

ETS Inc. STWI5-2 Dual Microphone Speaker Kit Instructions

The STWI5 is a two zone 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 are "line level" (0dbm). STW1s are not recommended for outdoor use where they may be exposed to water.

STW1 Microphone / Speaker Placement.

Locate the STW1 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 in the middle of the space if possible. Do not mount the STW1 near air conditioning vents, light fixtures or electrical equipment. The STW1 should be placed at least 5 feet away from the subject(s) to be monitored. The STW1 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-2 Interface box location

The STW1 interface box is designed to be located next to a DVR or I/P camera. The STW1 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 STW1.

Cable Runs

Run 2 each 22 gauge, stranded, two conductor shielded cable between each STW1 microphone / speaker and the STWI-2 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

To flush mount the STW1 on ceilings or walls, cut a 3.5" x 2.25" rectangular hole in the wall or ceiling tile to allow room for the circuit board and mount the STW1 to the surface with screws. The STW1 can also be mounted on a double gang electrical box.

STW1 Optional Call Switch

Connect this switch (STW1 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 Microphone Gain and Speaker Volume

Start with a midrange setting of the gain control on the STW1. 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 Microphone Jumpers

The SM1 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 SM1'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'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"

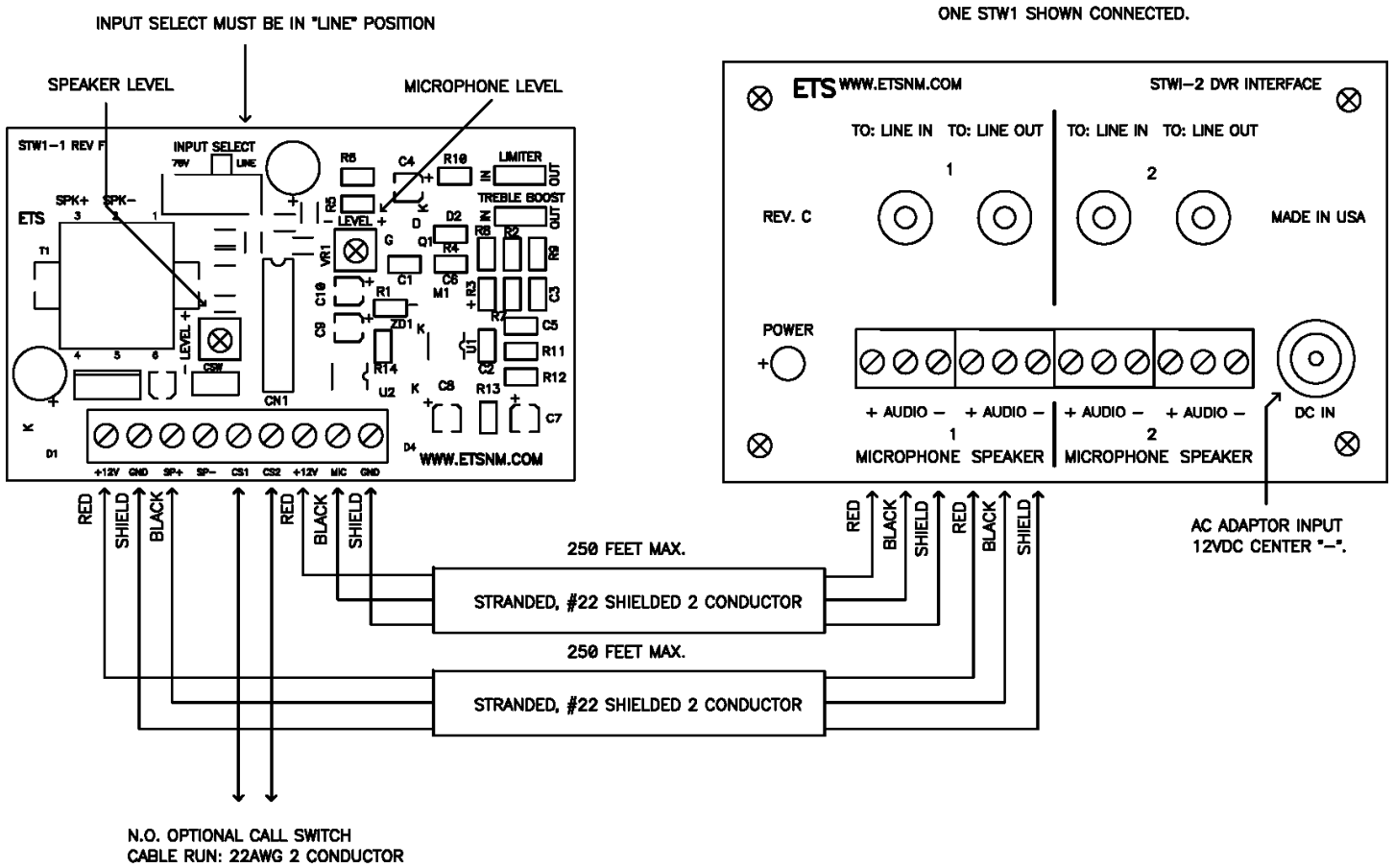


Figure 1.

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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