



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®



Revision	Date	Revision reason	Prepared	Checked/Approved
3	13/12/2018	Software update	MM	MM, FL

INDEX	PAGE
1. Introduction	3
1.1. PRESENTATION	3
1.2. SERVICES AND FEATURES	3
2. Installation	4
2.1. MINIMUM CONFIGURATION	4
2.2. SOFTWARE INSTALLATION	4
3. Starting up	5
3.1. ACTIVATION OF THE PROGRAM	5
3.2. DEVICES SEARCH	7
3.3. USER CONFIGURATION	9
3.4. MICROPHONE	10
3.5. MULTI-ZONE MICROPHONE CONSOLE	12
3.6. CONSOLE CONFIGURATION	14
3.7. GENERATION OF AUDIO STREAMS	15
3.8. SCHEDULING	16
3.9. AUDIO SEQUENCES	18
3.10. MEMORY	20
3.11. VARIOUS CONFIGURATIONS	21

1. Introduction

1.1. Presentation

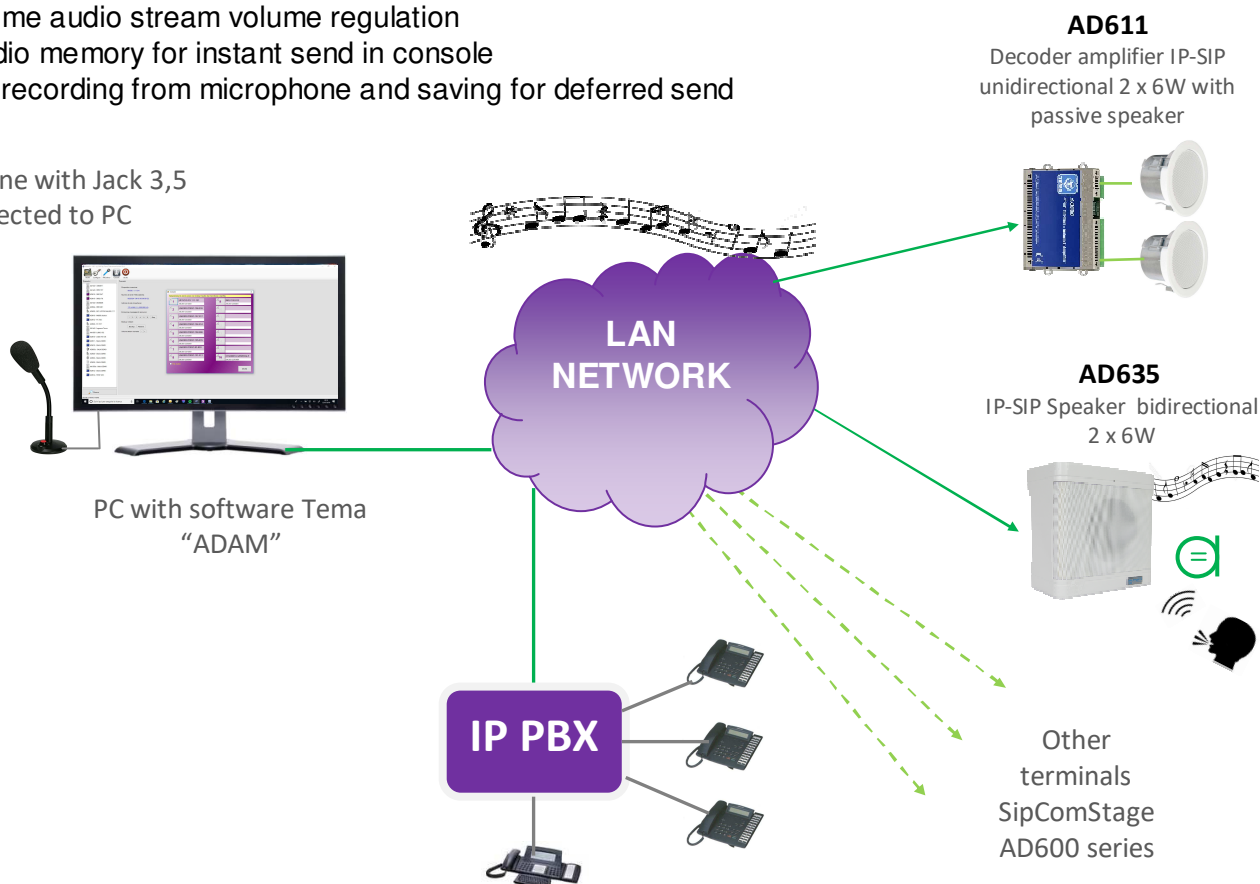
The ADAM software has been developed in Italy by the Tema Telecommunications laboratories. It operates in a Microsoft Windows® environment and, in the base version, simplifies the maintenance of IP Tema devices, such as IP-SIP loudspeakers, encoders, door phones, etc. In the full version this software become a complete Console to launch microphone 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
- Generation of audio streams for background music
- Automatic announcements at pre-set times (scheduling)
- Remote relay activation
- Up to 16 audio sequence (Play List), manual or automatic activable
- 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

