

Kramer Electronics, Ltd.



USER MANUAL

Model:

FC-16

RGBS to Component Video Transcoder

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This addendum adds the following information to the user manual:

	Caution – No operator-serviceable parts inside unit.
	Warning – Use only the Kramer Electronics input power wall adapter that is provided with this unit ¹ .
	Warning – Disconnect power and unplug unit from wall before installing or removing device or servicing unit.

¹ For example: model number AD2512C, part number 2535-000251

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 350-plus different models now appear in 8 Groups¹, which are clearly defined by function. Congratulations on purchasing your Kramer **FC-16 RGB/S to Component Video Transcoder**. This product is ideal for:

- Any 50Hz/60Hz interlaced display system requiring conversion between RGBS and YUV
- Multimedia, home theater and presentation applications
- Conversion to YUV from an RGB SCART source (for example, a set-top box or a DVD player)

The package includes the following items:

- **FC-16 RGB/S to Component Video Transcoder**
- 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 at <http://www.kramerelectronics.com>

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

3 Overview

The Kramer **FC-16** is a high quality converter for converting RGsB, RGSB or RGB+CV to component video (Y, B-Y, R-Y, or YUV)¹. The input RGB video signals are all DC-clamped within the **FC-16**, and the unit provides DC-coupled outputs and sync stabilization features to ensure the highest quality component video output.

The high performance **FC-16** also:

- Allows RGB video to be displayed on plasma monitors and on other display devices equipped with component video inputs
- Provides BNC connectors for all inputs and outputs
- Lets you display RGB video on plasma monitors and on other display devices equipped with component video inputs

The **FC-16** is rugged and dependable, and can be rack-mounted using the RK-80 19" rack kit, and is 12VDC fed.

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 and positioning your **FC-16** away from moisture, excessive sunlight and dust

4 Your FC-16 RGB/S to Component Video Transcoder

Figure 1, Table 1 and Table 2 define the **FC-16**:

¹ The unit does not de-interlace or scale the video resolution – it performs a format conversion (from RGB to YUV) at the same resolution as the input

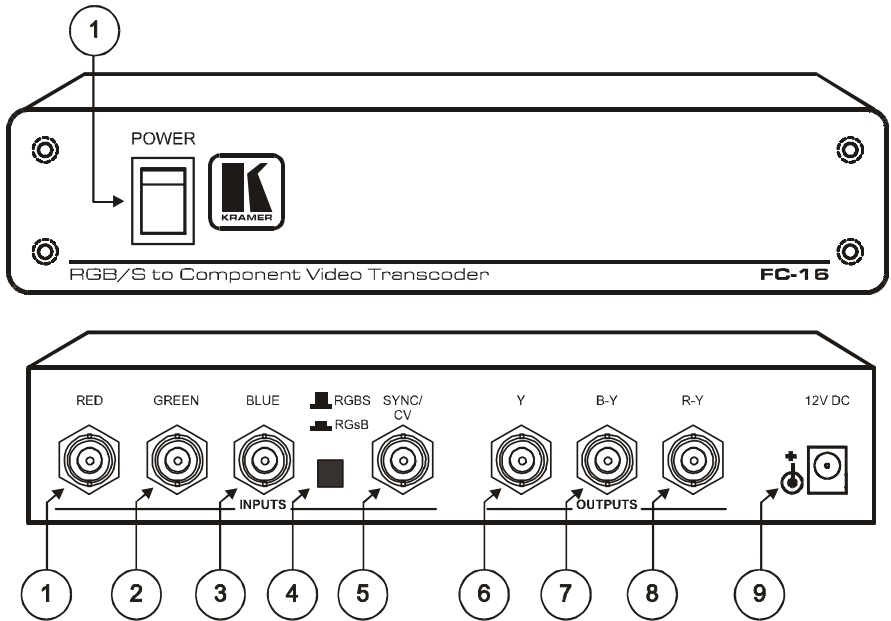


Figure 1: FC-16 RGB/S to Component Video Transcoder

Table 1: Front Panel FC-16 RGBS to Component Video Transcoder Features

#	Feature	Function
1	POWER Switch	Illuminated switch for turning the unit ON or OFF

Table 2: Rear Panel FC-16 RGBS to Component Video Transcoder Features

#	Feature	Function
1	INPUTS	RED BNC Connector
2		GREEN BNC Connector
3		BLUE BNC Connector
4	RGBS/RGB Button	Push in to select RGBS, release to select RGB
5	SYNC/CV BNC Connector	Connect to SYNC/CV source
6	OUTPUTS	Y BNC Connector
7		B-Y BNC Connector
8		R-Y BNC Connector
9	12V DC	+12V DC connector for powering the unit

