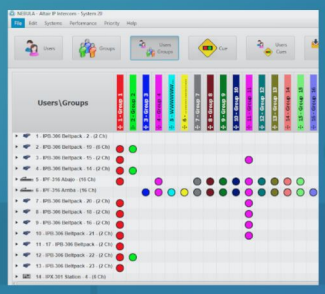
ALTAiR





IPcom matrix-type IP-based intercom system

AUDIO / BROADCAST / COMMUNICATION PRODUCTS

ALTAIR IPcom

E-300 Series

THE MATRIX-TYPE COMMUNICATION SYSTEM YOU NEED, AT LAST AFFORDABLE

It´s all about trust.

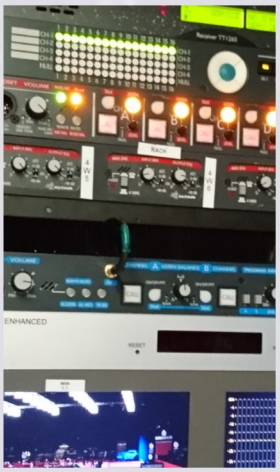
When you choose ALTAIR, you choose to benefit from **over 30 years of experience** in the live entertainment and broadcast industries.

Renowned for their robustness, reliability and ease of use, our products have always been great allies of professionals, particularly in the field of communications, a sector in which we have specialised for years.

After more than two decades of experience manufacturing intercom systems, ALTAIR takes a huge step forward with the launch of the new "**IPcom**", a global, decentralised, IP-based matrix communications system.

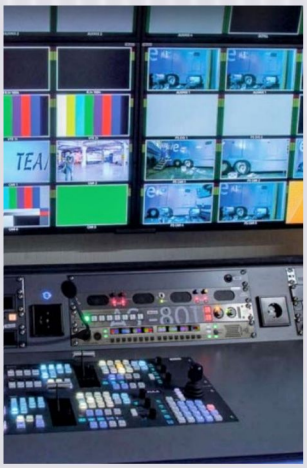
Discover in this short catalogue all the current references and potential of this new system and **let our engineering team help you to configure the most advantageous option for your needs**.

Finally, the matrix intercom system you need, at a price you can afford.











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IPcom
E-300 Series

A different Concept of Matrix Intercom...

How does it work?

IPcom is a decentralised IP-based global communications system. This means **it does not require a dedicated physical matrix** to operate. Instead, all you need to run an *IPcom* system is a managed switch with enough ports, capable of providing PoE (Power over Ethernet).
Even if PoE is not available, all *IPcom* user panels, beltpacks and interfaces can be externally powered using our specific adaptor "*ACPA-IP*".

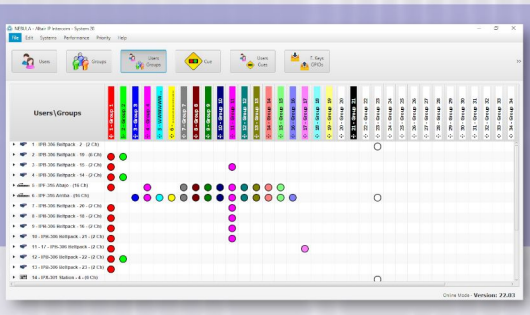
IPcom can coexist in a LAN with other systems and technologies, allowing static and dynamic IPs. Furthermore, setting up a simple *IPcom* network feels absolutely "plug & play": just connect your devices to the switch and you are ready to work in a basic 2-channel partyline mode.
In addition, this new system has been designed with interconnectivity in mind, with ***AES67*** support via a specific interface announced as the next addition for the series.

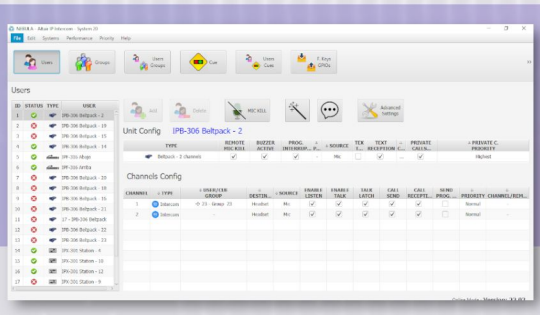
As for the matrix itself, we´ve previously explained that there´s no such thing.
All devices in the network collaborate in a "**distributed intelligence**" environment, acting each one of them as a backup of the entire system configuration.