Microphone with Jack 3,5
connected to PC



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

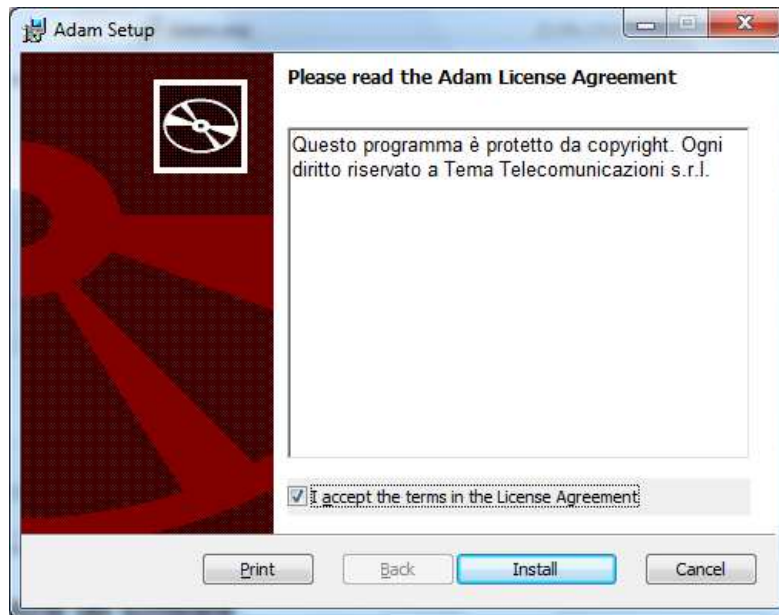
2. Installation

2.1. Minimum configuration

ADAM can be installed on any PC with Windows® operating system (7/8/10 or later), with Framework 4 or later installed.

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.

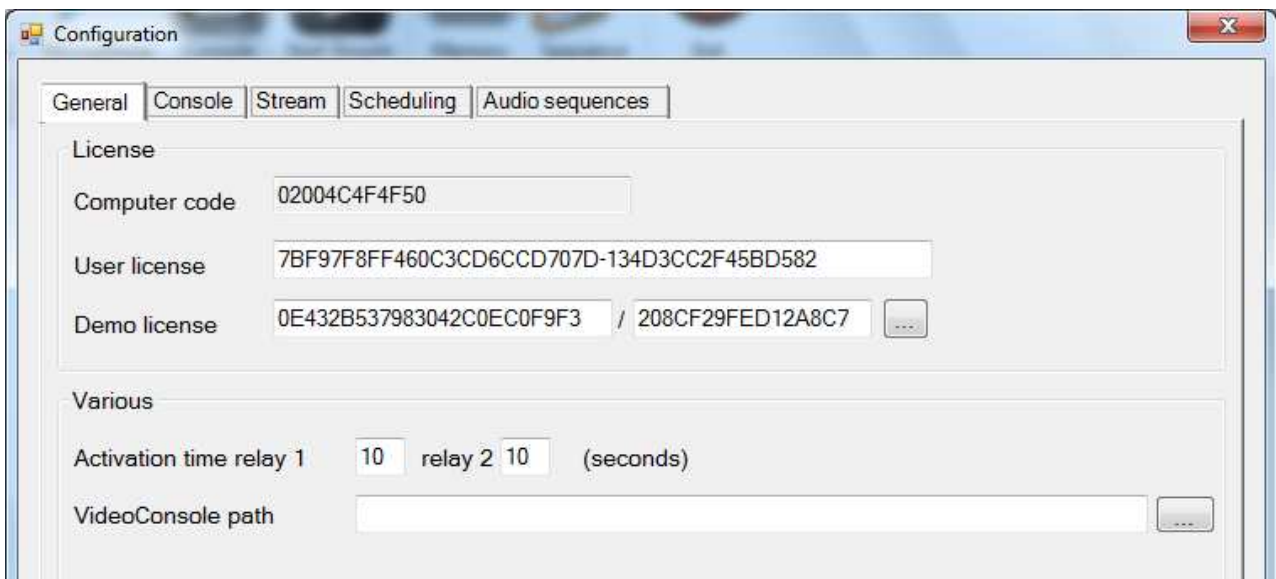
3. Starting up

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:

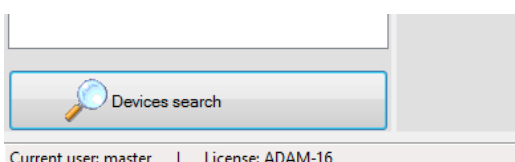


Once the program has started, activation is required. Each software is linked to a unique computer code for each installation. The activation codes must be entered in the configuration mask:



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	X	X	X	X	X	X
Display of devices data	X	X	X	X	X	X
Configuration Backup/Restore	X	X	X	X	X	X
Stream volume adjustment	X	X	X	X	X	X
Web connection to the device	X	X	X	X	X	X
Scheduling, Sequences	-	X	X	X	X	X
Launch of messages 1-6	-	X	X	X	X	X
Launch of PC audio file	-	X	X	X	X	X
Generating an audio stream "Live"	-	-	X	X	X	X
Microphone function for 3 zones	-	X	X	X	X	X
16-zone Console, Memories	-	-	X	X	X	X
32-zone Console, Memories	-	-	-	X	X	X
64-zone Console, Memories	-	-	-	-	X	X
128-zone Console, Memories (**)	-	-	-	-	-	X

