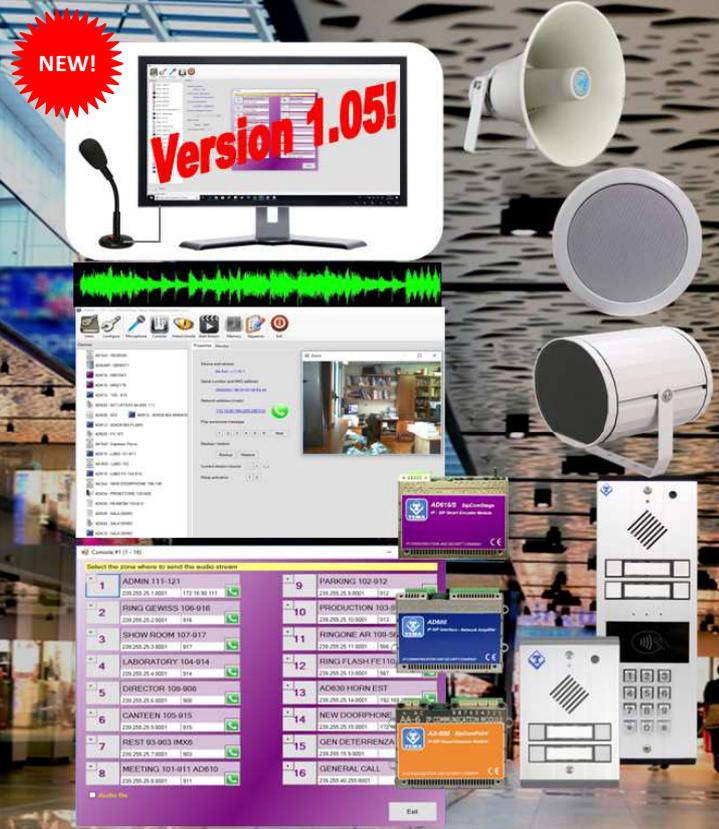


- **Centralized management of all Audio and Intercom IP-SIP terminals**
- **Multicast encoder for microphone announcements and audio files**
- **Turn a PC into a console control of the entire IP audio plant system**
- **No limits to the number of ADAM that can be installed on the network**
- **Over 1.000 of manageable terminals**
- **Scheduling for sending audio files at pre-established times and days**
- **SIP, P2P, Multicast calls**
- **Camera visualization of terminals**



## Audio Over IP LAN network Innovative Solutions, SIP integrated

ADAM Audio Domain & Access Management is a software that can be installed on a Windows PC and with a practical user interface transforms it into a complete centralized Console for monitoring and management of all AD600 series IP-SIP audio systems and AA-500/AA-600 Intercom series.

Through a click will be shown on screen all the devices connected to the LAN network, with the description assigned by the user to each device, the IP address and other useful information.

With ADAM it is possible to interrogate and program each terminal, update its software release, adjust the audio volume, activate audio messages contained in the remote device, and much more.

### Announcements Paging and sending of Multicast audio

ADAM is also an Encoder in Multicast channels capable of transmitting announcements from a local microphone connected to the PC on different priority multicast channels, or programmed reception zones, thus transforming the PC into a multi-zone microphone console for the transmission of announcements or pre-recorded audio files. The sending operation can be performed in a few seconds and is interrupted with a simple click.

### Audio Quality

The audio of the digital transmission can be chosen in a range up to 44.1KHz for maximum sound quality over LAN.

### Software developed in Italy

The software is entirely developed in Italy by TEMA which guarantees the upgrade of the performances and the support over time.

