



# *Intercom Systems*

www.altairaudio.com





# ALTAiR

## Intercom Systems

Our intercom components combine simplicity in the design of the communication system, an easy learning curve as well as total component compatibility. The system is modular, making expansion easier: from a small two point wired Intercom system to a complex multi-channel network with mixed wired and wireless technologies, the system is made up of the same elements, offering communication solutions for a great variety of professional sectors:

*Industry-Communication in training systems, teaching rooms, offices.*

*A/V – TV studios, video editing, CCU cams, mobile units, broadcast*

*Theatre – Stage crew, props, artistic and technical direction teams.*

*Live Concerts - Backstage, lights, sound crew and security.*

*Cinema Industry- Production, outdoors, crane operators.*

*Theme Parks-Sports, Casinos.*

### Compatibility.

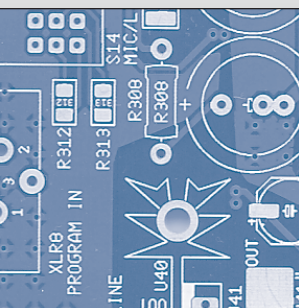
ALTAiR Intercom systems follow the market standard offering basic compatibility with major intercom manufacturers.

### Reliability.

Our quality system and our extensive experience in audio equipment manufacturing guarantee high reliability in agreement with the great daily dependency on the intercommunication system.

### Innovation.

Continuous Development and incorporation of new technologies = daily challenge in ALTAiR Engineering departments.



### WB-200 Wireless Intercom

Our offer includes two base stations with capacity for up to 4 and 8 beltacks per base as well as two different series of beltack versions - *compact* and *extreme* - both mono or double channel. Base compatibility makes it possible to create a mixed wired and wireless system simply by connecting some wired beltacks directly to the base station. The system operates continuously in full duplex mode. Multiple systems can be used together to meet the required number of users.

The system operates in a frequency band dedicated to voice communication assuring a clear and reliable communication, free from interferences from other systems typically used in most events: In Ear Monitor IEMs, wireless microphones, Wi-Fi, Bluetooth or mobile telephony among others.



### E-200 Wired Intercom.

Communication is carried out by means of standard screened two-wire cables, or multi pair cables in the most complex installations. The Master station combines a unique power supply to feed all other components in the system and a user station for the main base station operator. The wired intercom range of components includes single and dual channel beltacks, flash lights beacon stations, hand-free desk stations, Bluetooth extensions, power supplies, general purpose interfaces as well as programmable switching matrices.

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# Wireless Intercom System



WB-200 Series

## WBS-200 Single Channel Base Station

WBS-200 Digital Wireless Intercom, compatible with the wired system ALTAIR E-200 is made up of a base station that operates with the single channel wireless beltacks WBP-200 and WBP210.

The base station is designed to operate in standalone "Master" mode, enabling full duplex and secure communication with up to four beltacks and the base operator in simultaneous party line mode. The system can be extended by linking several station bases with their respective beltack stations, creating one or more groups or channels. Depending on the installation, the base station can be powered remotely from a wired EF-200 base station, therefore simplifying wiring and maintenance.

The base incorporates party line outputs to drive standard EM-201 wired beltacks. The Intercom line is compatible with major intercom 2 and 4 wire manufacturers.

### Specifications

**Power requirements:**  
90-264 VAC/50-60 Hz/  
50 VA.

**RF:**  
Frequency band 1900  
MHz, depending on  
country.

**Number of beltacks per  
base:**  
1 to 4 units.

**Connections:**  
2x wired Intercom Line,  
PRG in, PA out, dynamic  
or electret headset.

**Remote functions:**  
Mic kill, Buzzer kill.

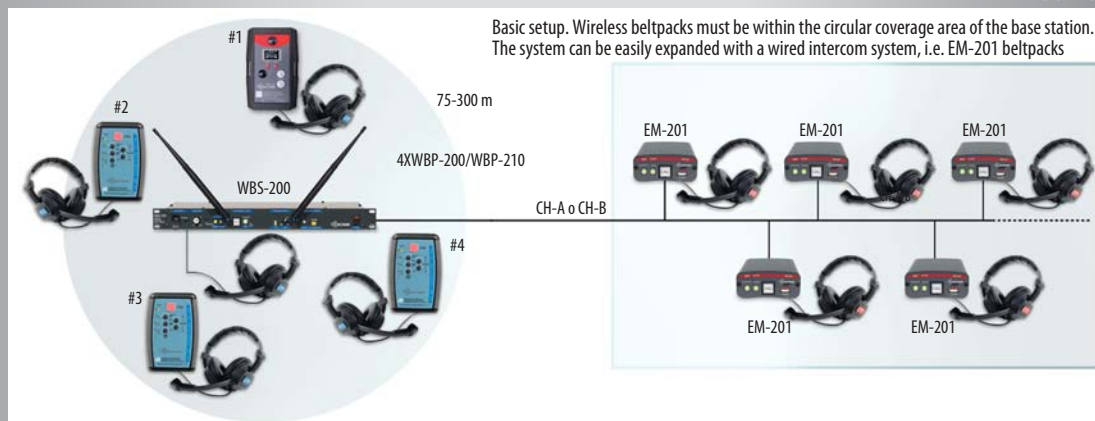
**Dimensions and Weight:**  
1U x 19" x 150 mm  
2.7 Kg net.

### Key Features

- Digital system, with high privacy encrypted communication.
- License free frequency operation.
- Diversity antenna system for minimum dropouts.
- Two detachable Omni antennas included allowing optional connection for directional higher range antennas.
- Free from interferences caused by IEMs, Wi-Fi or wireless mics.
- Support for up to 20 wired beltacks powered from the base.
- Compact or extreme series beltack finishing with dual internal antennas.
- Clear and powerful communications. Dsp assisted contoured voice link with EchoSup feature.

### APPLICATION EXAMPLE

### WBS-200





# Wireless Intercom System

WB-200 Series

## WBS-202 Dual Channel Base Station



### Specifications

**Power requirements:**  
90-264 VAC/50-60 Hz/  
50 VA.

**RF:**  
Frequency band 1900  
MHz, depending on  
country.

**Number of beltacks per  
base:**  
1 to 8 units.

**Connections:**  
2x Intercom Line, PRG in,  
PA out, SA, external  
powered loudspeaker,  
dynamic or electret  
headset.

