



TEMA TELECOMUNICAZIONI

"IP COMMUNICATION AND SECURITY COMPANY"

WWW.TEMATLC.IT

AD696/BM

Paging Microphone Base for Announcements and Chime



Serie Audio Over IP Network
"SipComStage"

Products for VoIP SIP LAN networking Communications, Paging Amplifiers Systems and Audio Applications. Zone Announcements, Night Ringer, Multicast general call, Background music, Standard SIP call or Emergency call, SD memory with pre-recorded messages, Relays for LAN drives.

PRODUCT MANUAL

Version HW 1.0 - Version SW 1.09m



Revision	Date	Revision reason	Prepared	Checked/Approved
0	20/03/2018	First release	DP	DP, FL



DICHIARAZIONE DI CONFORMITÀ CE

DECLARATION OF CONFORMITY CE

We, **TEMA TELECOMUNICAZIONI SRL Via C. Girardengo, 1/4 - 20161 MILANO**

declare under our sole responsibility that the product:

Product name **Base microfonica per annunci e din-don**

Trade name **TEMA TELECOMUNICAZIONI Srl**

Type or model **AD696/BM**

and accessories --

to which this declaration relates is in conformity with the essential requirements and other relevant requirements of the R&TTE Directive (1999/5/EC, 2006/95/EC, 2004/108/EC).

The product is in conformity with the followings standards and/or other normative documents:

HEALT & SAFETY EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011

EMC EN 55022:2010, EN 55024:2010, EN 61000-3-2:2006
EN 61000-3-3 :2008

MILANO, 27 February 2018

TEMA TELECOMUNICAZIONI SRL
D. Pontillo

I. IMPORTANT INFORMATIONS REGARDING THE RECOVERY AND RECYCLING OF THIS ELECTRONIC DEVICE

The crossed-out wheeled bin symbol below indicates that this electronic equipment is intended to be disposed in a separate collection and not in an unsorted municipal waste, in order to provide for the treatment of WEEE (Waste Electrical and Electronic Equipment) using best available recovery and recycling techniques. Specific treatment for WEEE is indispensable in order to avoid the dispersion of pollutants and other hazardous substances into the waste stream, while recycling leads to reduction of disposal of waste and the negative impacts on environment and human health. That is, priority is given to reuse of WEEE in its components, subassemblies and consumables. As the final holder, the user has an important role in contributing to reuse, recycling and other forms of recovery of WEEE and is responsible to return this waste in the collection facilities set up by EC Member States and to fulfill other duties in compliance with Directive 2002/96/EC and local laws.



TEMA TELECOMUNICAZIONI is a certified company



RECOMMENDATIONS

1. It is recommended to read this entire manual before proceeding to the installation of the device.
2. The installation and commissioning of the device can only be performed by specialized technicians.
3. The device is accurately manufactured and tested. In any case, the product is not recommended for use where an error of operations can cause property damage and/or injury to persons.
4. It is expressly not recommended maintenance inside the device which must be carried out by Tema Telecomunicazioni, the removal of the closures will invalidate the warranty and makes accessible internal parts with risk of electric shock.
5. Tema Telecomunicazioni accepts no responsibility for damage to property and/or persons resulting from incorrect use of the equipment or by procedures that do not comply with the instructions in this manual. Tema Telecomunicazioni reserves the right to make modification to the technical and functional specifications at any time and without any notice.
6. Products powered via PoE (Power over Ethernet) may only be connected with cables coming from the internal network company (inside the building), are not allowed connections LAN cables coming from outside the building.
7. Use for this device only and exclusively original spare parts and consumables supplied by Tema Telecomunicazioni. The company is not responsible for damage caused by the use of materials not supplied by the same.
8. Do not expose the unit to direct sunlight, protect from heat, dust, humidity and chemicals.
9. Tema Telecomunicazioni reserves the right to vary the product characteristics for improvement without prior notice. Check the WWW.TEMATLC.IT website for any updates to the latest firmware, manuals, and technical documentation.
10. This document is property of Tema Telecomunicazioni, It is forbidden any duplication and reproduction, even partial, as well as storage on any medium without written permission of Tema Telecomunicazioni.



This symbol in the descriptions indicates a general warning or a damage danger to equipment or people.



This symbol in the descriptions indicates useful information or a suggestion for the optimization of the device functionality.

