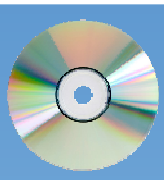
TEMA TELECOMUNICAZIONI

"IP COMMUNICATION AND SECURITY COMPANY"

WWW.TEMATLC.IT

ADAM

Audio Domain & Access Management Software



PRELIMINARY DOCUMENTATION

PRODUCT MANUAL

Version 1.04 for Windows 7® - 8® - 10®

CE

Revision	Date	Revision reason	Prepared	Checked/Approved
4	25/06/2019	Software update	MM	MM, FL

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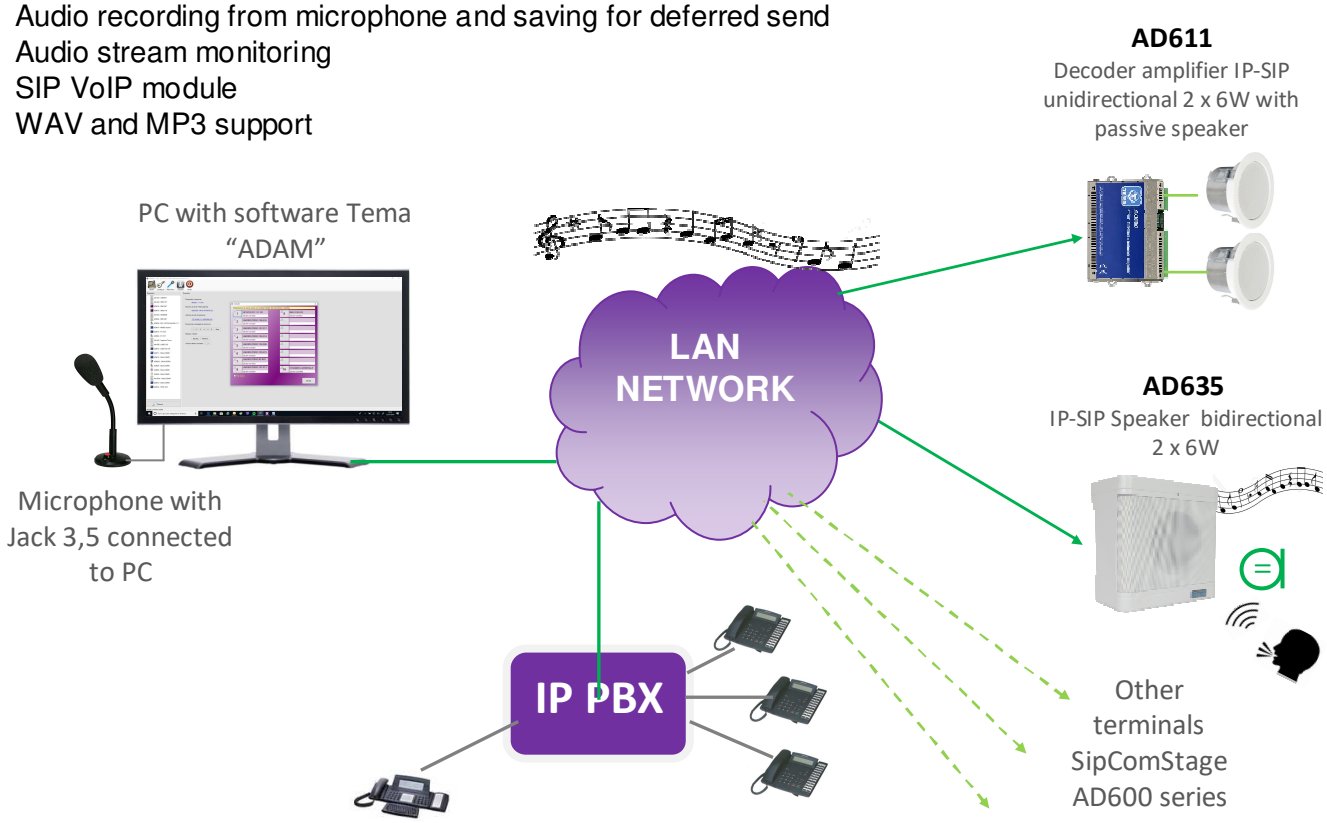
1. Introduction

1.1. Presentation

The ADAM software has been developed in Italy by the Tema Telecommunications laboratories. It operates in a Microsoft Windows© environment and, in the base version, simplifies the maintenance of IP Tema devices, such as IP-SIP loudspeakers, encoders, door phones, etc. In the full version this software become a complete Console to launch microfone PA messages or send pre-recorded audio files. The installation is very simple and the use intuitive, thanks to the familiar and well-known Windows user interface.

1.2. Services and features

- Automatic search and visualization for devices on the local network
- Immediate display of the main characteristics of each device (IP address, serial number, MAC address, etc.)
- Saving and restoring the configuration of each system
- Activation of the remote speaker
- Sending multicast audio, either from the microphone of your computer or from a pre-recorded audio file
- Multi-zone microphone console, with up to 128 zones
- Access to the system with multilevel password for more users
- Generation of audio streams for background music
- Automatic announcements at pre-set times (scheduling)
- Remote relay activation
- 16 audio sequence (Play List), manual or automatic activable, with pause, loop and random function
- Webcam showing (for devices that have it)
- Real time audio stream volume regulation
- 16 audio memory for instant send in console
- Audio recording from microphone and saving for deferred send
- Audio stream monitoring
- SIP VoIP module
- WAV and MP3 support



From every telephone set connected to the IP-PBX is possible to make calls at the AD600 series devices.

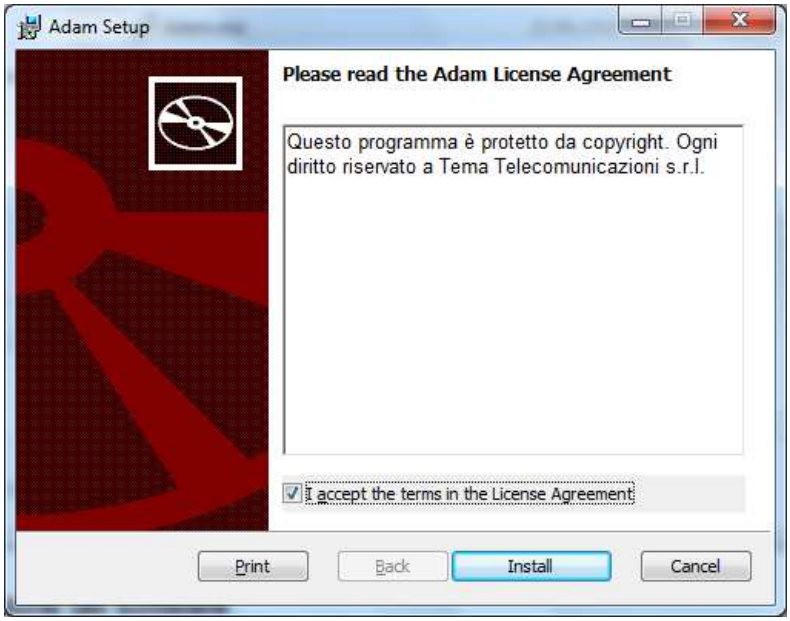
2. Installation

2.1. Minumum configuration

ADAM can be installed on any PC with Windows© operating system (7/8/10 or later), with Framework 4 or later installed. For minimum characteristics of the PC please see section 3.1.

2.2. Software installation

The installation of the software is very simple. Just run the "Adam.msi" setup program:



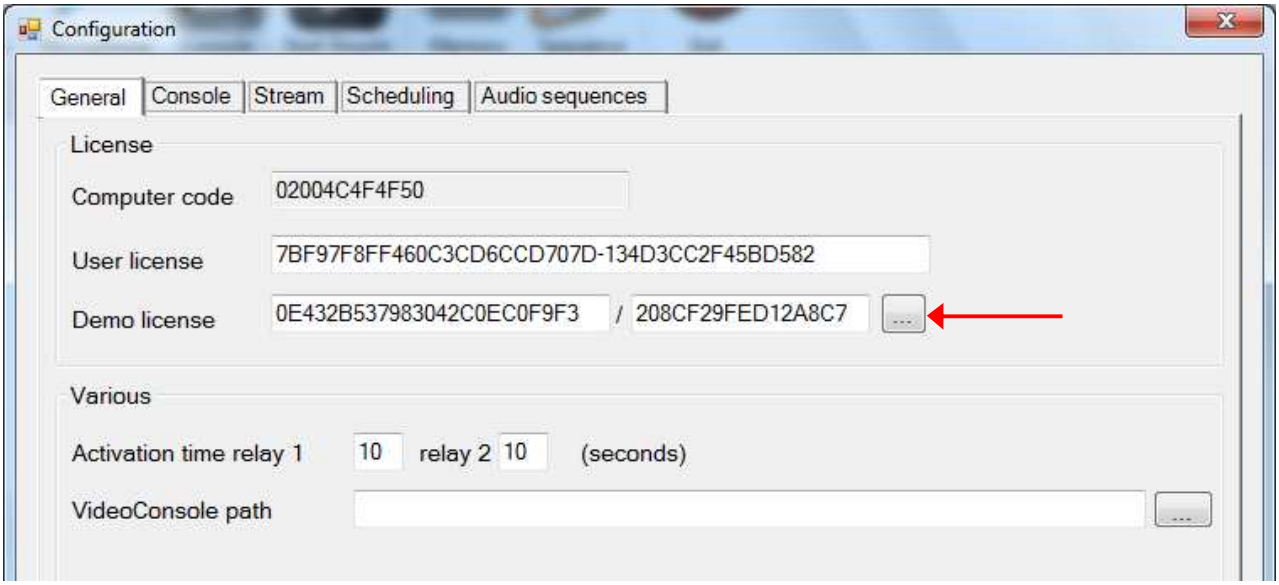
Once the license terms have been accepted, simply select the "Install" button. The program will be installed with the default settings in the system programs folder and a link will be created in the Windows menu. The software is available in Italian and English. On non-Italian language systems the English language will be automatically selected.

3. Starting up

3.1. Activation of the program

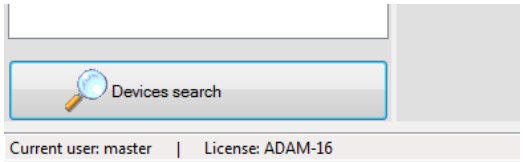
Once the software is started, you are prompted to enter the login credentials. By default the user **master** with password **master** is preconfigured. Obviously it is recommended to change at least the password for not to have problems of unwanted access:

Once the program has started, activation is required. Each software is linked to a unique computer code for each installation. The activation codes must be entered in the configuration mask:



The license is provided by Tema and is linked to the displayed computer code. It is possible to use a demo license (without limits but with a duration of 30 days) or request a license for use, for a fee, to be chosen among 5 different functional versions. The activation of the demo license is very simple and can be done autonomously: just click on the button next to the text for the demo license and be automatically connected to the required web page.

After entering the license key, the program has to be restarted. At the bottom, on the status bar, the code of your license will appear:



In the case of demo license, once expired, the software will behave as if the license had not been inserted and will not allow access to the program functions related to the license of use.

The table below provides more details related to the licensing policy.