*With ADAM, creating PA paging systems on the LAN has never been so easy. The use of the existing infrastructure avoids the laying of expensive cables and makes the installation of the system fast, inexpensive and scalable, with a noticeable increase in the quality of the transmitted audio.*

### The TEMA complete solutions offer

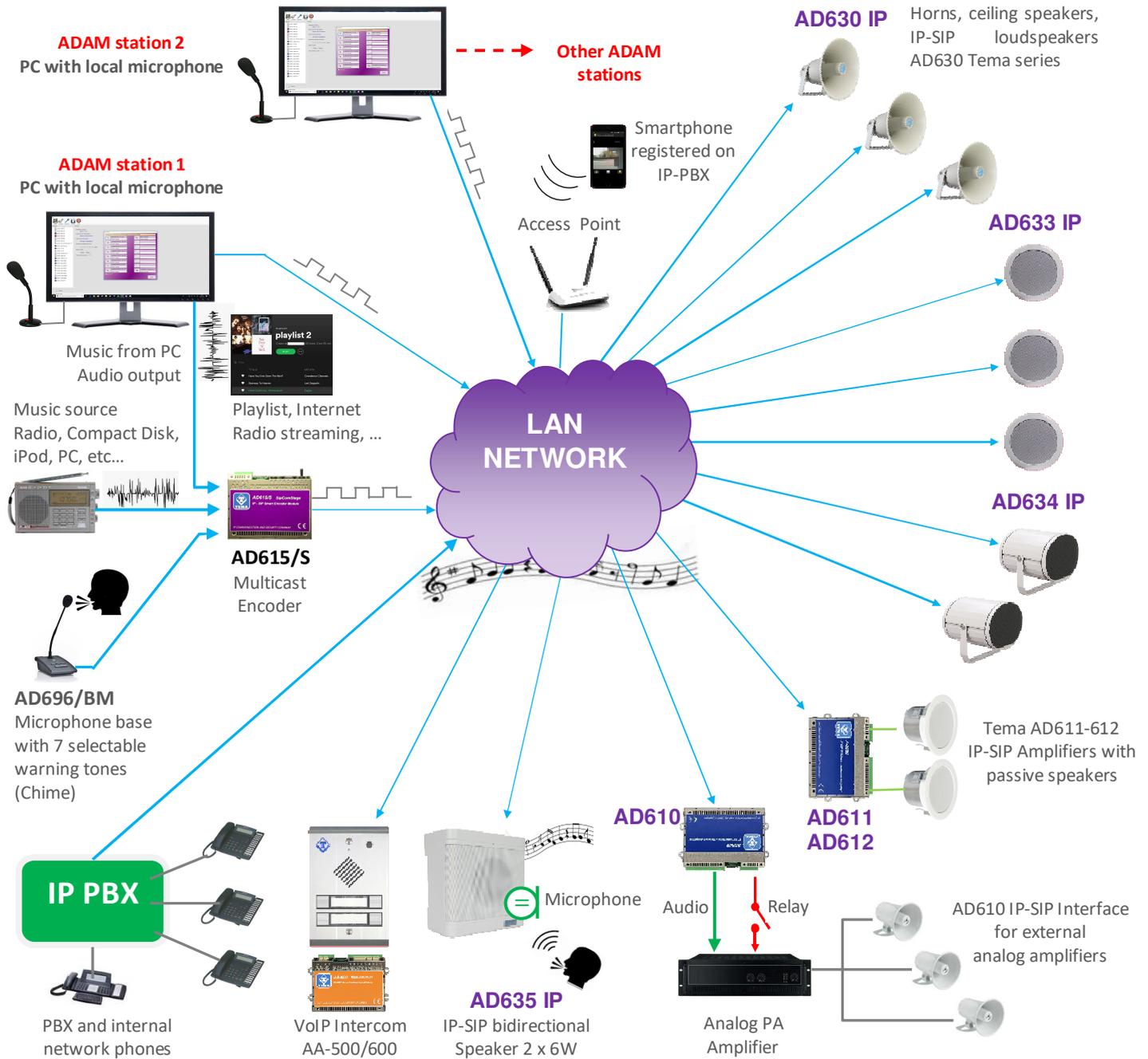
Tema produces all the necessary components for the realization of IP Paging systems on the LAN network, **integrated with the VoIP telephone system, the security system and video surveillance.**