(*) 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>

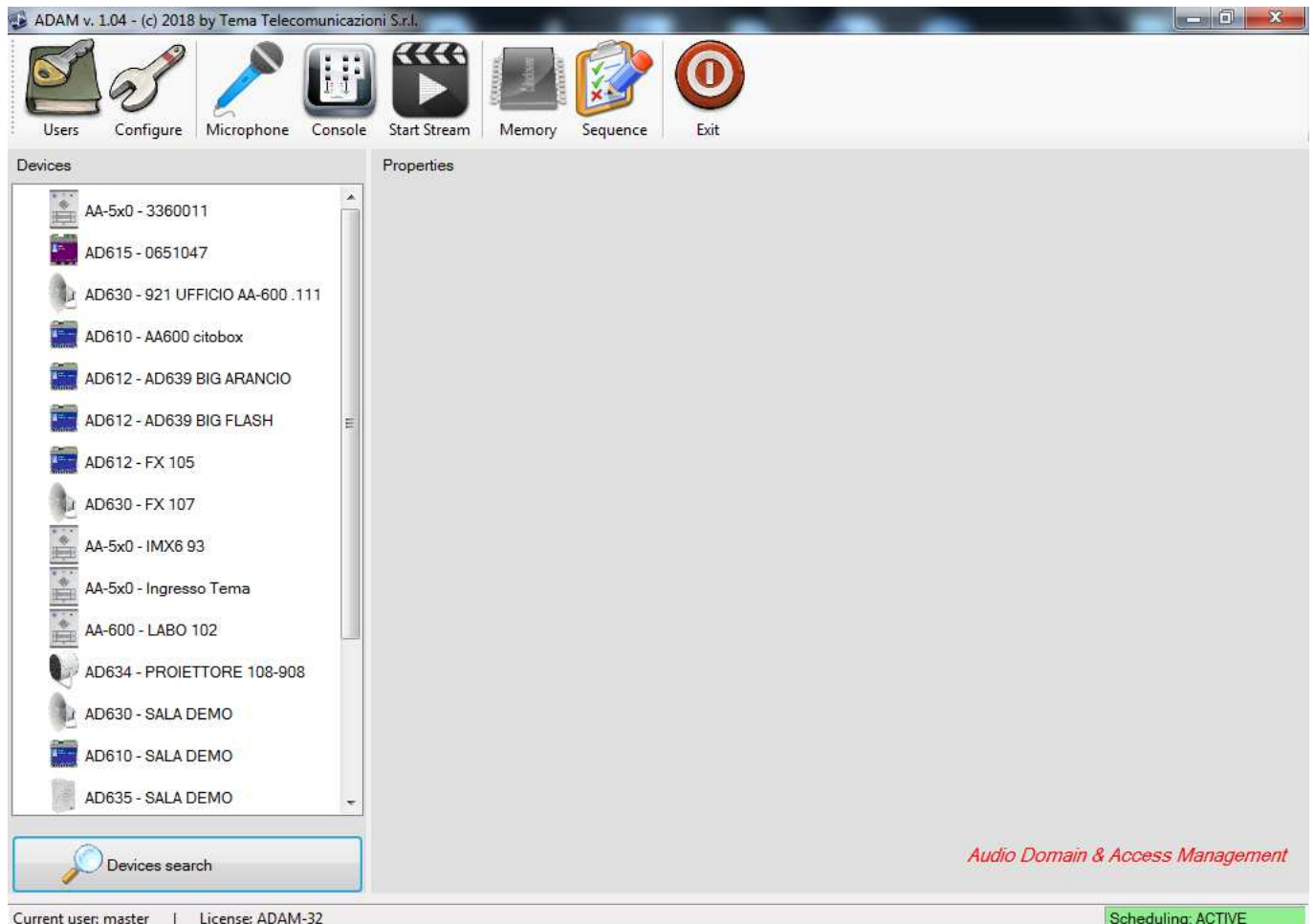
(**) ADAM versions with Console function are available over 128 zones/buttons up to over 1.024 zones.

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:

NETWORK	
IP address	172.16.90.123
Subnet mask	255.255.0.0
Default gateway	172.16.0.1
Primary DNS server	8.8.8.8
Secondary DNS server	8.8.4.4
Time server	ntp1.inrim.it
Ping address	172.16.0.88
Device description	AA600 citobox