**Remote functions:**  
Mic kill, Buzzer kill, Stage  
announcements.

**Dimensions and Weight:**  
1U x 19" x 210 mm  
3.2 Kg net.

WBS-202 Digital Wireless Intercom is made up of a base station that operates with the single channel wireless beltacks WBP-200 and WBP210 as well as with the dual channel *manager* beltacks WBP-202 and WBP-212.

This wireless base station doubles the capacity of the single channel WBS-200 maintaining full beltack compatibility. The unit features a complete double channel radio link with a capacity of up to 4 independent beltacks per block. By using a single switch button, the unit is set up in single channel configuration allowing all 8 beltacks to share the same channel party line conversation keeping their dual channel wired intercom capabilities.

The WBS-202 system includes a new dual channel *manager* beltack WBP-202 in *compact* lightweight case or the *extreme* WBP-210 in a rugged case, providing production managers with great versatility to follow simultaneous operation into two separate crews and broadcast direct messages to the PA equipment. The base can operate with a maximum of two units, one per block. The base unit can operate in isolated Master mode or connected in Slave mode to another wireless bases enabling creation of a large wireless system.

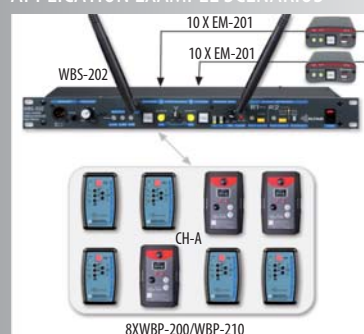
Two separated A/B party line output connectors are included to drive standard EM-201 wired beltacks or another compatible 2 or 4 wire intercom elements.

### Key Features

- Digital system, with high privacy encrypted communication.
- License free frequency operation.
- Diversity antenna system for minimum dropouts.
- Two detachable Omni antennas included allowing optional connection for directional higher range antennas.
- Free from interferences caused by IEMs, Wi-Fi or wireless mics.
- All in one wireless and wired dual channel powered base station.
- Support for up to 8 wireless beltacks and 20 wired beltacks powered from the base.
- *Compact* or *extreme* series beltack finishing with dual internal antennas.
- Clear and powerful communications. Dsp assisted contoured voice link with EchoSup feature.
- Full I/O audio expansions: Mic, Ear, SA, PGM in, party line, PA out, PGM out.

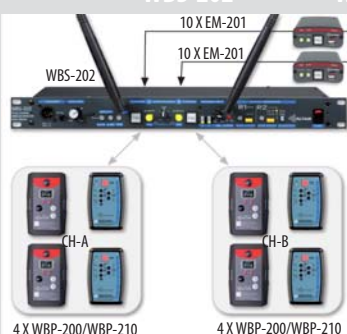


### APPLICATION EXAMPLE SCENARIOS



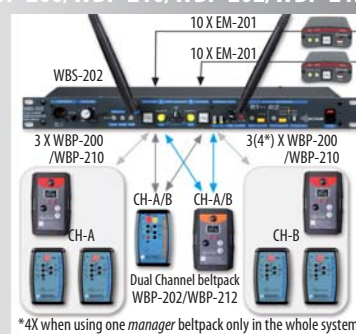
Up to 8 single channel beltacks in the same communication channel A. The base station links and powers other intercom components in both channels.

### WBS-202

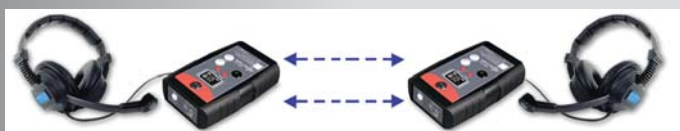


Two groups of 4 single channel beltacks working in separate communication channels A and B. The base station links and powers another intercom components in both channels.

### WBP-200/WBP-210/WBP-202/WBP-212



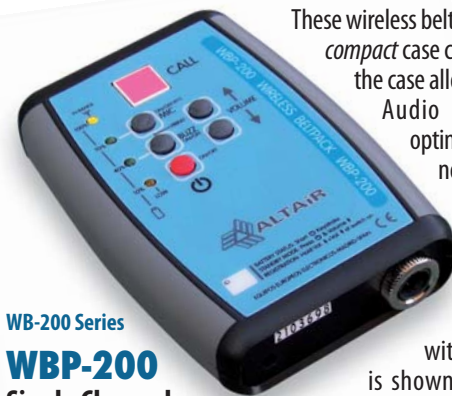
The new *manager* beltacks (only one per block) select the desired channel to talk and listen, enabling better management control of the two groups of wired and wireless beltacks.



### "TWIN" MODE

Basic wireless system. Consist of 2 WBP-210 beltacks set in "Twin" mode. This mode allows for a radio link between 2 beltacks without the need for a base station.

## Compact Series Beltpacks



**WB-200 Series**  
**WBP-200**  
Single Channel  
Wireless Beltpack

These wireless beltpacks are presented on a lightweight *compact* case concept. Antennas are included inside the case allowing a very comfortable belt fitting.

Audio circuits include dsp processing optimized for voice communication in very noisy environments. Echo suppression and related processing allow for a relaxed conversation in extended periods of use. By using low power circuitry, the beltpacks can be used up to 10 hours continuously without charging. The battery capacity is shown by a led bargraph. A vibrator is included to help receive calls in a noisy environment. Coverage, out of range information is also shown helping the user understand radio coverage and anticipating possible communication breaks.

### WBP-200 Key Features

- Compatibility: base stations WBS-200 and WBS-202.
- Ergonomic, lightweight design. Internal diversity antennas
- Battery life: 10 hour in conversation mode.
- Battery charging: WBPC-200.
- Call receive mode: up to 50 hour, stand-by use.

The Dual channel model allows conversations in both channels A and B simultaneously. This beltpack includes special functions to manage two separate working teams. Operation is intuitive; allowing selective listening of either one or a mix of both channels, as well as selective Call receive messages from both channels. A new feature, stage announce allows sending direct messages to the PA equipment from the beltpack mic.