- ◆ IP-SIP Speakers and Horns, IP-SIP Amplifiers from 4 to 40W
- ◆ IP Encoder from analog inputs
- ◆ IP Interfaces for traditional analog amplifiers
- ◆ Microphone Base and Console
- ◆ Centralized management software for Audio Management

### Target

- ◆ Companies, Industry, Banks, Warehouses
- ◆ Supermarkets, Shopping centers, Shops
- ◆ Garages and Public parkings
- ◆ Hotels, Pubs, recreation centers, fitness centers
- ◆ Hospitals, Schools, Campuses, Lifts
- ◆ Sports Facilities, Campsites, open public spaces
- ◆ Railway Stations, Airports, Ports, Ships and Boats

## Application of ADAM software with IP-PBX integration



It is possible to insert multiple **AD615/S** encoders in the network, without limits, each of which transmits a musical sound stream on a specific Multicast channel, in this way the IP-SIP speakers can be tuned to different musical contents according to the needs and preferences of the environments to be sounded.

Information and warning announcements launched by the microphone bases or by the **ADAM** stations can simultaneously reach all the AD600 terminals or, optionally, only a part of them.

**AD610** allows to interface a traditional amplification system to the LAN network while the IP **AD611-612** amplifiers in the same way allow to drive the speakers and the passive horns of the previous traditional system.

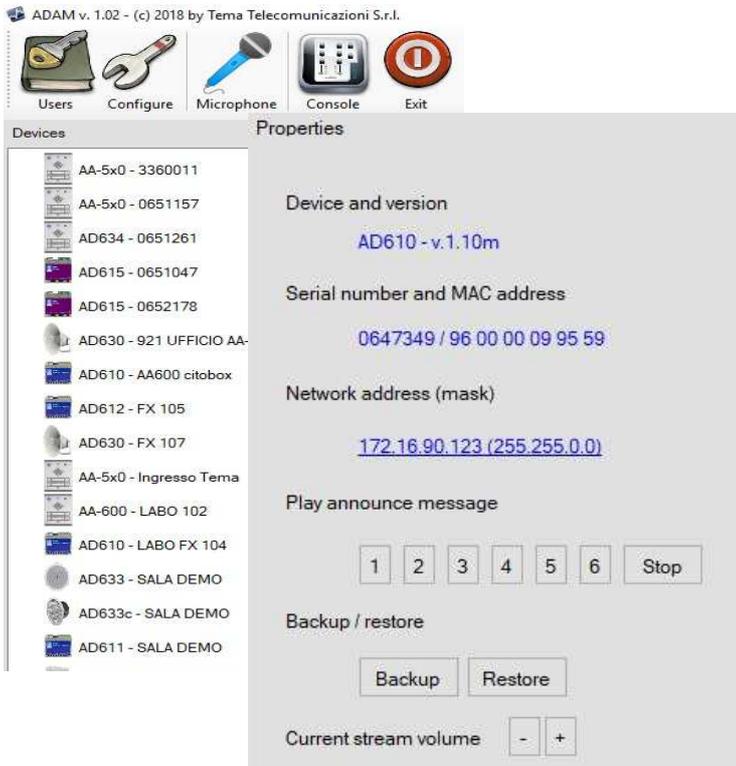
### Base Services (Without IP-PBX)

- Different Multicast music according to zone preferences
- Microphone alert messages by zone or all zones
- Messages from IP-SIP TEMA AA-500/600 series Intercom
- Multicast messages from a suitable SIP phone with function keys
- SIP calls in P2P (Peer to Peer)

### Additional services in the presence of an IP-PBX

- Bidirectional telephone call on each SIP loudspeaker
- Telephone call from Smartphones registered on the IP-PBX
- Messages from Smartphone with iOS/Android APP or soft phone
- Night call ringtone repetition (Night Ringer)

## • Total control of Tema IP audio terminals in the Network



### Devices search on the network

This function activates the search for all TEMA IP Audio devices in the local network. The devices are listed with the respective serial number or, at the user's choice, with a description programmed by the user himself in the device, for example the planimetric position can be indicated (Warehouse 1, Warehouse 2, Meeting room, etc.)