Performances	ADAM Free (*)	ADAM-03 Micro 3 Zones	ADAM-16 Console 16P	ADAM-32 Console 32P	ADAM-64 Console 64P	ADAM-128 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, Memories	-	✓	✓	✓	✓	✓
Launch of messages 1-6	-	✓	✓	✓	✓	✓
Launch of PC audio file	-	✓	✓	✓	✓	✓
Generating an audio stream “Live”	-	-	✓	✓	✓	✓
VoIP SIP interconnection (V1.05)	-	-	✓	✓	✓	✓
Microphone function for 3 zones	-	✓	✓	✓	✓	✓
16-zone Console/Buttons	-	-	✓	✓	✓	✓
32-zone Console/Buttons	-	-	-	✓	✓	✓
64-zone Console/Buttons	-	-	-	-	✓	✓
128-zone Console/Buttons (**)	-	-	-	-	-	✓

(*) 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 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

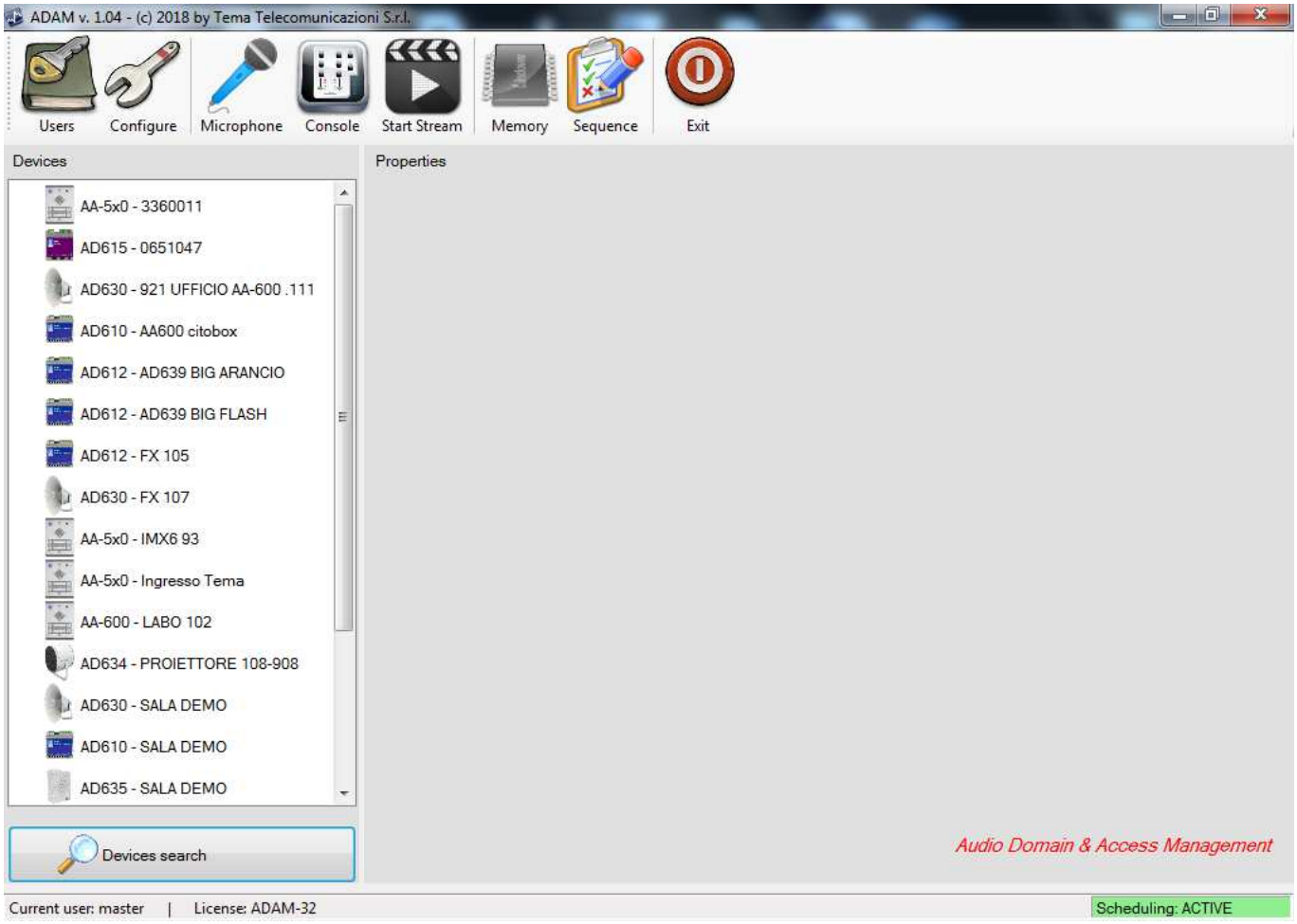
NOTE: the PC must be dedicated exclusively to the service with the ADAM application, other software applications cannot be activated in the same PC.

3.2. Devices search

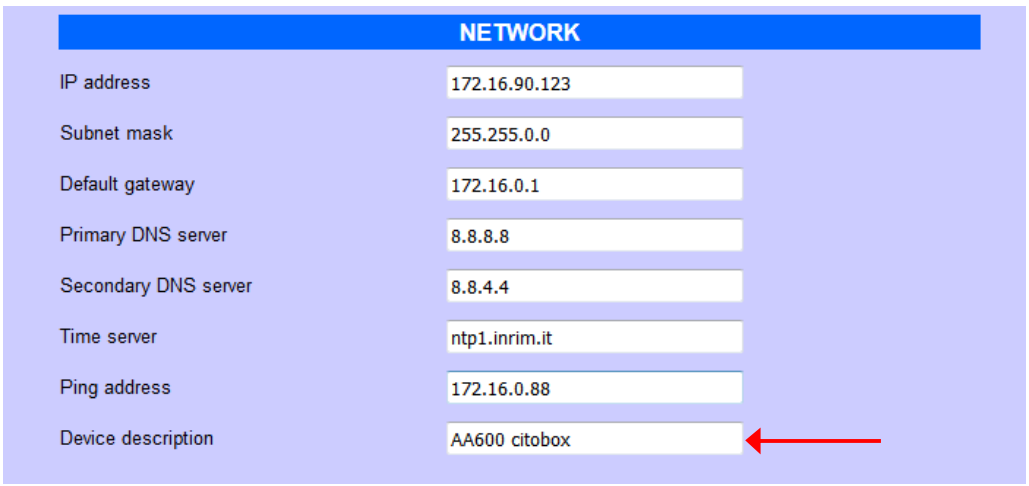
The heart of the program is without doubts the search for devices connected to the local network.

By clicking the "Search" button a scan is started on all network cards found on the computer. Because the scan involves sending ip messages outside of standard ports, it is possible that your firewall requires authorization (which should of course be granted).

The search takes a few moments and at the end is presented the list of all the Tema devices found:



The width of the list can be adapted to your liking and will be stored in the user settings. Next to the name of each device is shown its serial number or (if present) the description entered in the configuration mask of the network:



By selecting each device, the detailed information about it is shown (version, IP address, serial number, etc.):

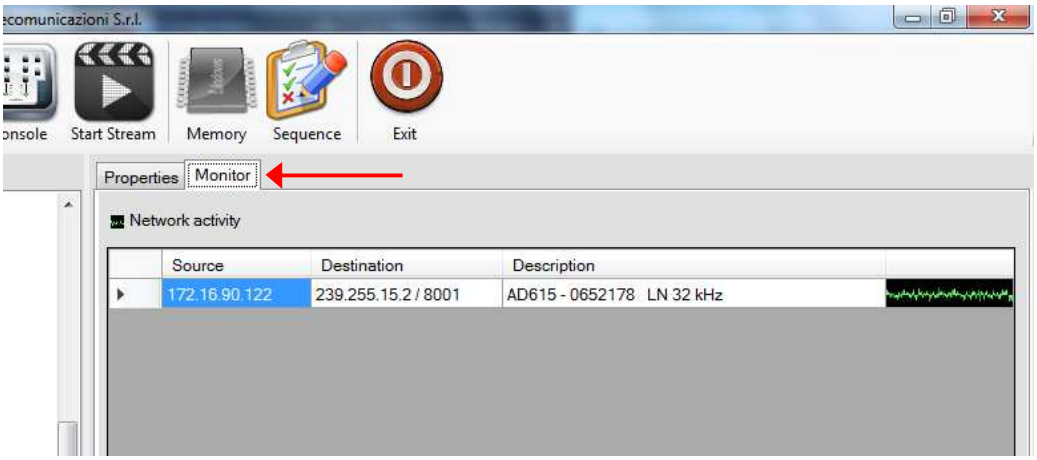
On the right side of the screen the following information and commands appear:

- ***Device and version:*** the name of the device and its firmware version are shown
- ***Serial number / mac address:*** each device has its own serial number and MAC address, different from all the others
- ***Network address and mask:*** this information is very useful if you connect a device for which you do not remember the assigned network address. By clicking on the highlighted link you can directly open the configuration web page (obviously you have to make sure that your PC is configured on the same network segment).

- ***SIP call button:*** this function (active only with Adam-16 or above) allows making a SIP call in peer-2-peer mode to the selected device (bidirectional if the device is microphone equipped).
- ***Play announcement message:*** buttons 1-2-3-4-5-6-Stop, you can force the device to issue one of the 6 pre-recorded announcement messages. It can be useful to reproduce a prerecorded message on command, or to understand which device you are managing (vice versa if there are many devices it may be difficult to detect)
- ***Backup / restore:*** you can save the configuration to a text file or reload a previously saved one. The serial number of the device is proposed as a name
- ***Volume of audio streaming:*** adjust volume output of the current reproduced multicast streaming in reproducing on the selected terminal

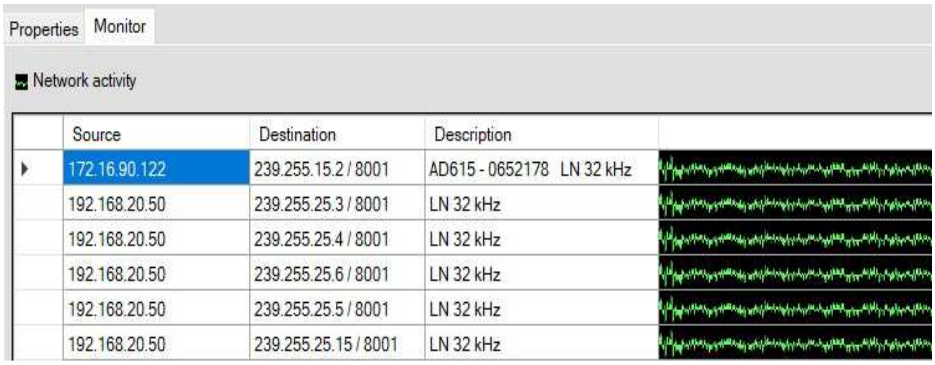
- ***Relay activation:*** is possible to activate the remote ralays on the device (the equipment can vary 1 or 2 relais depending on the hardware version). Activation times are defined in configuration but is possible also deactivate a relay with a second click.

Is also possible to check the network activity to discover any other audio stream (for example from other Adam software or AD615 encoders):



When starting audio stream, the sofware will check if an other device is transmitting on the same audio channel.