NEBULA
ALTAIR *IPCom* Control Software

Configuration Software

NEBULA is the tool from which we create the channel assignments, adjust specific parameters and priorities for the different devices in the system, create cue-light signals, manage GPIO actions and much more.





If something in this system were to be called "the matrix", it would be *NEBULA* software itself.
We´ve developed this software tool aiming to "keep things simple" without loosing any functions.
The result is an amazingly flexible system that is at the same time powerful and easy to use.

NEBULA Configuration Software **is a license-free tool.**

ALTAiR

IPcom
E-300 Series

"IPF-316"
16-Key, 32-Channel Intercom User Panel



Main Features

- 16 channel keys to control **up to 32 channels** (2 pages)
- Each channel can be assigned to different tasks: *Partyline* group, *one-to-many* group, cue-lights, remote control of unmaned devices in the network, GPIO and private call.
- **GPIO** actions can be executed from the station thanks to its GPIO interface (see rear panel).
- ***Cue-Lights*** function available (send/receive).
- **Built-in speaker**. ***Gooseneck*** **microphone** supplied with the unit.
- Powered via "PoE". Additional connector for redundant powering (24V DC, 0'4A)
- Programmable function Keys (assigned to GPIO or others)
- Analogue LINE input & output

Front Panel



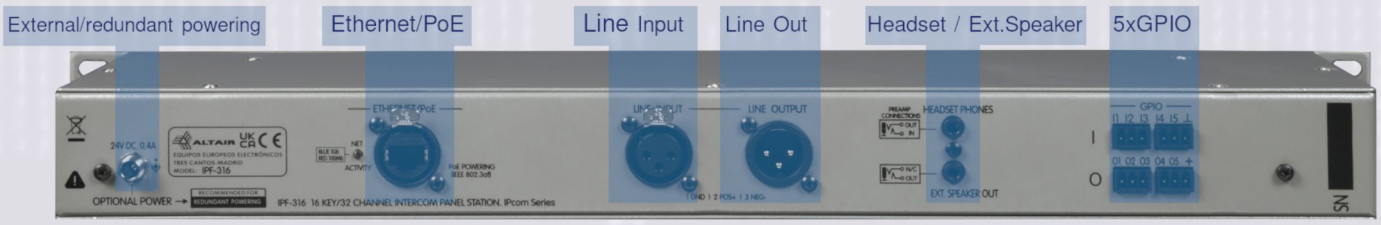
MIC & Headset Connectors + Keys

"Channel" Keys & Displays

Programmable Function Keys, MENU...

Speaker

Connections - Rear Panel



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"IPB-306"

6-Channel Intercom User Beltpack / Desktop Unit

IPcom
E-300 Series



Main Features

- 2 encoder keys & 2 "TALK" keys to control **up to 6 channels** (3 pages). Beltpack can be set to "2 channel, 4 channel and 6 channels" for workflow optimization (to avoid transit through empty pages).

- ***Cue-Lights*** function available (send/receive).
- Each channel can be assigned to different tasks: *Partyline* group, *one-to-many* group, cue-lights, remote control of unmaned devices in the network, GPIO and private call.
- **Built-in speaker** and **high-gain panel microphone** supplied with the unit.
- Powered via "**PoE**" for easy installation.
- ***BT Technology*** interface for wireless headsets.
- The device can be used as a regular beltpack or also as a desktop unit.
- Also available as ***IPW-306***, wall-mount/desktop communication console.
- When PoE is not available in the LAN or for a redundant power supply "**ACPA-IP**" adaptor (24V DC, 0'4A) is available in our catalogue.



ACPA-IP power adaptor

Front Panel View

-PANEL MIC

- CHANNEL A Keys: (control of channels 1, 3, & 5) Talk key & rotating encoder key (level + actuation)



- CHANNEL B Keys: (control of channels 2, 4, & 6) Talk key & rotating encoder key (level + actuation)

- Colour display: While active, shows TALK & LISTEN status for all channels (in the picture, beltpack is set as "2-channel")



IPW-306
desktop/wall unit

Connections - Rear View

Rear Side features a useful "NET Status" led, plus the *ETHERCON* connector (DATA + PoE) and the 4M-XLR headset connector (*IPB-306* beltpack is compatible to any 4F-XLR ALTAIR headset). In addition, a 24V DC port is included for external powering or for powering redundancy.