### WBP-202 Added Features

- Compatibility: base station WBS-202.
- Dual channel wireless beltpack.
- Design based on Manager requirements.
- Separate A/B or combined A+B channel listening
- Talk channel selection: A, B or A+B
- Stage announce key for PA messages

### WB-200 Series

## WBP-202 Dual Channel Manager Beltpack

### Specifications WBP-200/WBP-202

**Powering:**  
3.6V Ni-MH battery pack.  
Life 10 h. Charge 2-3 h.

**Range:**  
50-300 m around base.

**Headset connection:**  
mini XLR-4M.  
Dynamic/electret mic.

**Call indicators:**  
Light, buzzer, vibrator.

**Remote functions:**  
Mic kill, Buzzer kill, Stage announce (WBP-202 only).

**Dimensions and Weight:**  
120x80x25 mm/175 gr.  
including battery

## Extreme Series Beltpacks

### WB-200 Series

## WBP-212 Dual Channel Wireless Beltpack

### Specifications WBP-210/WBP-212

**Powering:**  
3.6V Li-Ion battery pack.  
Life 20 h. Full charge 4 h.

**Range:**  
50-300 m around base.

**Headset connection:**  
XLR-4M, mini XLR-4M.  
Dynamic/electret mic.

**Call indicators:**  
Light, buzzer, vibrators.

**Remote functions:**  
Mic kill, Buzzer kill, Stage announce (WBP-212 only).

**Dimensions and Weight:**  
145x93x35 mm  
350 gr. including battery.

### WB-200 Series

## WBP-210 Single Channel Wireless Beltpack



The WBP-210 and WBP-212 *extreme* beltpack series are compatible with all the WB-200 wireless intercom systems and are designed for diverse extreme applications, such as live music performances, TV ENG, outdoor cinema shots and other outdoor applications requiring extended reliability.

New features are incorporated to ease use in stress conditions: Headset connector by standard size XLR-4 for a higher durability and compatibility, long life Li-Ion battery, secondary battery supply for emergency uncharged main battery, keyboard lock to prevent unwanted operations, bigger illuminated switch buttons and many more.

Preset configurations, battery remaining time, coverage and other valuable information is provided by a helpful color screen. General keyboard operation is enabled by direct keystrokes in both upper and front panels.

Other general specifications are constant all through the *compact* version WBP-200/202 beltpacks: internal diversity antennas, high listening level, number of beltpacks per base station, range, etc. These beltpacks could be combined with the *compact* series WBP-200/202 in the same installation.

### WBP-210 Key Features

- Compatibility: base stations WBS-200 and WBS-202.
- Rugged case design. Rubber corners. Internal diversity antennas.
- Battery life (main battery): 20 hours in conversation mode.
- Secondary battery: 1x Alkaline AA gives 4-6 hour operation.
- Mic and Volume buttons on upper panel.
- USB connector for easy charge and firmware updates.
- Battery charging: WBPC-210 charger.



### WBP-212 Added Features

- Compatibility: base station WBS-202.
- Dual channel wireless beltpack.
- Design based on Manager requirements.
- Separate A/B or combined A+B channel listening.
- Talk channel selection: A, B or A+B.
- Mic and Channel selection on upper panel.
- Stage announce key for PA messages.



# Beltpack Chargers | Flight Cases

WB-200 Series

## WBPC-200 Wireless Beltpack Charger

### Specifications

**Power requirements:**  
110-120/220-240 VAC/  
50-60 Hz/15 VA.

**Connectors:**  
1 to 4 beltpack plugs/2-3 h  
full charge.

**Alarms and indicators:**  
Charge, no charge, trickle  
and short-circuit.

**Dimensions and Weight:**  
84x55x155 mm/650 gr.



Charger with worldwide voltage selector allows charging of up to 4 WBP-200/202 beltpacks at a time. The charger includes indicators for charge and trickle as well as valuable warning alarms for open and short-circuit on each output.

WB-200 Series

## WBPC-210 Wireless Beltpack Charger

### Specifications

**Power requirements:**  
90-264 VAC/50-60 Hz/  
20 VA.

**Connectors:**  
1 to 4 beltpack plugs/4 h  
full charge.

**Alarms and indicators:**  
Charge, no charge and  
short-circuit.

**Dimensions and Weight:**  
84x55x155 mm/290 gr.



Charger with worldwide voltage operation allows charging of up to 4 WBP-210/212 beltpacks at a time. The charger includes indicators for charge and trickle as well as valuable warning alarms for open and short-circuit on each output.

WB-200 Series

## WBFC-200 F All in one Wireless System Flight Case

### Specifications

**Rack slot:**  
1U height for base stations,  
WBS-200/202.

**Sliding drawer:**  
1x WBPC-200 + 4xWBP200.

**Bin capacity:** 5xWAM-100  
headsets plus accessories.

**Dimensions and Weight:**  
530x520x180 mm/10.5 Kg  
net/16.5 Kg all system  
installed.



This flight case allows easy and convenient transport and operation of a complete wireless system. The case includes 1U rack slot to be used for the base station, a sliding drawer for the powered charger plus four WBP-200 beltpacks and a removable bin with capacity for up to 5 WAM-100 headsets. The upper position of the base station antennas allows for immediate operation of the wireless system just in minutes.



WB-200 Series

## WBFC-200 Four Beltpack+charger Flight Case

### Specifications

**Dimensions and Weight:**  
460x350x130 mm/3.6 Kg  
net/5.1 Kg all components  
included.



Flight case with capacity for one WBPC-200 and four wireless beltpacks WBP-200.

WB-200 Series

## WBFC-202 Eight Beltpack+two Chargers Flight Case

### Specifications

**Dimensions and Weight:**  
620x360x130 mm/4.4 Kg  
net/6.7 Kg all components  
included.



Flight case with capacity for two WBPC-200 and eight wireless beltpacks WBP-200/WBP-202.

WB-200 Series

## WBFC-210 Four Beltpack+charger Flight Case

### Specifications

**Dimensions and Weight:**  
490x350x130 mm/4.2 Kg  
net/6 Kg all components  
included.



Flight-case with capacity for one WBPC-210 and four wireless beltpacks WBP-210.

WB-200 Series

## WBFC-212 Eight Beltpack+two Chargers Flight Case

### Specifications

**Dimensions and Weight:**  
660x390x130 mm/6.2 Kg  
net/9.8 Kg all components  
included.



Flight case with capacity for two WBPC-210 and eight wireless beltpacks WBP-210/WBP-212.

# Antennas, headsets and accessories



## Specifications

**Directivity/Gain:**  
Beam-with  
85°H-60°V/+8dBi.

**Mounting:**  
Wall or mic boom stand by  
using AS-MB200 support.

**Dimensions and Weight:**  
102x95x32 mm/110 gr.

## DA-P6060 Directional Antenna

This directional high gain antenna can be used in large areas or when the base station must be placed not in the centre but in an extreme of an oval or rectangular installation. Another application includes wireless coverage by focussing a complete building or area from the outside.