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1. PRESENTATION

The AD696/BM paging microphone base can be connected to an AD615 Tema Encoder to launch announcements on the LAN network in Multicast channels to the network amplifiers or to the IP-SIP AD600 series loudspeakers of the SipComStage line.



The desktop base is equipped with a "Talk" button to enable the microphone and a two-position switch to enable or disable the possible background music source connected to the AD615 Encoder.

The base allows to send alert sounds (Chime) up to 7 different preconfigured types and can be selected by a Dip-Switch located under the base.

On request, the sounds (or short messages) can be customized according to customer's specifications, maximum memory capacity 16sec.

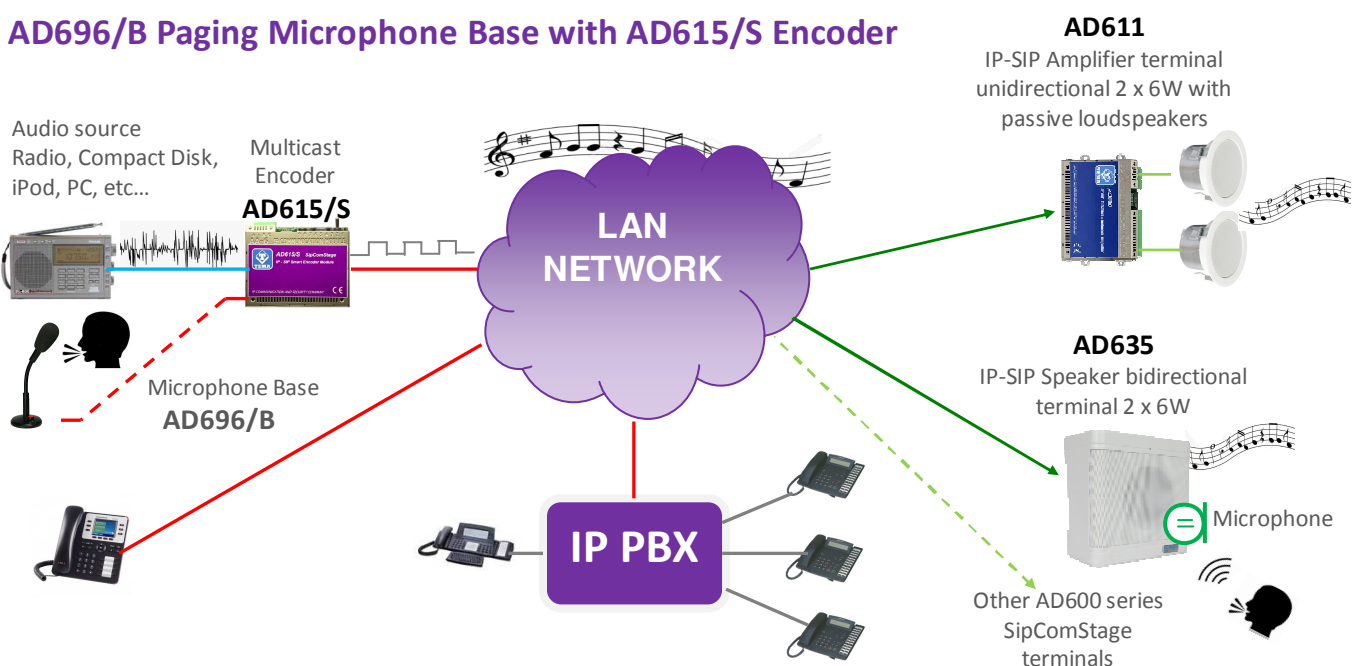
Il braccio, flessibile in due punti, è estraibile ed è fissato sulla base con un connettore standard XLR.

Three bright LED on the base signal the status of the activity.

"Always on" function, activated by pressing the "Talk" button with a particular sequence.

The 1.5 meter cable is terminated with a RJ45 connector specifically wired for the TEMA AD615/S Encoder.

AD696/B Paging Microphone Base with AD615/S Encoder



VoIP SIP Amplifiers-Speakers Products and Accessories of the AD600 “SipComStage” series

AD630 IP-SIP PoE 25W Horn Speaker with 40W internal amplifier (2x20W) IP65 protection.



AD635 IP-SIP PoE 12W speaker for wall mounting with the possibility of integrating a PoE injector adapter.



AD633 IP-SIP speaker 12W PoE open-to-ceiling version.



AD633C SIP IP-12W PoE Speaker ceiling version with IP54 flameproof cover.