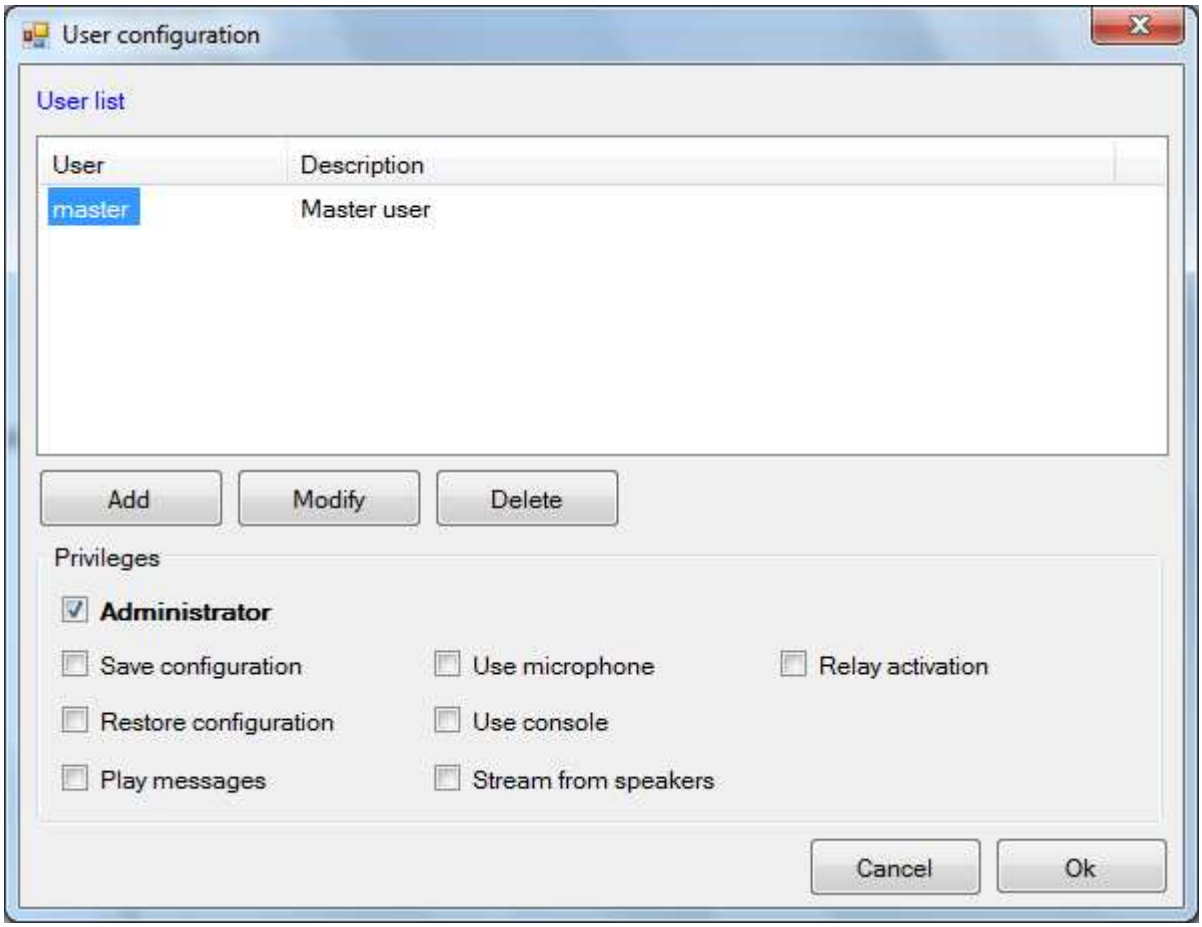
With the "Monitor" function of ADAM it is possible to display all the Tema devices on the network that at a given moment are transmitting audio in Multicast channels. The address of the transmitter terminal, the Multicast channel used, the description of the terminal, its serial number and the sampling 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.



3.3. User configuration

For obvious security reasons the functions of the program can accessed according to the current user. For example, a generic user cound be denied of using the microphone to send announcements but instead only play pre-recorded messages.

From the menu choose "Users":

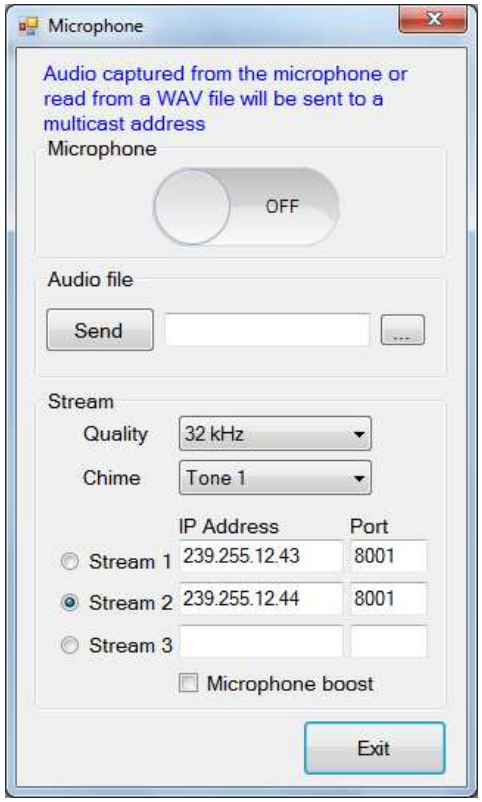


As said by default the "master" user is already present. It can be modified or deleted, but please note that it is mandatory to enter at least one user with all privileges (Administrator).

Select a user on the list to show the privileges with which he is equipped.

3.4. Microphone

From the menu choose "Microphone":



This option has a double function:

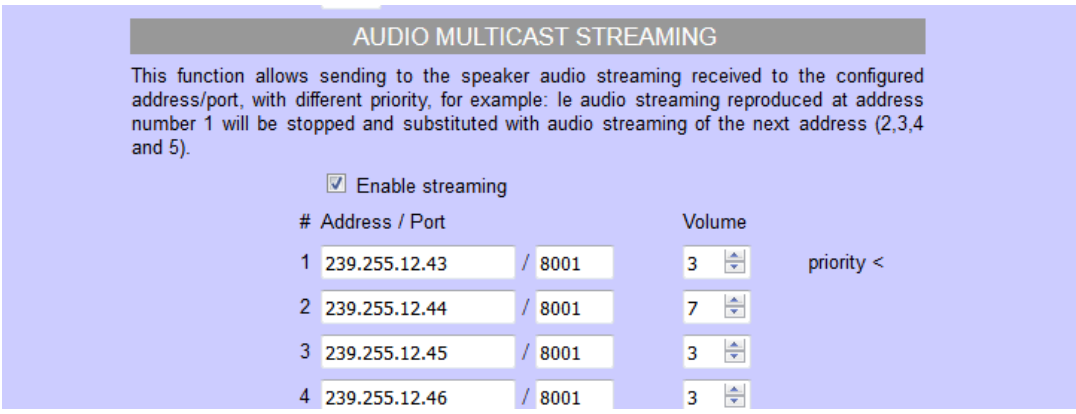
1) Send in multicast the audio captured directly from the microphone

2) Send in multicast the contents of the file (in .wav or .mp3 format) indicated in the "Audio file" box.

You can select the transmission sound quality as well as select 3 multicast addresses, 1 to 3, before activating the microphone. The compiled fields are saved when you exit the form, so you do not need to rewrite them each time.

You can precede the opening of the microphone by a warning tone (chime) to choose from 7 available tones (in the configuration mask) and you can increase the volume of the stream (boost) to compensate for any lack of sensitivity from the microphone.

The stream values must reflect what is programmed in the "Message management" table of the configuration of the device you want to receive and play the multicast audio:



Send an announcement with the microphone

1) Select the IP address stream where you want to send the announcement

2) Select the audio quality of the transmission (32KHz is the max audio quality)

3) Click on the microphone video button (the button switch in blue color)

4) At the end of transmission switch OFF the button

Send a pre-recorded .wav audio file

1) Select the IP address stream where you want to send the announcement

2) Click on 

to upload the audio file .wav or .mp3

3) Click "Send" to transmitt the file on the selected IP address Multicast stream. At the end of the file the transmission is interrupted. If you want to interrupt before the end of the file click on the microphone video button.

At the end of operation you can close the microphone function window.

NOTE: to avoid conficts due to the possibility that two stations transmit audio to the same address (which would result in annoying interference) the software will check if the address where we are going to transmit is already in use, in that case the transmission won't start.

This check is made also in the console or when an automatic transmission has to start.

3.5. Multi-zone microphone console

This function is active only with an ADAM-16 license or higher. The console provides the user with a multizone microphone base (from 16 up to 256 zones) with preconfigured addresses:

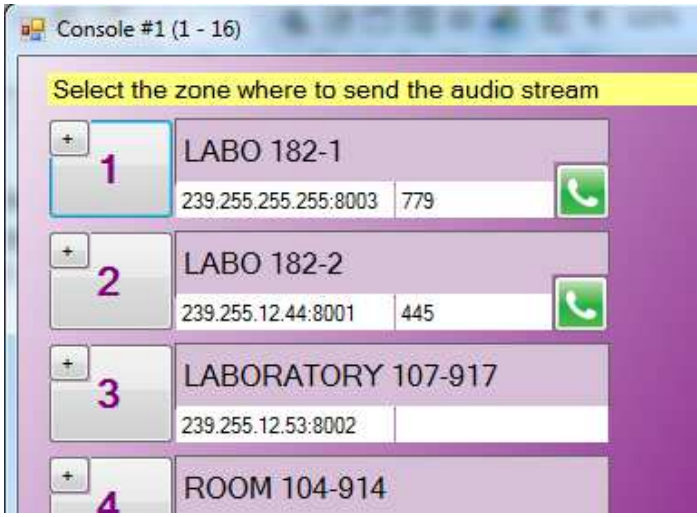
The descriptions and destination addresses are preprogrammed during configuration and can not be edited in this form (see the next chapter).

In addition to the stream addresses, it is also possible to preconfigure the peer2peer address or the SIP number to which a VoIP call can be made, in which case a telephone call symbol will appear (see the example in the figure above). The telephone call and the sending of audio streams are mutually exclusive.

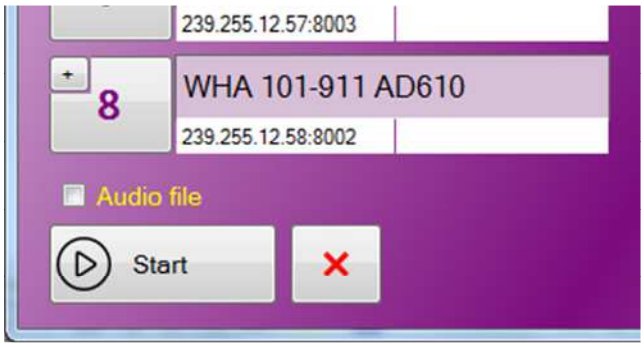
To send the audio to the desired area, simply select the relative number with the left switch of the mouse. The button will start to flash to make the opening of the microphone clear. To stop the stream, simply select the same button again.
With the right switch of the mouse on the desired area is possible to send pre-recorded messages from the “Memory” function (please see section 3.10).

If you have a license above 16, will be opened as many consoles as needed to use all the zones that have been configured. They can be positioned at will on the screen and the next re-opening the windows will be repositioned in the same way.

You can also open audio on multiple zones at the same time (for max 5 at the same time). To activate this function, mark the areas you want with the "+" key:



The little button is highlighted in green and at the same time the "Start" key appears at the bottom, which must be used to start the microphone transmission on the selected zones. The 'X' button allow you to deselect all buttons. At the end, if you do not want to send announcements or audio files to the same areas highlighted in green, remember to deactivate them.

