

DATA SHEET

THROUGH GLASS ELECTRONIC COMMUNICATION DEVICE MODEL UST1

UL 752 Levels 1-3 Ballistic Protection



The UST 1 provides electronic two-way, handsfree audio communications (duplex) between a partition. The inside operator controls the operation by speaking into the gooseneck microphone. The unit automatically initiates the “listen” mode when the operator discontinues speaking into the microphone. The UST 1 contains two voice channels, each incorporating a microphone amplifier, VOX switch, compressor, background noise monitor, attenuator controls, level detectors, and a bridge amplifier. The sound amplifier does not exceed a 0.2% total harmonic distortion rating. The UST 1 is four inches in diameter and equipped with an operator-side gooseneck microphone, power on/off switch, power on green LED, “talk” volume control and “listen” volume control. The exterior, or customer side, is equipped with a 2 1/4” ferrite, magnet speaker and electret microphone. The speaker and microphone are located so as not to be damaged by tools such as screwdrivers and pliers. The UST 1 incorporates a Class II bullet-resistant insert, able to withstand a standard bullet from a .357 Magnum firearm. The unit is constructed of machined aluminum and finished in silver or black.

- Rugged aluminum construction
- Compact 4.0” diameter design
- Bullet resistant insert
- Duplex communication
- Voice activated switch
- Background noise level monitoring
- Level detection and attenuation control
- Linear volume control

Installation:

Installing the Safety-Comm.™ :

Step

1. With the tool provided, remove the four (4) tamper-resistant screws ① located on the control plate.
2. Gently pull on the gooseneck to separate the control plate assembly from the main housing.
3. Remove the cabling connecting the outside plate and the control-plate assembly.
4. With a hollow-shaft nut driver (not included), remove the #8-32 mounting nuts ② as shown. This will allow you to separate the outside plate from the main housing.
5. Remove the outside plate from the main housing unit and throw away the plastic (or aluminum) spacers.
6. Align the outside plate over the opening in the barrier.
7. From the inside, reinstall the main housing unit on the bolt ② indicated in step 4 above. Reconnect the cable from the outside plate to the control plate assembly. See figure 2.
8. Reattach the control plate to the main housing units with the four (4) tamper-resistant screws ①.

FIGURE 2
REAR VIEW OF CONTROL PLATE

REAR VIEW OF HOUSING

AC ADAPTER SIDE VIEW

AC ADAPTER INTERIOR VIEW

IMPORTANT NOTE:
3.25" DIA. HOLE IS REQUIRED IN BARRIER

TOOLS REQUIRED

- (1) 11/32" HEX NUT DRIVER WITH HOLLOW SHAFT
- (2) 5/84" HEX KEY (INCLUDED WITH SC-100 UNIT)
- (3) 1/8" TIP WIDTH SCREW DRIVER

Adjusting the Safety-Comm.™ :

1. Turn "power" switch off.
2. Make sure the AC adapter is plugged in.
3. Turn "power" switch on. The green LED will illuminate.
4. Adjust "listen" and "talk" controls to the desired level. [note: Ideal speaking distance for the customer-side (outside) plate is 4' to 6' away. Ideal speaking distance from the gooseneck microphone is 3' to 5'.

The UST 1 is easily installed in a partition with either 3.25" or 3.5" cutout. An optional plate is available for 4" cutouts. The exterior plate is assembled to the interior housing via four bolts provided. A barrier thickness must be specified. The interior control plate is then fastened to the housing with four tamper-resistant screws. Gaskets prevent the unit from scratching the surface barrier. An AC adapter is supplied for continuous duty. The adapter steps down 120V AC input to filtered 18V DC output for class II installations.

