

# **Audio Over IP LAN network control Innovative Solutions**

**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

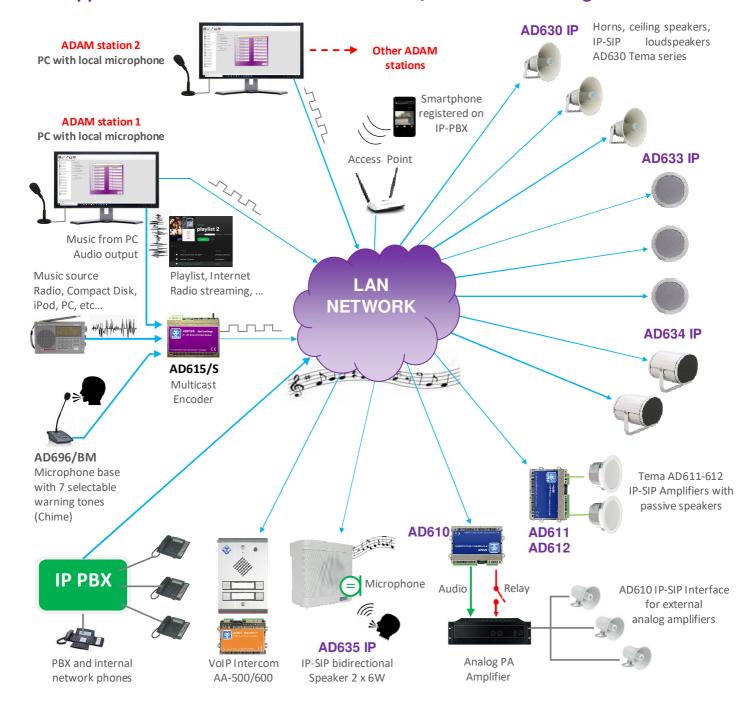
Tema produces all the necessary components for the realization of IP Paging systems on the LAN network, **integrated with the VoIP telephone system**, **the security system and video surveillance.** 

- ♦ 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 AD615/S Encoder for background music



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)

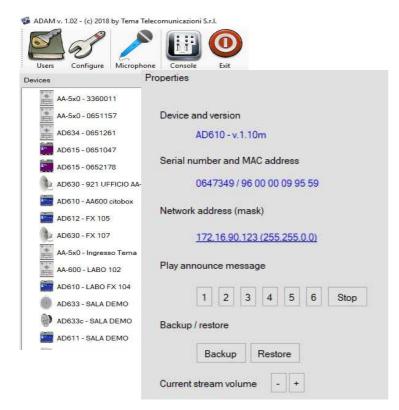
#### Additional services in the presence of an IP-PBX

- 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)



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# 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.

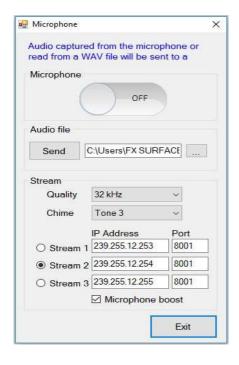
#### Messages playing

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.

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



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### • 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.

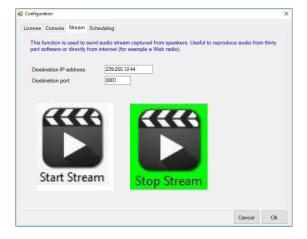
#### Sending of pre-recorded audio files

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.

#### Scheduling of pre-recorded audio files sending

It is possible to program the automatic sending of messages at pre-established times with daily, weekly, monthly and annual planning.

# • 2<sup>nd</sup> Multicast Stream



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

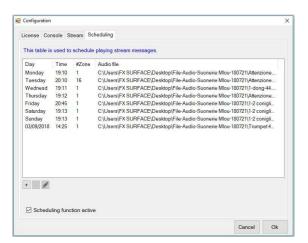
Adam is able to capture in digital format any audio content played at that moment on the PC capturing it from its sound card, in this way it is possible to activate a second Multicast Stream that can be sent to a specific IP address normally used by receivers for background music.

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.

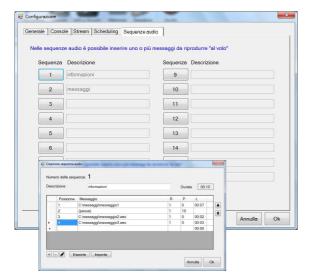
#### Sending of pre-recorded audio files to the microphone channel

As an alternative to a microphone announcement, it is possible to select an audio file from a PC folder and stream it on a Multicast channel.



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# 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.

# • Audio memories 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.

# 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.

#### "VideoConsole" Software





#### Integration of the "VideoConsole" software into ADAM

By installing the "VideoConsole" software in the PC where ADAM is present the corresponding activation key will appear on the toolbar.

It will then be possible to make real SIP telephone calls to the Tema IP-SIP AA-5xx (video intercoms) and AD6xx devices (IP-SIP audio terminals) by registering on IP-PBX or, in the absence of the PBX, in P2P Peer to Peer mode.



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#### Licenses

Performances	ADAM Free (*)	ADAM-03 Micro 3 Zones	ADAM-16 Console 16P	ADAM-32 Console 32P	ADAM-64 Console 64P	ADAM-128 Console 128P
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Devices search on the LAN network	Х	Х	Х	X	X	Х
Display of devices data	Χ	X	X	X	X	X
Configuration Backup/Restore	Х	Х	Х	Х	X	Х
Stream volume adjustment	X	Х	Х	Х	X	Х
Web connection to the device	Х	Х	X	X	X	Х
Scheduling, Sequences	-	Х	X	Х	Х	X
Launch of messages 1-6	-	Х	Х	Х	X	Х
Launch of PC audio file	-	Х	Х	Х	X	Х
Generating an audio stream "Live"	-	-	X	Х	Х	X
Microphone function for 3 zones	-	Х	Х	Х	Х	X
16-zone Console, Memories	-	-	Х	Х	Х	X
32-zone Console, Memories	-	-	-	Х	X	X
64-zone Console, Memories	-	-	-	-	Х	Х
128-zone Console, Memories (**)	-	-	-	-	-	Х

<sup>(\*)</sup> 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

: over 1.000 IP audio terminals in the network

	features

Audio Digitization : 8-16-32-44,1 KHzCodec : 6711, 6722, Linear PCM

Number of manageable

terminals

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

 $\label{lem:multi-zone} \textit{Multi-zone console software}: \textit{included, 16 selectable zones or groups}$ 

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

Windows Server 2012 or higher

CPU : better than 2,8 GHz
Hard disk capacity : 250GB minimum

RAM : 2 GB, suggested 4GB

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

## **ADAM** Audio Domain & Access Management Software

Complete centralized control and management of your TEMA IP-SIP Audio communication and security systems

Visit the TEMA website of Audio over IP products: <a href="http://www.tematlc.it/eng/audio-ip-en.asp">http://www.tematlc.it/eng/audio-ip-en.asp</a>
<a href="https://www.tema-ipaudio.com/en/product/ip-audio">https://www.tema-ipaudio.com/en/product/ip-audio</a>



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