## AS-MB200 Antenna Support

### Specifications

**Accessories included:**  
1x SMA-F to SMA-F  
adaptor.

**Dimensions and Weight:**  
100x110x23 mm/120 gr.

Black T shape universal support is designed for mobile or permanent antenna installations, roof vehicles, etc. Allow permanent wall mounting of 1 or 2 omni antennas (the base-station antennas) or one directional antenna DA-P6060. Includes a standard 3/8" thread for mounting on desk mount mic stands or standard mic booms in mobile applications.



- **EC3-MM** 3 meters
- **EC5-MM** 5 meters
- **EC10-MM** 10 meters
- **EC20-MM** 20 meters

Low losses coaxial extension cables  
SMA male on both ends.



## WB-200 Series

### WAM-100/2L Single Muff Lightweight Headsets

#### Specifications

**Mic:**  
Electret 6V/2Kohm.  
Noise cancelling capsule.

**Headphones:**  
150 ohm.

**Weight:**  
65 gr. including connector  
and cable .



## SYNK

Interconnection lead to be  
used when linking two or more  
WBS-200/202 base stations.  
Composition: Telephone wire  
ending with 2xRJ11-6/4 pin to  
pin connectors.

This low weight headset incorporates an  
adjustable headband and earloop to change  
between over-the-head and over-the-ear  
configuration. Includes listen volume and  
mic switch on the cable for a discrete setting.  
Fitted with mini XLR-4F.

## WB-200 Series

### WAM-100/2S Single Muff Headsets w/Rotating Microphone

#### Specifications

**Mic:** Dynamic, 200 ohm directional.

**Headphones:** 400 ohm.

**Weight:** 350 gr. including connector  
and cable.



## WB-200 Series

### WAM-100 S Double Muff Headsets w/Rotating Microphone

#### Specifications

**Mic:** Dynamic, 200 ohm directional.

**Headphones:** 200 ohm (2x400 ohm).

**Weight:** 450 gr. including connector  
and cable .



This series are equipped with a  
special rotating microphone  
boom. The mic can rotate to  
any desired position, left or  
right, including a precision  
switch when in the upper  
position. Ear caps provide an  
excellent insulation. Made of  
a special extremely durable  
PE material. Noise cancelling  
dynamic microphone. High  
acoustic isolation. Fitted with  
mini XLR-4F.

## WB-200 Series

### WAM-100/2 Single Muff Headsets

#### Specifications

**Mic:** Dynamic, 200 ohm directional.

**Headphones:** 200 ohm.

**Weight:** 245 gr. including connector  
and cable.



## WB-200 Series

### WAM-100 Double Muff Headsets

#### Especificaciones

**Mic:** Dynamic, 200 ohm directional.

**Headphones:** 200 ohm (2x400 ohm).

**Weight:** 330 gr. including connector  
and cable.



Closed earpad design.  
Unbreakable plastic  
housing.  
Noise cancelling dynamic  
microphone. Good acoustic  
isolation.  
Fitted with mini XLR-4F.



# Wired Intercom Systems

E-200 Series

## EF-200 Dual Channel Wired Intercom Master Station



### Specifications

- Power requirements:**  
90-264 VAC/ 50-60 Hz/  
50 VA.
- System Power:**  
24 VDC/1.8 A /pin2.
- Emergency power:**  
9V-PP3/ 1 hour  
(4xEM-201 system).
- System Impedance:**  
nominal 220 ohm / pin 3/  
max length 2,000 meters.
- Connections:**  
2x Intercom Line, PRG in,  
PA out, dynamic or electret  
headset.
- Remote functions:**  
Mic kill, Buzzer kill, Relay.
- Dimensions and Weight:**  
1U x 19"x210 mm  
3 Kg. net.

The EF-200 Master station unit includes the power supply for powering all the intercom components in the system. In the case of a short-circuit on any point of the line, the unit shuts down with automatic an instantaneous recovery after the fix is cleared. The system can drive up to 50 single channel beltpacks, 15 desk stations and other combinations.

Separated dual channels are provided with independent Talk, and Listen A-B balance. Linking both channels is made easy from the front panel buttons.

All the components in the system incorporate digital control to implement different task as Mic Kill, remote buzzer switch-off, latch or PTT mic switching, etc. Remote all mic switch-off helps the operator maintain a lower noise contribution on the system. Thanks to the remote buzzer function, there is no possibility of emitting undesired audible calls during public performances.

The unit features new functions as our novel *emergency supply* driven by a small battery that powers the whole intercom system in case of a drop in the electricity supply. System expandability is built in the design allowing the creation of multichannel systems by adding more Master stations with *link* connections. This feature allows free system design and in-site future upgrades.

The station includes program input (mic/line) with level attenuator assignable to any of the two channels and mic output to address PA messages from headset operator. Relay contacts are provided that follow the PA button action, letting the installer program multiple automatic tasks such as Tally, speaker switching and cue lights, among others.



### Key Features

- System capacity: up to 50 EM-201 single channel beltpacks.
- Mic Kill and Buzzer kill remote functions.
- Call and Talk illuminated push switches per channel. Selectable Listen control.
- LINK between channels and between stations in Slave mode.
- Multichannel link facilities enabling station cascades (4, 6, 8 channels).
- Removable battery, enabling complete emergency system powering on drop-outs.
- Relay contacts for remote control of Walkies, Tally lights, etc.
- Internal presets for mic gain, mic phantom, PRG interrupt, relay action, etc.



The Multi channel concept of the EF-200 wired intercom stations allows simple solutions in complex installations. In this example, a 6 channel station is easily built-up by cascading 3 dual channel stations.





## Four Channel Master Station

E-200 Series

### EF-204 Four Channel Intercom Master Station

#### Specifications

**Power requirements:**  
90-264 VAC/ 50-60 Hz/  
60 VA.

**System Power:**  
24 VDC/2.5 A /pin2.

**System Impedance:**  
nominal 220 ohm / pin 3/  
max length 2,000 meters.

**Connections:**  
Intercom: XLR-3M  
ABCD/XLR-5M+XLR-5F  
AB and CD/2xRJ45 ABCD,  
USB.

**Remote functions:**  
Mic kill, Buzzer kill,  
Relay, PA.

**Dimensions and Weight:**  
1U x 19"x250 mm  
4 Kg net.

The EF-204 Master station unit includes the power supply for all the intercom components in the system. In the case of short-circuit on any point of the line, the unit shuts down with an instantaneous recovery after the fix is cleared. System can drive up to 60 single channel beltpacks or 20 desk stations.

Separated four channels are provided with independent Talk, Listen, and Call signalling buttons. Linking between channels is made easy from the front panel buttons.