ALTAIR

IPcom
E-300 Series

"IPX-301"

4W & 2W Intercom & Audio Interface – Single Channel

Main Features



- *IPX-301* Interface acts as a multi-purpose bridge between Altair *IPcom Series* systems and the following types of systems:
- Two-wire cable-based and wireless intercom systems (2W)
- Standard systems based on four-wire input/output analog audio (4W)
- Analogue professional audio devices. Balanced In/Out

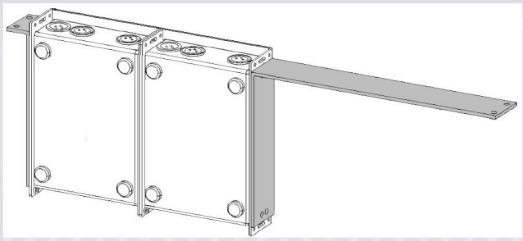
IPX-301 offers two operation modes in its 2W (two-wire) section: *Beltpack Mode* and *Base Mode*.

- *Beltpack Mode*: In this mode the *IPX-301* unit is capable of powering up to 5 wired beltpacks without the need for any additional power or master station.
- *Base Mode*: This mode is used to connect to complete powered systems such as wired/wireless

The device is manufactured in a robust case whose dimensions have been designed so that up to 4 units can be mounted together in a single 1U rack space, using just one "**OR-1-301**" mounting accessory.
The *IPX-301* Interface model is powered remotely via PoE , either directly from the network switch or via an external PoE source. In addition, *IPX-301* features a 24V DC input equipped with anti-pull safety connector on the front panel. This can be used as the main power source if PoE is not available, or as a redundant power supply. Finally, *IPX-301* is equipped with 1 x GPI and 1 x GPO for remote control of lights and other mechanisms.



IPX-301 front and rear view



OR-1-301 mounting accsessory set. Allows up to 4 x *IPX-301* or *IPX-302* in 1 RU space (image shows installation of just 2 devices)

"IPX-302"

2 x 4W Intercom & Audio Interface –Dual Channel



IPX-302 front panel

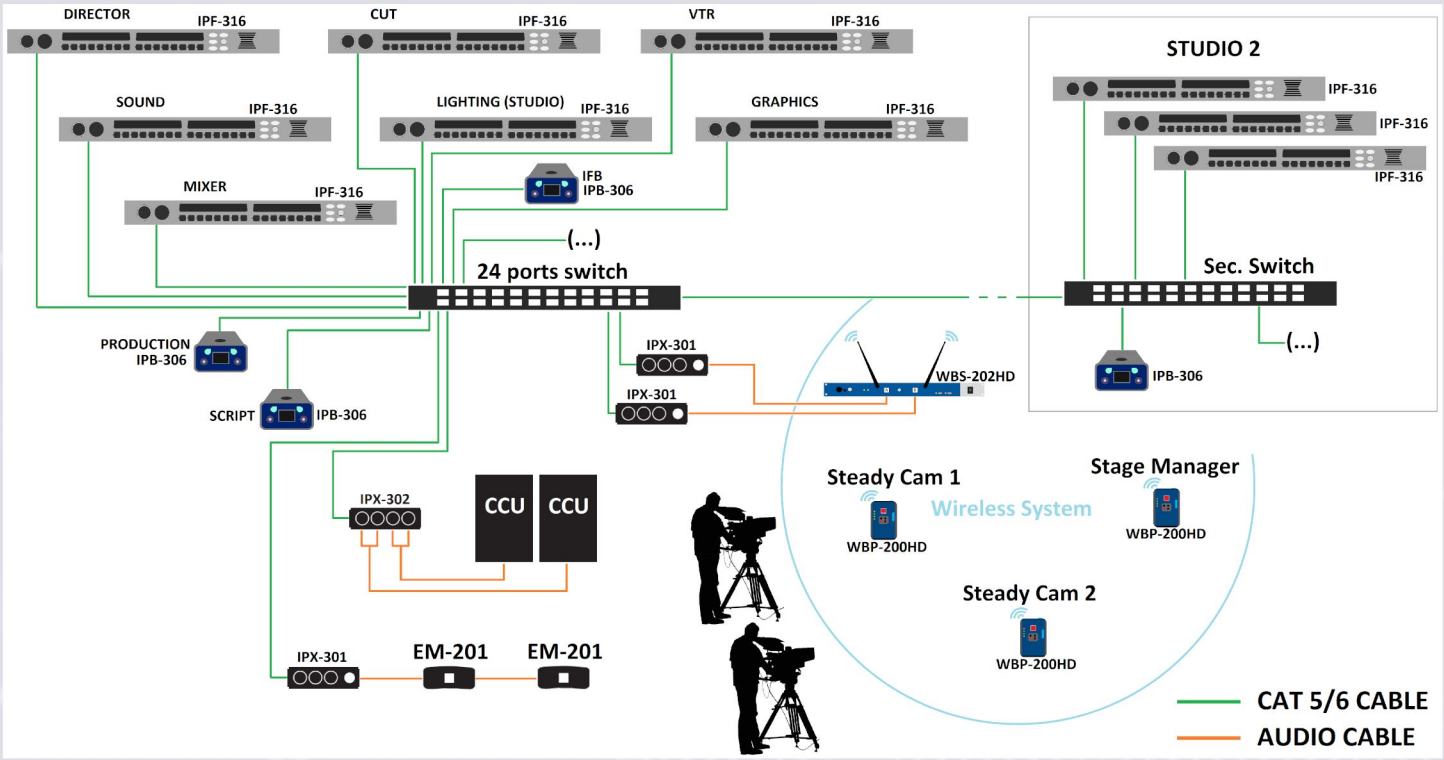
IPX-302 is a great addition to our portfolio, especially useful for those who wish to implement several studio cameras CCUs in an *IPcom* network.
In addition, integrators will benefit from this new model, as the cost-benefit optimization of having two interfaces in a single box will translate into a more compressed price for this product. Furthermore, this "two-in-one" interface facilitates the installation process and reduces space usage.
IPX-302 includes 2 x GPIO
Compatible with *OR-1-301* mounting accessory

