

ETS Inc. CSM8-SMA1 Speaker / Microphone Kit Instructions

The CSM8-SMA1 kit is a two way public address, audio surveillance system that is designed to interface with DVRs and I/P cameras. The CSM8 speaker / **pre-amplified** microphone is designed to flush mount in an acoustic ceiling tile, drywall, etc. The SMA1 is typically located near the DVR or I/P camera. Note-input and output signals on the SMA1 are "line level" only. *The CSM8-SMA1 is for use in half duplex audio systems only. Audio whine or "feedback" will be result if both speaker and microphone are active at the same time.*

CSM8 Microphone / Speaker Placement.

Locate the CSM8 speaker / microphone near the area of interest in the space to be monitored. If a large area is to be monitored, locate the CSM8 in the middle of the space if possible. Avoid mounting the speaker / microphone near air conditioning vents, light fixtures or electrical equipment. The CSM8 should be placed as close to the subject(s) as possible. 5 to 10 feet is ideal. The CSM8 is still useable in the range of 15-25 feet in public address applications but is dependent on the level of background noise in the area. Experimentation in the environment will determine what distances work best.

Audio Signal Cable Runs

Recommended cable is: 2 each 22 gauge, stranded, two conductor shielded cables (one for the microphone and the other for the speaker) between the SMA1 amplifier / interface and the CSM8 microphone / speaker. Keep the cable run distances under 1,000 feet and away from AC power sources, light fixtures and electrical equipment. *Make connections as shown in Figure 1.*

CSM8 Mounting

The CSM8 can be surface or flush mounted on ceilings or walls. For flush mounting, cut a 8.5" diameter hole in the wall or ceiling tile to allow room for the speaker / microphone assembly and mount the CSM8 to the surface with screws after making connections. For surface mounting, purchase a CSM8-S surface mount adaptor kit. Leave the factory set jumper on the MSI circuit board in the 5 watt position. Sound levels for the speaker and microphone are user adjustable on the SMA1 interface box.

SMA1 location and power:

The SMA1 interface box is designed to be located next to a DVR or I/P camera. The SMA1 requires a 120VAC power source within 3 feet of its location. If this is not possible in your application, you can splice in up to 100 feet of 18 awg, 2 conductor cable to extend the distance between the AC power source and the SMA1.

SMA1 70V / 8 Ohm direct switch:

When using the SMA1 with a CSM8 or HSM11 speaker / microphone, make sure this switch is in the 70V position.

DVR or I/P camera connections:

Connect the "audio out" of the SMA1 to the "audio in" of the DVR or I/P camera. Connect the "audio in" of the SMA1 to the "audio out" of the DVR or I/P camera. Note-input and output signals on the SMA1 are "line level" only. If the DVR or I/P camera uses screw terminals for audio connections, simply cut off the ends of the supplied RCA patch cables, strip the wires back and connect the wires to the I/P camera terminal blocks. The center conductor of a cut patch cable is + and the shield is -.

Adjusting the SMA1 Levels:

Set both level controls to 1/8 clockwise from full counter clockwise on the SMA1 before powering the system up. Adjust the controls + or - to the desired levels for both speaker and microphone. If the microphone sound at the DVR or head end is distorted, rotate the control towards the - mark (counter- clockwise). Adjust the volume of the speaker to the desired level. If the speaker volume is too high, amplifier oscillations may result. Turn the level control down if you experience this. Note-leave the MSI-1 jumper in the 5W position.

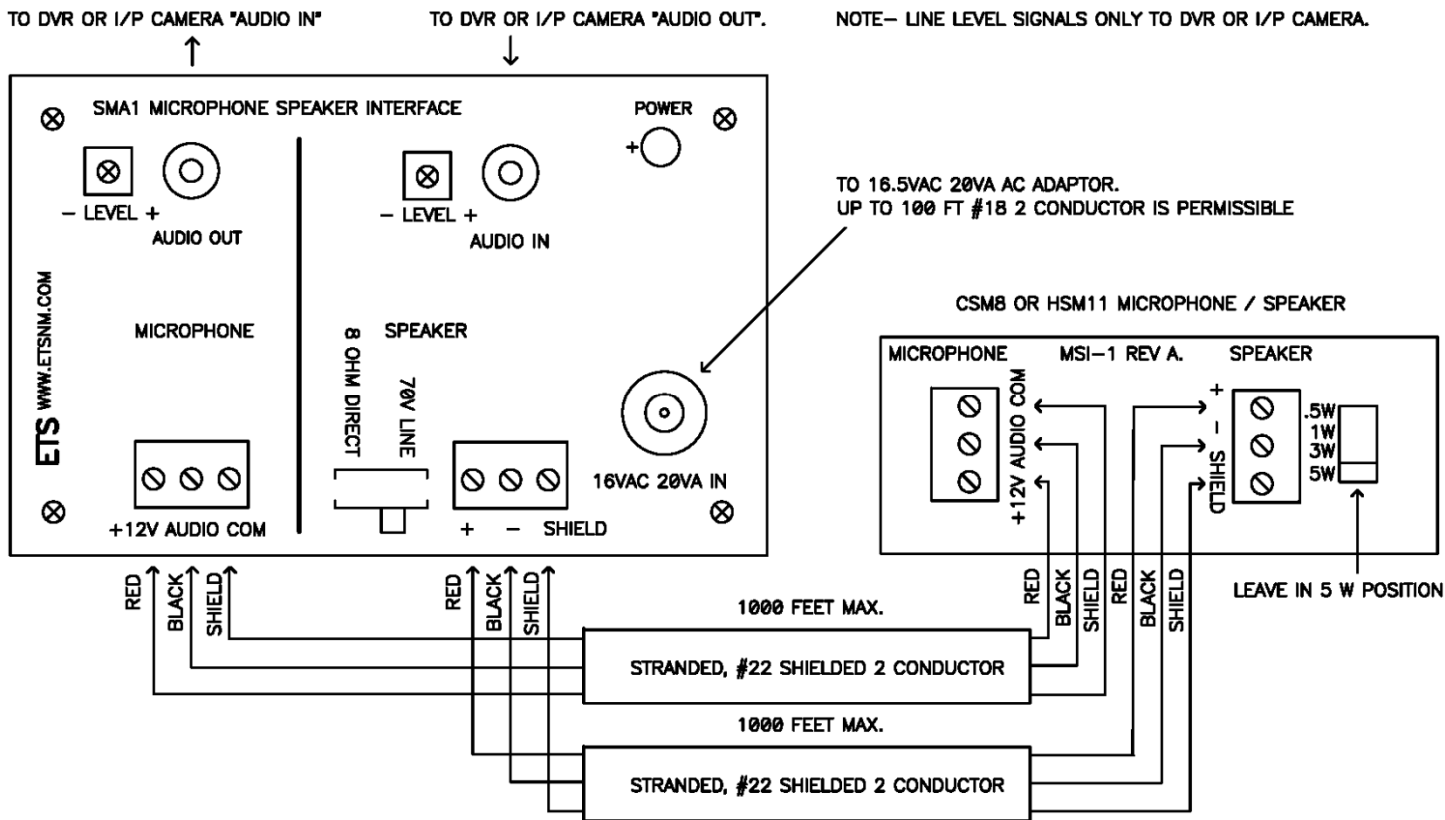


Figure 1.

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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by
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