All the components in the system incorporates digital control to implement different task as Mic Kill, remote buzzer switch-off, latch or PTT mic switching, etc.

The station incorporates program input (mic/line) with level attenuator assignable to any of the four channels and mic output to address PA messages from the headset operator. Relay contacts are provided that follows the PA button action, helping the installer to automate multiple tasks as Tally, speaker switching and cue lights among others.

The station can be used as a Main station driving all the system or as a desk remote console station in complex multipoint multichannel installations.

One block of four key buttons allows the unit to be preset for instant recall of programmed setups including Talk, Listen and Call key functions to any channel combination in an intuitive manner.

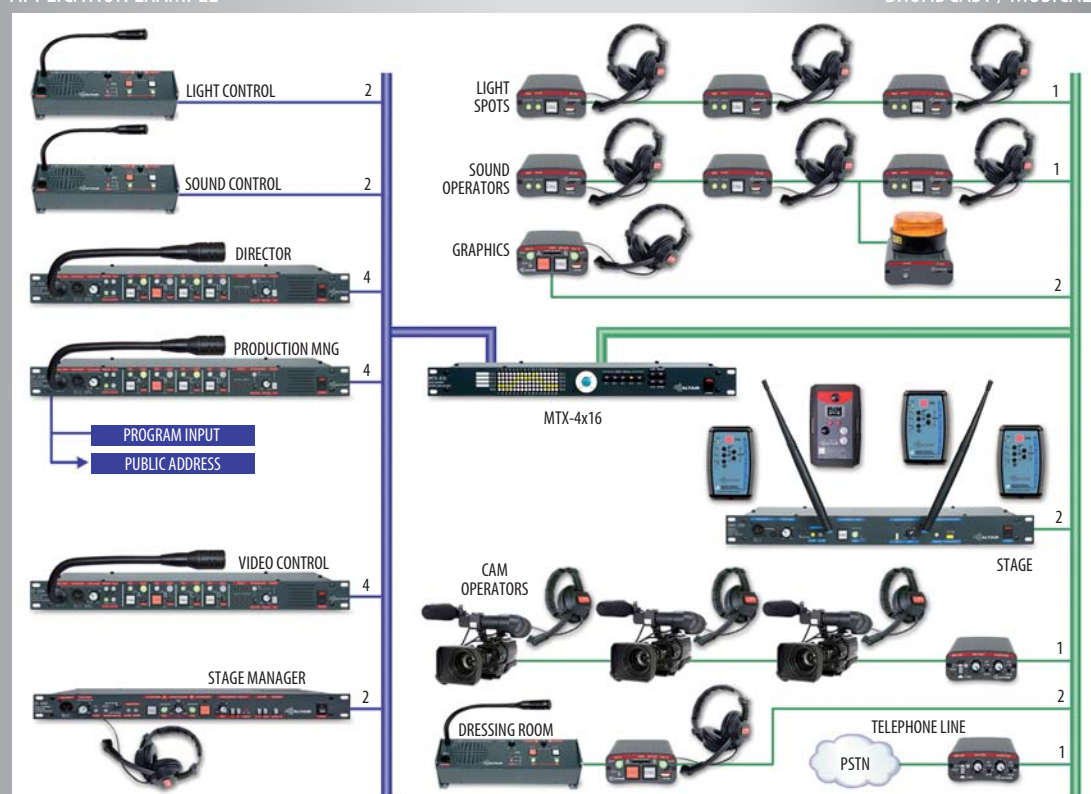
Front panel includes gooseneck panel microphone, headset connection and a high efficiency speaker.

#### Key Features

- System capacity: up to 60 EM-201 single channel beltpacks.
- Mic Kill and Buzzer kill remote functions.
- Call and Talk illuminated push switches per channel. Adjustable Listening control.
- LINK between channels.
- Expansion connectors for additional EF-204 cascading.
- Relay contacts for remote control of Walkies, Tally lights, etc.
- Four programmable key buttons.
- Panel access for advanced setups: Mic gains, phantom power, PRG interrupt, relay action, etc.
- Easy cabling to nearby slave stations by using cat-5 wiring.

#### APPLICATION EXAMPLE

#### BROADCAST / MUSICALS



# Intercom Beltpacks

E-200 Series

## EM-201 Single Channel Beltpack

### Specifications

**Power requirements:**  
12-32V, nom. 24V/ 35 mA.

**Connections:**  
Intercom Line XLR-3M/XLR-3F per channel.  
Headset XLR-4M.

**Remote functions:**  
Mic kill, Buzzer kill.

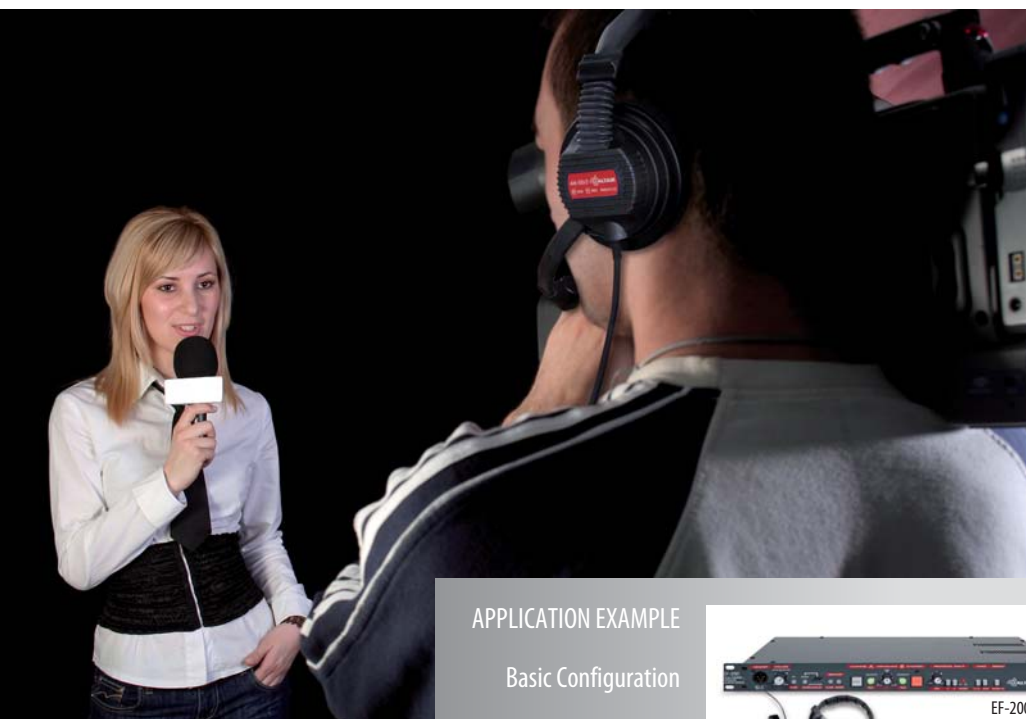
**Dimensions and Weight:**  
84X38X105 mm  
235 gr net.