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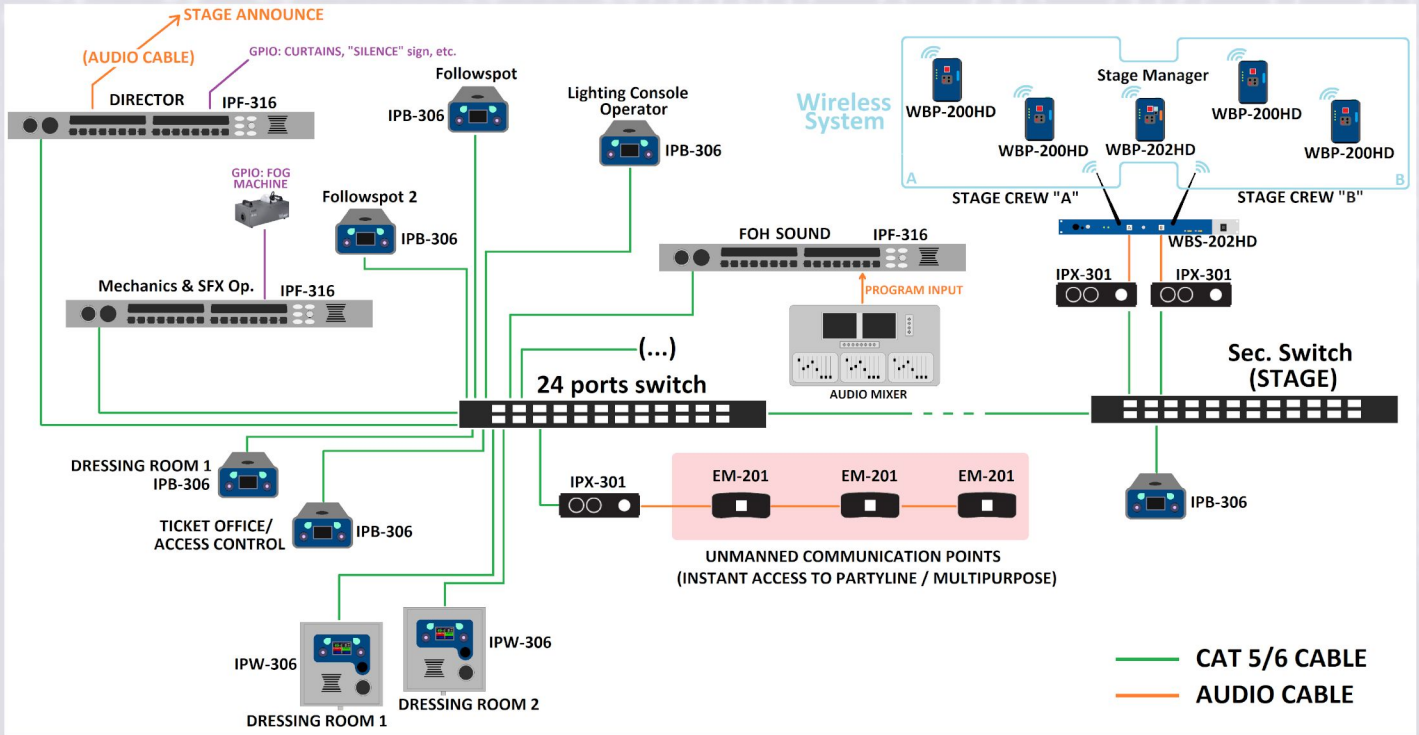
IPcom
E-300 Series

