

The SMI-8L is an 8 channel interface for use with all SM1 series microphones. It provides a convenient way of supplying power to the SM1, installer friendly termination of the cable runs and standard RCA or 3.5mm audio output connectors. The SMI-8L easily connects to recording equipment such as DVRs, NVRs, IP cameras and audio recorders.

SM1 Microphone Placements

Locate the SM1 microphones as close as possible to the areas of interest in the spaces to be monitored. If large areas are to be monitored, locate the SM1s in the middle of the rooms. Do not mount the microphones near air conditioning vents, light fixtures or electrical equipment. The SM1 should be placed as close as possible to the subject(s) to be monitored. The SM1s are usable at distances of up to 25 feet but is dependent on the level of background noise in the areas. Experimentation in the environment will determine what distances work best.

Mounting

The SM1s can be surface or flush mounted on ceilings or walls. For flush mounting, cut a 2 ¼" by 2 ¾" hole in the wall or ceiling tile to allow room for the circuit board and mount the SM1 to the surface with screws. For surface mounting applications, Purchase SM1-LEs. Or use single gang electrical boxes.

SMI-8L location and power

The SMI-8L interface box is designed to be located next to a DVR or IP camera. The SMI-8L 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 20 awg, 2 conductor cable to extend the distance between the AC power source and the SMI-8L.

Cable Runs

Run 2 each, 22 gauge, stranded, two conductor shielded cables between the SMI-8L interface and the SM1 microphones. Keep the cable run distances under 1,000 feet and away from AC power sources, light fixtures and electrical equipment. *See Figure 1 for connection diagram.*

Setting the SM1 Hi-Cut/Lo-Cut Switches (open the enclosure to adjust)

The normal frequency response of the SM1 microphone is 500-13Khz. When both switched "in", The "HI Cut" and "Lo Cut" filters set the SM1's frequency response to 900-6Khz. Enabling one or both of the filters is useful when background noise needs to be further reduced and intelligibility of speech emphasized. We recommend experimenting with the switch settings to achieve the best acoustic result for your application.

Adjusting the SMI-8L Volume Levels.

Select the desired volume range and turn the gain fully clockwise when using an SM1 microphone with the SMI-8L interface. The low setting is normally used with mic level device inputs such as IP cameras with mic level inputs. The high setting is for use with NVRs, DVRs or IP camera's that have line level inputs. Set the level controls on the SMI-8L for each microphone for the desired volume level. If the sound at the "head end" is distorted, rotate the control towards the – mark (counter-clockwise). If the volume at the "head end" is too low, rotate the control towards the + mark (clockwise).

