

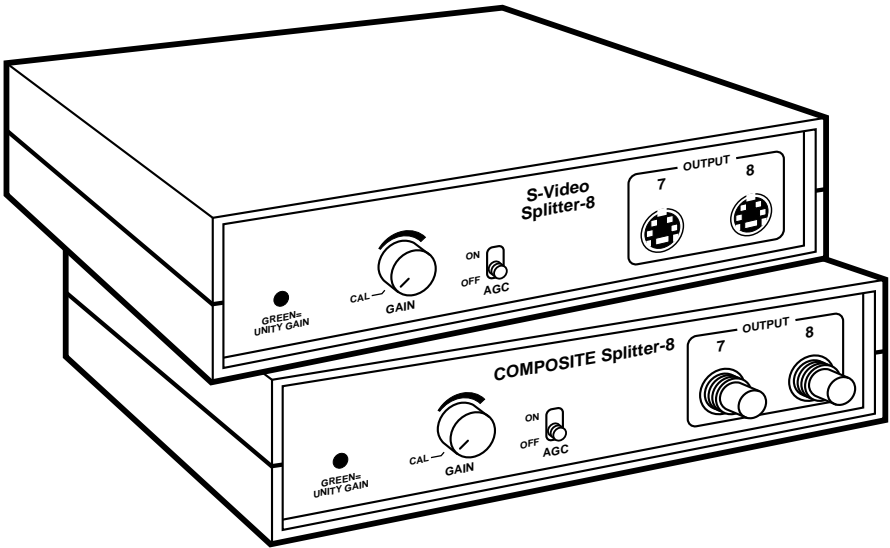


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S-Video Splitter-8 Composite Splitter-8



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**FEDERAL COMMUNICATIONS COMMISSION
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RADIO FREQUENCY INTERFERENCE STATEMENT**

This equipment generates, uses, and can radiate radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio communication. It has been tested and found to comply with the limits for a Class A computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when the equipment is operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This digital apparatus does not exceed the Class A limits for Radio noise emission from digital apparatus set out in the Radio Interference Regulation of Industry Canada.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Règlement sur le brouillage radioélectrique publié par Industrie Canada.

TRADEMARKS

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NORMAS OFICIALES MEXICANAS (NOM) ELECTRICAL SAFETY STATEMENT

INSTRUCCIONES DE SEGURIDAD

1. Todas las instrucciones de seguridad y operación deberán ser leídas antes de que el aparato eléctrico sea operado.
2. Las instrucciones de seguridad y operación deberán ser guardadas para referencia futura.
3. Todas las advertencias en el aparato eléctrico y en sus instrucciones de operación deben ser respetadas.
4. Todas las instrucciones de operación y uso deben ser seguidas.
5. El aparato eléctrico no deberá ser usado cerca del agua—por ejemplo, cerca de la tina de baño, lavabo, sótano mojado o cerca de una alberca, etc..
6. El aparato eléctrico debe ser usado únicamente con carritos o pedestales que sean recomendados por el fabricante.
7. El aparato eléctrico debe ser montado a la pared o al techo sólo como sea recomendado por el fabricante.
8. Servicio—El usuario no debe intentar dar servicio al equipo eléctrico más allá a lo descrito en las instrucciones de operación. Todo otro servicio deberá ser referido a personal de servicio calificado.
9. El aparato eléctrico debe ser situado de tal manera que su posición no interfiera su uso. La colocación del aparato eléctrico sobre una cama, sofá, alfombra o superficie similar puede bloquea la ventilación, no se debe colocar en libreros o gabinetes que impidan el flujo de aire por los orificios de ventilación.
10. El equipo eléctrico deber ser situado fuera del alcance de fuentes de calor como radiadores, registros de calor, estufas u otros aparatos (incluyendo amplificadores) que producen calor.

11. El aparato eléctrico deberá ser conectado a una fuente de poder sólo del tipo descrito en el instructivo de operación, o como se indique en el aparato.
12. Precaución debe ser tomada de tal manera que la tierra física y la polarización del equipo no sea eliminada.
13. Los cables de la fuente de poder deben ser guiados de tal manera que no sean pisados ni pellizcados por objetos colocados sobre o contra ellos, poniendo particular atención a los contactos y receptáculos donde salen del aparato.
14. El equipo eléctrico debe ser limpiado únicamente de acuerdo a las recomendaciones del fabricante.
15. En caso de existir, una antena externa deberá ser localizada lejos de las líneas de energía.
16. El cable de corriente deberá ser desconectado del cuando el equipo no sea usado por un largo periodo de tiempo.
17. Cuidado debe ser tomado de tal manera que objetos líquidos no sean derramados sobre la cubierta u orificios de ventilación.
18. Servicio por personal calificado deberá ser provisto cuando:
 - A: El cable de poder o el contacto ha sido dañado; u
 - B: Objetos han caído o líquido ha sido derramado dentro del aparato; o
 - C: El aparato ha sido expuesto a la lluvia; o
 - D: El aparato parece no operar normalmente o muestra un cambio en su desempeño; o
 - E: El aparato ha sido tirado o su cubierta ha sido dañada.

