

# Tempest<sup>®</sup> Wireless Intercom



## For Maximum Reliability, Functionality, and Mobility

Tempest®2400 Wireless Intercom System offers the most comprehensive set of features ever available in wireless intercom systems to the global production community.

Tempest2400 Wireless Intercom System is a revolutionary, all digital, 4-audio channel, wireless intercom system that operates with up to 5 wireless Beltpacks per BaseStation in full duplex, simultaneous operation.

With Tempest2400 Wireless production teams can now have more UHF wireless microphones, IFB and in-ear monitors with less interference and no intercom frequency coordination issues. A total of 10 Tempest2400 BaseStations and 50 Tempest2400 full duplex wireless Beltpacks can be operated in close proximity, while maintaining excellent

system performance - more users than conventional FM wireless systems operating under similar conditions. The 2.4GHz band is approved for non-licensed use in virtually every country.

All Tempest2400 Wireless Intercom Systems feature license-free frequency usage in most global locations, patented 2xTX digital frequency hopping technology, compatibility with existing installed intercom systems, remote antenna options, on-line control of BaseStation and Beltpack functions, flexible power supply options and more.



### BaseStation features include:

4 audio channels, up to 5 full duplex Beltpacks, proprietary 2xTX voice data redundancy transmission, Accu-Sync™ BaseStation coordination and remote antenna capability.

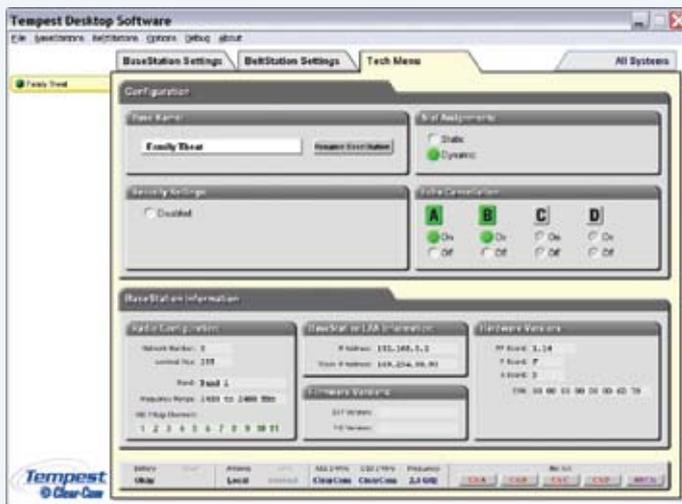
### Beltpack features include:

Backlit LCD display, local programmable controls, unique GPO addressing, discreet audio path for point-to-point communication, plus the ability to select, monitor, mix and talk simultaneously on two of the four audio intercom channels using the A/B and C/D channel selectors.

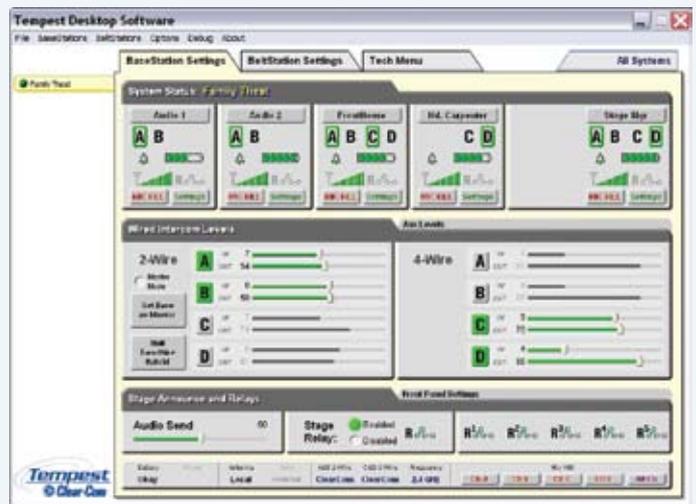


## T-Desk

The Tempest Wireless Intercom System is supplied with T-Desk, a PC-based desktop application for monitoring and managing the equipment in a wireless network. Not only does T-Desk simplify the configuration and management process, it provides ultimate flexibility by allowing these functions to be performed from a remote location via a LAN (Local Area Network) connection. Because the software does not require installation, it can run from a portable flash drive as well as being resident on a computer. It provides an intuitive, self-evident method of optimizing multiple Tempest BaseStations and their associated Beltpacks. T-Desk allows a user to adjust critical BaseStation or Beltpack settings from the computer and only requires connection to your existing computer network.