### Key Features

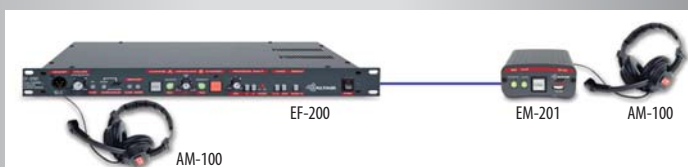
- Metallic (Aluminium) low weight enclosure. Oval shaped. Plastic clip.
- Mic on/off push switch logic function (push to talk or latching).
- Remote Mic-off (Mic kill) operation.
- Remote Buzz-off (Buzz kill) operation.
- Bright CALL switch with signalling led.
- Microphone limiter easing comfortable communications.
- Internal presets for mic gain, mic phantom, limiter disabled, etc.

The single channel beltpack unit was designed for intensive use in portable applications. An unbreakable plastic belt clip enables easy and secure suitability. Call signalling is dual, visual and audible for improved adaptability. This unit can be configured for dynamic or electret mics enabling the use of different types of headsets and hand-free earpieces in the market.



### APPLICATION EXAMPLE

#### Basic Configuration



E-200 Series

## 5P3-202 5pin to 3pin Splitter

### Specifications

**Connections:**  
Channel A and B XLR-3M+XLR-3F | Channel A/B XLR-5M+XLR-5F.

**Dimensions and Weight:**  
84X38X105 mm/225 gr. net.



Accessory box for 2 channel intercom 5 pin wiring. It combines two 3 pin wires into one 5 pin wiring, or splits one 5 pin wire into 3 pin wiring. Extension (link) connectors and power led per channel.

E-200 Series

## EM-202 Dual channel beltpack

### Specifications

**Power requirements:**  
12-32V, nom. 24V/ 50 mA.

**Intercom Lines:**  
XLR-3Fx2 (3pin version)  
or XLR-5M+XLR-5F (5pin version).

**Headset connection:**  
XLR-4M.

**Remote functions:**  
Mic kill, Buzzer kill.

**Dimensions and Weight:**  
84X38X105 mm  
270 gr net.



### Key Features

- Dual channel beltpack with listening balance A, A+B, B.
- Metallic (Aluminium) low weight enclosure. Oval shaped.
- Mic on/off push switch logic function (push to talk or latching).
- Remote Mic-off (Mic kill) and remote Buzz-off (Buzz kill) operation.
- Microphone limiter easing comfortable communications.
- External access for configuration presets: mic gain, mic phantom, limiter disabled, etc.
- Bright Call switches, one per channel.

The ALTAIR EM-202 beltpack, compatible with the E-200 intercom series, allows independent or simultaneous communication with both channels A and B. Listening balance is made by means of a miniature fader allowing a precise balancing between channels, so it is possible to talk with a channel while listening to both channels at a time. Call signaling is dual, visual and audible for improved adaptability.

The beltpack is designed for an intensive use in portable applications. An unbreakable belt clip enables easy and secure suitability. This unit can be set for dynamic or electret mics enabling the use of different types of headsets and hand-free earpieces in the market. This beltpack is available in two different versions: EM-202-3P fitted with a 3 pin connector per channel and EM-202-5P with 5 pin connectors (both channels in the same connector)





## Remote Desk Station

The ES-200 can be mounted as an angled position desk station or rack and flush mounted using the included ears. The unit allows full duplex hands-free communication with both channels and is powered remotely from the intercom system.

Permanent gooseneck panel microphone and internal loudspeaker optimised for voice communication allows clear communications in moderate noisy environments.

### E-200 Series

## ES-200 Dual Channel Desk Station

### Specifications

**Power requirements:**  
12-32V, nom. 24V/ 70 mA.

**Connections:**  
2x Intercom Line XLR-3M/XLR-3F per channel.

**Remote functions:**  
Mic kill, Buzzer kill, Mic-speaker activation.

**Dimensions and Weight:**  
2U X 19" | 310X89X70 mm  
1,6 Kg. net.

The headset connection disables automatically the mic and the speaker when privacy is needed.

Besides the normal intercom applications, the unit features a remote message function as well as a Mic-On-Remote function both remotely controlled by the Master station.

This unit is a complement of the EF-200 master station when the panel mic and speaker listening are a must.

### Key Features

- Internal loudspeaker and gooseneck microphone
- Automatic disconnection of the mic-speaker when headset is used
- Mic latched or PTT –push to talk–logic function
- Remote mic and buzzer kill functions
- High buzzer sounding with volume control
- Microphone limiter easing comfortable communications
- Feedback controls on the front panel
- Programmable functions: Remote speaker and mic activation.



## Universal Interface

This single channel unit changes the bidirectional intercom line into one-direction IN/OUT signals. Wide range mic or line level signals can be accommodated to/from the intercom system. Output signal from the intercom line is easily adjustable to adapt for external operation as recording, PA, etc. The unit allows interfacing to another non compatible intercom systems.

This interface is also useful to connect an entire intercom system to a telephone line allowing external calls to be shared within the intercom operators. The unit is especially suitable for interfacing professional CAMS equipped with CCU to the intercom lines.



### E-200 Series

## 4W2-200 Universal 4W/2W Interface

### Specifications

**Power requirements:**  
12-32 V, nom. 24V/ 25 mA.

**4W Connection:**  
balanced XLR-4M.

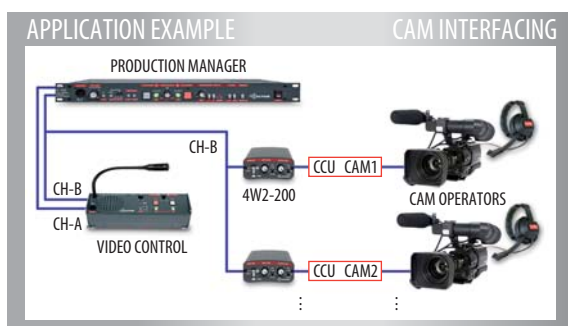
**Intercom Line:**  
XLR-3M.