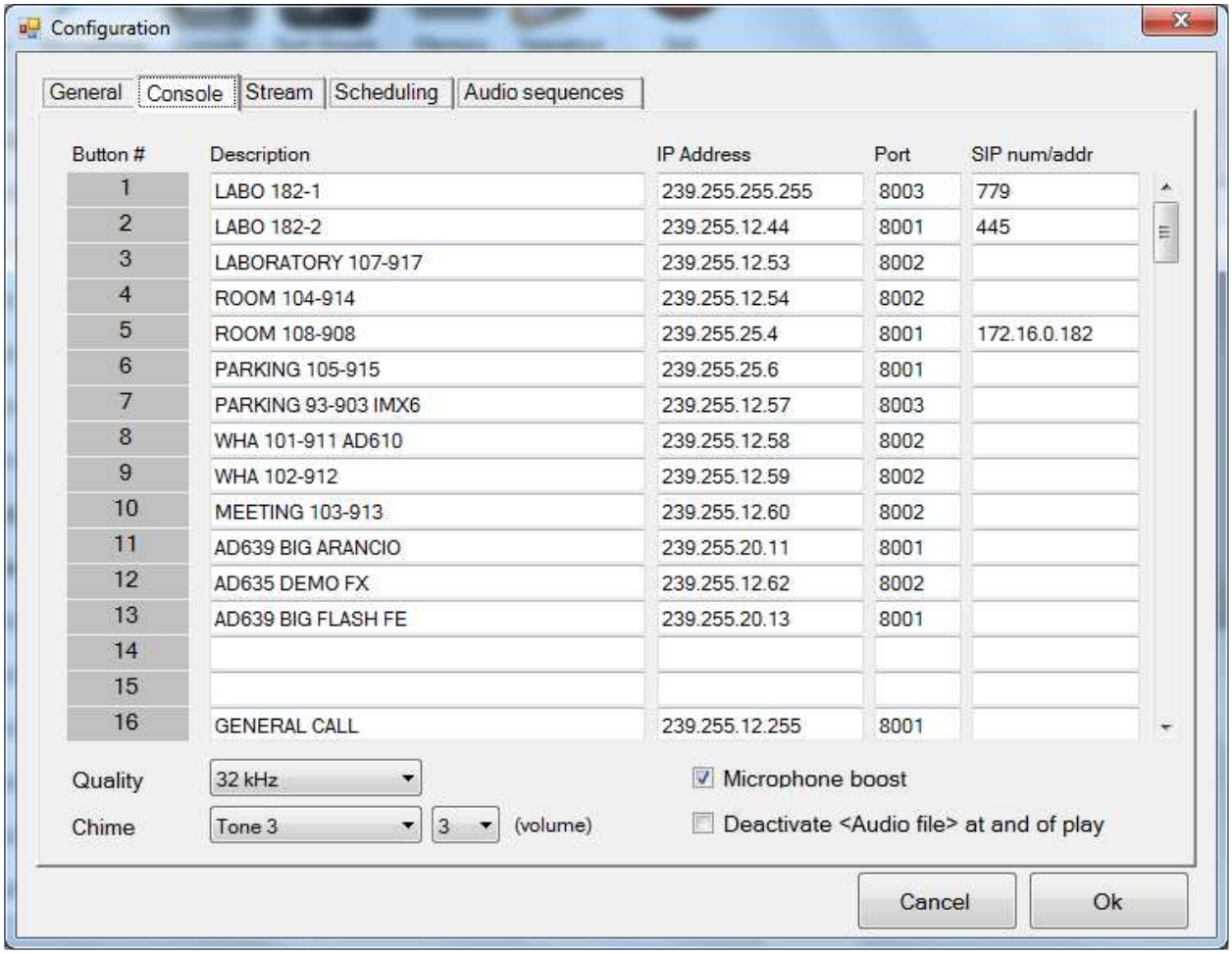


Is not possible to make a SIP call to more than one device.

Finally it is possible, with the "Audio file" option, to extract the audio not from the microphone but from a normal wav file already present on disk. You can tap into a list of 10 files that can be changed dynamically by the operator himself.

3.6. Console configuration

In the configuration form, you can set the operating mode of the console (area description, ip address, etc.), so that the operator who then goes to use it physically does not have to worry about programming it. In the configuration menu:



In this mask it is possible to configure up to 16 zones. When a zone is configured, the IP address of the stream and the port is assigned. Possible configuration errors (invalid addresses or duplicates) are highlighted in red.

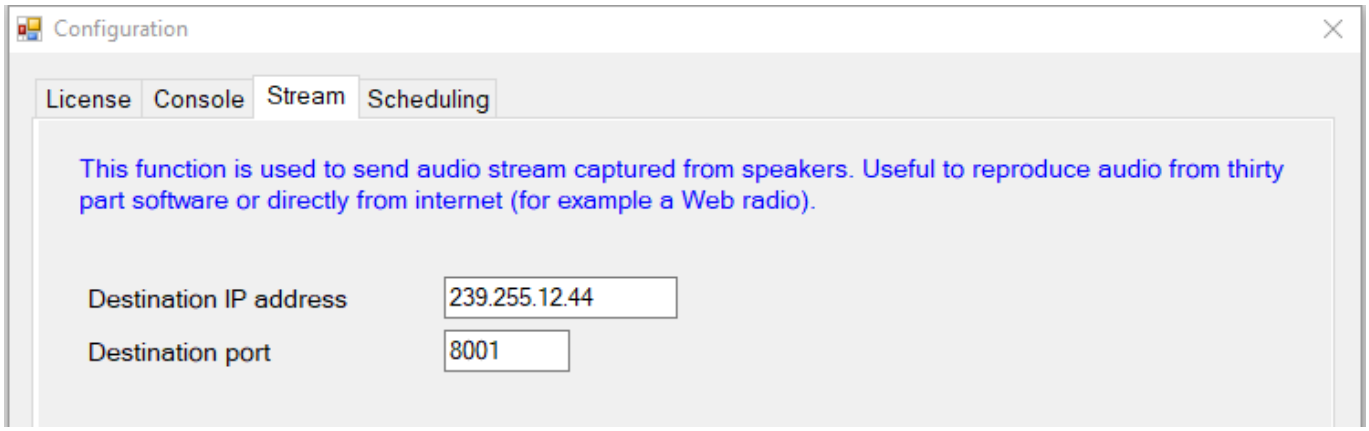
Unconfigured zones will appear in gray on the console. The zone configuration is also used by scheduling as well as by the console (see below). The number of zones that can be configured is set by your license: ADAM-03 maximum 3 zones, ADAM-16 maximum 16 zones, etc.

For each zone it is also possible to associate a number or a SIP address to make a phone call (therefore two-way). Note that there is no real correlation between the area and the telephone number of the device to be called (one zone can group multiple devices), however to avoid confusion for the operator it is advisable to program only the areas that belong to a single device only, which will be registered on the indicated SIP number. For example zone 1 (Labo-1) is a single device registered on the number 779, while zone 16 (General call) is evidently an area to which several devices belong, however in the SIP field it will be possible to put only one number of phone. It is not possible to make a SIP call simultaneously on multiple devices.

It is possible to choose the sound quality to use (if there are no particular network problems it is advisable to use the maximum quality), if to emit a tone and which (chime) and with what volume (from 1 to 4) when opening the microphone, if to increase the microphone volume (boost) and finally if to disable the "Audio file" option at the end of each file playback.

3.7. Generation of audio streams

This function is active only with an ADAM-16 license or higher. It allows to duplicate the audio played from the speakers of your computer to the configured stream address. In practice it is possible to transmit background music to all the devices listening to the chosen address:



In this way the user can use his favorite program for music playback (for example Media Player ™, iTunes ™, etc.) and use his own playlist.

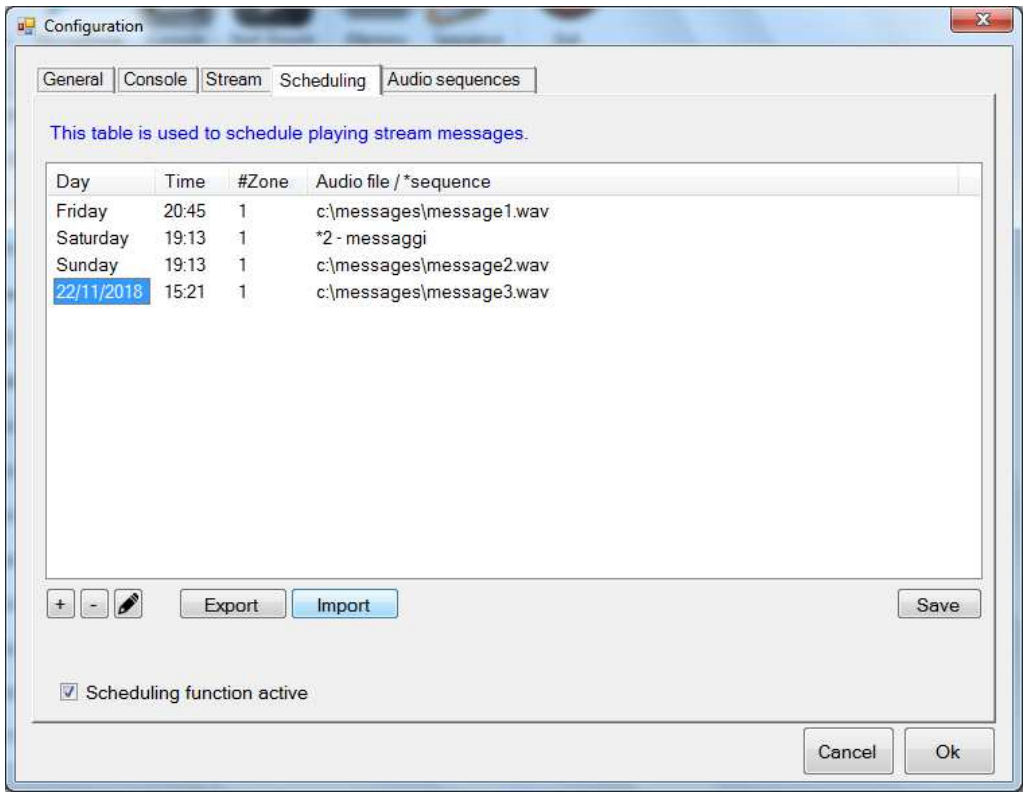
Once the destination address and port is configured, the activation takes place from the main screen:

The stream remains active until it is interrupted with the same key or the program is closed.

If a microphone or console message is also launched while the stream is active it will not stop. The devices will behave as for any other stream, ie giving precedence to the stream with higher priority (so be careful not to use the same address at the same time both for background music and microphone messages).

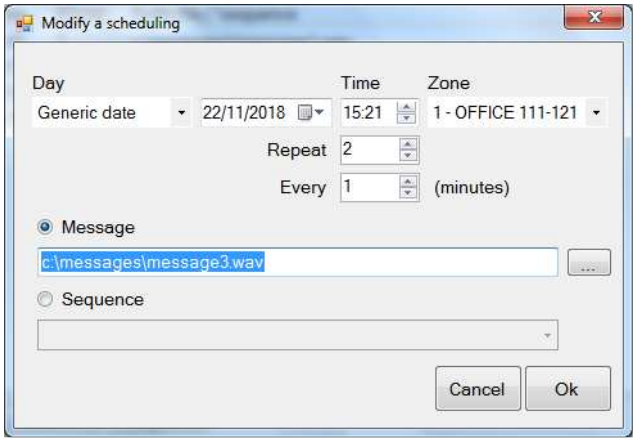
3.8. Scheduling

Scheduling is the possibility to compile a calendar for the automatic emission of prerecorded messages in stream. There are no limits in the table and it is possible to enter days of the week (every day of the indicated week and at the specified time a message is played) or precise dates (the message will be played only that day and never again):



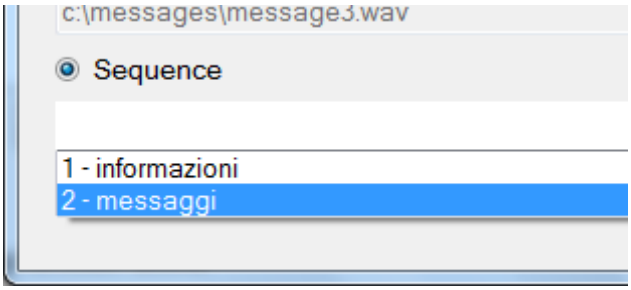
It is possible to reproduce a single message or a sequence of messages (programmable in the "Audio sequences" section). In this case the list is highlighted with the character * (asterisk) indicating that at that time a sequence of messages / audio files will start.