Application Examples - Diagrams

TV Studio - Broadcast



Musical - Theatre



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All technical specifications and models subject to change without notice.
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IPcom
E-300 Series

"IPA-304"

4 x Streams IN/OUT AES67 Interface

Main Features



IPA-304 Interface unit acts as a bridge between ALTAIR IPcom systems and other AoIP audio systems based on different protocols.
This interface uses the ***AES67*** protocol, based on the AES standard, to allow the compatibility with different systems:

- Intercom systems featuring *AES67* compatibility.
- Audio streaming systems featuring *AES67* compatibility.

The device is built in a robust metal case, whose dimensions have been designed so that up to four units can be installed in a 1U rack space using the *"OR-1-301"* accessory kit (sold separately).

Like the rest of IPcom Series devices, *IPA-304* is powered remotely via PoE (Power over Ethernet), either directly from the network switch or via an external PoE source. In addition, it includes a 24V DC input with anti-pull safety connector, which can be used as a main power supply if PoE is not available, or as a redundant power supply.

IPA-304 Interface connects via an Ethernet network LAN supporting 100/1000 Mbps.
Of course, both an IPcom system and some *AES67* compliant streams must be present on the LAN.
The device will detect the present *AES67* streams and will convert them to Altair *IPcom* streams.
On the other, IPA-304 will generate up to four *AES67* streams.



IPA-304 *connectors* panel

The unit converts digital audio streams present on the LAN and for this reason it does not feature any analog or digital external ports.

NEBULA Configuration Software will be used to assign intercom groups, define the different audio levels and set up all the parameters of the unit.

Up to 6x4 intercom groups (*Party-Line*, *One-To-Many*) within the *IPcom* domain can be adressed to up to 4 *AES67* streams at the same time. The parameters of each of these 24 groups can be adjusted individually.
The unit includes two pairs of GPIO IN/OUT ports to be used along the *IPcom* system.
Finally, *IPA-304* can be remotely controlled from other devices in the IPcom network, such as user panels or beltpacks.

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AIRP4CK

IPcom
E-300 Series

4-Channel Wireless Intercom Beltpack / Desktop Unit

ALTAIR "**AIRP4CK**" wireless beltpack joins the IPcom product family, bringing our tested wireless technology and making it available within an ALTAIR's *IPcom* network.



Main Features

- 2 encoder keys & 2 "TALK" keys to control **up to 4 channels** (2 pages). Beltpack can be set to "2-channel or 4-channel" for workflow optimization (to avoid transit through empty pages).
- ***Cue-Lights*** function available (send/receive).
- Each channel can be assigned to different tasks: *Partyline* group, *one-to-many* group, cue-lights, remote control of unmaned devices in the network, GPIO and private call.
- **Built-in speaker** and **high-gain panel microphone** for desktop use.
- Up to 12H autonomy, instantly replaceable batteries. 4-beltpack direct contact charger.
- **HD audio** quality (100Hz-7KHz)
- Up to 600m separation between users (diameter around antenna unit)
- Up to 12H autonomy, instantly replaceable batteries.
- 4-beltpack direct contact charger ***IPC-44***

IPD-308 Antenna Unit



- **Digitally encrypted**. Safe communications.
- **IP-based** antenna unit
- Allows the operation of up to 8 ***AIRP4CK*** beltpacks
- Remotely powered via **PoE**. RJ45 connection.
- Provides a 600m range (diameter around antenna unit)
- External antenna ports, multiple antenna accesories.
- Several antenna units can work in the same area providing connectivity for up to 40 ***AIRP4CK*** units
- Remote and local registration of beltpacks.
- Local and remote indicators: low batt, link, low range...
- Standalone or in-system operation

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AUDIO / BROADCAST / COMMUNICATION PRODUCTS



ALTAIR - Equipos Europeos Electrónicos S.A. Avenida de la Industria, 50 - 28760, Tres Cantos, Madrid (SPAIN)
+34 91 804 32 65 - www.altairaudio.com / altair@altairaudio.com