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

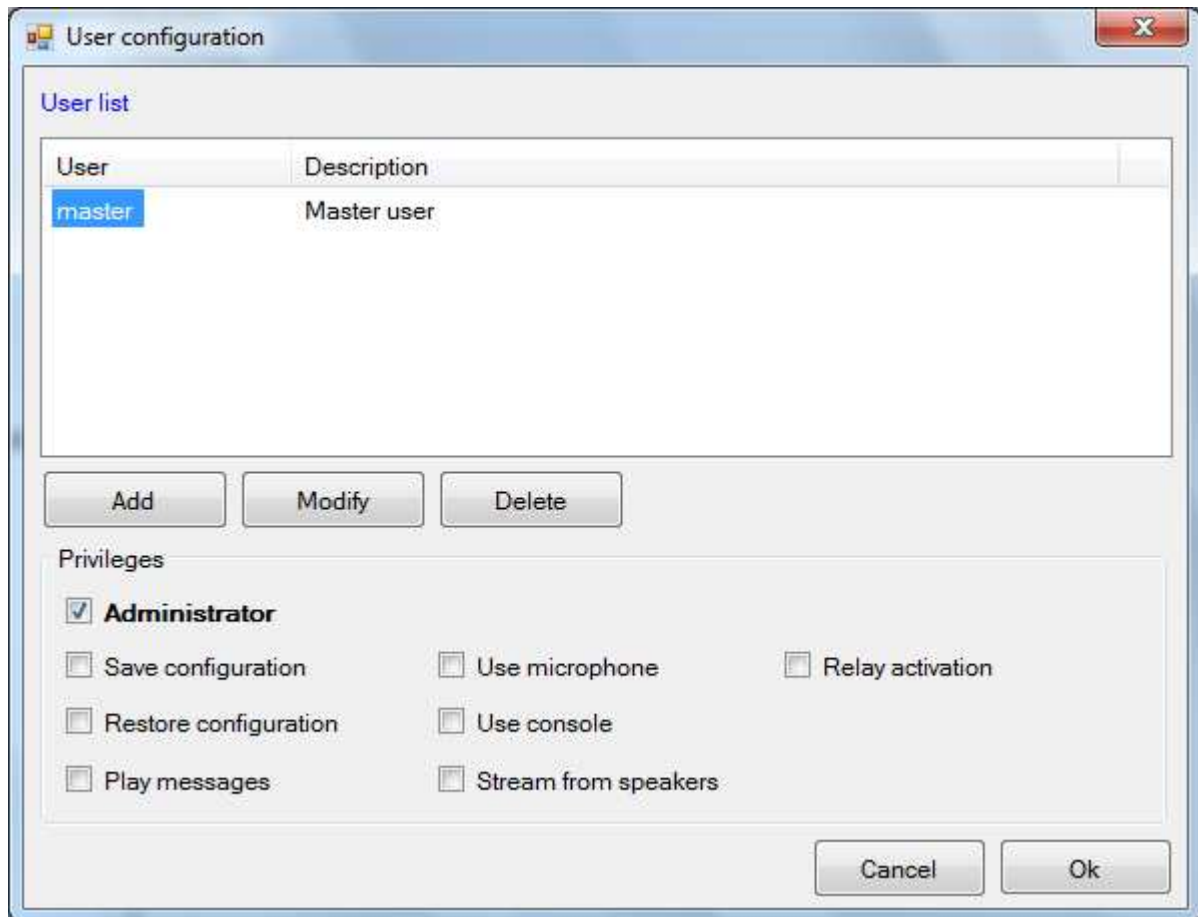
On the right side of the screen the following information and commands appear:

- **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).
- **Play announcement message:** 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 relays on the device (the equipment can vary depending on the hardware version). Activation times are defined in configuration but is possible also deactivate a relay with a second click.

3.3. User configuration

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

From the menu choose "Users":

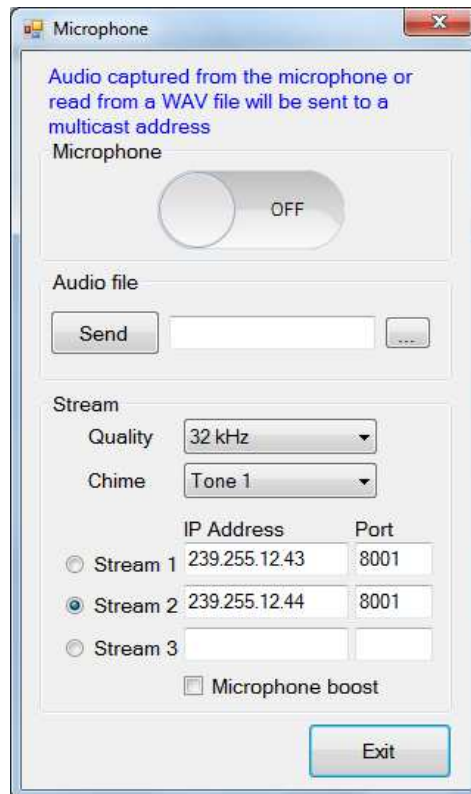


As said by default the "master" user is already present. It can be modified or deleted, but please note that it is mandatory to enter at least one user with all privileges (Administrator).

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 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:

AUDIO MULTICAST STREAMING

This function allows sending to the speaker audio streaming received to the configured address/port, with different priority, for example: le audio streaming reproduced at address number 1 will be stopped and substituted with audio streaming of the next address (2,3,4 and 5).

