S-Video Switch 8 to 1
Composite Switch 8 to 1
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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1. Specifications

Specifications are the same for the S-Video Switch 8 to 1 (AC041A) and Composite Switch 8 to 1 (AC042A) unless specifically noted.

Bandwidth — >30 MHz
Rise/Fall Times — <10 ns
Connectors —
  AC041A: 4-pin mini-DIN (Female)
  AC042A: BNC (Female)
Inputs (8) —
  Impedance: 75 Ohms Y, C
  Level: 0 to 1.5 V PP (0-210 IRE)
  Gain: Unity
  Diff. Gain: <0.30%
  Diff. Phase: <0.1
Outputs (1) —
  Impedance:
    AC041A: 75 Ohms Y, C
    AC042A: 75 Ohms
  Isolation: >45 db @ 3.58 MHz
  Level Max.: 1.5 V PP (210 IRE)
Propagation delay — <13 ns
Vertical
  Interval Switching — 500 µs after V. Sync pulse, within 1 field of pushing button. If no V. Sync is present, "HOT" switch occurs in <60 ms. For roll-free switching, all inputs must be synchronized.
Remote Control — 8-button illuminated electronic hand unit; can be used up to 1000 feet (304.8 m) away with 6-conductor modular telephone wire (RJ-11)
Indicator — Single Digit LED
Size —
  Width: 7" (17.8 cm)
  Height: 1.7" (4.7 cm)
  Depth: AC041A: 5.5" (14.0 cm)
    AC042A: 6.5" (16.5 cm)
Weight — 1 lb. (0.5 kg); Shipping weight: 3 lb. (1.4 kg)
Power — 9 VDC 500 MA: 105- to 130-VAC or 220-VAC plug-mounted transformer
2. Introduction

The S-Video Switch 8 to 1 (AC041A) and Composite Switch 8 to 1 (AC042A) are designed for maximum flexibility and economy. The Video Switches feature roll-free, vertical interval switching controlled by a wired, electronic remote control which selects from up to 8 inputs (2 on the front panel, 6 on the rear panel).

The AC041A is a 30-MHz S-Video (Y/C) switch for S-VHS, ED-BETA, Hi-8, and other video applications which use the 4-pin mini-DIN connectors.

The AC042A is a 30 MHz Composite Video switch with BNC connectors.

The single-digit, front-panel LED indicates the selected channel or flashes when there is no attached video input.

Features include:

- 30 MHz bandwidth
- 8-button illuminated, wired remote control
- 1000-foot range on the remote unit
- Vertical interval switching
- Unity gain
- Table-top or rack mounting
- Single-digit LED to indicate selected channel

Your Video Switch package consists of the following:

- Video Switch unit
- P6 Remote Control Unit
- 25-foot remote control cable with modular plugs
- 9 VDC 500 MA plug-mounted transformer
- User Manual
3. Installation

The procedure to install either the SVHS Switch 8 to 1 (AC041A) or the Composite Switch 8 to 1 (AC042A) is the same unless specifically noted otherwise.

3.1 Preparation

Place your Video Switch on a flat surface. For a permanent installation, you may want to use an optional 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 (7.6 cm) is required behind the unit in order to connect the input signals and the output signal to your monitor.

With multiple video sources, you may want to consider placing your Video Switch as close as possible to the video sources in order to conserve wire.

3.2 Remote Control (P6) Connection

To connect the P6 remote control unit, first insert the modular plug (RJ-11) of the 25-foot cord into the plug on the P6 remote (see Figure 1). Connect the other end of the cord to the rear-panel, female RJ-11 connector on the Video Switch (see Figure 2). Make sure the cable meets your local safety and community building codes.

3.3 Input Signal Connection

First, identify each video source (1 through 8) for easy selection. Using the appropriate cable, attach your video source inputs to the back- or front-panel connectors of the Video Switch marked “INPUT.”

Figure 1. Attach the RJ-11 modular plug to the bottom of the P6 remote.
CHAPTER 3: Installation

• AC041 uses 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 before inserting them into the jack on your Video Switch. Align the cable connector with the plastic key down (see Figure 3).

![Figure 3. 4-pin mini-DIN connector (female)](image)

• AC042 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.

3.4 Monitor Connection

Using the appropriate cable, connect your monitor to the rear-panel connector on your Video Switch that is marked OUTPUT. Some monitors are only equipped with RCA inputs. In these cases you will need a BNC to male RCA adapter.

3.5 Power connection

To connect your Video Switch to an AC power source, first uncoil the wire attached to the power cube. Connect the single plug to the power input jack located on the back of your Video Switch. 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 Switch is illuminated.
4. Operation, Troubleshooting and Maintenance

4.1 Operation

The operation of the switch is relatively simple. To select input number 1, just press 1 on the P6 remote control (press on the shaded embossed area of the key pad). The number 1 on the Remote Control will be illuminated. The single-digit LED will also indicate that input channel 1 has been selected. If you select a channel that does not have a video input attached to it, the LED will flash. The LED also functions as a power indicator.

If the picture rolls when the video source is switched: The inputs are not synchronized.

If the LED flashes when selecting an input: Make sure the input source is properly connected.

If the monitor will not display the video sources: Check to make sure that the video sources are on and that they are properly connected to the Video Switch. Also make sure that the monitor is properly connected to the Video Switch.

4.2 Troubleshooting

If the unit will not switch or if no power indicated: Check the AC source and the power-cord connection on the back panel of the unit.

If the LED flashes when selecting an input: Make sure the input source is properly connected.

4.3 Maintenance

The Video Switch is designed and manufactured to the highest degree of quality. There are no user-serviceable components inside the switch unit or the P6 remote. It is recommended that the unit be returned for repairs.

Figure 4. Front panel of the Video Switch (AC042A shown).