Kramer Electronics, Ltd.



USER MANUAL

Model:

6241

4x1 SDI Switcher / DA

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1 Introduction

Dedication by Kramer Electronics since 1981, to the development and manufacture of high quality video/audio equipment, makes the Kramer line an integral part of the finest production and presentation facilities in the world. In recent years, Kramer has redesigned and upgraded most of the line, making the best even better! The Kramer line of professional video/audio electronics is one of the most versatile and complete available, and is a true leader in terms of quality, workmanship, price/performance ratio and innovation. In addition to our high quality Kramer DigiTOOLSTM, distribution amplifiers, and switchers and matrices, we also offer excellent remote controllers, processors, interfaces and computer-related products.

Congratulations on purchasing your Kramer **6241** 4x1 SDI Switcher / DA. This product is ideal for the following typical applications:

- Video broadcast studios for signal routing
- Non-linear editing suites
- Video production studios, to connect various sources to acceptors

The package includes the following items:

- **6241** 4x1 SDI Switcher / DA
- Power adapter (12V DC Input)
- This user manual
- Kramer concise product catalog/CD

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 Your SDI Switcher / DA

The **6241** 4x1 SDI Switcher / DA outputs the selected serial digital video input to 2 serial digital video outputs simultaneously (doubling as a 1:2 DA¹). In addition, the **6241** 4x1 SDI Switcher / DA:

Is adjustment-free

1 Distribution Amplifier

- Provides automatic equalization for losses on 75 Ω coaxial cable¹
- Reclocks the input signal to provide 2 low-jitter serial digital outputs
- Supports multi-standards 4fsc PAL, 4fsc NTSC, component 4:2:2 and 16:9 (wide-screen)
- Operates for both 10 bit and 8 bit video, automatically recognizing the word length

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 Kramer **6241** *4x1 SDI Switcher / DA* in a location free from moisture and away from excessive sunlight and dust

Figure 1 and Table 1 define the **6241** 4x1 SDI Switcher / DA:

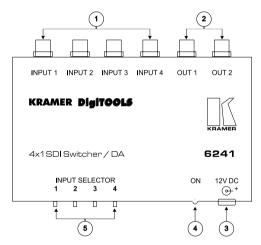


Figure 1: 6241 4x1 SDI Switcher / DA

Table 1: Features and Functions of the 6241 4x1 SDI Switcher / DA

#	Feature	Function
1	INPUT BNC Connectors	Serial digital video input (75 Ω) (1 to 4)
2	OUT BNC Connectors	Serial digital video output (75 Ω) (1 to 2)
3	12V DC	+12V DC connector for powering the unit
4	ON LED	Illuminates when receiving power
5	INPUT SELECTOR Switches	Select the serial digital video sources (from 1 to 4)

¹ Up to hundreds of meters of cable (depending on the cable quality and the video standard)

4 Connecting the SDI Switcher / DA

To connect your **6241** 4x1 SDI Switcher / DA, as Figure 2 illustrates:

- 1. Connect up to 4 serial digital video sources (for example, 2 digital broadcast cameras and 2 digital video players) to the 4 serial digital video *INPUT* BNC connectors¹.
- 2. Connect the 2 serial digital video *OUT* BNC connectors² to the 2 serial digital video acceptors (for example, 2 digital monitors).
- Connect the 12V DC power adapter to the power socket and connect the adapter to the mains electricity.
 Pressing an INPUT SELECTOR button routes that serial digital video input to both serial digital video outputs.

