

ETS Inc. SA1-HP Speaker Driver Instructions

The SA1-HP is a single / multi -speaker driver designed to connect to the audio output of DVRs, IP cameras etc, for talk down only or two way audio applications. The SA1-HP can also be connected to STWX base stations for increased speaker power or existing PA systems using 70v speaker lines. Note- the audio “line” input of the SA1-HP is “line level” (0db).

Speaker Placement

Locate the speaker(s) as close as possible to the area of interest in the space to be monitored. Do not mount the speaker(s) near air conditioning vents, light fixtures or electrical equipment. The speaker(s) should be placed at least 5 feet away from the subject(s) to be addressed. A speaker is still usable in the range of up to 200 feet but is dependent on the level of background noise in the area. Experimentation in the environment will determine what distances work best.

SA1-HP location and power

The SA1-HP interface box is designed to be located next to a DVR or IP camera. The SA1HP requires a 120VAC power source within 3 feet of its location. The power cord to the 24Vac transformer may be extended up to 100’ with #18, 2 conductor if an 120AC source isn’t readily nearby.

Speaker Cable Run

Run a 22 gauge, stranded, two conductor shielded cable between the SA1-HP amplifier and the speaker. Keep the cable run distance at or under 500 feet (70v mode only) and away from AC power sources, light fixtures and electrical equipment. In 8 Ohm mode, keep the cable run at or under 100 feet. *See Figure 1 for connection diagram.*

Multiple speakers (public address system)

Note-70v speaker systems permit long cable runs with multiple speakers and minimal power losses across the speaker wires. Use 70V speakers only in multi-speaker applications. Select wattage taps on speakers for desired volumes and total wattage not to exceed 30 watts. In 70V mode, speakers are connected in parallel (daisy-chained). The sum of their power “taps” must add up to 30 Watts. Examples of possible speaker combinations:

- 1 68W 8 Ohm speaker
- 1 30W 70V speaker
- 2 15W 70V speakers
- 6 5W 70V speakers
- 15 2W 70V speakers

70V / 8 Ohm speaker output switch

If you want to use an 8 Ohm speaker, place this switch in the 8 Ohm position and limit your speaker cable run to 100 feet. If your are using a single 70V speaker, place the switch in the 70v position and pick the wattage tap closest to 30 Watts.

70V / line audio input switch

If you are using the SA1-HP to boost the power level of an ETS base station speaker output OR tying into an existing 70V public address system, place this switch in the “70V” position. If you are connecting the SA1-HP to a DVR, IP “line level” audio output, place this switch in the “line” position.

SA1-HP level control

The speaker level can be adjusted to a higher or lower volume. Experiment with the level control to achieve the desired volume.

SA-1HP audio line input.

This input is line level (0db). Connect this to the audio output of your DVR, IP camera, etc. If the audio output is a screw terminal type, cut one end off the supplied patch cable and strip back the wires. Connect the center conductor to “+” terminal and the shield to the “-” terminal.

Connecting STW base stations

Run a #22 shielded cable from an ETS base station speaker output to the SA1-HP 70V input and select 70V input mode. Connect + to +, - to - and shield to shield.

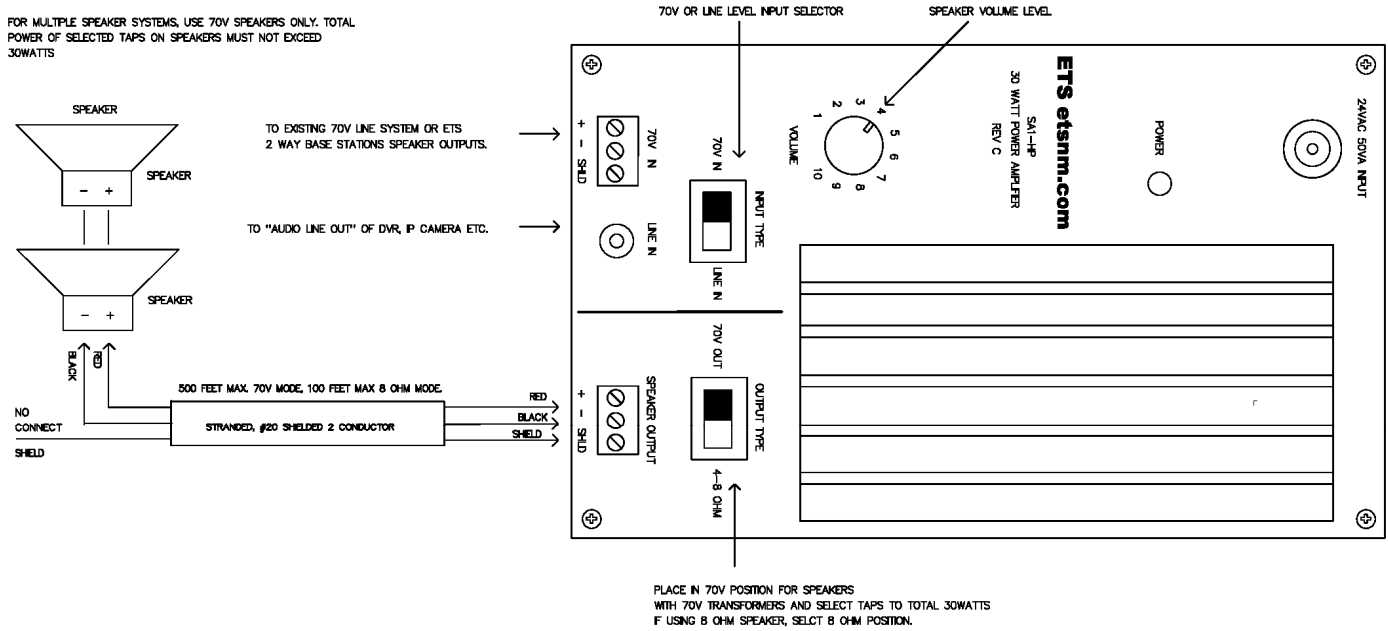


Figure 1.

Caution

It may be against the law to install this microphone kit in certain environments. It may also be against the law to record conversations of the person(s) being monitored without their knowledge. It is the responsibility of the installation company and end-user to determine if the application of this product is legal. These laws vary from state to state. If you are not informed on these matters, consult a qualified attorney or contact the appropriate state agency. A sticker is provided with this kit for the applications where notification must be posted.

Warranty

All ETS products carry a one year parts and labor warranty. This warranty does not cover damages as a result of misuse, improper handling of the unit or exposure to extreme temperatures or moisture. At its discretion, ETS reserves the right to repair or replace this unit under the conditions of the warranty. If you experience problems with your equipment call ETS at: 505-888-3923 to obtain a return authorization number. Equipment requiring repair beyond the warranty period or units that have been damaged or are not covered under the warranty can be repaired by ETS for a minimal cost under most conditions.

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ETS Inc.