### Display of main device parameters

With a simple click on the chosen device the main information's are shown: model, firmware version, serial number, MAC address, IP address.

### Audio volume adjusting

On the selected device, it is possible to increase or decrease the output audio volume.

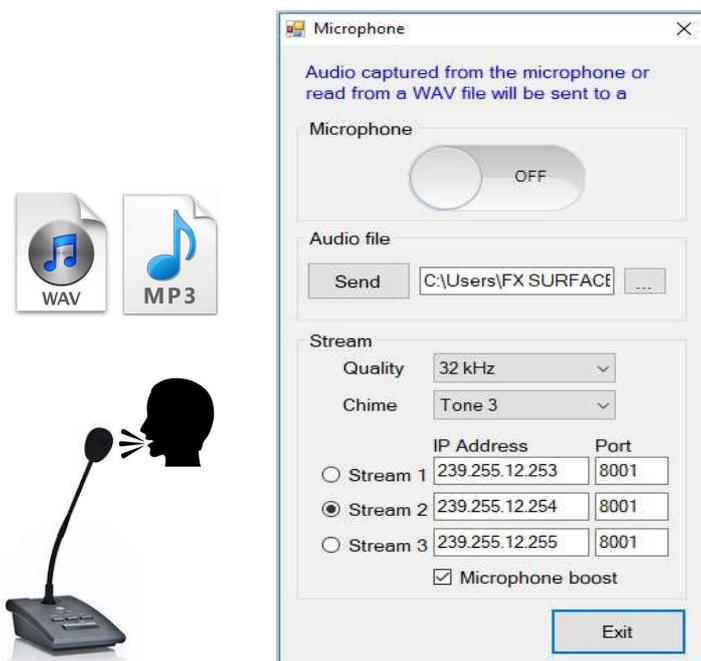
### Messages playing

In each of the Tema IP audio terminals, it is possible to load up to 6 pre-recorded audio files (Messages, Sounds, Music) and launch them manually from the centralized location with the ADAM software.

### Configuration backup and restore

They allow to save and restore the configuration of the device for security reasons

## • Microphone announcements and audio file sending



### Announcements from local microphone

With this function it is possible with a simple click to send an announcement from the local microphone connected to the PC to a specific Multicast channel with priority over the music channels, in this way any background music is interrupted in the remote devices and the microphone audio will be sent. At the end of the announcement, the music will be restored.

It is also possible to send a **warning tone (Chime)** before starting the announcement. The type of warning tone can be selected in the configuration mask among several available.

### Sending of pre-recorded audio files

As an alternative to a microphone announcement, it is possible to select an audio file from a PC folder and send it in streaming on a Multicast channel. Audio files can be WAV or MP3.

It is possible to choose both the Multicast channel on which to send announcements or audio files and the sound quality of the stream.

## • Multi-Zone Microphone Console



### Extreme operational simplicity

With the "Console" function of ADAM launch an announcement from the local microphone to a specific area is an operation that requires just one click on the button of the desired area, then it is possible to start talking in the microphone and ending with another click. It is also possible to send a **warning tone (Chime)** before starting the announcement. The type of tone can be selected in the configuration among different available.

### Announcements on multiple zones at the same time

With the same simplicity it is possible to select the zones and start talking in the microphone, another click ends the operation.

### Sending of pre-recorded audio files

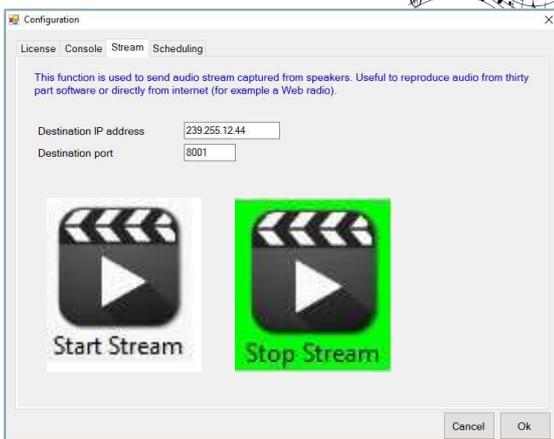
It may be useful to have pre-recorded audio files to be sent to the IP speakers of the zones at the desired times. Simply select and load the desired audio file from a PC folder into ADAM and activate the sending with just one click.