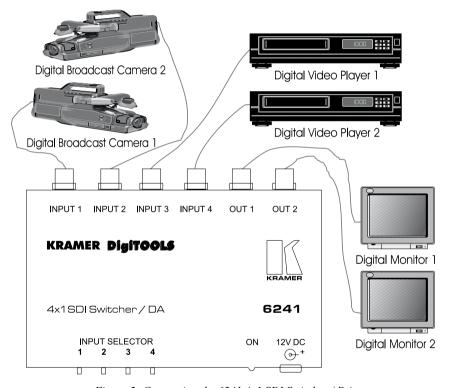


Figure 2: Connecting the 6241 4x1 SDI Switcher / DA

² You do not have to connect both outputs



3

¹ You do not have to connect all the inputs

5 Technical Specifications

Table 2: Technical Specifications of the 6241 4x1 SDI Switcher / DA

Inputs:	4 serial digital video inputs (75 Ω) on BNC connectors
Outputs:	2 serial digital video outputs (75 Ω) on BNC connectors
Standards:	4fsc PAL, 4fsc NTSC, component 4:2:2 and 16:9 (wide-screen)
Equalization:	Automatic equalization for losses on 75 Ω coaxial cable
Dimensions:	12 cm x 7.5 cm x 2.5 cm (4.7" x 2.95" x 0.98", W, D, H)
Power Source:	12 VDC, 60 mA
Weight:	0.25 kg (0.6 lbs.) approx.
Accessories:	Power supply, mounting bracket
Options:	RK-T1 or RK-T3 rack mount kit

LIMITED WARRANTY

Kramer Electronics (hereafter Kramer) warrants this product free from defects in material and workmanship under the following terms

HOW LONG IS THE WARRANTY

Labor and parts are warranted for three years from the date of the first customer purchase.

WHO IS PROTECTED?

Only the first purchase customer may enforce this warranty.

WHAT IS COVERED AND WHAT IS NOT COVERED

Except as below, this warranty covers all defects in material or workmanship in this product. The following are not covered by the warranty:

- Any product which is not distributed by Kramer, or which is not purchased from an authorized Kramer dealer. If you are uncertain as to whether a dealer is authorized, please contact Kramer at one of the agents listed in the web site www.kramerelectronics.com.
- Any product, on which the serial number has been defaced, modified or removed.
- Damage, deterioration or malfunction resulting from:
 - Accident, misuse, abuse, neglect, fire, water, lightning or other acts of nature
 - ii) Product modification, or failure to follow instructions supplied with the product
 - Repair or attempted repair by anyone not authorized by Kramer iii) iv)
 - Any shipment of the product (claims must be presented to the carrier)
 - v) Removal or installation of the product
 - vi) Any other cause, which does not relate to a product defect
 - Cartons, equipment enclosures, cables or accessories used in conjunction with the product

WHAT WE WILL PAY FOR AND WHAT WE WILL NOT PAY FOR

We will pay labor and material expenses for covered items. We will not pay for the following:

- Removal or installations charges.
- 2. Costs of initial technical adjustments (set-up), including adjustment of user controls or programming. These costs are the responsibility of the Kramer dealer from whom the product was purchased.
- 3. Shipping charges.

HOW YOU CAN GET WARRANTY SERVICE

- To obtain service on you product, you must take or ship it prepaid to any authorized Kramer service center.
- Whenever warranty service is required, the original dated invoice (or a copy) must be presented as proof of warranty coverage, and should be included in any shipment of the product. Please also include in any mailing a contact name, company, address, and a description of the problem(s).
- 3 For the name of the nearest Kramer authorized service center, consult your authorized dealer.

LIMITATION OF IMPLIED WARRANTIES

All implied warranties, including warranties of merchantability and fitness for a particular purpose, are limited in duration to the length of this warranty.

EXCLUSION OF DAMAGES

The liability of Kramer for any effective products is limited to the repair or replacement of the product at our option. Kramer shall not be liable for:

- Damage to other property caused by defects in this product, damages based upon inconvenience, loss of use of the product, loss of time, commercial loss; or:
- Any other damages, whether incidental, consequential or otherwise. Some countries may not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations and exclusions may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights, which vary from place to place.

NOTE: All products returned to Kramer for service must have prior approval. This may be ob tained from your dealer.

This equipment has been tested to determine compliance with the requirements of:

EN-50081: "Electromagnetic compatibility (EMC);

generic emission standard.

Part 1: Residential, commercial and light industry"

EN-50082: "Electromagnetic compatibility (EMC) generic immunity standard. Part 1: Residential, commercial and light industry environment".

CFR-47: FCC Rules and Regulations:

Part 15: "Radio frequency devices Subpart B - Unintentional radiators"

CAUTION!

- 🖾 Servicing the machines can only be done by an authorized Kramer technician. Any user who makes changes or modifications to the unit without the expressed approval of the manufacturer will void user authority to operate the equipment.
- Use the supplied DC power supply to feed power to the machine.
- Please use recommended interconnection cables to connect the machine to other components.





The list of Kramer distributors appears on our web site: www.kramerelectronics.com

We welcome your questions, comments and feedback.