Enable streaming

#	Address / Port	Volume	priority <
1	239.255.12.43 / 8001	3	
2	239.255.12.44 / 8001	7	
3	239.255.12.45 / 8001	3	
4	239.255.12.46 / 8001	3	


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
- 3) Click "Send" to transmit 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 conflicts 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 (up to 16) with preconfigured addresses:

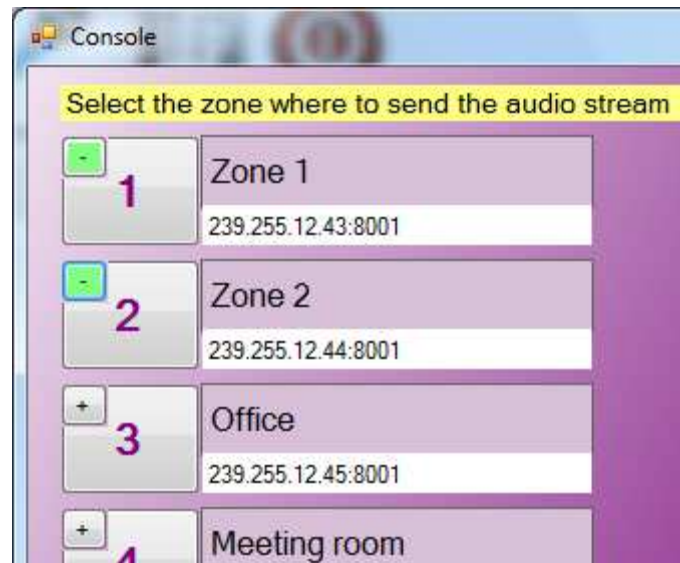


The descriptions and destination addresses are preprogrammed during configuration and can not be edited in this form (see the next chapter).

To send the audio to the desired area, simply select the relative number with 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.

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 16 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. 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.



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:

Button #	Description	IP Address	Port
1	OFFICE 111-121	239.255.12.43	8001
2	LABORATORY 106-916	239.255.12.52	8001
3	LABORATORY 107-917	239.255.12.53	8001
4	ROOM 104-914	239.255.12.54	8001
5	ROOM 108-908	239.255.12.55	8001
6	PARKING 105-915	239.255.12.56	8001
7	PARKING 93-903 IMX6	239.255.12.57	8001
8	WHA 101-911 AD610	239.255.12.58	8001
9	WHA 102-912	239.255.12.59	8001
10	MEETING 103-913	239.255.12.60	8001
11	AD639 BIG ARANCIO	239.255.12.61	8001
12	AD635 DEMO FX	239.255.12.62	8001
13	AD639 BIG FLASH FE	239.255.12.63	8001
14			
15			
16	GENERAL CALL	239.255.12.255	8001

Quality: 32 kHz
 Chime: Tone 3, 3 (volume)
 Microphone boost
 Deactivate <Audio file> at and of play

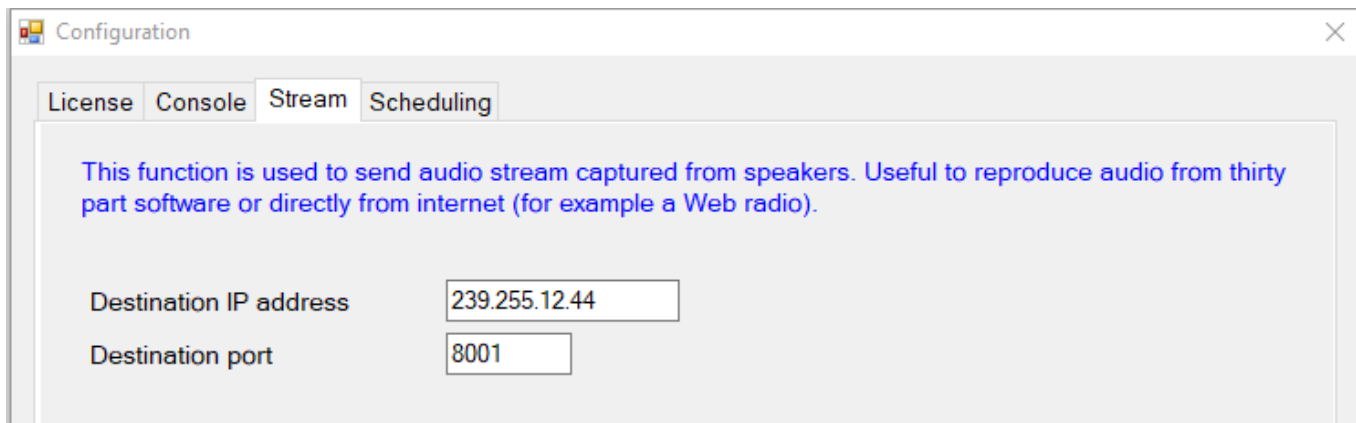
In this mask it is possible to configure up to 16 zones. When a zone is configured, the IP address of the stream and the port is assigned. Possible configuration errors (invalid addresses or duplicates) are highlighted in red.

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.

