

The STWI5-W4 is a two-way audio surveillance system (intercom accessory) designed to be used with DVRs, I/P cameras etc. Note- the audio signals going into and out of the STW1-W5 are "line level" (0dbm). STW1-W4 s are not recommended for outdoor use where they may be exposed to water.

**STW1-W4 Microphone / Speaker Placement.**

Locate the STW1-W4 as close as possible to the area of interest in the space to be monitored. If a large area is to be monitored, locate the STW1-W4 in the middle of the space if possible. Do not mount the STW1-W4 near air conditioning vents, light fixtures or electrical equipment. The STW1-W4 should be placed at least 5 feet away from the subject(s) to be monitored. The STW1-W4 is still useable in the range of 15-25 feet but is dependent on the level of background noise in the area. Experimentation in the environment will determine what distances work best.

**STWI-1 Interface box location**

The STWI-1 interface box is designed to be located next to a DVR or I/P camera. The STWI-1 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 STWI-1.

**Cable Runs**

Run 2 each 22 gauge, stranded, two conductor shielded cable between the STW1-W4 microphone / speaker and the STWI-1 interface. Keep both cable run distances under 250 feet and away from AC power sources, light fixtures and electrical equipment. See *Figure 1 for connection diagram.*

**Mounting**

Mount the STW1-W4 on walls or ceilings using the provided hardware. Note where the microphone is and orient it in the general direction of the area of interest.

**STW1-W4 Optional Call Switch**

Connect this switch (STW1-W4 terminals cs1 and cs2) to equipment that permits a "page" signal input. It is a N.O. (normally open) dry switch contact. Use a 22awg 2 conductor for this cable run.

**Adjusting the STW1-W4 Microphone Gain and Speaker Volume**

Start with a midrange setting of the gain control on the STW1-W4. Adjust the VR1 control + or – for maximum microphone clarity. If the sound at the DVR is distorted, rotate the control towards the – mark (counter- clockwise). If the volume at the amplifier is too low, rotate the control towards the + mark (clockwise). Adjust the "talk-back" speaker volume to the appropriate level using the blue level control located near the "70v / line" switch.

**Setting the STW1-W4 Microphone Jumpers**

The STW1 microphone has jumper selectable treble boost and limiter circuits. The treble boost circuit when jumpered in, emphasizes the high frequency sounds that the microphone picks up. This is useful for improving the sound quality on slow speed tape recordings (VCR time-lapse recordings). The limiter circuit, when jumpered in, automatically keeps the STW1's output at a relatively constant level. This eliminates the need for the listener to reduce the volume control on the amplifier when sounds get louder.

**Note:** Do not use the STW1-W4's limiter circuit if you are using a tape recorder or other device that uses an AGC or limiter circuit. Most tape recorders have limiter circuits. The recommended jumper settings are as follows:

|              | Stand-alone Application | Tape Recorder Application |
|--------------|-------------------------|---------------------------|
| Limiter      | "IN"                    | "OUT"                     |
| Treble Boost | "OUT"                   | "IN"                      |