**Telephone line:**  
Standard RJ-11

**Dimensions and Weight:**  
84X38X140 mm  
330 gr net.

### Key Features

- Unit is remotely powered from the Master Station.
- Cam interfacing trough CCU connections.
- Telephone line interfacing.
- Interface for non compatible intercom systems.
- Wide range level adjustments.
- IN/OUT are transformer balanced ensuring clean signals and an improved EMI immunity.



# Bluetooth Extension

E-200 Series

## EB-200 Bluetooth Extension

### Specifications

#### Power requirements:

12-32V, nom.  
24V/ 100 mA.

#### Frequency band:

ISM 2400 Mhz/Class I.

#### Antenna:

One small antenna  
included.

#### Connections:

XLR-3M+XLR-3F. USB  
firmware update.

#### Dimensions and Weight:

84X38X105 mm  
250 gr net.



The Bluetooth EB-200 station is compatible with the ALTAIR E-200 cable based intercom systems. This new first on the market station allows the operation of Bluetooth (BT) devices into the communication system. Operation and connection are the same as a beltpack, just connect to the line and go.

The device can be used in two main modes:

**Headset mode** The intercom signal is transmitted in full duplex to any BT compatible headset.

**Interface mode** The intercom signal is transmitted to any BT compatible gateway device. In this mode, a mobile phone call can be shared within the intercom system.

Another seldom used feature could be the radio linking of two nearby intercom system by using two of these extensions.

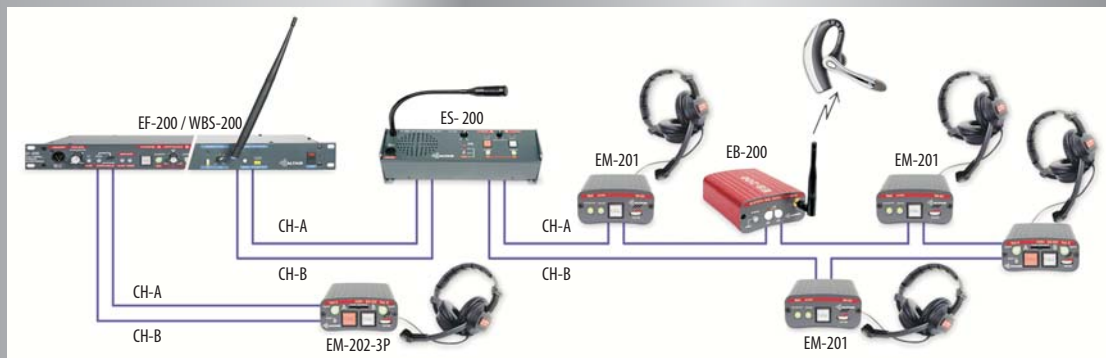
This station includes mic and ear level setting to accommodate a broad range of devices.

Application includes wireless replacement of a wired beltpack and headset, telephone interface from mobile phones and short range wireless intercom system among others.

When range is a premium feature, it is recommended to use class I Bluetooth devices.

### APPLICATION EXAMPLE

EB-200



Note: The BT extension links the intercom signal to a maximum of one compatible headset.

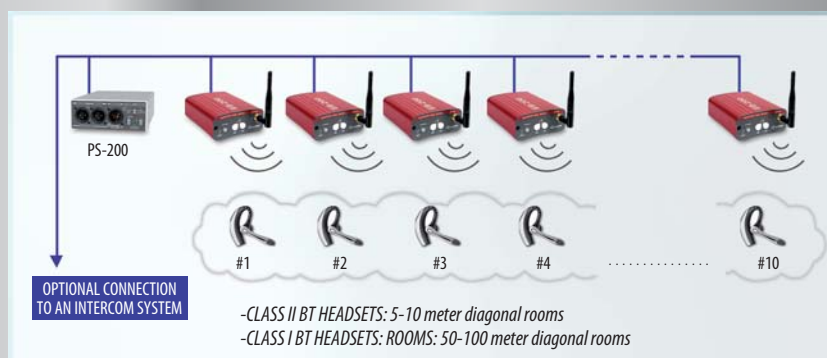


### Key Features

- Bluetooth Class I device. Maximum theoretical range is 100 meter.
- Connection to wired intercom systems ALTAIR E-200 series.
- Radio link to Bluetooth headsets. One link per station maximum.
- Allows mobile phones to be easily interfaced.
- Two wired intercom systems can be *wirelessly* interconnected.

### SHORT RANGE WIRELESS SYSTEMS

By using some EB-200, headsets and a small PS-200 power supply, we can deploy a small wireless network in crowded rooms where permanent contact and easy to wear discrete headsets are highly valued.





# Flash lights, headsets and accessories



## E-200 Series

### FL-200 Buzzer Flash Light

#### Specifications

**Power requirements:**  
20-32V, nom. 24V/ 100 mA.  
**Connections:** Intercom Line  
XLR-3M+XLR-3F.  
**Dimensions and Weight:**  
84X88X105 mm/300 gr net.

This portable unit adds more versatility to the ALTAIR E-200 series by helping recognize a Call in noisy and stressed complex environments by the use of a high efficiency Xenon flash light. The unit is powered remotely as a beltback unit with extension connectors for daisy chaining. A Buzzer function is included with remote Buzz kill and panel selector.

#### Key Features

- Metallic (Aluminium) low weight enclosure. Oval shaped
- Light, Buzzer or both operation modes selectable.
- Remote Buzz-off (Buzz kill) operation
- High luminous intensity Xenon strobe with 360° beam
- Call time extension helps reminder

The PS-200 is designed for powering small intercom systems. The unit includes connectors to drive

a dual channel system in both 3 and 5 pin wire configurations. A link switch allows to join both channels when desired. The remote function BUZZ KILL is included to disable all the buzzers in the system. This unit does not include headset connection.



#### Key Features

- Stainless steel robust case.
- Dual channel power supply.
- Link A+B and Remote buzz kill switches.
- Universal AC input range power supply.
- Rack mount ears as an accessory option.

## E-200 Series

### PS-200 Intercom Power Supply for Basic Systems

#### Specifications

**Power requirements:**  
90-264 VAC/ 50-60 Hz/  
50 VA.  
**System Power:**  
24 VDC / 1,8 A.  
**Connections:**  
XLR-3M per channel+XLR-  
5M (both channels in a  
connector).  
**Dimensions and Weight:**  
1U x 1/4 19"  
(42x110x150 mm)  
650 gr net.