1. Specifications

Specifications are the same for the S-Video Splitter-8 (AC043A) and Composite Splitter-8 (AC044A) unless specifically noted.

Bandwidth —	>30 MHz
Rise/Fall times —	<10 ns
Connectors —	AC043A: 4-Pin Mini-DIN (Female) AC044A: BNC (Female)
Inputs (1) —	Impedance: 75 ohms Y, C Level: 0 to 1.5 V PP (0 to 210 IRE) Gain: -6 to +6 db or unity or automatic unity ref. from pedestal to 100 IRE white. AGC requires >10 μ s IRE white per field (VIR/VIT signal). Manual gain has "CAL" detect. LED is green when Gain = Unity. Diff. Gain: <0.50% Diff. Phase: <0.6
Outputs (8) —	Impedance: AC043A: 75 ohms Y, C AC044A: 75 ohms Level Max.: >1.8 V PP into 75 ohms Adjust w/ Gain Control: (Y) 0.714 V PP (100 IRE) Video Out for <0.5 V (70 IRE) to >1.4 V PP (196 IRE) Input DC Restoration: Switchable: Pedestal or Sync TIP = 0 VDC with \pm 1 V offset on input
Propagation Delay —	<10 ns
Size —	Width: 7.0" (17.8 cm) Height: 1.7" (4.2 cm) Depth: AC043A: 5.5" (14.0 cm) AC044A: 6.5" (16.5 cm)
Weight —	1 lb. (0.5 kg); Shipping weight: 3 lb. (1.4 kg)
Power —	9 VDC, 1 A, 105- to 130-VAC or 220-VAC plug-mounted transformer

2. Introduction

The S-Video Splitter-8 (AC043A) and Composite Splitter-8 (AC044A) distribute a video signal from one source to many video displays. Each unit features DC Restoration and Fixed, Manual and Automatic Gain Controls.

The SVHS Splitter-8 is a 30-MHz S-Video (Y/C) Distribution Amplifier for S-VHS, Hi-8, ED-BETA, and other video applications that use 4-pin mini-DIN connectors.

The Composite Splitter-8 is a 30-MHz Composite Video Distribution Amplifier with BNC connectors.

Features include:

- 30-MHz bandwidth
- 8 outputs from a single input
- Automatic gain
- Manual gain control
- Unity gain
- Table-top or rack mounting

Your complete package will have the following:

- The Video Splitter unit.
- 9 VDC, 1 A plug-mounted transformer
- User Manual

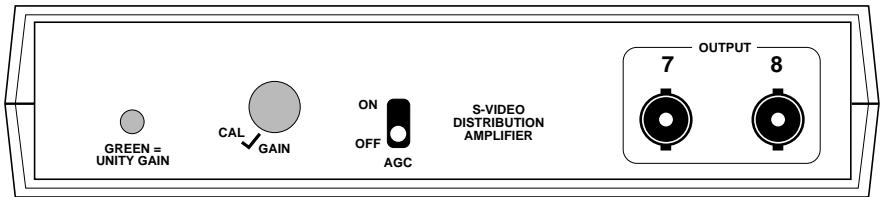


Figure 1. Front panel of the Video Splitter (AC044 shown here).

3. Installation

The procedure to install either the S-Video Splitter-8 (AC043A) or the Composite Splitter-8 (AC044A) is the same unless specifically noted.

3.1 Preparation

Place your Video Splitter on a flat surface. For a permanent installation, you may want to use a rackmount tray (RM001 or RM002). You can place up to two (2) units side by side on the tray.

In a table top installation, a minimum of 3 inches is required behind the unit in order to connect the input signal and the output signals to your monitor.

With multiple video outputs, you may want to consider placing the your Video Splitter as close as possible to the video monitors in order to conserve wire. It is important that the video cables meet your local safety and community building codes.

3.2 Input Signal Connection

Using the appropriate cable, connect your video source to the back-panel connector labeled "INPUT."

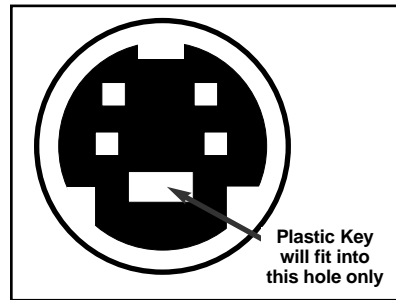


Figure 2. 4-pin mini-DIN connector (female)

- AC043 uses the S-Video cable with 4 pin mini-DIN connectors. When installing the cables, be sure that the small pins in the mini-DIN connector are not bent or damaged prior to inserting them into the jack on your Video Splitter. Align the cable connector with the plastic key down.
- AC044 uses standard video cable (ETN59) with BNC connectors. When installing the cables, be sure that the BNC cable connector has been turned clockwise to its locking position.

