

# TTU-5

## Norcon TTU Systems

### Installation Instructions

1. Install back boxes at desired location. Back box w/bullet proof shield are to be mounted on inmate side.
2. Route the two pair cable (with connector on one end) FROM the inside unit TO the outside unit. Make sure the connector is in the inside unit. Attach the cable to the terminal block on the outside unit, color to color. Connect shield to black wire. Join the connector with the wire harness from the printed circuit board so the colors line up.
4. For power connection, route the one pair cable (with the connector on one end) FROM the inside unit TO the location of the PS-1 Power supply. Connect the conductors to the power supply (RED to +, BLACK to -). Plug the connector to its mate from the printed circuit board

### Installation Notes

1. Drill holes on the housing where required for installation.
2. The "Inside" unit houses the circuit board for the system, the microphone, volume controls, power switch.
3. The "Outside" unit has no electronics. A speaker and a microphone are Attached to the "Outside" unit.
4. The sound absorbing material in the housing may be removed during installation but should be replaced for normal operation.
5. Connect the cables to the terminal blocks on the plate as shown in the attached wiring diagram.
6. Attach the plates to the back boxes with tamper resistant screws (Screws provided).
7. For best result separate units as far as possible.

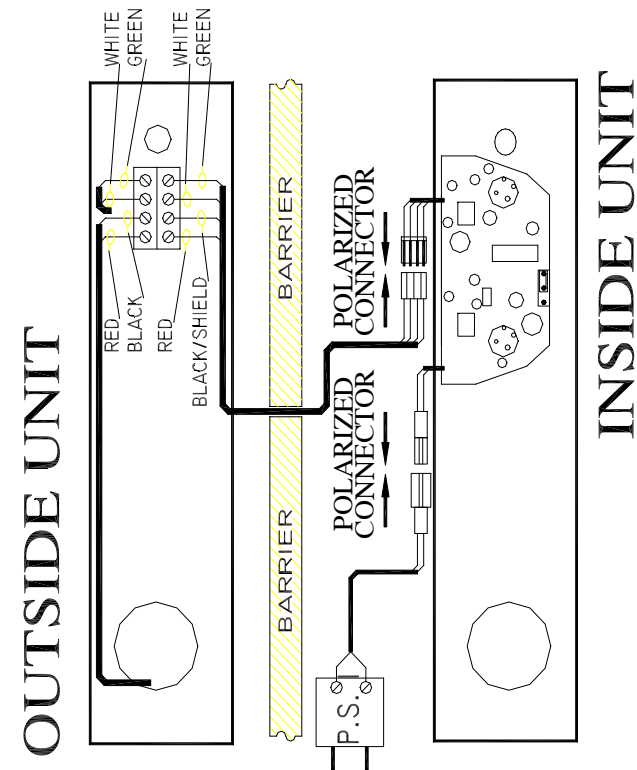
### Operation Instructions

The **TALK** Channel and **LISTEN** channel volume controls (Screw driver adjustable) are located on the **INSIDE** panel. They are labelled "T" and "L", respectively. Turning the control clockwise increases the volume.

The **TALK** channel delivers audio from **INSIDE** panel to the **OUTSIDE** panel. The **LISTEN** channel carries audio in opposite direction. In normal operation, the **LISTEN** channel is active until someone speaks into the **TALK** channel microphone. The unit then switches and makes the **TALK** channel active (while the person is speaking). It reverts to the **LISTEN** direction when the speech stops.

In some instances, where there is a moderate to high level of ambient noise in the area of the talk side of the unit and someone speaks loudly or very close to the listen side unit that person's voice may seem to break up or "bubble". There are several remedies to this problem. First, have the person speak softer or further away from the unit. Second, reduce the volume on the **LISTEN** channel. Or third, reduce the volume on the **TALK** channel. This should solve the problem.

For best operation, the person on the **TALK** side should speak three to six inches away from the unit and the person on the **LISTEN** side should be at least two feet from the unit.



**Service Policy**

TALK-THRU SYSTEM WARRANTY REPAIRS

Norcon Communications Inc. warrants the products manufactured by Norcon to be free from defects in material and workmanship for a period of one year from the date of shipment from the factory provided:

1) The product has not been abused, misused or improperly maintained, repaired and /or modified during such period, and 2) such defect is not a result of voltage surges/ burnouts, lightning, water damage, flooding, fire, explosion, earthquakes, tornadoes, acts of aggressions, war or similar phenomenon; and 3) the product has been properly installed according to the appropriate Norcon Installation Guide.

Both incoming and outgoing freight charges are at the customer's expense. Domestic repair will be returned to customer by UPS Ground. International repair will be returned to customer using normal shipping arrangements. Any other shipping instructions must be made in writing and will be at the customer's expense.

Norcon Communications Inc.

# TTU-5 Instructions

*Talk-thru system*

## The Flush Wall-Mounted Voice Communication System for Maximum Security Locations

The activities of inmates and patients in high-security or sensitive types of areas requires a special kind of communication system. The system must be sensitive enough to deliver clear, intelligible communications in high-ambient noise environments. It must be durable enough to withstand a tough environment. And it must provide a measure of control for those responsible for the inmates or patients.

The TTU-5 is designed for maximum security, making it the preferred system for correctional facilities, secure patient areas, and other environments where security is of utmost importance. All the components including the microphones are housed in the sleek, compact units to minimize unauthorized adjustment and tampering.

