



Norcon TTU-7X Installation & Operating Instructions

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TTU-7X Outside Unit

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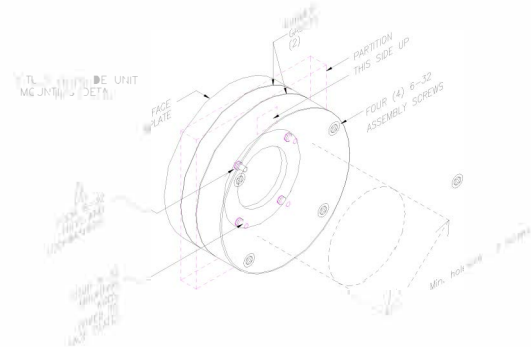
4. Recommended cables for wiring :

For all Spk /mic connections use West Penn Wire #357. This is a four conductor 22 gauge wire with two wires that are shielded and two are without shield. Use the shielded pair for the mic connection. For power and paging connections use West Penn wire #221. This is a stranded single pair 22 awg, Plenecon -II jacket Rohs cable. Keep Mic/Spk and power cable bundles away from other power cable. Black wire and shield wire have to be grounded.

The outside unit needs a 3" to 4" cutout in the barrier. The rubber gaskets prevent slippage and protects the barrier surface; Remove the four (4) 6-32 assembly screws. Remove the four (4) 8-32 mounting nuts from the mounting rods. Separate the faceplate and housing. Hold the faceplate over the partition opening. Take care to center the faceplate and align the lettering horizontally. Masking tape can be used temporarily to secure the faceplate to the outside of the partition.

On the inside of the partition mount the housing over the four (4) mounting rods. Be certain to position the housing so that the threaded hole is positioned properly. If using tubing, orient the hole in the direction, which the tubing is to exit (left, right, top, and bottom). If tubing is not being used, place the plugged hole at the bottom.

- 5. 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.
- 6. For power connection, route one pair cable (with the connector on one end) From the inside unit to the location of the PS-8a Power supply. Connect the conductors to the power supply (RED to +, BLACK to -). Plug the connector to its mate from the printed circuit board.
- 7. The sound absorbing material in the housing may be removed during installation but should be replaced for normal operation.
- 8. For best result maintain maximum separation between inside and outside units.



TTU-7X Series 2-Way Talk-Thru Electronic Communication System:

A voice communications system for High-Security and Isolation Booth Situations. Today's security and isolation booths are often the best step you can take to protect your employees. But is it equipped to protect and maintain your very important public image? Not if clerks and customers have to yell and repeat themselves to be heard or understood.

Norcon's Patented TTU-7X Talk-Thru Communicator is a 2-way, hands-free audio system that provides high-quality personal communication between people separated by security or isolation barriers.

FEATURES

- Clear 2-way hands-free voice communication.
- Quality electronic design and engineering.
- Now with removable XLR mic for your convenience.
- Avoids shouting, repetition, and misunderstanding.
- Special made for the window with slide down gate.
- Rugged, tamper-resistant materials. Anodized aluminum
- Units available for ADA applications.
- Headset jack equipped on all models for using the optional headset.
- Export models available.

HOW TO USE THE TALK-THRU COMMUNICATOR:

With power switch off, turn Talk and Listen controls completely counter clockwise. Turn the unit ON by switching AUTO MUTE switch to the up position. In this position the unit also in the auto mute mode. Adjust the TALK volume control until the attendant is clearly heard by the person outside the window when the attendant is speaking 2" to 4" from the gooseneck microphone at a normal speaking level. The green LED should go on when attendant starts talking and go off when the attendant stops talking. If the green LED stays lit constantly, it indicates either the TALK volume setting or the ambient noise is too high.

Adjust the LISTEN control until the person outside the window is clearly heard when speaking at a normal level. In most situations, both the TALK and LISTEN volume are normally set to 11 to 12 o'clock position.