AD610 2X2W PoE IP-SIP Amplifier Module, External Amplifier Adapter with Sound Isolation Transformer. Directly pilot external power amplifiers or 8 Ohm external passive speakers.



AD611 IP-SIP PoE 10W Amplifier Module (2X5W). Directly pilot 8 Ohm external passive speakers.



AD612 IP-SIP PoE 40W (2x20W) Amplifier Module when powered with an external power supply. Directly pilot 8 Ohm external passive speakers.



AD615/S Audio Encoder Module from analog to digital on LAN Network in Multicast/Broadcast Channels.



AD333/12TTP Passive 8 Ohm 12W speaker with anti-flame cover (AD333/12TTP without cover), internal transformer for 100V audio line. Ideal for connecting to AD610-611-612 or as 2nd speaker to the AD63x series IP-SIP speakers.



AD335/06TP Passive 8 Ohm 6W speaker with 100V audio line transformer. Ideal for connecting to AD610-611-612 or as 2nd speaker to the AD63x series IP-SIP speakers.



AD330/25T Passive horn speaker 25W 8 ohm with transformer for 100V audio line. Ideal for connecting to the AD610-611-612 modules or as 2nd speaker for AD63x IP-SIP speakers series.



AD330/xx Are available Speakers of different power, Horns and Loudspeakers for flush and ceiling mount.

**AA-39DL**

Plug Power Supply 220Vac/12Vdc-1,0A.

**AA-39D1A**

DIN Power Supply 220Vac/15Vdc-1,0A.

**AA-39P4**

PoE injector 230Vac/48Vdc 0,5A.

**AA-39E3 /-E6V**

DIN Power Supplies 220Vac/24Vdc-1,5A 220Vac/24Vdc-2,5A.

**AD301R**

30W analog amplifier, 2 channels, Volume-High-Low +/-12dB controls

**AD320/30**

PA 100V audio line transformer 30W, constant voltage, high efficiency toroidal type with low magnetic flux leakage.

**AD32**

Isolation transformer, balanced, mixer, attenuator, audio signal filter, low impedance output. Ideal for decoupling devices of audio sources to other amplifiers to eliminate noises.

**AA-36**

Protected Power Relay Actuator 250Vac/16A/4KVA, command in AC/DC 12V/24V, 1 contact, Led, contacts protected by electric arcs. Ideal for driving loads up to 4.000W.

**AA-697xxx**

Flash lights with Xeon lamp or high brightness LEDs. Ideal to be controlled by the relay of the IP-SIP speakers of the AD630 series or by the IP-SIP amplifier AD610, AD611, AD612 modules, with a call in progress add a light signal to the acoustic signal.



2. TECHNICAL SPECIFICATIONS

Microphone capsule	Electret condenser
Polar diagram	Cardioid
Frequency response	50 ÷ 16.000 Hz
Output impedance	150 Ohm
Sensitivity	-40dB (0dB 1V/Pa @1Khz)
Controls	"Chime/PTT" button, "Background Music" switch
Signalings	3 LED (On Air, Musica, Din-don)
Regolazioni	Microphone volume, Chime tone selection
Number of Chime sounds	7 selectable with dip-switch
Microprocessor	16 bit CPU
Souns memory	E2PROM 2Mbit, 16sec audio PCM
Messages Customizations	Optional. Up to 7 tones or short messages that can be customized and recorded by Tema in the non-volatile memory of the microphone base, on request **
Arm	Flexible gooseneck with 2 points, removable, with XLR connector
Arm lenght	455mm
Arm body	shock resistant metal alloy
Windproof cap	black polyurethane foam
Power Supply	5Vdc, directly powered by the AD615/S system
Connector/Cable	RJ45 8-way proprietary, C5 1,5mt
Operating temperature	-10° ÷ -55°C
Storage temperature	-20° ÷ +65°C
Umidity	0-95% non-condensing
Dimensions	113 x 140 x H35 mm (base) + 455 mm (arm)
Weight	0.52 kg cable included

** the customization must be carried out in the factory before the system is supplied

3. PACKING LIST

The systems are supplied with the parts included in the following list:

- One AD969/B base with integral cable, microphone arm and windproof cap
- A paper manual, system documentation, installation, programming, use
- A CD-ROM with complete documentation

4. OPERATION

The AD696/BM microphone base is specifically designed to work with the AD615/S audio Encoder system, one of the components of the Tema Telecomunicazioni paging sound system.

