

Kramer Electronics, Ltd.



USER MANUAL

Model:

VM-30AYC

1:3 Audio/s-Video DA

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1 Introduction

Welcome to Kramer Electronics (since 1981): a world of unique, creative and affordable solutions to the infinite range of problems that confront the video, audio and presentation professional on a daily basis. In recent years, we have redesigned and upgraded most of our line, making the best even better! Our 500-plus different models now appear in 8 Groups¹, which are clearly defined by function.

Congratulations on purchasing your Kramer **VM-30AYC 1:3 Audio/s-Video DA**, which is ideal for the following applications:

- Video duplication studios
- Broadcasting, production, or presentation systems requiring high quality signal distribution
- Schools, retail outlets, sports bars, or other point-of-sale and CCTV

The package includes the following items:

- **VM-30AYC 1:3 Audio/s-Video DA**
- Power adapter (12V DC Input)
- This user manual²

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
- Use Kramer high performance high resolution cables³

1 GROUP 1: Distribution Amplifiers; GROUP 2: Video and Audio Switchers, Matrix Switchers and Controllers; GROUP 3: Video, Audio, VGA/XGA Processors; GROUP 4: Interfaces and Sync Processors; GROUP 5: Twisted Pair Interfaces; GROUP 6: Accessories and Rack Adapters; GROUP 7: Scan Converters and Scalers; and GROUP 8: Cables and Connectors

2 Download up-to-date Kramer user manuals from our Web site: <http://www.kramerelectronics.com>

3 The complete list of Kramer cables is on our Web site at <http://www.kramerelectronics.com>

3 Overview

The **VM-30AYC 1:3 Audio/s-Video DA** is a high performance 1:3 distribution amplifier for s-Video and stereo audio signals. The **VM-30AYC** accepts one s-Video signal¹ and/or one stereo audio signal and distributes them to 3 identical outputs. A set of front panel trimmers lets you control the video level and the audio level.

To achieve the best performance:

- Connect 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)
- Avoid interference from neighboring electrical appliances that may adversely influence signal quality and position your Kramer **VM-30AYC** away from moisture, excessive sunlight and dust

4 Your VM-30AYC Audio/s-Video DA

Figure 1 illustrates the front and rear panels of the **VM-30AYC**, and Table 1 defines them:

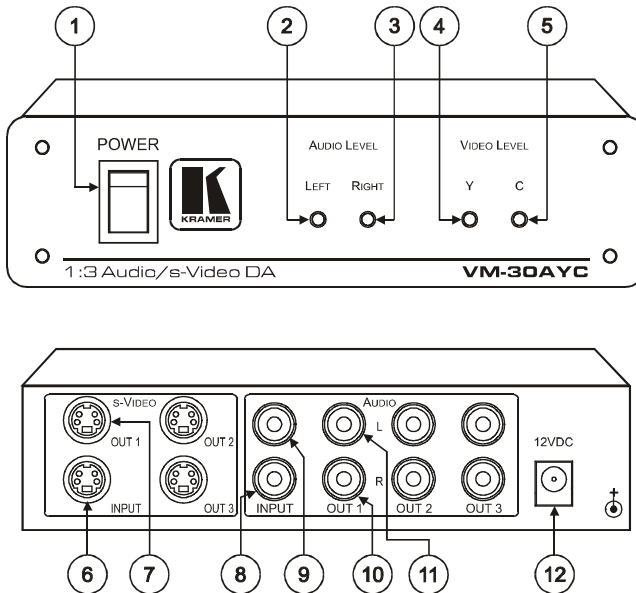


Figure 1: VM-30AYC 1:3 Audio/s-Video DA

¹ From an s-Video source, for example, a camera

Table 1: Features and Functions of the VM-30AYC 1:3 Audio/s-Video DA

#	Feature		Function
1	POWER Switch		Illuminated switch supplying power to the unit
2	AUDIO	LEFT Trimmer	Adjust ¹ the left audio signal output level
3	LEVEL	RIGHT Trimmer	Adjust ¹ the right audio signal output level
4	VIDEO	Y Trimmer	Adjust ¹ the Y video signal output level
5	LEVEL	C Trimmer	Adjust ¹ the C video signal output level
6	s-VIDEO INPUT 4p Connector		Connect to the s-Video source
7	s-VIDEO OUT 4p Connectors		Connect to the s-Video acceptors (from OUT 1 to OUT 3)
8	AUDIO	R RCA connector	Connect to the right audio source
9	INPUT	L RCA Connector	Connect to the left audio source
10	AUDIO	R RCA Connectors	Connect to the right audio acceptor (from OUT 1 to OUT 3)
11	OUT	L RCA Connectors	Connect to the left audio acceptor (from OUT 1 to OUT 3)
12	12VDC		+12V DC connector for powering the unit

4.1 Connecting the VM-30AYC

To connect² the **VM-30AYC 1:3 Audio/s-Video DA**, as the example in Figure 2 illustrates, do the following:

1. Connect an s-Video source (for example, an s-Video player) to the s-VIDEO INPUT 4p connector, and to the L (left) and R (right) AUDIO INPUT RCA connectors.
2. Connect up to three s-VIDEO OUT 4p connectors³ to up to three s-Video acceptors (for example, s-Video recorders), and connect up to three L (left) and R (right) AUDIO OUT RCA connectors to the appropriate audio inputs on the s-Video acceptors.
3. Connect the 12V DC power adapter to the power socket and connect the adapter to the mains electricity.

Adjust the audio level and the video level, if required.