5 Connecting the FC-16

To connect your **FC-16 RGB/S to Component Video Transcoder**, as the example in Figure 2 illustrates, do the following¹:

1. Connect an RGBS source (for example, a Set Top Box) to the RGB BNC connectors.
2. Connect the SYNC source to SYNC/CV BNC connector.
3. Connect the Y, B-Y, and R-Y outputs of the **FC-16** to a plasma monitor.
4. Connect the 12V DC power adapter to the power socket and connect the adapter to the mains electricity.
5. Press the RGsB/RGBS push button accordingly².

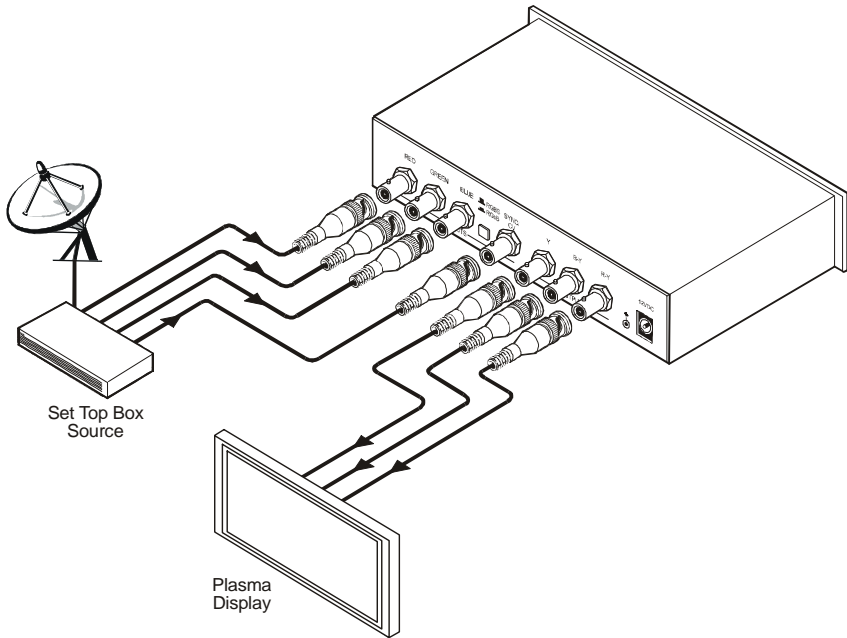


Figure 2: Connecting the FC-16 RGBS to Component Video Transcoder

1 Switch OFF the power on each device before connecting it to your FC-16. After powering up your FC-16, switch on the power on each device

2 Push in for RGsB, release for RGBS

6 Technical Specifications

Table 3 includes the technical specifications.

Table 3: Technical Specifications¹ of the FC-16 RGBS to Component Video

INPUTS:	R, G, B, and SYNC/CV on BNC connectors
OUTPUTS:	1 component video - (Y, B-Y, R-Y) on BNC connectors
MAX. OUTPUT LEVEL:	VIDEO: 2.1Vpp
BANDWIDTH (-3dB):	VIDEO: 39MHz
K-FACTOR	1.1%
S/N RATIO	76dB
COUPLING (Input):	DC
POWER SOURCE:	12 VDC 200mA
DIMENSIONS:	22cm x 18cm x 4.5cm (8.7" x 7" x 1.8") W, D, H.
WEIGHT:	1.1 kg (2.4lbs.) approx.
ACCESSORIES:	Power supply (12V, 500mA)
OPTIONS:	Universal 12-Volt Power Supply

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 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:

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.



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