### Automatic interlock

If a second ADAM station broadcasts on a specific multicast address already engaged, the same is momentarily blocked.



## • 2<sup>nd</sup> Multicast Stream



### Generazione 2° Stream Audio Multicast (Useful for background Music)

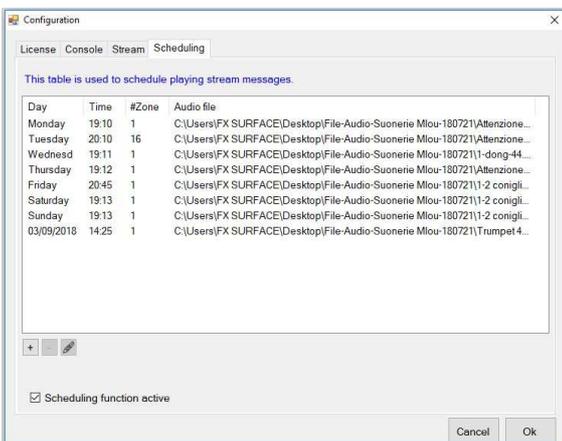
Adam is able to capture in digital format any audio content played at that moment on the PC capturing it from its sound card, in this way it is possible to activate a second Multicast Stream that can be sent to a specific IP address normally used by receivers for background music.

For example, if the PC is playing a radio or TV channel streamed from the internet, the content will be sent on the established Multicast channel and played by all the Tema AD600 series decoders in the LAN network enabled for the service.

With ADAM, the PC also becomes a multimedia station for the transmission of music and media content on the LAN:

**Internet Radio and TV streaming, Youtube, Spotify, iTunes, Playlist, CD players, USB, local Smart Cards, etc.**

## • Scheduling



### Sending of pre-recorded audio files at scheduled times or days

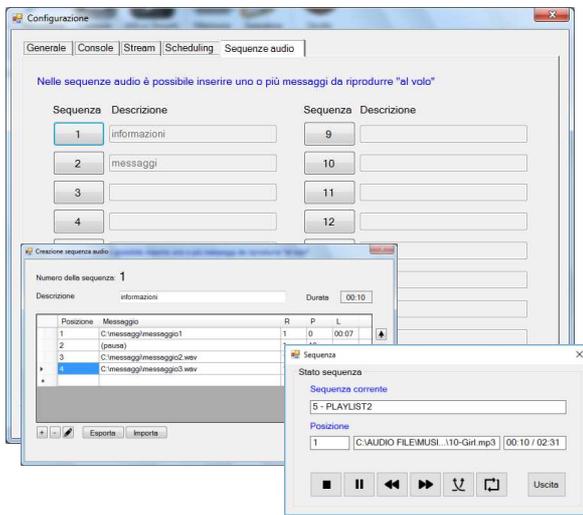
With this function it is possible to program the sending of pre-recorded audio files to the desired times and possibly repeat them on the preset days. It is also possible to schedule the announcement of announcements at pre-established intervals, for example, as a promotion program produced in supermarkets, the notice of term lectures in a school, a signal for the end of working hours, etc.

There are no limits in the number of programmable audio files available online in the programming mask of the ADAM software.

### Import/Export of scheduled programs

With the "Export" and "Import" keys it is possible to export an XML file that characterizes a scheduling program in such a way as to be imported at the same ADAM station or in any other ADAM station on the network.