Operation Hints:

- 1. Increasing the talk volume control allows the attendant to speak further from the gooseneck microphone as well as increasing the talk channel volume. The optimum distance from the gooseneck microphone should be maintained at approximately 3" or conversations not directed to customers may be heard outside the booth.
- 2. Install a headset into the headset jack will allow communications from the headset and disconnect the gooseneck microphone.
- 3. The unit will decrease the incoming volume level by approximately 70% in about 30 seconds after the attendant speaking into the gooseneck microphone. The purpose of this feature is to decrease the amount of extraneous noise entering the booth when no one is at the booth. Normal volume level is restored when the attendant speaks into the gooseneck microphone. The muting function can be defeated by switching the AUTO MUTE switch to NO MUTE (down) position

HOW IT WORKS ...

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

The TTU-7X Talk-Thru Communicator now incorporates advanced circuitry to automatically attenuate the outside channel. If the gooseneck microphone is not used for a period of 30 seconds, the outside channel volume will be reduced approximately 70%. Normal operation is restored as soon as the attendant speaks into the gooseneck microphone. The automatic volume attenuation circuit prevents outside noise from bothering the attendant. The TTU-7X provides clear communication even in environments with high ambient noise by shaping the sound for maximum intelligibility. Its compression circuitry decreases loud, annoying sounds.

HOW TO INSTALL ...

- 1. Mount the TTU unit using the method shown in figure (1).
- 2. Remove the control panel from the prism-shaped housing.

The "Inside" unit houses the circuit board for the system, the gooseneck microphone, volume control, power switch, power indicator LED and speaker.

- 3. Use holes on the housing where required for installation.

TTU-7 SPECIFICATIONS

MECHANICAL:

Outside assembly: Aluminum, anodized finish, Tamper-resistant  
Inside assembly: Aluminum, anodized finish, Tamper-resistant.  
Dimension: Main unit 6" W x 2 3/8" H x 2 3/8" D  
Outside unit: 5" Diameter x 1/2" Depth  
XLR Gooseneck Microphone length 18"

Weight: 5 lbs.

Mounting: Main unit mount on Countertop, outside unit mount on window.

Panel control: Listen volume, Talk volume, power on/off, and LED power indicator. Talk on indicator.  
TTU@-7BX same as TTU@-7X, but with bullet-resistant option (UL Level 3) on outside window unit.

ELECTRONIC:

Audio frequency response: Selectively shaped for maximum voice intelligibility.

Audio power: 2 watts per channel.

Distortion: Less than 2%.

Listen mode: 20dB compression

Talk mode: VOX

Microphones: Electret

Power supply: Input 90V-240 V AC / 60Hz

Output 15V DC, 1A.UL, FCC,CE ,level VI.

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

Specifications are subject to change without notice

## Accessories and Options for TTU:

### Professional Wireless Headset System (Optional)

**TTU® -WHS-D:** Wireless Headset is designed to work with the TTU-WR Wireless ready unit only.

#### FEATURES

- Clear 2-way hands-free voice communication.
- Quality engineering and innovative design
- Walk around freely while talking to the customer.
- Self-powered unit with rapid rechargeable battery



**ANC 700 Headset (Optional)** for use with regular non RF ready units **TTU-NCHS:**

- Superior sound quality
- Noise Cancellation microphone
- Long wearing comfort



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### TTU-3X Series:

Select from following available Models:

TTU-3X 6" Continuous power unit complete with removable XLR mic.

TTU-302WX: One outside unit communicates with two inside units. It is a special design for calling the back office during off business hours.

TTU-3CX is a TTU-3X basic without gooseneck microphone for using headset only.



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### TTU-WHS (Optional)

- Mobile: DECT 6.0 technology hand-free mobile design with range of up to 300 feet from base unit
- Extended Use: Ten hours continuous talk time on rechargeable battery.