## E-200 Series

### EM-201-FL Single Channel Beltback With Beacon Light

#### Specifications

**Power requirements:**  
20-32V, nom. 24V/ 140 mA.  
**Connections:**  
Intercom Line  
XLR-3M+XLR-3F.  
**Dimensions and Weight:**  
84x88x105/320 gr. net.

This units includes all the functionalities of the EM-201 beltback plus the FL Flash beacon light properties in a compact metal case.



This panel allows mounting on a 1U rack up to 4 beltback size elements as EM-201, EM-202, 4W2-200 and EB-200.

## E-200 Series

### PC-4-200 Beltback Panel

## E-200 Series

### AM-100/2L Single Muff Lightweight Headsets

#### Specifications

**Mic:**  
Electret 6V/2Kohm.  
Noise cancelling capsule.  
**Headphones:**  
150 ohm.  
**Weight:**  
65 gr. including connector  
and cable .



## Serie E-200

### AM-100/2S Single Muff Headsets w/Rotating Microphone

#### Specifications

**Mic:** Dynamic, 200 ohm directional.  
**Headphones:** 400 ohm.  
**Weight:** 350 gr. including connector  
and cable.



## Serie E-200

### AM-100 S Double Muff Headsets w/Rotating Microphone

#### Specifications

**Mic:** Dynamic, 200 ohm directional.  
**Headphones:** 200 ohm (2x400 ohm).  
**Weight:** 450 gr. including connector  
and cable .



This series are equipped with a special rotating microphone boom. The mic can rotate to any desired position, left or right, including a precision switch when in the upper position. Ear caps provide an excellent insulation. Made of a special extremely durable PE material. Noise cancelling dynamic microphone. High acoustic isolation. Fitted with XLR-4F.

## Serie E-200

### AM-100/2 Single Muff Headsets

#### Specifications

**Mic:** Dynamic, 200 ohm directional.  
**Headphones:** 200 ohm.  
**Weight:** 245 gr. including connector  
and cable.



## Serie E-200

### AM-100 Double Muff Headsets

#### Especificaciones

**Mic:** Dynamic, 200 ohm directional.  
**Headphones:** 200 ohm (2x400 ohm).  
**Weight:** 330 gr. including connector  
and cable.



Closed earpad design. Unbreakable plastic housing. Noise cancelling dynamic microphone. Good acoustic isolation. Fitted with XLR-4F.

# Programmable 4X16 Intercom Switching Matrix

## MTX-416 Programmable 4x16 Switching Matrix



### Specifications

**Power requirements:**  
90-264 VAC/ 50-60 Hz/  
20 VA.

**System Power:**  
Taken from the Master  
stations.

**Current capacity:**  
1A/30V DC max per  
connection.

**Connections:**  
Audio-Intercom 20x 3pin  
sockets/expansion by  
IDC/control by RJ45/PC  
USB.

**Bandwidth/Crosstalk:**  
DC-20KHz/>80dB.

**Dimensions and Weight:**  
1Ux160 mm  
5 Kg net.

Designed for large systems, the ALTAIR MTX-416 is a programmable intercom switching matrix that allows instant recall of up to 5 different presets. Each preset determines the allocation of up to 16 intercom lines into the 4 intercom channels. The matrix operates in vertical and exclusive mode, so any intercom element or branch connected, e.g. to line 1, can be assigned exclusively to one of the 4 available channels.

Power to the lines is taken from the 4 intercom channels that are powered from the respective Master stations. The design incorporates input and output link connectors for easy X and Y expansions of the number of channels and or lines. An 8 ch to 32 lines matrix system can be done by using 4 units.

The use of a switching matrix in a medium to large size intercom system allows for daily instant reorganization of the full intercom functionality and the ability for easy reconfiguration by the system administrator.

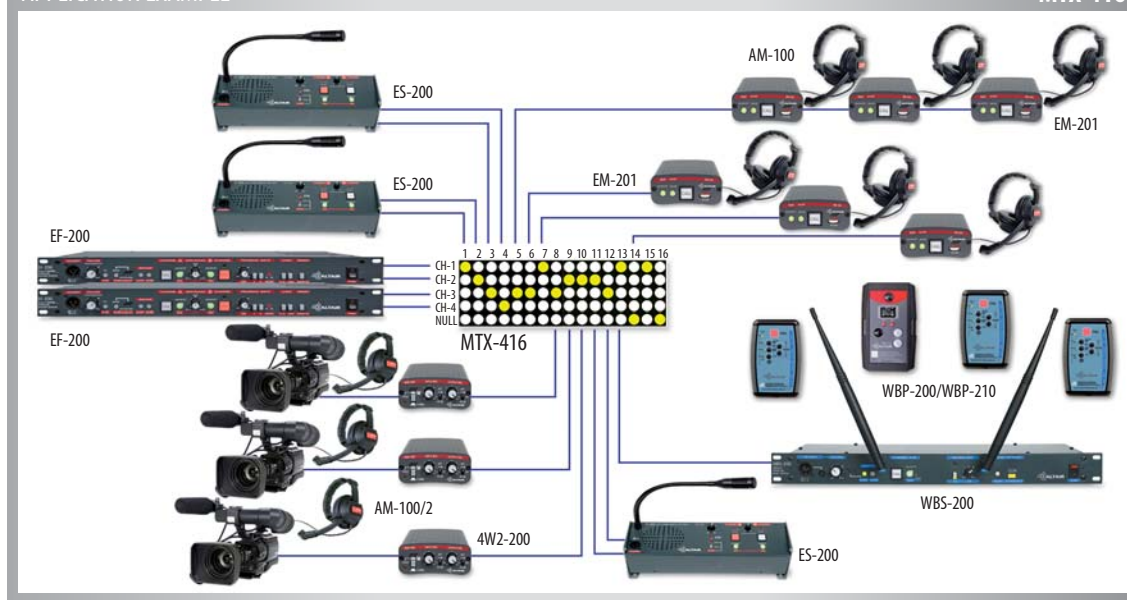
The unit can also be used as a 4 in to 16 out Audio Matrix, or as a 16 in to 4 out matrix selector when used in reverse mode, operating in horizontal exclusive mode.

### Key Features

- 4 intercom channels to 16 lines switching.
- 5 instant recall presets.
- Easy to use and simple to operate.
- Daisy chain expansion in Vertical & Horizontal.
- USB interface. Logic external control.
- Compatibility to any party line intercom system.
- Operation as 4x16 or 16x4 Audio Matrix.
- Rear connectors by Phoenix TM sockets.

### APPLICATION EXAMPLE

### MTX-416





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