## • Audio file sequences (Play List)



### Immediate sending of audio files sequences

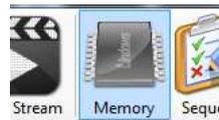
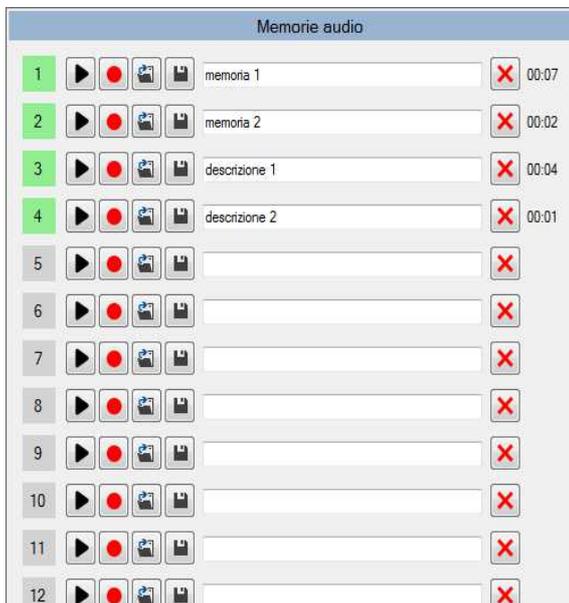
With this function it is possible to program the sending of audio files that can be consecutive timed messages or music files such as Play List. The programmed sequences can be activated in manual mode or called up from the "Scheduling" program even at pre-established days and times.

Within a sequence, the individual files can be freely moved with the use of position arrows.

There are no limits in the number of audio files that can be programmed within a specific sequence. Thanks to the "Import" and "Export" functions, the programmed sequences can be archived, recalled or managed by different computers with installed ADAM software.

The audio file sequences can be output consecutively or randomly and in "Endless" mode. It is possible to suspend the issue and resume it with the appropriate keys.

## • Audio Clips for immediate sending



### Programmable memories of pre-recorded audio files for instant sending

The function allows to record messages through the microphone, store them on disk and recall them for immediate sending to a specific zone or in general to all zones. There are 16 memory areas in which it is possible to store audio content (messages but also music) with duration of each file up to 30 minutes. The sending can be interrupted at any time.

The use of this feature is particularly useful in very large environments with accentuated reverberations, where is required a considerable power of the amplifiers with many speakers and it is not possible to avoid noise of the microphone, if not with expensive control equipment: in this way you record the message and send it in deferred mode, when the microphone is no longer active. Other use include sending of standard repetitive messages and in different languages.

Messages recorded with the "Memory" function can be exported in WAV files with an appropriate file name to create an archive of audio messages that can be imported at any time in a memory area and used. The operation is also possible "of-line" with the PC not connected to the network, using ADAM as an audio recorder.



## • Activation of the relays



### Remote activation of the relays of all Tema terminals in the LAN network

From the ADAM installed in a PC, it is possible to select each individual AA-5xx or AD6xx terminal in the LAN and operate the equipped relays with a simple click on the position of the respective relay. In the same way the relay can be deactivated indifferently from the set timing.

## • Monitor of Multicast transmissions

V 1.05

*Monitor on the LAN of all Tema terminals that are currently transmitting on the network on Multicast channels*

With the "Monitor" function of ADAM it is possible to display all the Tema devices on the network that at a given moment are transmitting audio in Multicast channels. The address of the transmitter terminal, the Multicast channel used, the description of the terminal, its serial number and the sampling frequency of the transmitted audio are displayed. In this way it is possible to locate and monitor all Multicast transmissions in a simple and fast way.

| Source        | Destination          | Description               |  |
|---------------|----------------------|---------------------------|--|
| 172.16.90.122 | 239.255.15.2 / 8001  | AD615 - 0652178 LN 32 kHz |  |
| 192.168.20.50 | 239.255.25.3 / 8001  | LN 32 kHz                 |  |
| 192.168.20.50 | 239.255.25.4 / 8001  | LN 32 kHz                 |  |
| 192.168.20.50 | 239.255.25.6 / 8001  | LN 32 kHz                 |  |
| 192.168.20.50 | 239.255.25.5 / 8001  | LN 32 kHz                 |  |
| 192.168.20.50 | 239.255.25.15 / 8001 | LN 32 kHz                 |  |

## • VoIP SIP & Peer-to-Peer Calls

V 1.05

*VoIP SIP and P2P calls to and from all network terminals*

The function allows making and receiving calls to all AD600 and AA-500/AA-600 series terminals on the network, whether registered in an IP-PBX or, failing that, in P2P (Peer-to-Peer) to the IP address of the terminals. All terminals can call ADAM at the number assigned in the PBX or in P2P at the IP address of the PC where ADAM is installed. Of course ADAM can also communicate with any telephone in the internal telephone network if registered in the IP-PBX, or in P2P mode.