### Microphone Grill Windshield Sponge:

Specification:

- Material: Foam ,Color: Black
- I D: Approx. 12mm Size: Approx. 65x10mm (L\*W)
- High elasticity, durable and soft, Replacement for your worn-out or lost headset microphone pads

Package include:

- 5 x Microphone Covers

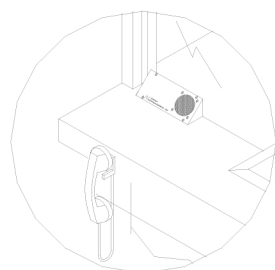


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### Handset with Hook-switch (Optional):

Amplified handset with volume control Heavy duty handset with 29" or 48" armored cord Stainless steel plate with chrome hook

Switch Automatic disconnect the speaker and microphone to keep the conversation privacy.



### Paging Button (Optional) & speakers for paging

A paging push button switch can be added to TTU-3X for paging over a ceiling speaker. There are 2 types of speaker to meet your application requirement.

- APF-15 High efficiency ceiling or wall mounted horn speaker for direct connect with TTU3XSD for 1 to 2 speaker application.
- SD-72WV Indoor Ceiling Speaker with 25V/70V transformer for uses with UA 35T II Amplifier (Option). It is good for more than 2 speaker application.

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### Introducing the Norcon TTU® -1X NC:

When using a Talk-thru unit in a noisy area such as heavy traffic street, a crowded movie theater hall way or a gas station, the noise makes the conversation difficult. A powerful DSP chip inside the Norcon noise cancellation unit samples an ambient noise environment and attenuate the noise around the desired speech signals. As a result, continuous and repetitive noise is removed; a clear conversation can be had, even with a passing truck in the background. To take the advantage of this new technology, the existing unit can be sent to us for upgrade.



### Introducing the Norcon TTU-1X Series:

There are times, when the isolation barrier has a 3" to 4" hole on it, the Norcon TTU-1X is special design for it.

The TTU-1X is a 5" in diameter round unit. The front face and the housing are easily mounted on opposite sides of the barrier. They allow hand free communication through barriers. It is the most widely used system of its type in the U.S. and the world.

TTU-1X series includes TTU-1AX basic model; the TTU-1ABX UL listed level 3 bullet proof unit; with removable gooseneck microphone unit; TTU-1DX rechargeable battery operated unit and much more. Norcon provides audio/visual, communications, and secure talk-thru solutions for critical applications around the world.

Please visit our web-site at [crlaurence.com](http://crlaurence.com) for the entire series of Norcon's high quality product. We are sure you will find one to meet your needs. Special requirements and custom-design projects are welcome.

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### TROUBLESHOOTING:

You may occasionally encounter a problem with your TTU system. If this happens, refer to the following list. If additional help is needed, please contact us.

- No sound at all

Is the power supply properly plugged into a working outlet?

If the power supply has been plugged into a working outlet for a while, the power supply should be warm, if it not; the power supply may be defective.

- Howling ( Feedback)

Is the TALK or LISTEN volume turned too high?

Set the volume control to a proper level. In most cases, both TALK and LISTEN should be set to the position of around 11 to 12 o'clock.

- Conversation cutting-off and breaking-up.

Is the TALK volume setting too high?

Turn down TALK volume to a proper level.

- Is the attendant too far from the gooseneck microphone?

The ideal distance is 3" to 4" from the gooseneck microphone.

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### TTU®-1X Series:

Select from available models with detachable XLR mic.

- TTU® -1AX continuous power unit. Housing 5" Dia x 2 1/2" depth.
- TTU® -1AWX Wireless ready.
- TTU®-1ABX same as TTU®-1AX, but with bullet-resistant option (UL Level 3).
- TTU®-1ACX same as TTU®-1AX without gooseneck microphone for headset use only.
- TTU®-1DX Battery operated unit. Complete with rechargeable batteries and charger. Housing 5" Dia x 3 1/2" depth.
- TTU®-1DBX same as TTU®-1DX, but with bullet-resistant option (UL Level 3).

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

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## 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 customer's expenses. 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

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