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:

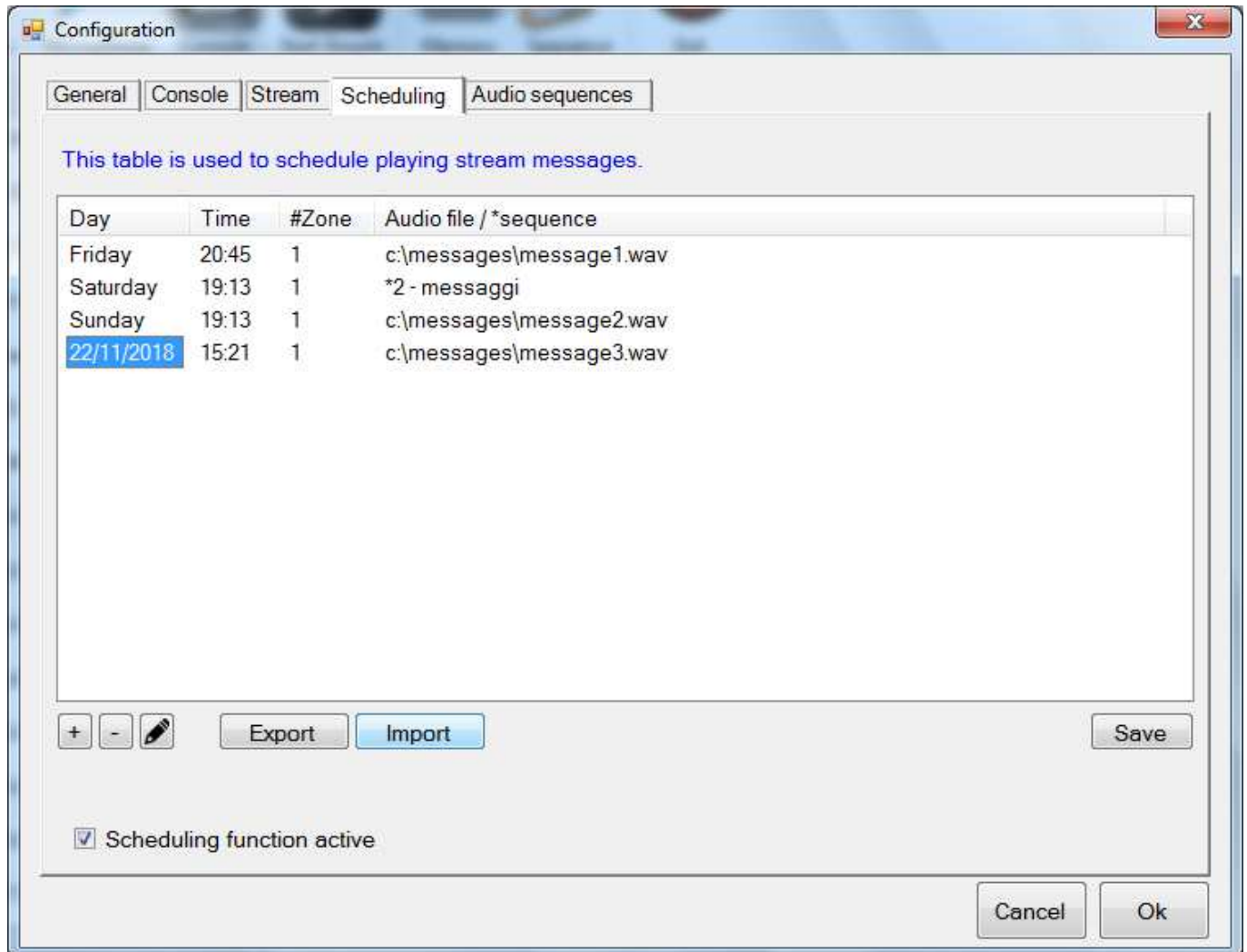


The stream remains active until it is interrupted with the same key or the program is closed.

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).

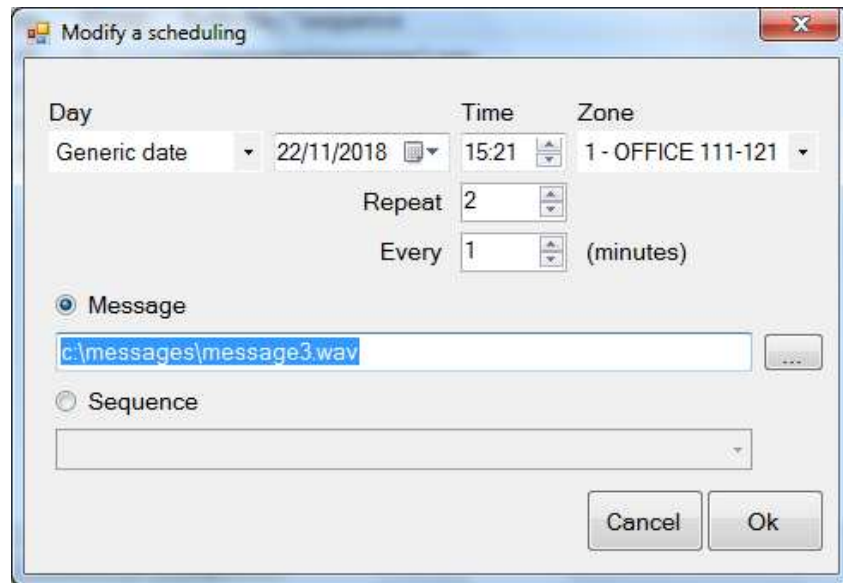
3.8. Scheduling

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):



