



PBX interface

AA-10/PA

*for connection with analog trunk
and PA amplification systems interface*



PBX / PA SYSTEM INTERFACE TECHNICAL MANUAL ADDENDUM

Made in Italy by TEMA TELECOMUNICAZIONI S.r.l.

Recommendations

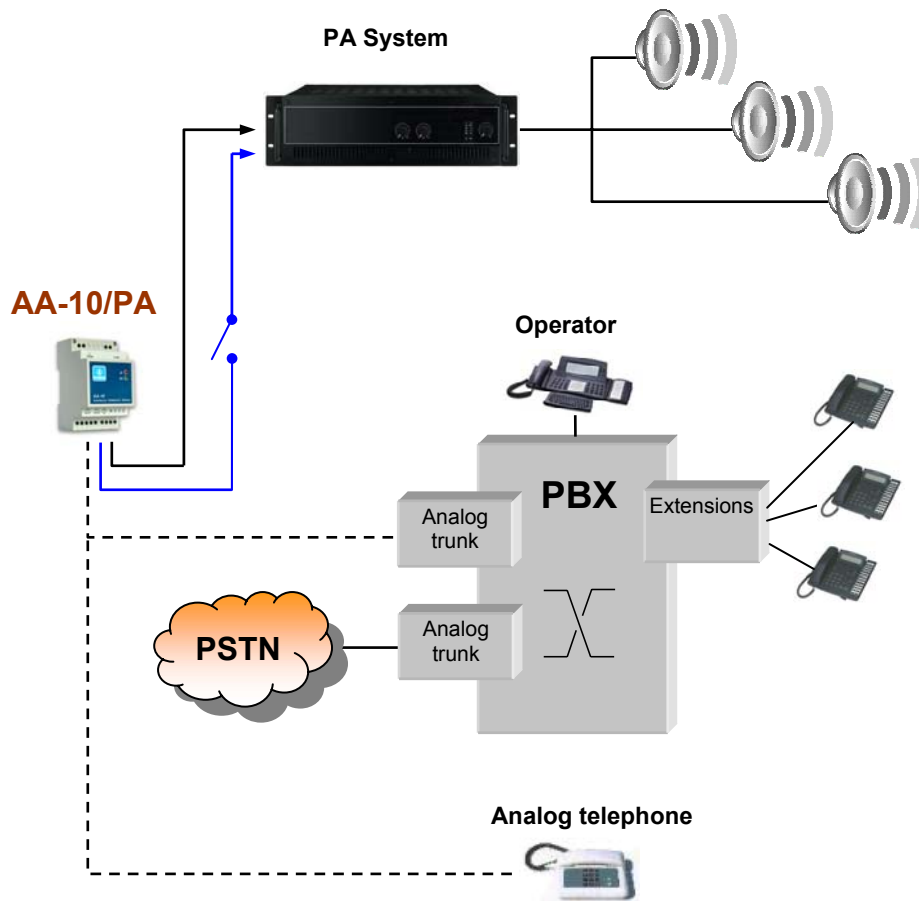
1. Use only original spare parts and consumables supplied by Tema Telecomunicazioni Srl for this equipment. The company shall not be held responsible for any damage caused by the use of materials that they have not supplied.
2. The device has been carefully manufactured and tested. In any case, the product is not recommended for use in situations in which incorrect operating may result in damage to persons and/or property.
3. We recommend that you carefully read all this manual before starting to use the device.
4. Do not expose the device to sunlight and protect it from sources of heat, dust, humidity and chemical agents.
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| Revision | Date | Revision reason | Prepared | Checked/Approved |
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| 0 | 02/02/2012 | First release | GBC | FL |

1. OVERVIEW

This addendum manual describes the use of AA-10/PA as interface between an analog telephone unit or PBX analog trunk to a generic audio messages diffusion system for people searching or public notices, a generic PA system.

All other informations about the AA-10 system are shown in the booklet that describes the system itself, such as technical characteristics, the relay contacts maximum load etc.



The operator, using the analog phone directly connected to the AA10/PA, can broadcast warning messages in the area served by the PA system, by lifting the handset of his telephone and simply speaking. When the operator will hang up, the message will be terminated.

Connecting AA10/PA to an analog trunk of PBX instead of just a generic analog telephone unit will make possible for all enabled internal users of the PBX, to spread their warning message simply engaging the analog trunk where AA-10/PA is connected and starting to talk. Typically, to engage an analog trunk for using a different service instead making an outside line to call, you should set up a particular engaging code that will be used only by service operators for PA messages.