AD696/BM allows to one operator to transmit a message to a network of IP speakers for the purpose of alerts or announcements, presents useful automatic functions for the announcement and different chime signals to choose, of different length, useful for example to differentiate between announcement notices when within the same area served by the systems of TEMA paging systems there are more announcements points (more operators and more pairs of systems AD696/BM + AD615/S).



At the base of the windproof cap on the top of the microphone stand there is a red plastic ring. This is illuminated to signal that the microphone base is correctly connected to the AD615/S system and the system is switched on and in operation. It is the correct condition of system in stand-by.

Every operator who has the AD696/BM microphone base can spread an announcement on the network speaker in a simple way:

- Press and hold the PTT button
- The system plays the chime message start and turns on the CHIME led
- When the chime is finished, the SPEAK led lights up and the CHIME led goes off, now it is possible to speak into the microphone clearly and quietly to give the message
- At the end of the announcement release the PTT button, the SPEAK led goes off and the microphone will be muted

or in automatic mode

- Press the PTT button twice in quick succession (releasing it)
- The system plays the chime message start and turns on the CHIME led in a flashing way
- When the chime is finished, the SPEAK LED lights up flashing and the CHIME led goes off, now it is possible to speak into the microphone clearly and quietly to give the message
- At the end of the announcement, press the PTT button again to end, the SPEAK led switches off and the microphone will be muted

this allows not have to hold the PTT button for the duration of the announcement.

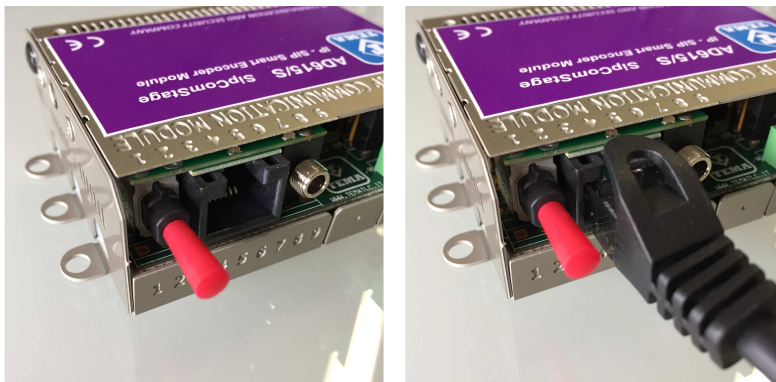
The selection lever on the AD615/S system connected to AD696/BM must be in the central position. In case AD615/S is used for broadcasting background music in the environment, its lever must be placed upwards (AD615/S controls the broadcast).

Any background music broadcasted by AD615/S will still be replaced by the AD696/BM microphone message. If the broadcasting music control lever on the AD615/S is left in the central position, it is also possible for the operator to control the broadcast of the background music directly from the AD696/BM microphone base. To do this, turn the ON switch to position I. The BACKGROUND MUSIC LED will signal when the music is being played.

For further information on the AD615/S system and its operation, refer to its specific user manual.