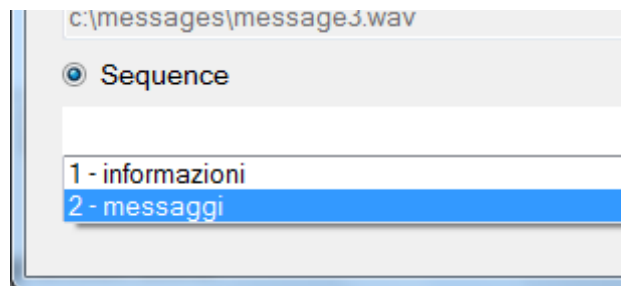
It is possible to reproduce a single message or a sequence of messages (programmable in the "Audio sequences" section). In this case the list is highlighted with the character * (asterisk) indicating that at that time a sequence of messages / audio files will start.

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.

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:

Configuration

General Console Stream Scheduling **Audio sequences**

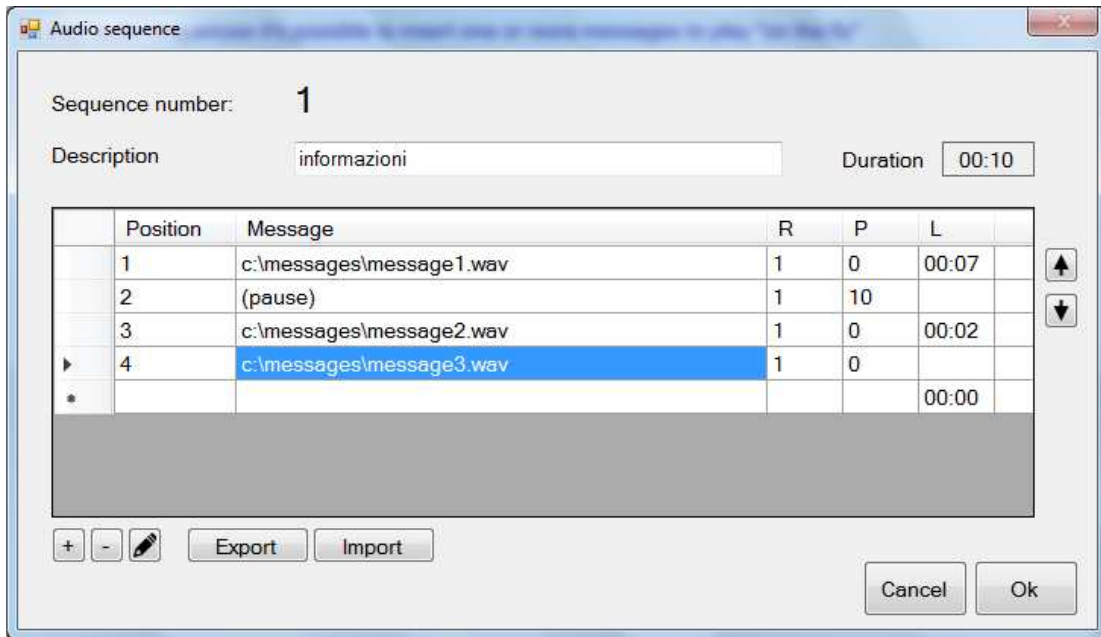
Into audio sequences it's possible to insert one or more messages to play "on the fly"

Sequence	Description	Sequence	Description
1	informazioni	9	
2	messaggi	10	
3		11	
4		12	
5		13	
6		14	
7		15	
8		16	

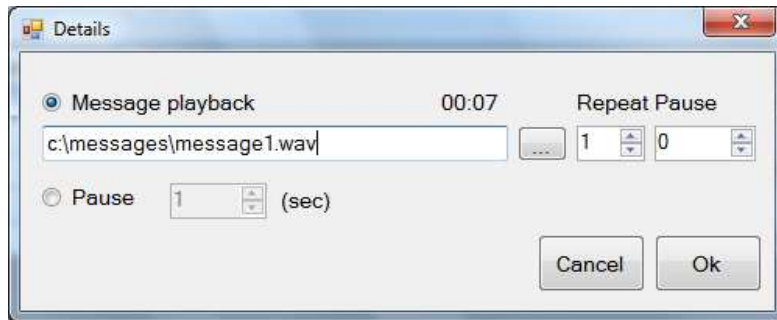
Cancel Ok

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

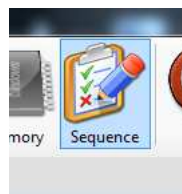
IMPORTANT NOTE: both for the Scheduling program and for the Sequences it is important that the folder containing the audio files has a fixed path and does not have variations of the name, as indeed the individual files, because if Scheduling are scheduled for days and times or Sequences of files and 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.