Device and version  
AD630 - v.1.10.4m

Serial number and MAC address  
0629324 / 96 00 00 09 B5 E2

Network address (mask)  
172.16.90.111 (255.255.0.0)

Play announce message  
1 2 3 4 5 6 Stop

Backup / restore  
Backup Restore

Current stream volume  
- + (...)

Relay activation  
1 2

Console #1 (1 - 16)

Select the zone where to send the audio stream

|    |                       |                     |               |  |
|----|-----------------------|---------------------|---------------|--|
| 1  | ADMIN 111-121         | 239.255.25.1.8001   | 172.16.90.111 |  |
| 2  | RING GEWISS 106-916   | 239.255.25.2.8001   | 916           |  |
| 3  | SHOW ROOM 107-917     | 239.255.25.3.8001   | 917           |  |
| 4  | LABORATORY 104-914    | 239.255.25.4.8001   | 914           |  |
| 5  | DIRECTOR 108-908      | 239.255.25.6.8001   | 908           |  |
| 6  | CANTEEN 105-915       | 239.255.25.5.8001   | 915           |  |
| 7  | REST 93-903 IMX6      | 239.255.25.7.8001   | 903           |  |
| 8  | MEETING 101-911 AD610 | 239.255.25.8.8001   | 911           |  |
| 9  | PARKING 102-912       | 239.255.25.9.8001   | 912           |  |
| 10 | PRODUCTION 103-913    | 239.255.25.10.8001  | 913           |  |
| 11 | RINGONE AR 109-566    | 239.255.25.11.8001  | 566           |  |
| 12 | RING FLASH FE110-567  | 239.255.25.13.8001  | 567           |  |
| 13 | AD630 HORN EST        | 239.255.25.14.8001  | 192.168.20.33 |  |
| 14 | NEW DOORPHONE         | 239.255.25.15.8001  | 172.16.90.199 |  |
| 15 | GEN DETERRENZA        | 239.255.15.9.8001   |               |  |
| 16 | GENERAL CALL          | 239.255.40.255.8001 |               |  |

Audio file

Exit

## • Viewing cameras

V 1.05

*Display of cameras in Tema video door entry devices*

ADAM is able to display the cameras present in the Tema AA-500 / AA-600 series IP video door entry devices on the network, even without establishing a communication: the camera images are always received, even with the video-entry phone at rest. Compatible video protocols are: H263, H264, H264+, MPEG.

## • Digital Audio up to 44,1KHz, MP3

V 1.05

*Max sound quality transmitted, both for announcements and for music*

ADAM is able to make vocal announcements from the local microphone at the highest quality and intelligibility for a crystal-clear sound, it can also transmit pre-recorded audio files (Voice and/or music) both in Windows WAV and MP3 format, performed with any sampling from 8KHz to 44,1KHz.