The stream is played back to one of the zones configured in the "Console" table. It is also possible to choose how many times to reproduce the message and how often:



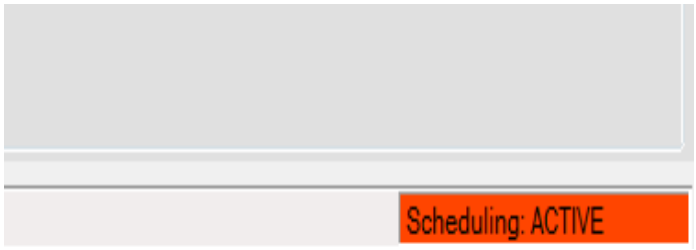
In the example, the message is played 2 times at a distance of 1 minute between each reproduction starting at 15:21 am on 22/11/18.

The Scheduling program can send messages, as we have seen, but it can also recall at a certain time a sequence of audio files (messages/music) programmed in the specific "Sequences" function.
If you want to send a sequence, you are asked to enter one of your choice, among those already prepared (see below):



Scheduling list can be saved or imported in "XML" format, useful for having more configurations to use at different times of the year or to transfer the list from one computer to another.

Obviously, closing the program disables scheduling. While playing a message, the field at the bottom right of the main window is highlighted in red:

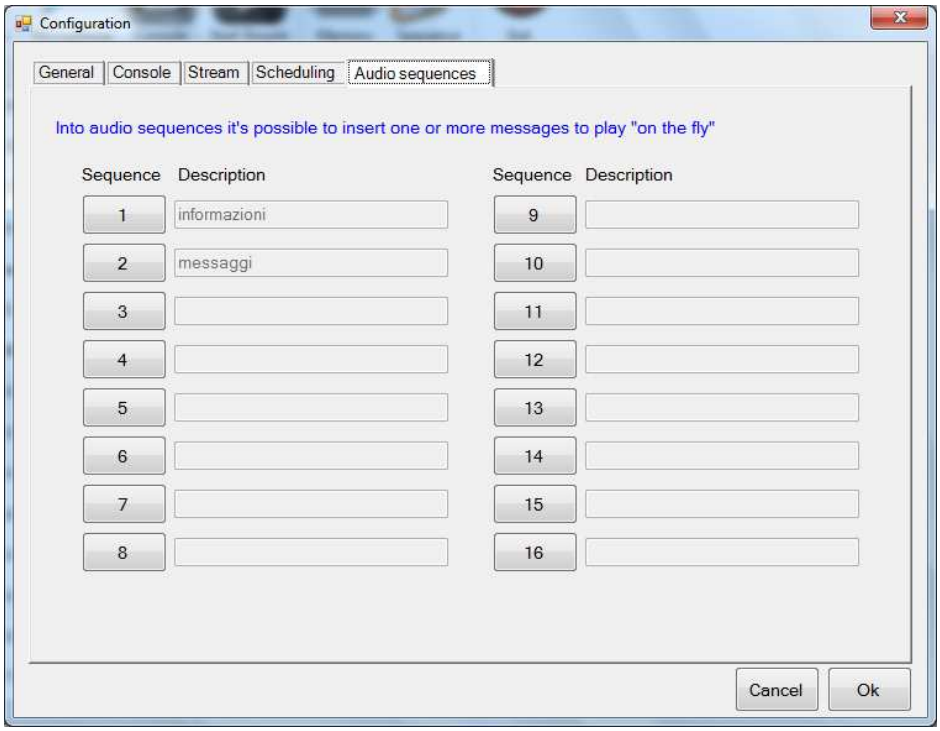


During playback, clicking with the mouse on the frame, it is possible to stop playing the current message (and also end any subsequent repetitions).

The repetition of a message is eventually canceled by the activation of another message. If, for example, at 12:30 you start a message to be played 6 times every 5 minutes, the sequence should end at 13.00. However, if you also configure a message at 12:38, it will cancel the repetitions of the previous message.

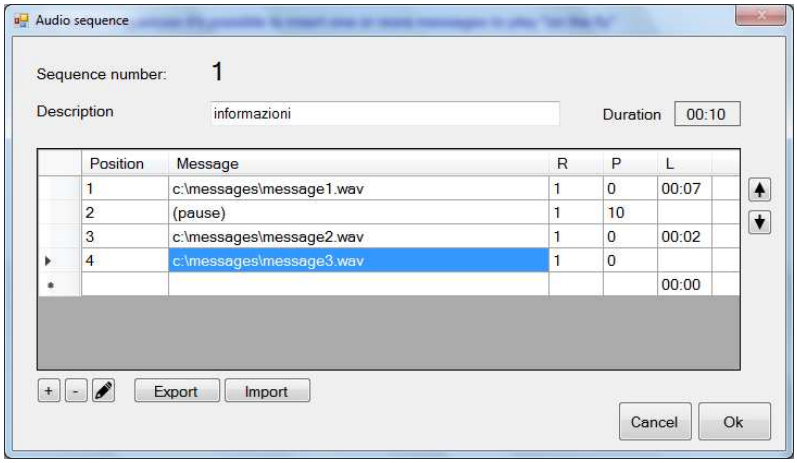
3.9. Audio sequences

An audio sequence (or Play List) is a list of predefined messages that can be streamed, automatically or manually. You can create up to 16 sequences:

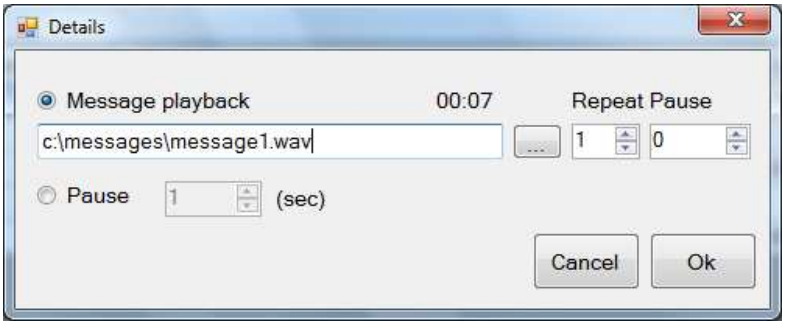


Each sequence has no limits with respect to the number of messages that can be inserted:

IMPORTANT NOTE: both for the Scheduling program and for the Sequences it is important that the folder containing the audio files has a fixed path and does not have variations of the name, as indeed the individual files, because if Scheduling are scheduled for days and times or Sequences of files and subsequently they are changed or the name of the folder containing the files or the path, the ADAM program, not finding them anymore, obviously does not reproduce them and signals errors in the path of the programmed files.
It is strongly suggested to place the folder containing all the files usable by ADAM directly in C: \ AUDIOFILES\ ... and avoid changing the name both to the folder and to the individual files.

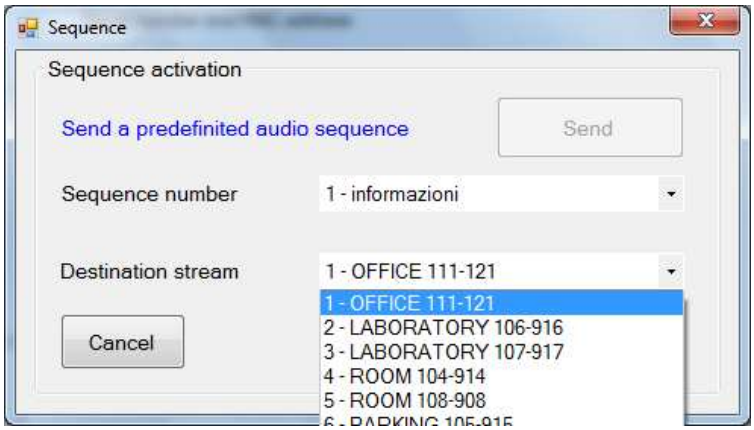


You can also specify how many repetitions (R) for each message and a pause (P) in seconds at the end or before moving on to the next message:

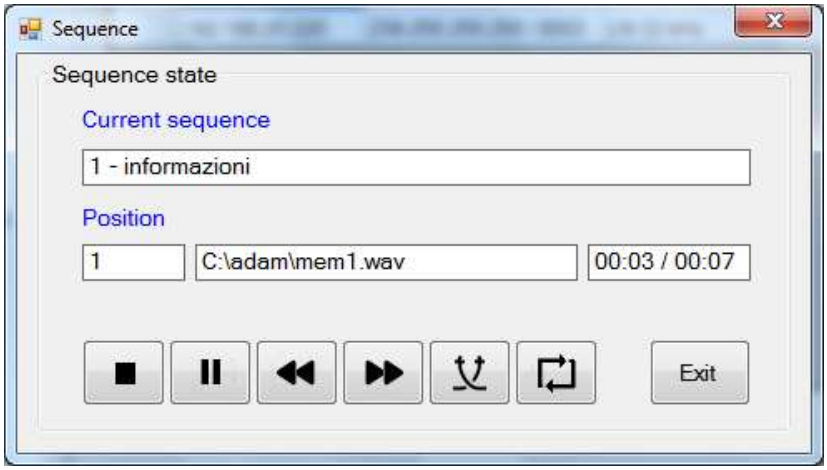


The manual reproduction of a sequence takes place from the main form:

By choosing the "Sequence" button you will have access to the window that will allow you to choose which sequence and to which zone to play:



With the "Send" button the audio sequence is immediately played back to the indicated stream and with the programmed modes (messages, pauses, repetitions). If, when the "Sequence" button is selected, a play list is already in progress, the window that opens will show information about the current status:



In this case, in addition to displaying its status, it will be possible to end the playback, to pause, skip, shuffle or loop the sequence.

3.10. Memory

It is possible to record up to 16 messages (memories) with associated a brief description to be used inside the console. For example, if you often have to give the same messages, you can record them once and for all and reuse them when you need them (even if there is the possibility to choose a file to play inside the console, this method is more practical and faster).

On the toolbar, choose "Memory":

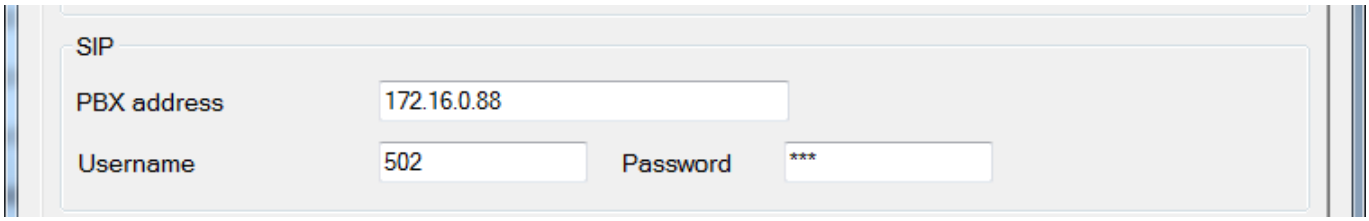
A window will open that will allow us to manage up to 16 audio memories:

The occupied memory locations are highlighted in green, while the empty ones remain in gray. You can listen to each memory, record it directly with a microphone, load it from a file or save it to a file, insert a brief description and then empty its position.

To use the memories, inside the console, simply place the mouse on the area you want to transmit, **right-click** and choose the memory to be played:

3.11. SIP Configuration

In the Adam-16 or higher licensed version, you can use the software as a VoIP SIP terminal, for peer-2-peer calls to devices. It is also possible to register the same Adam on a SIP pbx, so that he can be called from the terminals:



Simply provide the IP address of your pbx and your registration credentials.

3.12. Various configurations

In general configuration it is possible to set the activation times of the relays, the description of the station (will serve as information displayed on the monitor page) and the ip address of the network interface to be used.

