

Wireless Handsfree Full-Duplex Truck Scale Intercom System with High-Volume Speaker and Advanced Noise Cancellation



This truck scale intercom system provides crystal-clear two-way audio communication with simultaneous talk and listen conversation just like a telephone call. Its advanced design ensures that both the scale operator and the driver clearly understand what's being said.

The system uses digital 900Mhz wireless technology so you don't have to spend thousands of dollars trying to cut through concrete around the scale to run wires. It also uses proprietary encryption so conversations are secure.

The amplified horn speaker gives drivers the level of sound they need to hear over the noisiest engines, while the noise cancellation filters out the truck noise so the scale operators can clearly understand the drivers.

This is a one-of-a-kind, made-in-the-USA wireless solution to one of the most challenging environments for a full-duplex intercom. Its low installation cost and superb audio communication make it an excellent business investment that eliminates complaints about poor audio.

OPERATION:

Drivers don't have to try to reach past their mirrors to press a button since an optical sensor can be connected to the scale intercom. The scale intercom automatically calls the scale house giving drivers totally hands-free operation!

An optional firmware upgrade enables the scale house operator to press a button on the inside unit to have the scale intercom answer automatically. This can only be used when you have one scale intercom.

Two relays on the scale intercom can be activated from the scale house to perhaps turn on a light or ring a bell for signalling the driver. Or instructions can be given verbally.

Up to nine truck scale units can call any number of scale house units (none of the units intercommunicate). However only one pair can communicate at a time. For bi-directional scales that need intercoms on both sides of the scale, we recommend two separate systems.

If the "Call" button is pressed during communication, the call drops. Otherwise, talk time is 4 minutes (fixed) after which the unit will hang up.

THE CHALLENGES OF TRUCK SCALE COMMUNICATION

There are two problems to be solved for a truck scale intercom system: 1. The trucks are very loud, and scale operators can't understand the drivers. 2. The truck scale intercom needs lots of volume to overcome engine noise.

It's easy enough to amplify sound so the driver can hear, but the hard part is the scale operator side. Two technologies are required to make this work well: Acoustic Echo Cancellation (AEC) and Active Noise Cancellation (ANC).

Acoustic Echo Cancellation is required for full duplex and is used to cancel feedback (squealing noise) on the truck scale intercom. The higher the volume, the harder AEC has to work. It takes expensive processing power and complex, patented software algorithms to make this happen. Now add noise cancellation and it takes even more processing power. Lower cost systems don't work well because they can't use the quality components and engineering needed to give you both volume and understandable conversation.



Available Options:

- ✓ AT1002 High Gain Omni-Directional Antenna Kit
- ✓ AT1004 Addon Indoor Base Station
- ✓ AT1010 25-foot Antenna Cable Extension
- ✓ AT1011 8-foot Antenna Cable Extension
- ✓ AT1013 Addon Truck Scale Callbox
- ✓ AT1014 Auto-Answer Firmware Upgrade
- ✓ PD1018 Wireless Truck Scale Intercom Pole
- ✓ PR-11BE Photoelectric Beam Sensor

Specifications:

- Full-duplex speakerphone with background noise immunity
- Terminal outputs for connecting an amplified horn speaker
- Secure communication link - proprietary encryption
- Dual "Strike" Relays for controlling two independent access points
- "Request-To-Exit " (RTE) switch support
- Aux input port for "auto calling" Inside unit after detecting a vehicle at entry way
- Multiple outdoor and indoor units can be utilized within a facility.
- Each outdoor unit can be assigned a unique "access point ID" using a rotary switch
- Vandal-resistant stainless steel outdoor enclosure with illuminated "Call" button
- Attractive indoor enclosure "desk top unit"
- Solar Panel Ready: Designed to easily utilize solar panels for power in remote wire-free applications
- Long Range audio communication: up to 4000 feet (direct line-of-site)
- Robust radio communication with excellent interference immunity against cell phones, pagers, and handsets.
- 10 selectable radio channels for cross-talk immunity between adjacent facilities
- FCC approved Installer-friendly design:
- Simple "dashboard-like" interface that visually guides installer
- Signal QUALITY LED (bar graph) - indicates radio range performance
- Signal LEVEL LED (multi-color) - indicates radio Signal Strength
- Status LEDs for each terminal - for easy installation & troubleshooting
- Built-in lightning protection on ALL terminals - immune to 20KVolts, 10KAmps Surges
- (902-928) 900 MHz spread spectrum frequency hopping
- Operating Temperature Range: -20C to +70C
- Multiple base stations can be used. The base station that responds first to a callbox takes over communication
- Power to either unit can be in the 12-24 volt AC or DC range, non polarity sensitive. Power supplies are included: Outside: 16 Volts AC, Inside: 12 Volts DC

Contact us at: www.intercomsonline.com