



Automated switching systems

There are 3 main categories of auto switchers.

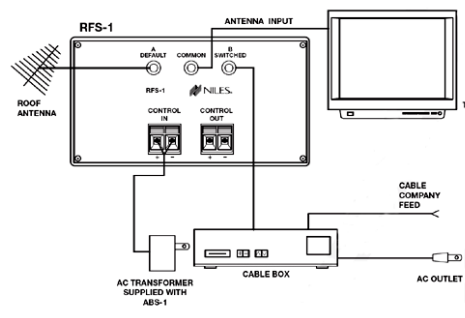
1 Voltage Triggered

- **RFS-1** RF A-B switcher voltage triggered

Product: The RFS-1 is a voltage-triggered switcher, that when triggered will switch from a default A coaxial cable input to the B input.

Design intent: To replace manually operated coaxial A-B switches.

Common application: Standard antenna and a cable box sharing the single RF input on a television. Antenna is hooked up to *A Default* input of RFS-1. The cable box is hooked up to *B Switched input*. A 12-volt AC power supply is in the cable box's switched power plug and connected to the 12-volt *control input* of the RFS-1. Antenna is passed through the *Common* RF until the cable box is turned on. Then the cable box now passes through the *Common* output.



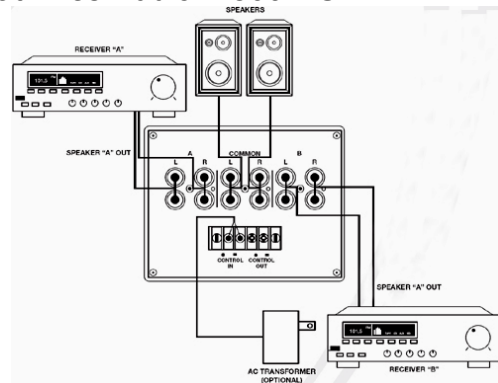
- **SPK-1** Speaker-level A-B switcher, voltage triggered

Product: The SPK-1 is a voltage-triggered switcher, that when triggered will switch from a default A speaker input to the B input.

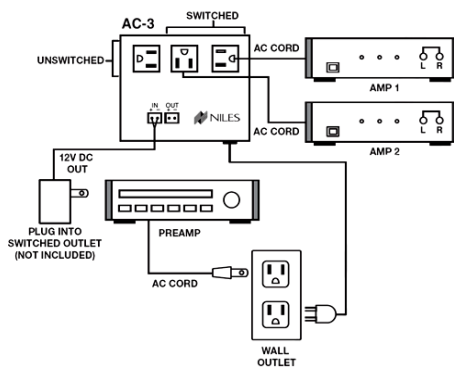
Design intent: To replace manually operated speaker level A-B switches.

Common application: Two receivers sharing one pair of speakers. Receiver 1 speaker outputs are hooked up to *A Default* input of SPK-1 Receiver 2's speaker outputs are hooked up to *B Switched input*. A 12-volt AC power supply is plugged in the Receiver 2 switched power outlet and connected to the 12-volt *control input* of the SPK-1. Receiver 1 plays through the common speakers until Receiver 2 is turned on. Receiver 2 is now heard through the *Common* output

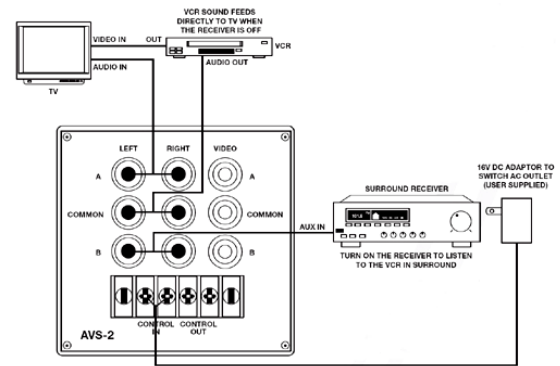
Unique application: In reverse, one receiver automatically switching between two speakers based on a 12-volt trigger input. For further information on this application contact Technical Support at Niles Audio 1-800-BUY-HIFI.



- AC-3 Voltage triggered AC power strip**
Product: The AC-3 is a voltage triggered power strip that has two switched outlets and one unswitched outlet.
Design intent: Automate power turn-on and turn-off of an A/V component or system.
Common application: A 12-volt power supply is connected to a preamplifier and connected to the control *IN* input. Any devices that need to be turned on with the preamplifier should be plugged in the switched outlets. Note, those devices plugged into the switched outlets should not have clocks or any type of electronic memory or they will reset each time the preamplifier is turned off.