AA-10/PA does not generate any particular early warning beep message. An embedded relay contact of AA-10/PA closes and remains closed until the user hang up. This contact can be used to signal to the PA to activate itself to deliver the message on his speakers.

2. GENERAL FUNCTIONS

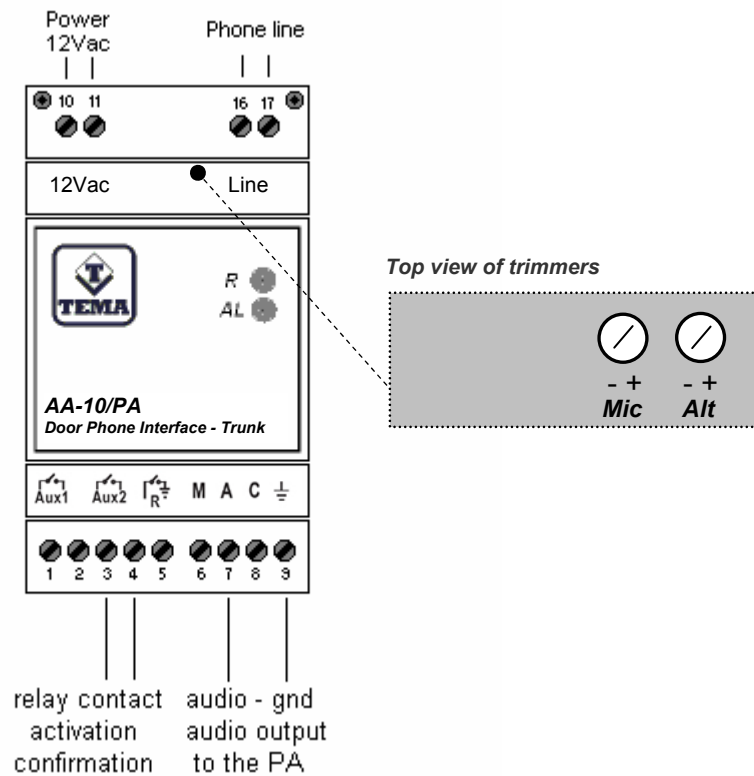
Simply, every time it is engaged the analog trunk or is used the analog telephone unit directly connected to AA-10/PA:

AA-10/PA is engaged

- Signals its activation closing his embedded relay contact
 - It features the voice on his audio output to the PA system
 - ... the operator spreads its message ...
 - ... remains in this state until the operator hangs up at the end of announcement ...
- It frees itself, ready for a new announcement

3. GENERAL DESCRIPTION AND INSTALLATION

3.1. AA-10/PA front view and signal terminals



Signal to / from the device

Screw terminals 10-11

Connect the power source of AA-10/PA. Power supply range from 12V_{AC} to 18V_{AC}, or from 16V_{DC} to 28V_{DC}

Screw terminals 16-17

Connect the analog telephone or the PBX analog trunk

Screw terminals 03-04

Connect the PA system command (normally open contact)

Screw terminals 07-09

Connect the audio input of the PA system, terminal 7 audio signal, terminal 9 common GND of the PA audio input
Output impedance <600Ω, adjustable signal level 0÷775mV

Screw terminals 1-2-5-6-8

Don't use

3.2. Adjusting Trimmers

On the top side of the system there are two trimmers (see picture below).



ALT = telephone audio level volume adjusting towards the PA amplifier input

MIC = not used

Before proceeding to the installation it is advisable to set the ALT trimmer to half range. Set also the PA volume at low levels.

Then is necessary to make a test announcement, and adjust the volume using the ALT trimmer and PA volume in order to achieve the desired level of audio emission in the area served by the PA.

To avoid the always possible establishment of hisses (Larsen effect), please maintain the output level to the lowest level among those required to enable a good listening without increasing too much the level itself. It is good that the user's phones performing ads are not directly audio influenced (the phone unit is not in the same environment where the message is being spread by the PA system). The "Larsen" effect is still dependent on sound environmental conditions.

You may need to adjust the trimmer before applying AA-10/PA on DIN rail, depending on the conformation of the framework which will be installed. In this case, connect it, make adjustments and then secure it to the rail of the metal framework.