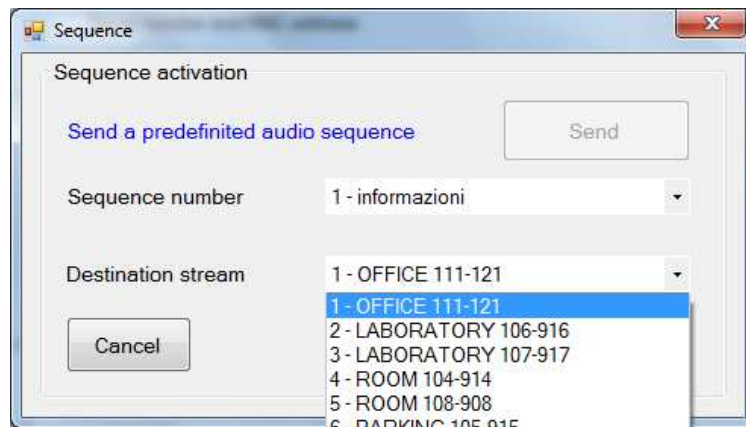
You can also specify how many repetitions (R) for each message and a pause (P) in seconds at the end or before moving on to the next message:



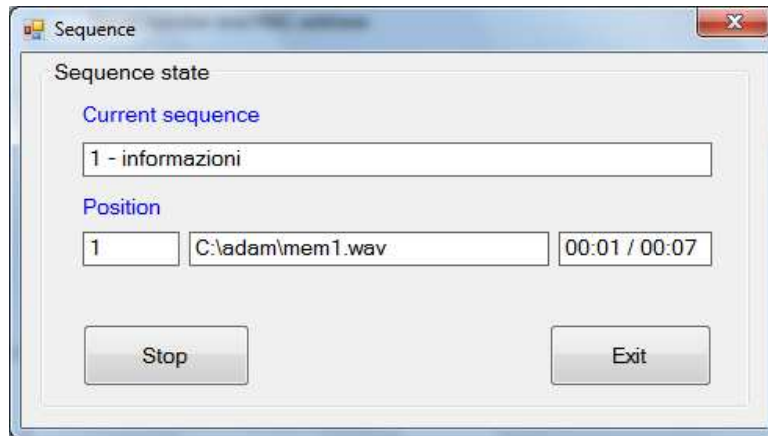
The manual reproduction of a sequence takes place from the main form:



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.

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":

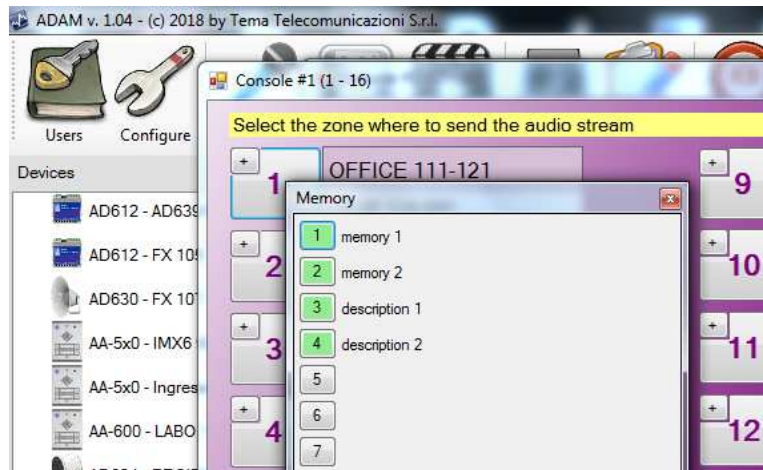


A window will open that will allow us to manage up to 16 audio memories:



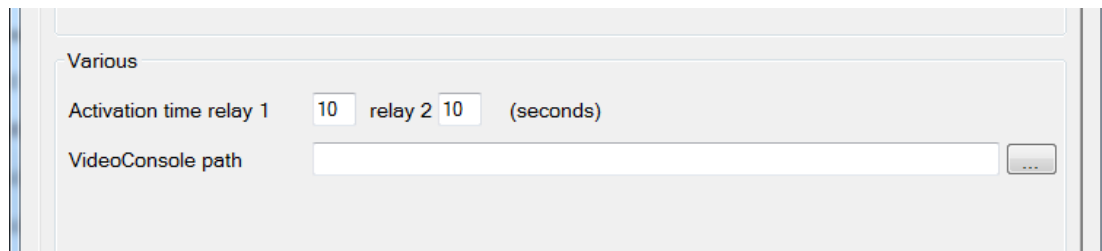
The occupied memory locations are highlighted in green, while the empty ones remain in gray. You can listen to each memory, record it directly with a microphone, load it from a file or save it to a file, insert a brief description and then empty its position.

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. Various configurations

In general configuration it is possible to set the activation times of the relays and the possible path of the VideoConsole (for which reference is made to the relative manual supplied) if installed, especially useful in case of the devices installed there are also the AA-5xx series door phone equipped with a camera:



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

Finally, if you enter the path where the "VideoConsole" software is installed, the corresponding activation key will appear on the toolbar:



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

NOTES: