ as well as asynchronous applications

Achieving the best performance means:

- Positioning your **CVG-FW4x4** in a location free from moisture and away from excessive sunlight and dust

1 Originally developed by Apple™ 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 A computer only has limited ports available

4 Configures automatically without any driver. Whenever a device is added or removed the 1394 bus re-enumerates.

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

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

- 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

4 Your FireWire Switcher

The high quality **CVG-FW4x4** 4x4 FireWire Switcher is a mechanical 4x4 switcher for FireWire signals, using 6-pin FireWire connectors. In particular, the **CVG-FW4x4**:

- Is designed for applications requiring a compact desktop unit for routing FIRE WIRE signals¹ between any one of 4 sources to any one of 4 acceptors²
- Is ideal for high speed data signals up to 400 MB/s
- With its high quality switching components and carefully designed circuits, provides excellent isolation between inputs
- With its unpowered design is advantageous for applications in which various regulatory compliances would otherwise be required

Figure 1 and Table 1 define the **CVG-FW4x4** 4x4 FireWire Switcher:

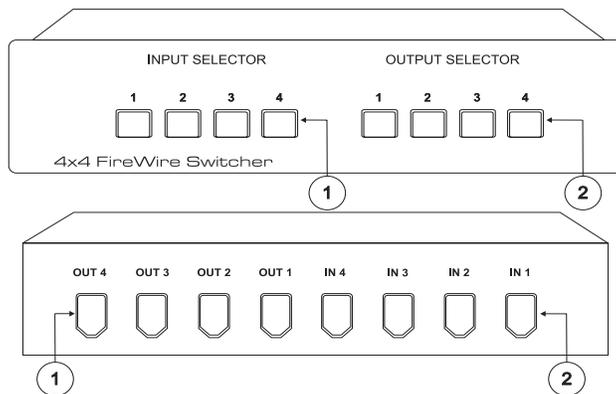


Figure 1: CVG-FW4x4 4x4 FireWire Switcher

Table 1: Front Panel CVG-FW4x4 4x4 FireWire Switcher Features

#	Feature	Function
1	INPUT SELECTOR Buttons	Selects a source from 1 to 4
2	OUTPUT SELECTOR Buttons	Selects an acceptor from 1 to 4

Table 2: Rear Panel CVG-FW4x4 4x4 FireWire Switcher Features

#	Feature	Function
1	OUT 6-pin Connectors	Connects to the acceptors from 1 to 4

¹ For example, digital video or data

² The CVG-FW4x4 can only provide one signal path at any given time (one active crosspoint). It cannot distribute a signal to multiple outputs simultaneously

5 Using the FireWire Switcher

Sections 5.1 and 5.2 describe how to connect and how to operate your **CVG-FW4x4 4x4 FireWire Switcher**, respectively.

5.1 Connecting the FireWire Switcher

You can connect the **CVG-FW4x4 4x4 FireWire Switcher** to up to 4 sources and to up to 4 acceptors, using 1394 cables with 6 pin connectors.

For example, to connect the **CVG-FW4x4 4x4 FireWire Switcher** to 2 sources (a PC and a laptop) and to one acceptor (a digital video camera), as Figure 2 illustrates, do the following:

1. Connect a PC to the IN 1 port and connect a laptop to the IN 3 port.
2. Connect the OUT 4 port to the digital video camera.

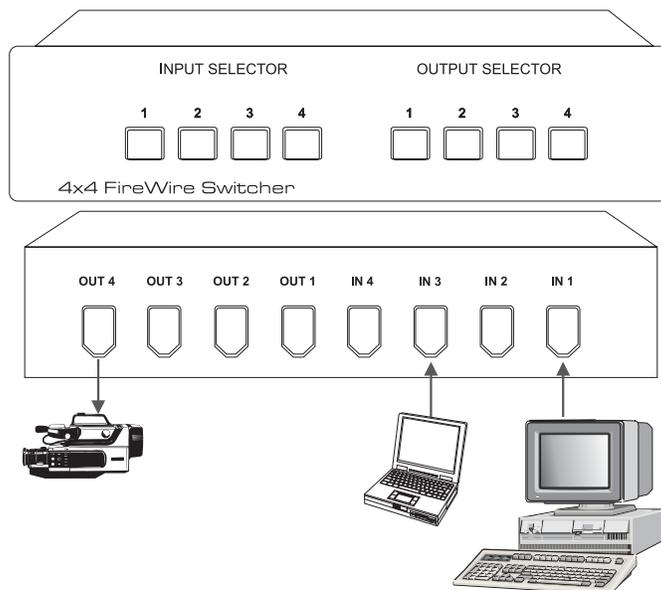


Figure 2: Connecting the CVG-FW4x4 4x4 FireWire Switcher

5.2 Operating the FireWire Switcher

You can route any one of 4 sources to any one of 4 acceptors when operating your **CVG-FW4x4 4x4 FireWire Switcher**.

For example, to route the signal from the PC to the digital video camera, as Figure 2 illustrates, do the following:

- Press the INPUT SELECTOR IN 1 button
- Press the OUTPUT SELECTOR OUT 4 button

The signal from the PC routes to the digital video camera

For example, to route the signal from the laptop to the digital video camera, as Figure 2 illustrates, do the following:

- Press the INPUT SELECTOR IN 3 button
- Press the OUTPUT SELECTOR OUT 4 button

The signal from the laptop routes to the digital video camera

6 Technical Specifications

Table 3: Technical Specifications of the CVG-FW4x4 4x4 FireWire Switcher

Inputs:	4 firewire, 6-pin connectors
Outputs:	4 firewire, 6-pin connectors
Switching System:	Mechanical, break-before-make
Compatibility:	Up to 400 MB/s
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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