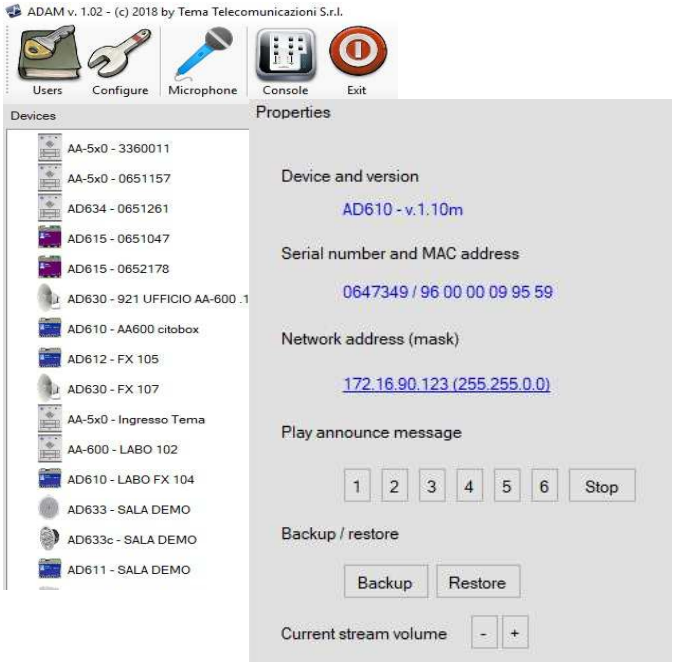
The activation times of the relays are different from those programmed inside the devices and are valid for all.

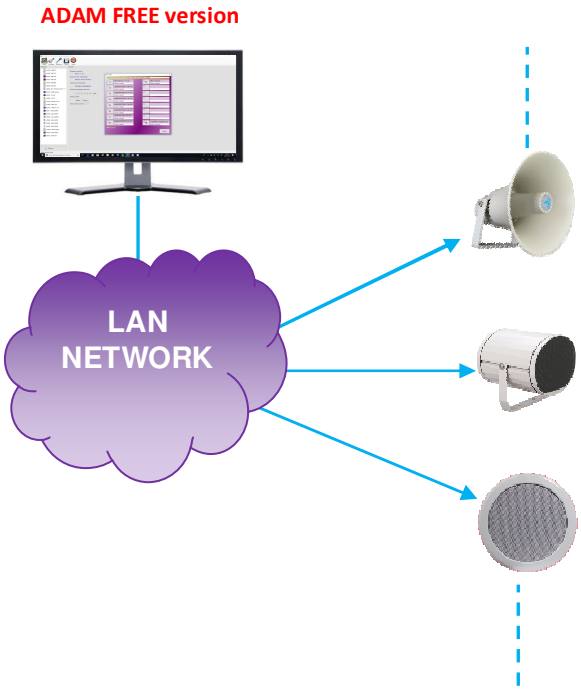
The ETH stream address is normally filled in automatically by the program when a scan is performed. In exceptional cases it is possible to configure it manually, in which case it is sufficient to enter the IP address of the network interface to be used for sending the audio stream.

4. Software versions and application examples

4.1. ADAM version Free

Administrator monitoring and management of all devices in the network





In the FREE version of this powerful software, the Network Administrator has complete control of all installed Tema SipComStage devices and is extremely easy to manage. These are the basic functions:

Search and display of TEMA devices on the network
This function starts the search for all TEMA IP Audio devices in the local network. The devices are listed with the own serial number or a description programmed by the user in the device, for example the planimetric position can be indicated (Warehouse 1, Warehouse 2, Meeting room, etc.).

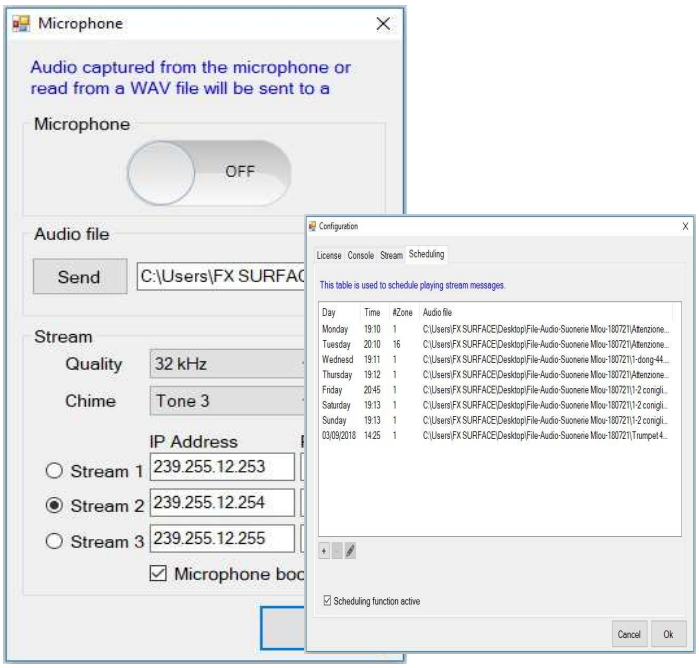
Main device parameters display
A simple click on the chosen device will show all the main information: model, firmware version, serial number, MAC address, IP address.

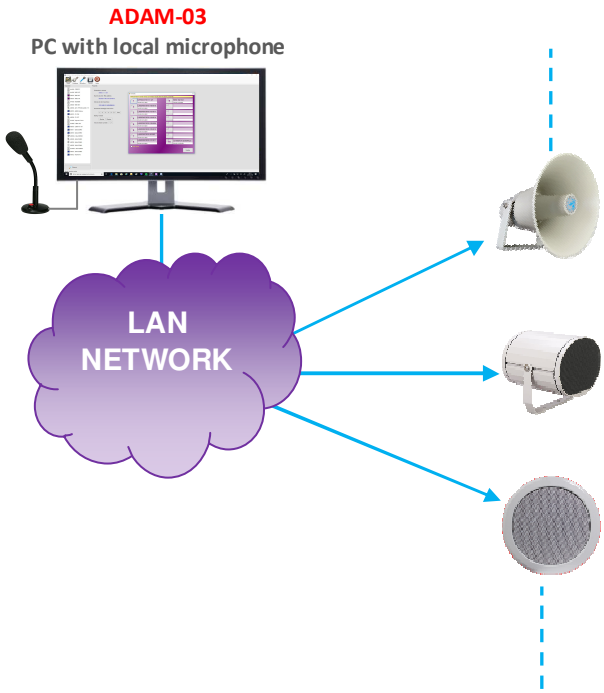
Configuration Backup and Restore
They allow to save and restore the configuration of the device for security reasons.

Audio volume adjusting
It is possible to increase or decrease the output audio volume on the selected device. Moreover, the Administrator can install the ADAM software Free version on every PC where an AD600 series IP loudspeaker is installed nearby so that the local staff can independently adjust the desired volume in the room. To that user, the Network Administrator can assign access privileges and limitations.

4.2. ADAM-03

Sending microphone announcements to 3 zones, scheduling, sending audio files, without IP-PBX.





In many environments where there is a traditional analogue PBX, either completely absent, or simply do not want to extend the existing VoIP PBX with additional SIP licenses, it is possible to realize a uniquely unidirectional audio announcements system in a "stand alone" way simply using the ADAM-03 software installed on a PC where the Tema microphone base mod. AD696/AA is connected. The realization is simple, immediate and cheap, without the need of new cables because the existing LAN is used.

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 for the zone or in general call. 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

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.

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

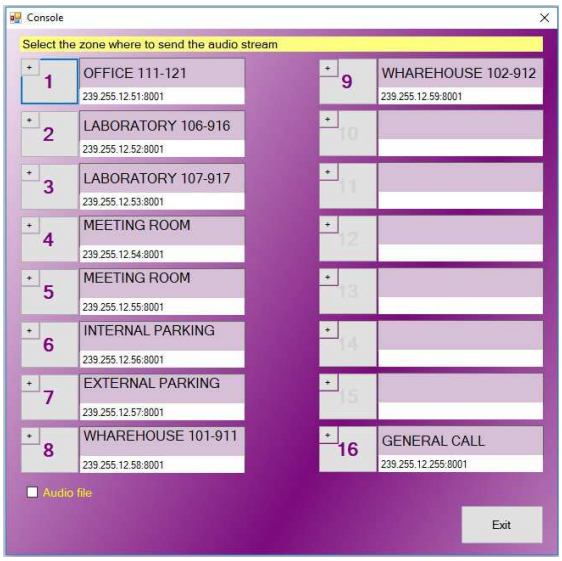
With this function it is possible to program the sending of pre-recorded audio files to the desired times and possibly repeat them on the preset days. It is also possible to schedule the announcement of announcements at pre-established intervals, for example, as a promotion program produced in supermarkets,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

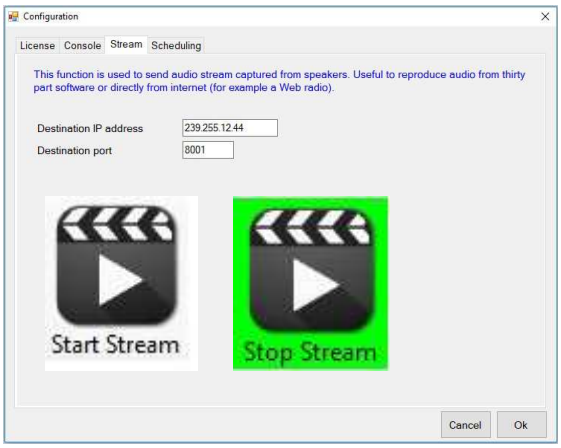
There are no limits in the number of programmable audio files available online in the programming mask of the ADAM software.

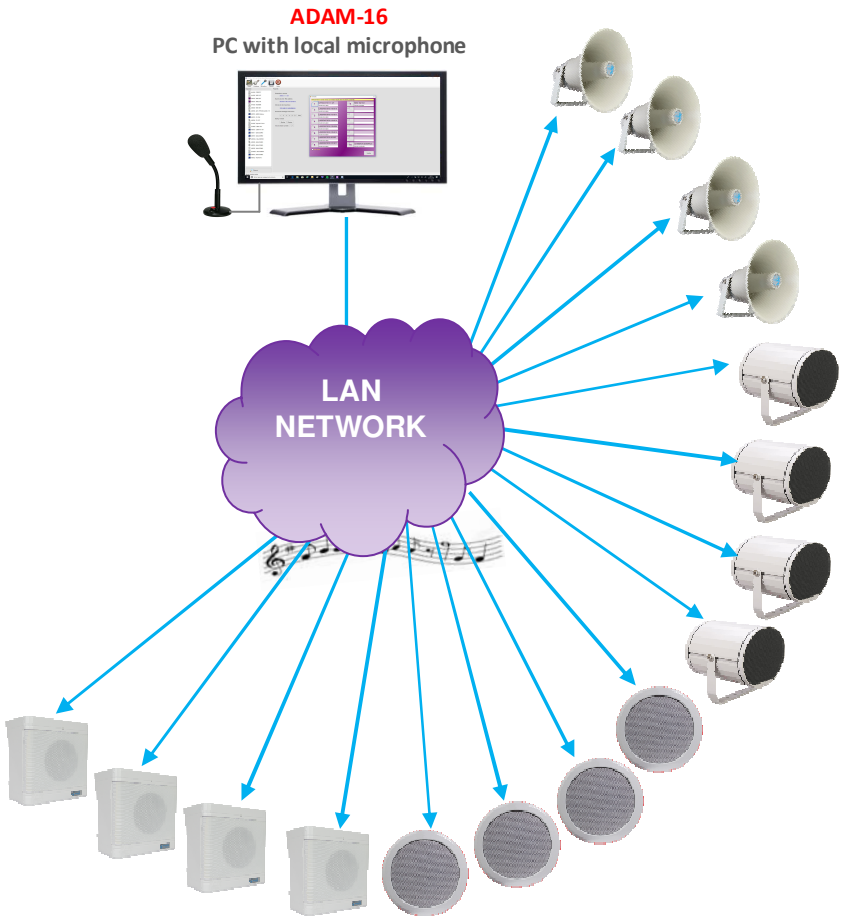
NOTE: it is not necessary to upgrade to higher ADAM versions in case of installation of many IP-SIP loudspeakers as long as the 3 zones are not exceeded since more terminals can be configured on each single zone.