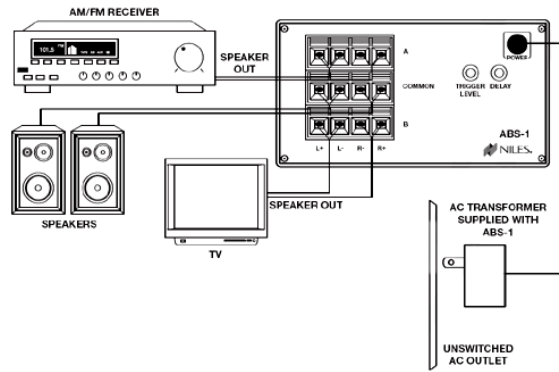


- AVS-2** Line level A-B switcher, voltage triggered
Product: Audio and/or Video line level switcher that is triggered by an outside 12-volt signal. When the 12-volt signal is present the AVS-2 will switch from the default A input to the switched B input.
Design intent: To replace manually operated audio/video line level A-B switches.
Common application: A videocassette recorder and a video game sharing one input of a television. A VCR's audio/video outputs are hooked up to *A Default* input of AVS-1. The video game audio/video outputs are hooked up to *B Switched* input. A Niles LS-1 is used on the power LED of the video game and then is connected to the 12-volt *control input* of the AVS-2. The VCR plays through the television external input until the video game is turned on. Then the video game now is viewed through the television's external input.
Unique application: Used with a Niles SAS-1, a DTS pre-amplifier and a Dolby Digital pre-amplifier share a single 6-channel amplifier. For further information on this application contact Technical Support at Niles Audio 1-800-BUY-HIFI.



2 Signal Sensing

- ABS-1** Speaker-level A-B switcher, sound triggered.
Product: The ABS-1 is a signal sensing switcher that switches from source A to source B.
Design intent: To replace manually operated speaker level A-B switches.
Common application: Two receivers sharing one pair of speakers. Receiver-1 speaker outputs are hooked up to *A Default* input of ABS-1. Receiver-2's speaker outputs are hooked up to *B Sensing/Switched* input. Receiver-1 is heard through the speakers. When a signal is sensed on the *B Sensing/Switched* input the speakers switch over to Receiver-2.
Unique application: The rear speakers of a home theater system can toggle from being rear speakers or being same as the fronts. For further information on this application contact Technical Support at Niles Audio 1-800-BUY-HIFI.

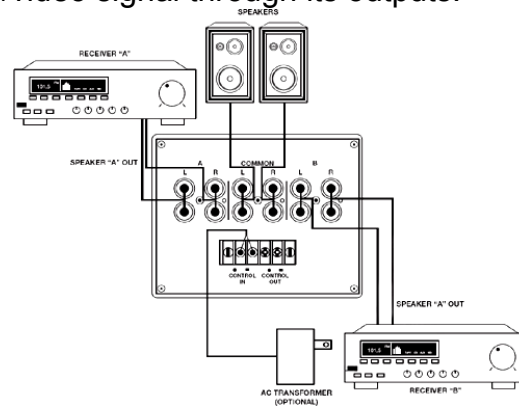


- **SAS-1** Combination speaker-level and A/V line-level A-B switching system that is sound, video, or voltage-triggered.

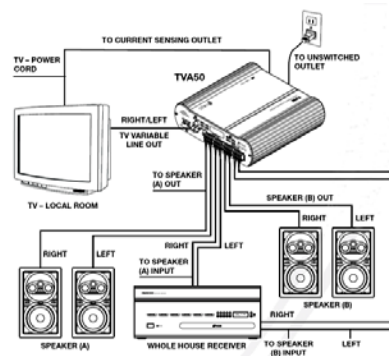
Product: The SAS-1 is capable of switching speaker level, line level, and composite video signals. The switching is triggered either by music sensing, (line level or speaker level) video sensing or voltage. The SAS-1 can be divided in half, an A side and a B side, every and all devices that hooked up to the A side will be switched to the B side after the SAS-1 has been triggered.

Design intent: Replaces manually operated A-B switches.