Tempest Tech Menu



Tempest BaseStation Settings



Tempest Beltpack Settings

# Tempest® Wireless Intercom Systems

## Tempest Wireless System Advantages

Features	Advantages	Description
<b>Patented, all digital, frequency hopping, spread spectrum technology</b>	Clear and secure communication with no licensing costs and no frequency coordination needed.	By using Tempest2400 Wireless Intercom System, an unprecedented 10 BaseStations with 50 wireless Beltpacks can be in use at the same time - more than the number of conventional FM wireless users operational under similar conditions.
<b>2xTX-Transmission Voice Data Redundancy</b>	Each packet of data is transmitted twice to insure interference-free communication.	Every transmission cycle, redundant audio data packets are sent out on alternating antennas. Each packet of data, representing a small slice of audio, is sent twice, once from each antenna and each on different frequencies. The Tempest Wireless system then discards any redundant data and plays the audio at the appropriate location.
<b>Unlicensed 2.4Ghz band</b>	No interference from production wireless microphones and flexible configurations for optimal performance using large multi-base installations.	With Tempest2400 Wireless operating in the 2.4GHz band, production teams can now have more talent wireless microphones, IFB and in-ear monitors with less interference and no intercom frequency coordination issues.
<b>No frequency coordination required</b>	Changes in wireless microphones, IFB and regional UHF users will not affect Tempest. No frequency coordination required.	Patented, all digital, frequency hopping, spread spectrum technology. You can use Tempest Wireless anywhere you go, worldwide.
<b>License-Free Worldwide</b>	No license fees required – virtually everywhere.	The 2.4GHz band is approved for non-licensed use in virtually every country.
<b>Configurations available with up to 50 full duplex Beltpacks</b>	Supports high, user-count applications with easy implementation, clarity and freedom from interference.	Up to 10 Tempest2400 BaseStations and 50 Tempest2400 full duplex wireless Beltpacks can be operated in close proximity while maintaining excellent system performance.



Tempest2400 Wireless Intercom System with Clear-Com Switchboard Main Station

## BaseStation Unique Advantages

Features	Advantages	Description
<b>4 intercom channels per BaseStation</b>	Beltpack users can continually select between 4 intercom/program channels.	Up to 5 Beltpacks can access all 4 intercom channels and "Dual-Listen" to 2 of the 4 intercom channels on a single BaseStation.
<b>5 full duplex Beltpacks available per a 1RU BaseStation</b>	Reduce operating costs and reduce rack space.	Up to 5 full duplex Wireless Beltpacks on a single BaseStation.
<b>2-wire and 4-wire intercom interface available on each channel</b>	Party-line and matrix intercoms can be interfaced on different audio channels simultaneously on a single BaseStation.	Compatible with Clear-Com, RTS, and Telex 2-wire and 4-wire intercom systems. Tempest also allows two different 2-wire systems to be connected at the same time.
<b>Stage-Announce</b>	Any Beltpack can be programmed to route their headset microphone to a backstage public address speaker and trigger the related contact closure.	Beltpacks can access the shared stage announce line-level output on the back of the BaseStation.
<b>Unique GPIO Contact Closures</b>	Five Beltpack users can each trigger a unique external event or interface with external systems that utilize GPO closures.	Each BaseStation offers 5 programmable Beltpack triggered contact closures, one for each BaseStation.
<b>Call Signals to and from wired intercom are supported</b>	Remote users can send or receive a standard 'Call' alert to or from other users on the wireless or wired intercom.	Beltpacks can send and receive audio and call-level signals including "Remote Talk Kill" from wired intercom systems.
<b>Auxiliary Input</b>	A local program or other source can be routed to any or all wired intercom channels.	The Aux input allows an additional line-level audio input to be routed to one or more of the intercom audio channels. The selected channel and its gain are adjustable through the user interfaces.
<b>Auxiliary Output</b>	Any or all intercom channels can easily be routed to an external output for monitoring, recording or other application.	The Aux output provides a line-level audio output. This output is often used for recording an intercom channel. The selected channel and its gain are adjustable through the user interfaces.
<b>Accu-Sync™ timing system for optimum performance when using multiple BaseStations</b>	Multiple BaseStations can be located in close proximity while minimizing interference.	Multiple BaseStations can be co-located with minimal system performance degradation. A master sync signal provides timing for all BaseStations creating a multi-unit synchronous transmission system.
<b>Optional Remote Transceiver allows antennas to be placed up to 1,500 ft. from BaseStation</b>	BaseStations can be located in equipment rooms, production trucks or other areas that are distant from the production area.	An RJ-45 connector enables the remote transceiver to be located up to 1,500 ft away from the BaseStation. The data, along with power and control information, is transmitted over standard CAT5 cable from the BaseStation.
<b>PC-based LAN Thin-Client control interface</b>	An operator can access and monitor status and settings, and remotely adjust BaseStation and Beltpacks.	Online system-wide configuration and monitoring from LAN interfaces.
<b>Worldwide Power Compatibility</b>	Power Tempest Wireless System anywhere in the world with virtually any power source available.	Tempest Wireless can accept AC or DC power sources, AC power: 90 – 250 VAC at 50 – 60 Hz, DC power: 11 – 32 VDC.