## • Licenses and Free version

| Performances                      | ADAM<br>Free (*) | ADAM-03<br>Micro 3 Zones | ADAM-16<br>Console 16P | ADAM-32<br>Console 32P | ADAM-64<br>Console 64P | ADAM-128<br>Console 128P |
|-----------------------------------|------------------|--------------------------|------------------------|------------------------|------------------------|--------------------------|
| Devices search on the LAN network | ✓                | ✓                        | ✓                      | ✓                      | ✓                      | ✓                        |
| Display of devices data           | ✓                | ✓                        | ✓                      | ✓                      | ✓                      | ✓                        |
| Configuration Backup/Restore      | ✓                | ✓                        | ✓                      | ✓                      | ✓                      | ✓                        |
| Stream volume adjustment          | ✓                | ✓                        | ✓                      | ✓                      | ✓                      | ✓                        |
| Web connection to the device      | ✓                | ✓                        | ✓                      | ✓                      | ✓                      | ✓                        |
| Scheduling, Sequences             | -                | ✓                        | ✓                      | ✓                      | ✓                      | ✓                        |
| Launch of messages 1-6            | -                | ✓                        | ✓                      | ✓                      | ✓                      | ✓                        |
| Launch of PC audio file           | -                | ✓                        | ✓                      | ✓                      | ✓                      | ✓                        |
| Generating an audio stream "Live" | -                | -                        | ✓                      | ✓                      | ✓                      | ✓                        |
| VoIP SIP & P2P Calls (V1.05)      | -                | -                        | ✓                      | ✓                      | ✓                      | ✓                        |
| Microphone function for 3 zones   | -                | ✓                        | ✓                      | ✓                      | ✓                      | ✓                        |
| 16-zone Console, Memories         | -                | -                        | ✓                      | ✓                      | ✓                      | ✓                        |
| 32-zone Console, Memories         | -                | -                        | -                      | ✓                      | ✓                      | ✓                        |
| 64-zone Console, Memories         | -                | -                        | -                      | -                      | ✓                      | ✓                        |
| 128-zone Console, Memories (**)   | -                | -                        | -                      | -                      | -                      | ✓                        |

(\* ) The ADAM software and complete documentation can be downloaded free of charge from the Tema website in the full version (ADAM-16) usable for a duration of 30 days: <http://www.tematlc.it/eng/audio-ip-en.asp#81>  
After 30 days, if the license is not purchased, the FREE version will remain active for the supervision of all devices and base functions (see table above).

(\*\*) ADAM versions with Console function are available over 128 zones/buttons up to over 1.024 zones.

### Technical features

|                        |   |
|------------------------|---|
| Audio Digitization     | : 8 – 16 – 32 – 44,1KHz – WAV, MP3  |
| Codec                  | : G711, G722, Linear PCM  |
| Number of manageable   | : over 1.000 IP audio terminals in the network  |
| Compatibility          | : Tema AD600, AA-500-600 products series  |
| Availability/Licenses  | : free full version downloadable via Web for 30 days, can be converted on a fee at the expiration |
| Access                 | : with multilevel password and administrator-programmable privileges                              |
| Videoconsole software  | : included, 16 selectable zones or groups   |
| VoIP support           | : including SIP protocol for integration with any type of IP-PBX on the market                    |
| Languages              | : English, Italian  |
| Software customization | : on request it is possible to realize software on customer's specifications                      |

### Minimum PC requirements

|                    |   |
|--------------------|---|
| Operating system   | : Windows 7/8/10 or higher<br>Windows Server 2012 or higher |
| CPU                | : better than 2,8 GHz                                       |
| Hard disk capacity | : 250GB minimum   |
| RAM                | : 2 GB, suggested 4GB or over                               |
| LAN network board  | : standard 100Mbit/Gigabit                                  |
| Audio board        | : SB Windows compatible                                     |
| Microphone         | : jack 3,5mm input  |
| Line output        | : jack 3,5mm – 0dB 150 Ohm                                  |
| Speakers           | : local, standard stereo                                    |
| Monitor            | : VGA 800x600 minimum                                       |
| Keyboard, Mouse    | : standard  |

NOTE: the PC must be dedicated exclusively to the service with the ADAM application, other software applications cannot be activated in the same PC.

Infinite applications in every sector: enterprise, commercial, industrial

Audio deterrence in video surveillance systems

Enterprises, Offices

Security in Schools, Campus, University

Supermarket, Shops, Parking

Hospitals, Clinics, Nursing homes



**SipComStage**  
... for a world that wants more!



Railway stations, subways



Airports, Ports, Boats



Industry, Manufacturing, production, warehouses



Fitness centers, spas



Hotel, entertainment, lifts, emergency