

# ETS Inc. HSM8-D Speaker / Microphone Instructions

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The HSM8-D is a combination 10W 70V speaker and **pre-amplified** microphone designed to be used in outdoor applications. The HSM8-D is designed to directly interface with the ETS SMA1-xx for connection to DVRs, IP cameras, etc. but, can be used with other compatible equipment. **Note- to prevent unwanted feedback, use this product with systems supporting PTT (push to talk) half duplex audio or full duplex audio systems using acoustic echo cancelling technology**

## HSM8-D Microphone / Speaker Placement.

Locate the HSM8-D speaker / microphone near the area of interest in the space to be monitored. If a large area is to be monitored, locate the HSM8-D in the middle of the space if possible. Avoid mounting the speaker / microphone near air conditioning vents, light fixtures or electrical equipment. The HSM8-D should be placed as close to the subject(s) as possible. 5 to 10 feet is ideal. The HSM8-D is still usable in the range of up to 50 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 HSM8-D microphone / speaker and the SMA1-xx or other equipment. Keep the cable run distances under 500 feet and away from AC power sources, light fixtures and electrical equipment. *Make connections as shown in Figure 1.*

## HSM8-D Connections

The HSM8-D is designed to be mounted on ceilings or walls and features up/down adjustments for directional aiming. Make wire connections inside the weather tight box on the back of the HSM8-D and screw the lid down. Mount the speaker in a fashion that does not allow water to directly flow (from driving rain etc.) inside the junction box. Sound levels for the speaker and microphone are user adjustable on the SMA1-xx interface box.

Note- Microphone and speaker volumes cannot be adjusted on the HSM8-D. Adjustments to volume levels can be done at the other end of the cable on the connected ETS equipment or in the head end software of your system.