# Tempest® Wireless Intercom Systems

## Beltpack Unique Advantages

Features	Advantages	Description
<b>5 Beltpacks can "Dual-Listen" to 2 of 4 intercom channels</b>	Beltpack users can create individual, discreet 2-channel mixes using the A/B and C/D intercom channel selectors.	Each wireless Beltpack can monitor and talk on two of the four intercom channels at once. The level for the A/B and C/D intercom channel selectors are set via two independent volume adjustment knobs creating a mix to suit each user.
<b>Backlit LCD with operational status</b>	Users can quickly see all important status and operational information .	Status and settings for Beltpacks are displayed locally on the LCD display to allow the user to be completely informed as to the channel, talk condition, battery level, RF signal strength and other features.
<b>"Vibrate Call" function</b>	A user can have the headset off and still be alerted to a call.	Any Beltpack can choose to enable "Vibrate Call" as in addition to standard call alert light or tone.
<b>Point-to-point capability via the 4-wire interface and a matrix intercom</b>	When using a 4-wire interface and a matrix intercom router, a Beltpack user can have direct contact with any other Beltpack or wired intercom station.	Beltpacks can be programmed to use any one of four intercom channels that can be programmed to route back through the wired matrix to a single desk panel or beltpack.
<b>On-Command roaming with iSelect™</b>	Beltpack users can move between coverage areas and select which BaseStation to which they want to connect.	Using the intuitive LCD user interface on the Beltpack, a user can easily change BaseStation affiliation in just a few seconds. Each wireless Beltpack remembers the last 64 BaseStations with which it has been registered, so selectable roaming throughout a large facility with several independent Tempest Wireless systems can be accomplished easily.
<b>Talk switch can be remote detached from either the BaseStation or the hard-wire intercom</b>	An open microphone can quickly be detached or killed directly from the wireless or wired intercom.	The BaseStation can interpret a Remote Mic Kill signal from the hardwired intercom and transmit that signal to all of the wireless Beltpacks currently monitoring that channel. In addition, individual talk buttons on each wireless Beltpack can be deactivated from the BaseStation or PC interface.



## Beltpack Features & Benefits

Features	Benefits	Description
<b>Advanced internal antenna design</b>	No antenna replacement costs and no downtime due to antenna breakage and repair.	Each Beltpack has an internal antenna that acts as both transmitter and receiver. This is ideal for production environments where traditional external antennas can be easily broken.
<b>Engineered and ergonomically designed for the production professional</b>	Beltpacks are tough, light-weight and low-profile with easy-to-use controls for durability in any demanding production environment. The unique design instills confidence that the Tempest2400 Wireless intercom system will provide years of reliable service.	Tempest2400 Beltpacks are constructed of a strong, light-weight ABS co-polymer blend with a high performance polyurethane over-mold. Purpose-built for the sometimes harsh physical conditions in demanding "around the clock" productions. Special mechanical and electrical design attention has been given to weather-proofing Tempest Wireless Beltpacks.
<b>Li-Polymer Battery (supplied standard) or AA Batteries</b>	Beltpacks come standard with a Li-Polymer rechargeable battery or can use (3)AA batteries (no adaptor or sled needed) if a charged battery is not available.	The Beltpack's Li-Polymer batteries are charged with an AC rapid-charge power adapter connected via a mini USB port on the side of the Beltpack. An optional 5-bay battery charger is available. The Beltpack also accepts AA batteries.
<b>Battery Monitor</b>	Users and system engineers can monitor Beltpack battery status to prevent a Beltpack battery failure during production.	Each Beltpack transmits Li-Polymer battery telemetry data to the BaseStation. The Beltpack LCD display shows current battery level and approximate time left to empty. A visual and audible alert can be set to activate in order to let users know when battery levels are low.
<b>Headset Auto Configure</b>	No headset compatibility 'surprises'.	Headset connectors accept both dynamic and electret condenser microphones. An auto-sense circuit automatically detects the type of microphone and sets gain and bias voltage accordingly.
<b>Beltpack Program Port</b>	Beltpack pairing and programming is easy and fast.	Beltpacks must be paired to a BaseStation. Settings for the last 64 paired BaseStations are saved. If a Beltpack has been pre-programmed to a specific BaseStation, the individualized settings are applied. If the Beltpack is new to the BaseStation, default settings will be applied. All settings can be modified via the various user interfaces.





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