3.3 Monitor(s) Connection

Make sure your video monitor(s) or recording device(s) meets your local safety and community building codes. Using the appropriate cable, connect your monitor(s) to the rear- or front-panel connectors on your Video Splitter that are marked “OUTPUT.” Connect the other end of the cable(s) to your monitor(s). Some monitors are only equipped with RCA inputs. In these cases you will need a BNC to male RCA adapter.

NOTE: Outputs 1 through 6 are located on the rear of the unit, while outputs 7 and 8 are located on the front. The front output connections are ideal for temporary hookup of additional video displays or recorders.

3.4 Power Connection

To connect your Video Splitter to an AC power source, first uncoil the wire attached to the power cube. Connect the single plug into the power input jack located on the back of your Video Splitter. Next, plug the power cube into a standard AC power receptacle (105 to 130 VAC). Check to see if the power indicator on the front of your Video Splitter is illuminated.

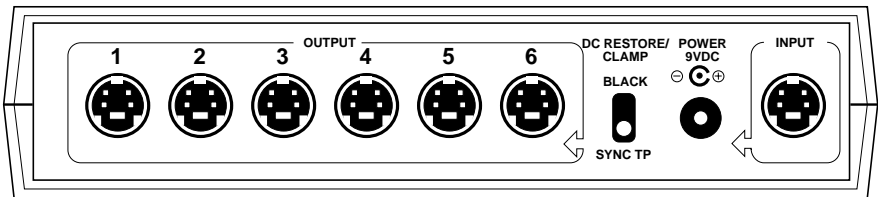


Figure 3. Back panel of the Video Splitter (AC043 shown here).

4. Operation, Troubleshooting and Maintenance

4.1 Operation

The operation of the Video Splitter unit is relatively simple. All connected output devices (Monitors, Recorders, etc.) will see the same signal as the input source. No selection of outputs is possible.

AUTOMATIC AND ADJUSTABLE GAIN

When the front-panel Automatic Gain Control (AGC) switch is set to ON, turn the adjustable gain counterclockwise to the left until it clicks into place by the CAL indicator. The Video splitter will provide unity gain to each output. This will be confirmed by the front-panel LED being green.

When the AGC switch is set to the OFF position, gain is manually controlled by the adjustable front-

panel knob. The front-panel LED will turn red. The output gain can be adjusted from -6dB to +6dB. The front-panel LED changes from red to green to indicate unity gain.

DC RESTORE/CLAMP

The DC restore/clamp switch is located on the back-panel of your Video Splitter. Set this switch in the position which yields the best picture.

For most applications, the switch will be set in the "BLACK" position (up). In this position, the output video is clamped at 0 VDC (see Figure 4).

With the switch in the "SYNC TIP" position (down), the sync signal is raised above ground (0 VDC) (see Figure 5). On some monitors this will result in a brighter picture.

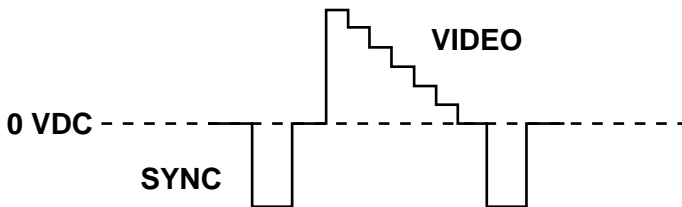


Figure 4. Video output clamped at 0 VDC.

POWER INDICATOR

The front-panel LED will be lit whenever the Video Splitter is being supplied with AC power.

4.2 Troubleshooting

If no power is indicated: Check the AC source and the power cord connection on the back panel of the unit.

If the monitor(s) will not display the video source image: Check to make sure that the video source is on and that it is properly connected to the Video Splitter. Also make sure that the monitor(s) are properly connected to the Video Splitter.

4.3 Maintenance

The AC043 and AC044 Video Splitters are designed and manufactured to the highest degree of quality. There are no user-serviceable components inside of the Video Splitter. We recommend that the unit be returned for repairs.

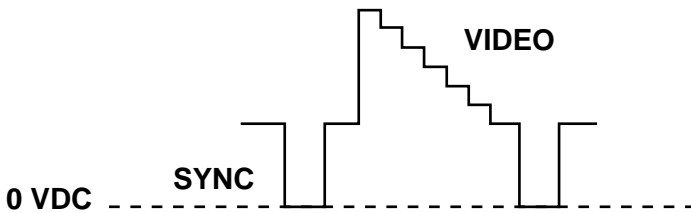


Figure 5. Sync raised above ground.

NOTES