Common application: Two DVD players sharing one audio/video input of a receiver. DVD1 audio/video output is hooked up to the A audio/video input. DVD2 audio/video output is hooked up to the B audio/video input. DVD1 will be the default DVD player and will be the one seen or heard until DVD2 is turned on, as soon as DVD2 is turned on the SAS-1 senses the video signal and triggers the SAS-1 to now route DVD2's audio/video signal through its outputs.

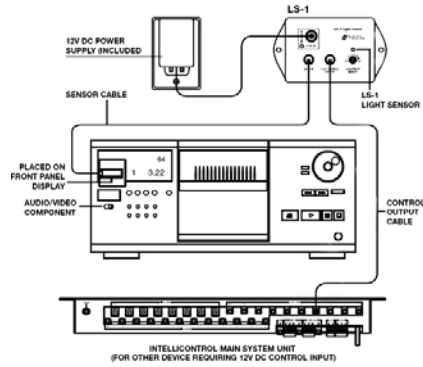


- TVA-50** Stereo amplifier with built in automated speaker-level A-B switcher
Product: The TVA-50, either triggered by current sensing or 3-30 voltage trigger, is a switcher that will either pass through a speaker level signal hooked up to the *Speaker A In* input or if triggered will amplify a line level signal coming in over the *Line In* RCA jacks and route that signal to the speakers.
Design intent: To replace manual operated A-B switches and a receiver for local line level signals.
Common applications: Triggering a pair of local speakers to switch between a house-wide music system and a local television. The variable audio outputs of a television are connected to the *Line In* RCA jacks of the TVA-50. Speaker level wires from the house-wide music system are hooked up to the *Speaker A In* input. Speaker wire to the local speakers is connected to the *Speaker A Out*. The television's power cord is plugged into the *Current Sensing AC Outlet*. The house-wide music system is heard through the speakers until the television is turned on, then the television's audio is heard through the speakers.



3 Secondary Sensing

- LS-1** Light sensor, light-triggered
Product: 12-volt output device that issues a 12-volt DC signal when its photo diode senses light.
Design intent: Senses a component's on/off status by the change in brightness of the component's front panel display.
Common application: A receiver or pre-amp with no switched outlet. Place the photo diode over a receiver's front panel display. The 12-volt output of the LS-1 would then be connected to a Niles AC-3 or AC-6+.

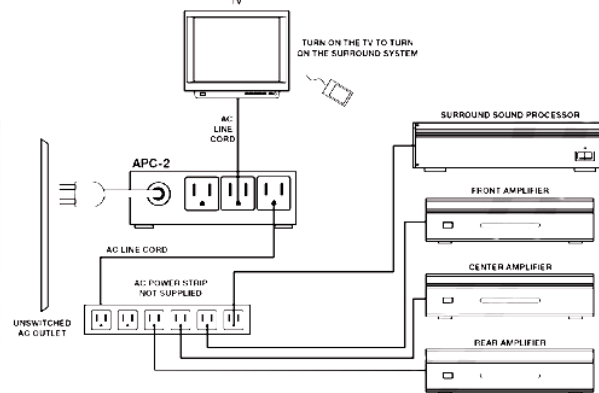


- **APC-2** Current sensing AC outlet switcher

Product: Three AC outlets one current sensing, one switched and one unswitched. N.O. (normally open) and N.C. (normally closed) relay contacts for controlling other devices such as projector lifts or drapes. When a device that is plugged into the current sensing input, is turned on, the switched outlet turns on and the contact relay changes.

Design intent: Gives certain A/V components a switched AC outlet.

Common application: Triggering an electric screen, that has either a relay or is AC triggered, to come down when a video projector is turned on. A video projector is plugged into the *Current Sensing* outlet and a relay operated video screen is hooked up to the *N.O.* or *N.C.* relay output of the APC-2. When the video projector is turned on the relay opens/closes and drops the video screen.



- **CS12V** Current sensing AC outlet trigger

Product: One current sensing AC outlet, one 12-volt trigger output for controlling other devices such as projector lifts or drapes. When a device that is plugged into the current sensing AC outlet, is turned on, 12 volts @ 200mA is then sent out the 3.5mm jack labeled *OUT*. The current sensing detection can be programmed and the trigger output can be set at one of three delays.

Design intent: Trigger screens from a projector.

Common application: Triggering an electric screen, that is activated, to come down when a video projector is turned on. A video projector's power cord is plugged into the *Current Sensing AC Outlet* of the CS12V and a video screen that is voltage trigger activated, is hooked up to the *OUT* of the CS12V. When the video projector is turned on the voltage trigger drops the video screen.