Different from other TTU systems, these units are most suitable in environments with relatively low background noise, as they don't include any external microphones. This configuration is ideal for situations like inmate-to-visitor communications.

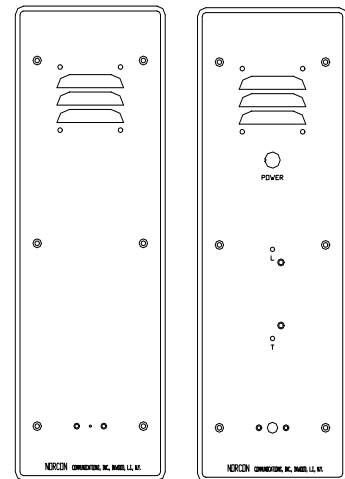
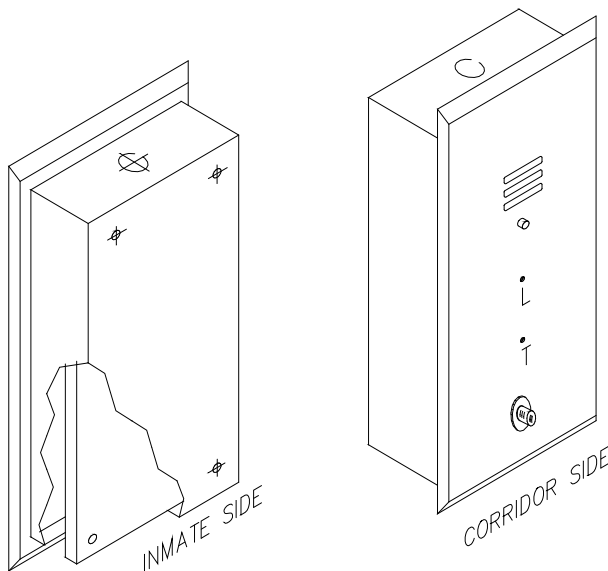
### HOW IT WORKS

The Norcon TTU system permits hands-free communication between the booth attendant and the customer. VOX circuitry facilitates ongoing, clear, 2-way conversation at all times, as if both people were in the same room.

It includes sound shaping circuitry for maximum intelligibility and compression circuitry to lower harsh loud sounds.

### INSTALLATION

The TTU-5 is installed flush against a wall, with internals hidden behind the unit in the wall. To connect the inside and outside units for both models, run a cable through a small hole in the barrier or under the countertop. To provide for maximum security, we use tamper resistant screws. Norcon provides you with a tool so that only you can screw and unscrew them.



# Norcon TTU-5 Talk-Thru Unit



## FEATURES

- Clear 2-way hands-free voice communication.
- Avoids yelling, repetition, misunderstanding.
- Quality electronic design and engineering.
- No gooseneck microphone and no external controls.
- Rugged, tamper-resistant materials.
- Simple, one-person installation.
- Compact, contemporary design. Fits any decor.
- Export models available.
- ADA compliant option.
- Built in the U.S.A.
- **We have a long history of customization. Contact us about your application.**

## SPECIFICATIONS

### MECHANICAL

- Steel back-boxes 11<sup>1</sup>/<sub>2</sub>" H x 3<sup>1</sup>/<sub>2</sub>" W x 2" D.
- Face Plates: <sup>1</sup>/<sub>16</sub>" stainless steel standard (other gauges available). 13<sup>5</sup>/<sub>8</sub>" H X 4<sup>1</sup>/<sub>2</sub>" W
- Weight: Depends on gauge and type of material.
- Mounting: Back-boxes recessed in barrier wall.
- Panel controls: Exterior (corridor) panel only on-off switch, recessed listen volume, and recessed talk volume.

### ELECTRONIC

- Audio frequency response: Selectively shaped for maximum voice intelligibility.
- Audio power: 2 amplifiers. 2 Watts per amplifier.
- Distortion: Less than 2%.
- Listen mode: 20dB compression.
- Talk mode: VOX (voice activated).
- Microphones: Electret.
- Power supply: 100-240 VAC (input) 15 VDC, 1A (output).

## AVAILABLE MODELS

- ◆ **TTU-1AX.** The most popular Talk-Thru Unit. Continuously powered. Depth: 2<sup>1</sup>/<sub>2</sub>".
- ◆ **TTU-1DX.** Battery powered complete with rechargeable batteries and charger. Depth: 3<sup>1</sup>/<sub>2</sub>".
- ◆ **TTU-3X.** Counter mounted for when you can't cut a hole in the glass. Has an option for an additional counter unit for back office use.
- ◆ **TTU-4 and TTU-5.** Tamper resistant units with no gooseneck microphone. Ideal for correctional institutions.
- ◆ **TTU-7X.** Counter mount inside unit and shallow window unit. Perfect when interior shades are used. Depth: 3<sup>1</sup>/<sub>2</sub>".
- **Additional Accessories:** wired headset, wireless headset, handset with armored cable, lavalier microphone, microphone windscreen, marble base for counter units, and donut adapter kit.
- **Options (Not Available on All Units):** Bullet resistant, push to talk, ADA compliant, wireless integration, noise cancelling, monitoring and recording, tamper resistant, and back office use.

Specifications are subject to change without notice.

Talk-Thru™ systems are shipped complete with cables, instructions, and power supply.

*Call us to talk about custom units and applications*