4.3. ADAM-16

Sending announcements from a local microphone on 16 zones, Multicast Streaming Generator







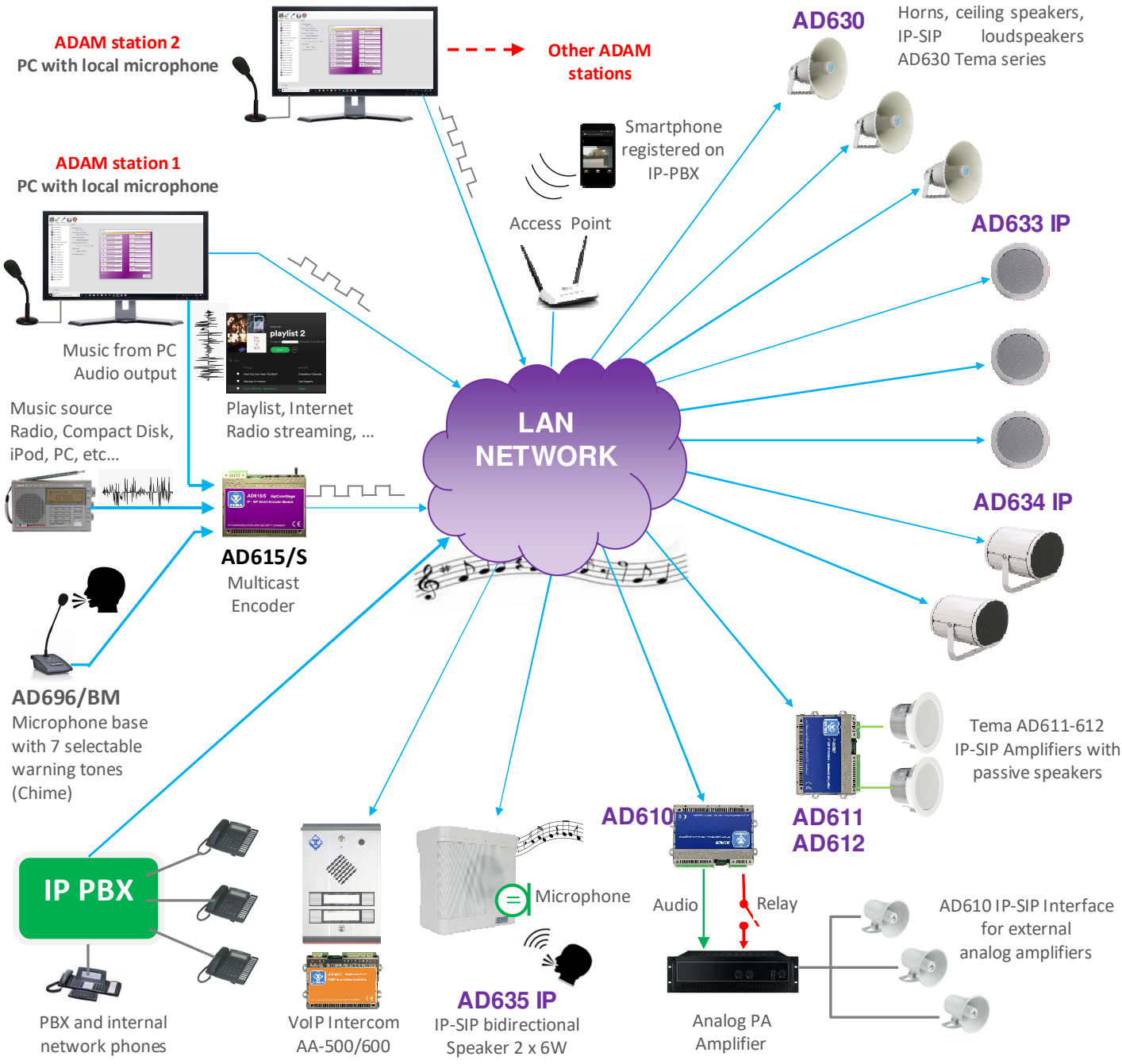
The ADAM-16 version, in addition to having all the performance of other versions, allows to extend the zones up to 16 and is equipped with a practical Console window that significantly speeds up the sending of announcements and prerecorded audio files, ideal for applications where it is needed to have an easy view of the areas and operate with ease and speed.

Generation of 2nd Multicast Stream Audio (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.***

4.4. ADAM-32/64/128/256

For large and articulated plants.



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 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 iOS/Android APP or softphone
- Night call ringtone repetition (Night Ringer)

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.

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.

4.5. ADAM: example of typical configuration for business installation

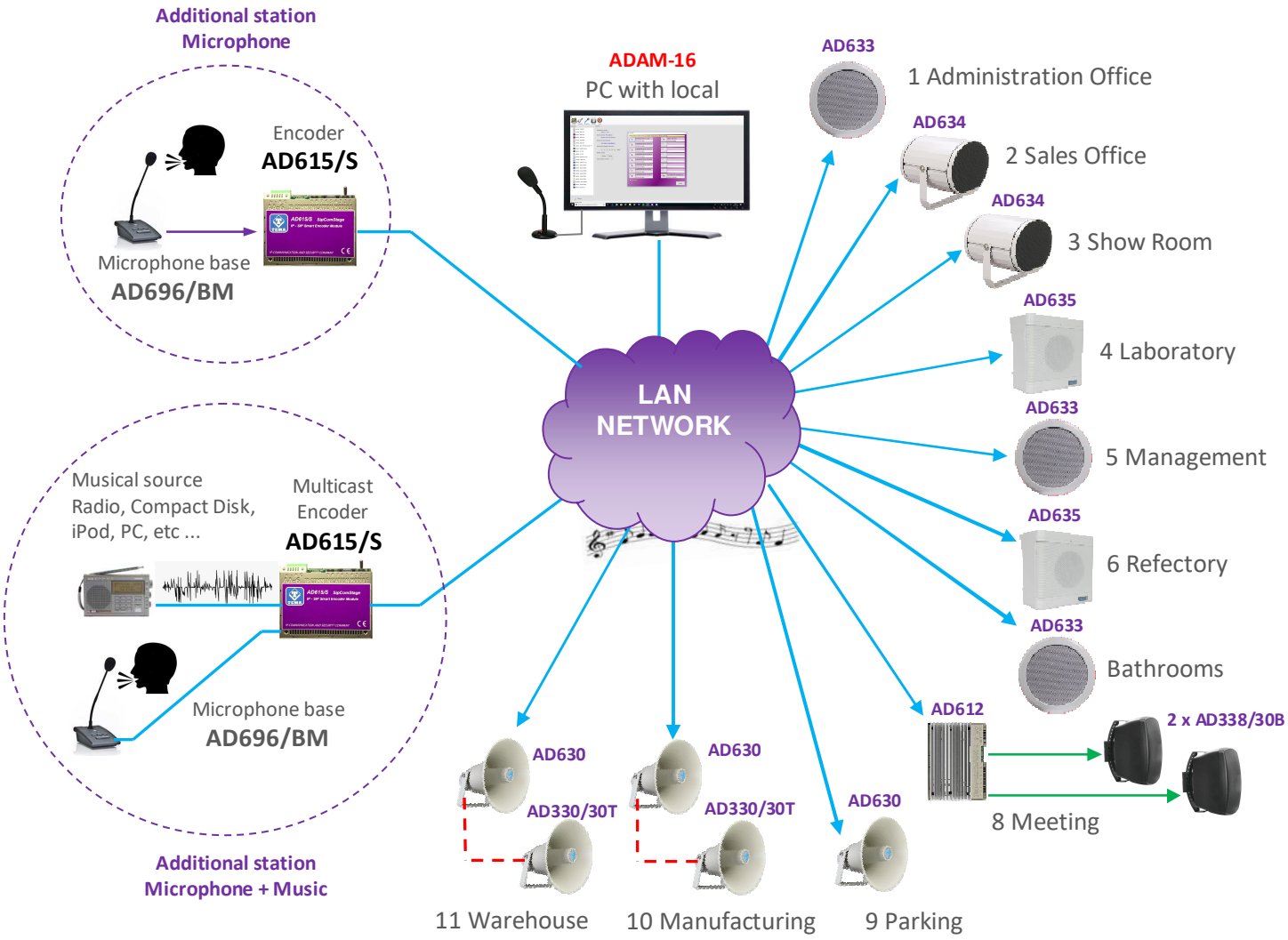
In a typical company system with 11 terminals consisting of speakers and IP-SIP modules, SipComStage AD600 series, it is proposed a configuration of the ADAM software and the programming of the devices in the LAN network suitable for exploiting the maximum potential of the system. The application allows the sending of announcements to each individual terminal, to groups of terminals, or in general calls to all terminals. It also allows sending background music generated by the computer itself and sent in a special Multicast channel to all terminals with individually adjustable volume for each terminal, which can be differentiated from the volume required for announcements, normally higher.

In area 8 (Meeting Room) an IP-SIP AD612 amplifier with two 2-way passive speakers was used for higher sound quality.

In areas 10 and 11 of Manufacturing and Warehouse, being larger than the other areas, an IP-SIP AD630 horn was used, with the relative passive model to double the sound power.

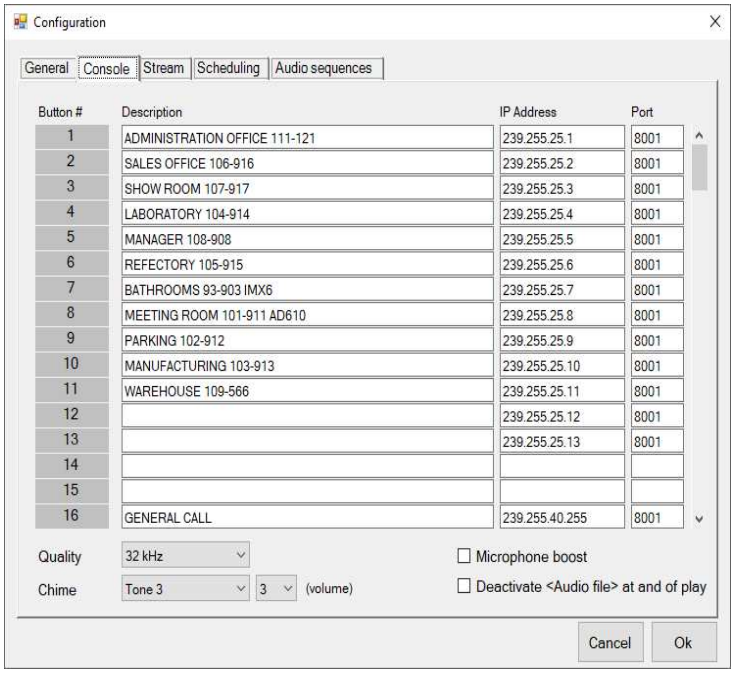
Additional stations may be provided for the launch of announcements consisting of a microphone base and an encoder each, with no limit as the number of stations added on the LAN. If other music channels to be broadcast on the network are needed, just add an Encoder and the music source to be connected to the Encoder itself.
In the same way, other ADAM stations can be added, without number limits, in order to operate on the same terminals from different locations.