5. CONNECTION AND PREPARATION OF THE MICROPHONE BASE

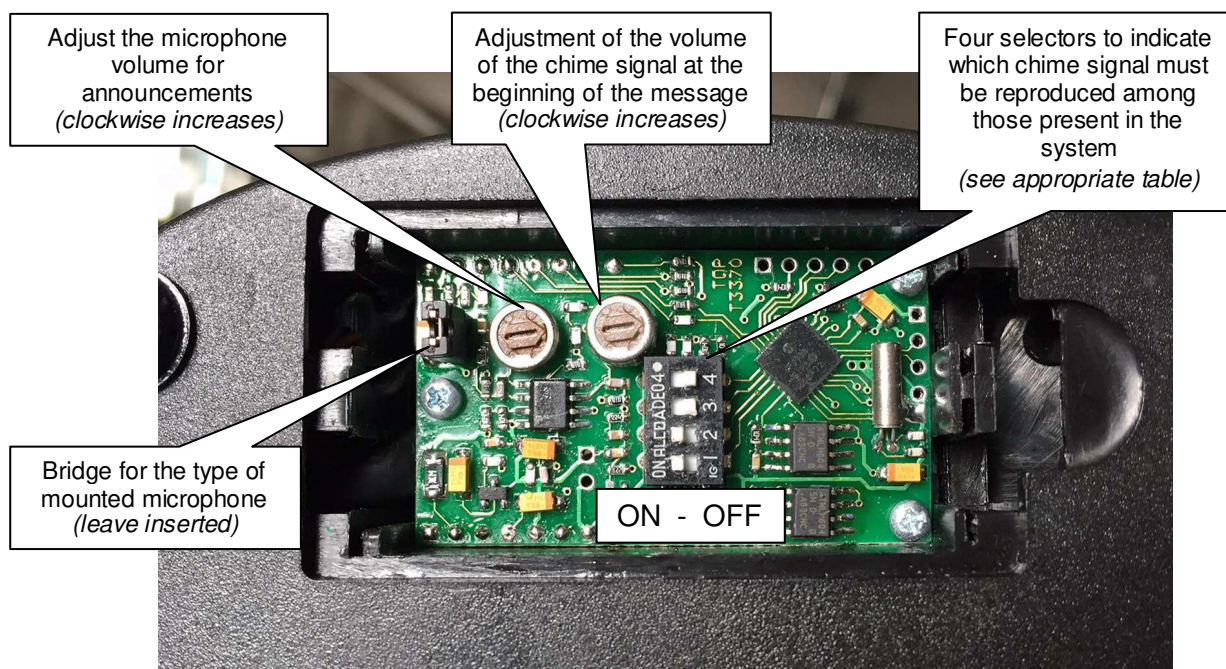
The AD696/BM microphone base is powered by the AD615/S system to which it must be directly connected. Insert the 8-pole plug connector of the integral cable connected to AD696/BM into the black RJ45 socket on the AD615/S module as clearly indicated in the photos below.



Now turn the base by laying it on one side, open and remove the flap located under the base to access the compartment enclosing the control circuit board.



The board features programming dip-switches and two volume adjustment trimmers: one for adjusting the volume of messages announced via the microphone and the other for adjusting the start warning tones message (Chime). At the end of the adjustments or settings, replace the door in its seat.



5.1. Select message start tone

Nella tabella qui sotto riportata si trovano le impostazioni del banco di selezione dei toni di avviso.

SW1	SW2	SW3	SW4	DESCRIPTION **	DURATION
OFF	OFF	OFF	--	No message start tone	0 sec
ON	OFF	OFF	--	Message start tone number 1	4 sec
OFF	ON	OFF	--	Message start tone number 2	4 sec
ON	ON	OFF	--	Message start tone number 3	2 sec
OFF	OFF	ON	--	Message start tone number 4	2 sec
ON	OFF	ON	--	Message start tone number 5	2 sec
OFF	ON	ON	--	Message start tone number 6	1 sec
ON	ON	ON	--	Message start tone number 7	1 sec

If it is chosen to have no start tone, when the PTT button is pressed, the SPEAK LED will light up immediately and then it is possible to start talking to spread the announcement message. The same applies to the automatic announcement mode (double push of the PTT key).

** Optional. Up to 7 tones or short messages that can be customized and recorded by Tema in the non-volatile memory of the microphone base, on request. The customization must be carried out in the factory before the system is supplied.

5.2. Notes for adjusting the microphone volume

The base is supplied with a suitable microphone that requires the setting of the volume adjustment trimmer to 75% of the maximum stroke, in practice to $\frac{3}{4}$ of turn in clockwise direction (towards maximum). This is the optimal regulation established in the factory and, as far as possible, it is preferable not to make adjustments to the volume trimmer, if not necessary for particular situations.

Remember that each emission point that is part of the paging sound systems (IP speakers, IP horns, ... of the TEMA AD600 series) has its own volume control and therefore for the microphone base start from the default setting, adjust each point/device of emission in the plant according to the area that has to be served.

The microphone volume adjustment trimmer present on the Multicast Encoder AD615/S system by default is set at $\frac{1}{4}$ of a turn from the minimum and, as far as possible, it is preferable not to make adjustments to the volume trimmer, if not necessary for particular situations.

5.3. Notes for adjusting the message start signal

The message start signal (chime) must have the function to alert those present about the fact that some operator is going to make an announcement and can in some way be prepared to pay attention to what follows the tone itself.

A correct volume must be identified according to the type of chosen tone according to the table and bearing in mind the purpose of its emission. A too high message could be annoying, "distorted" (also because of the possible reflections of the sounds in the environments) and can produce almost the opposite effect to that for which it was thought.