¹ Insert a screwdriver into the small hole and carefully rotate it, to trim the appropriate level

² Switch OFF the power on each device before connecting it to your VM-30AYC. After connecting your VM-30AYC, switch on its power and then switch on the power on each device

³ You do not have to connect all the outputs

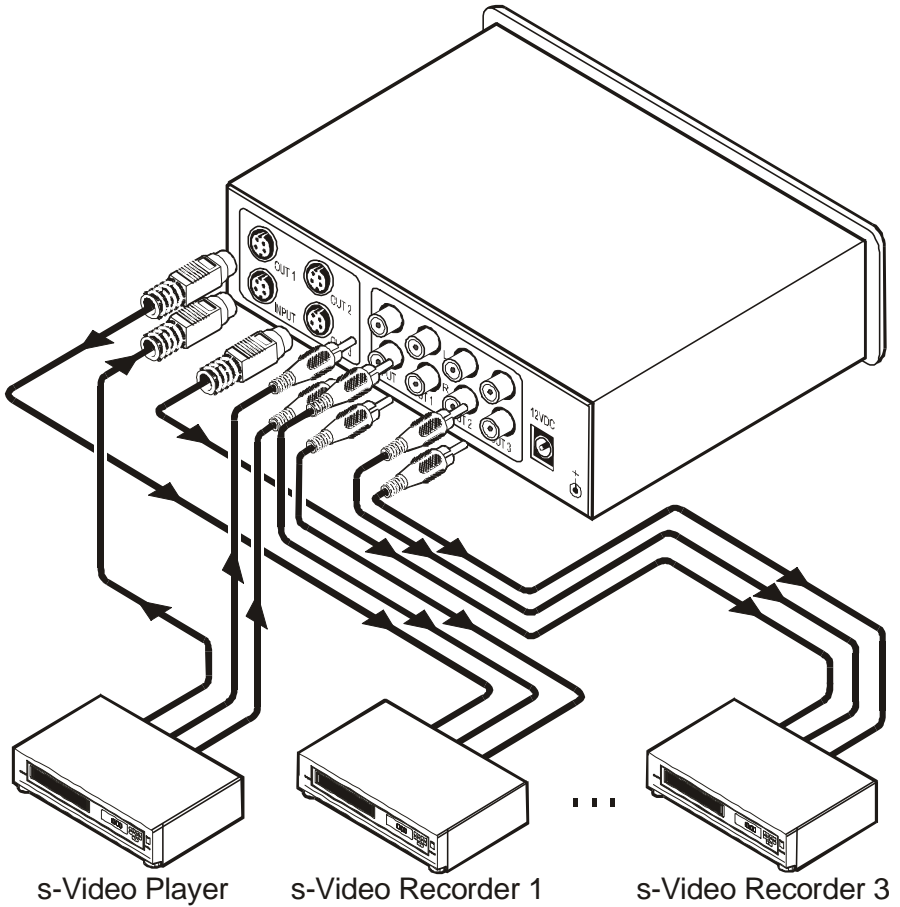


Figure 2: Connecting the VM-30AYC 1:3 Audio/s-Video DA

5 Technical Specifications

Table 2 includes the technical specifications.

Table 2: VM-30AYC¹ Technical Specifications

INPUTS:	1 YC, 1Vpp/75Ω (Y), 0 3Vpp/75Ω (C) on a 4p connector 1 audio stereo, 5Vpp/73kΩ on RCA connectors	
OUTPUTS:	3 s-Video, 1Vpp/75Ω (Y), 0 3Vpp/75Ω (C) on 4p connectors 3 audio stereo, 5Vpp/150Ω on RCA connectors	
MAX. OUTPUT LEVEL:	VIDEO: 2Vpp	AUDIO: 7dBm (5Vpp)
BANDWIDTH (-3dB):	VIDEO: 120MHz	AUDIO: >100kHz
DIFF. GAIN:	0.03%	
DIFF. PHASE:	0.03 Deg.	
K-FACTOR:	<0.05%	
S/N RATIO:	VIDEO: 79dB@5MHz	AUDIO: 94dB
CROSSTALK (all hostile):	AUDIO: -59dB@5MHz	
CONTROLS:	VIDEO: Y level: -2.1dB to +4.7dB, C level: -2.5dB to +4.6dB AUDIO: -20dB to +16dB	
COUPLING:	AC	
AUDIO THD + NOISE:	0.013%	
AUDIO 2nd HARMONIC:	0.003%	
POWER SOURCE:	12V, 35.8mA	
DIMENSIONS:	16.3cm x 11.8cm x 4.36cm (6.42" x 4.65" x 1.72", W, D, H)	
WEIGHT:	0.65 kg (1.4 lbs.) approx.	
ACCESSORIES:	12 VDC power supply, brackets for stacking multiple units	
OPTIONS:	RK-50RN 19" rack adapter	

¹ Specifications are subject to change without notice

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 seven 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:

1. 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.
2. Any product, on which the serial number has been defaced, modified or removed.
3. Damage, deterioration or malfunction resulting from:
 - i) Accident, misuse, abuse, neglect, fire, water, lightning or other acts of nature
 - ii) Product modification, or failure to follow instructions supplied with the product
 - iii) Repair or attempted repair by anyone not authorized by Kramer
 - 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
 - vii) 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:

1. 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

1. To obtain service on you product, you must take or ship it prepaid to any authorized Kramer service center.
2. 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:

1. 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;
2. 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 obtained 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.



For the latest information on our products and a list of Kramer distributors, visit our Web site: www.kramerelectronics.com, where updates to this user manual may be found. We welcome your questions, comments and feedback.



Caution

Safety Warning:

Disconnect the unit from the power supply before opening/servicing.



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