Note that by installing the additional "VideoConsole" software on the same PC where ADAM is installed (and/or on other PCs), it will be possible to establish bidirectional communications with all the IP-SIP speaker terminals (excluding IP modules AD610-611- 612 that do not have an internal microphone). Furthermore, a bidirectional call can be established from each IP-SIP loudspeaker without additional costs, simply by connecting one or two external buttons on the terminals, even without the use of any PBX.

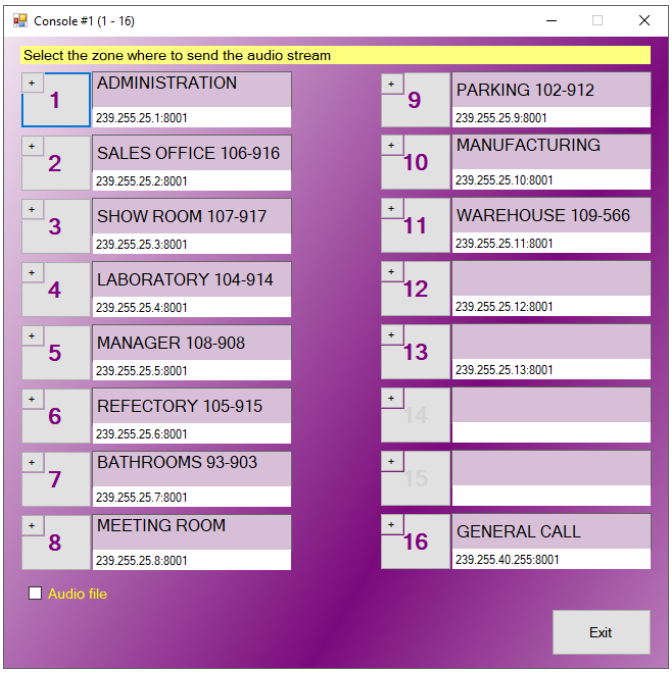


Configuration of the ADAM console and AD600 terminals

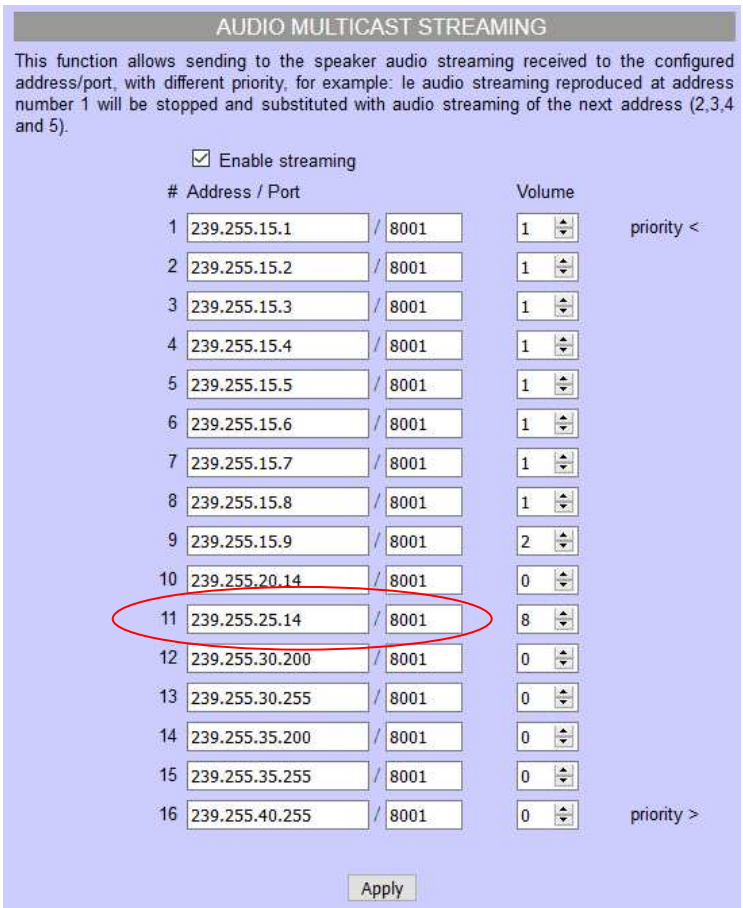
ADAM: configuration of the Console in the appropriate section



ADAM: operation screen of programmed Console



Suggested addresses to be programmed in each AD6xx terminal on the network



The figure shows the programming of the multicast channels of the 1st terminal of the Administration Office, all the other terminals can be programmed in the same way, except for channel 11 which determines the unique number of each terminal. The channels have consecutive priority, channel 1 is the lowest while channel 15 is the highest priority.

Multicast channels with address "15" from 1 to 8 are reserved for low volume background music channels.

Channels 9 and 10 are reserved for services such as audio deterrence and personal streaming (Not considered in the application).

Channel 11 with address "25" is followed by the number assigned to the terminal, in this case the number 14. Each other terminal must have a different extension (... 2 ... 3 ... 4 ... etc. up to .255)

Channel 12 is used to receive messages in specific Scheduling of the terminal or by group of terminals.

Channel 13 is used for scheduling at all terminals

Channel 14 is used to send an emergence audio sequence to a group of terminals manually or at set times.

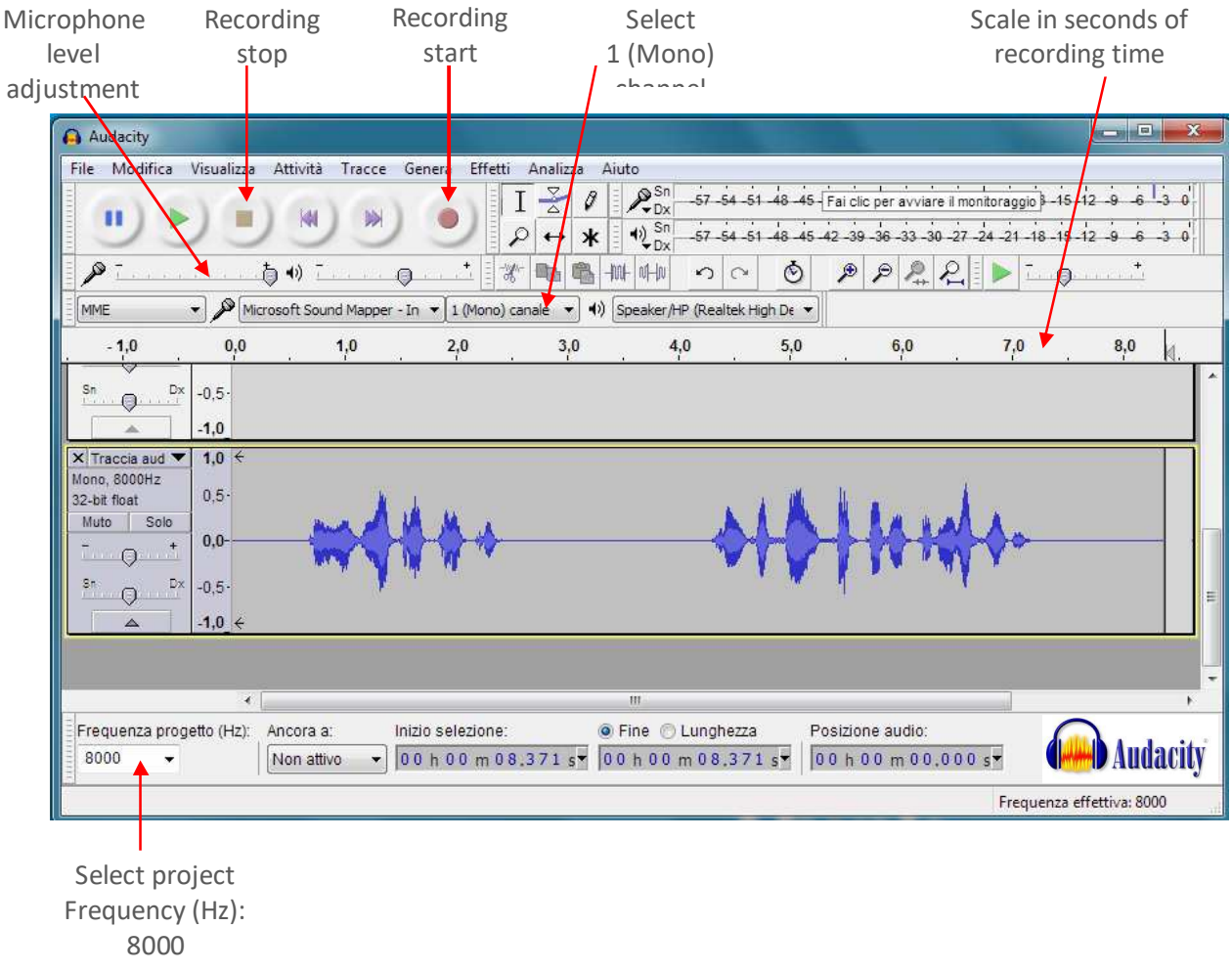
Channel 15 is used to send a general emergency sound sequence to all terminals, either manually or at set times.
Channel 16 (the highest priority) is reserved for general calls from each microphone station, including PC stations with ADAM.

The described application is only a functional example, obviously it is possible to choose other IP addresses to be assigned to the terminals in the range of addresses reserved for Multicast communications established by the international organization for the Internet (class "D" from 224.xxx up to 239.xxx).

5. APPENDIX

5.1. Audacity free audio processing software

For recording your audio files, it is possible to use one of the free software such as AUDACITY downloadable for free from the link ***http://www.audacityteam.org/*** remembering to record and save audio files in .WAV format at 8KHz-16Bit Mono if the files must be uploaded on the AD600 series devices (Please pay attention: other formats are not accepted in AD600 series!!), or in more hight quality (16-32-44,1KHz) if files must be used from ADAM software. Below there are some information about basic operations. For more information on the AUDACITY program, please refer to the manufacturer program guide.



6. FAQ

Where can I download the DEMO version of the ADAM software?
At this link: : ***http://www.tematlc.it/eng/audio-ip-en.asp#81*** where you can find also complete documentation on the products

I am using version 1.04, how can I upgrade to 1.05?
Download version 1.05 from the website and uninstall the previous version from the PC before installing the new one. Both the configured database and the license purchased remain stored with the new version.

I have an ADAM-03 license and want to expand it with the ADAM16 console?
Proceed to make an extension order, a new license number will be sent by e-mail shortly.

The functionality of VoIP and P2P calls with which PBX is compatible?
ADAM has also been tested with all the switchboards of the most prestigious brands such as: SIEMENS - AVAYA - ALCATEL – PANASONIC – SAMSUNG - NEC - 3CX - LG - WILDIX - AASTRA - ASCOM - NITSUKO - SELTA – PHILIPS – MITEL, SISTEMI BASATI SU ASTERISK, SOFTCLIENT of various manufacturers.

What kind of files can I upload to ADAM programs? And what is the maximum duration?
The files manageable by ADAM, in the Scheduling, Sequences and Memories functions, can be of WAV type with sampling from 8 to 44.1KHz or MP3. The maximum duration for each file is 30 minutes, but it is recommended to upload files of shorter duration to reduce possible causes of slowing down of the PC in issue.

And in the 6 memories of the AD600 series IP SIP modules and speakers?
The SIP IP Modules and Speakers have 6 internal autonomous memory zones where message / music audio files can be loaded, but ONLY accept the 8KHz-16bit WAV format, the maximum duration for each memory is 60 seconds, expandable with license up to to 8 minutes per message.

What kind of microphone can I connect to the PC where I installed ADAM?
Theoretically any condenser microphone available on the market can be fine, but it is preferable that it has a directional response (cardioid) for good efficiency when used for announcements, especially in a noisy environment. In the Tema catalog there is the specific ADAM microphone base item AD696/AA with the required features and flexible and adjustable arm.

For other FAQs consult the site: ***http://www.tematlc.it/eng/audio-ip-en.asp***

NOTES: