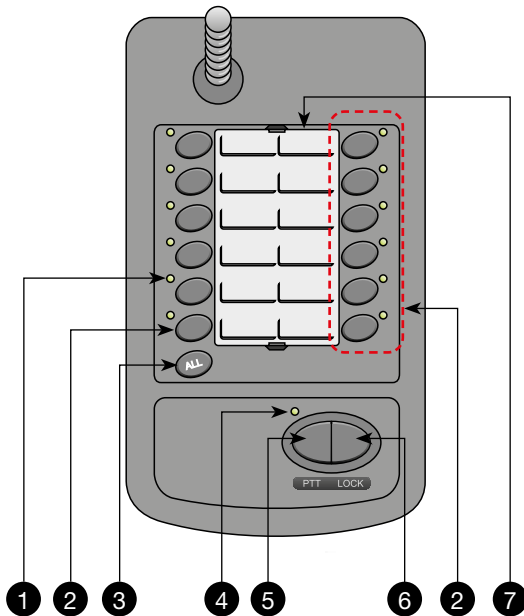


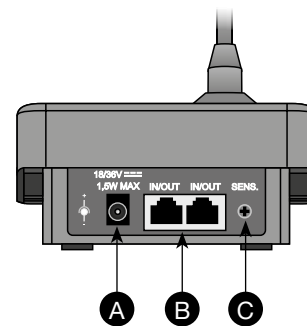
# VA-MC-5xx

VA-MC-506 with 6 call keys, VA-MC-512 with 12 call keys



Front view (FRS)

- 1 Zone LED
- 2 Zone call key (6 or 12 pcs)
- 3 ALL call key
- 4 LED signalling activation of the microphone
- 5 Call button (hold-down type)
- 6 Call button (toggle type)
- 7 Zone label



Front view (FRS)

- A Socket for external local power supply
- B Input/output connectors
- C Adjustment of the microphone sensitivity

## Description

### Designation and function

For sending voice messages using the electret microphones of the stations. The VA-MC-506 call station has 6 zone call keys, the VA-MC-512 is equipped with 12 zone call keys.

The microphone consoles can be connected to each other via a cascade connection.

Their main functional characteristics are:

- Powered from control centre or through a local 18 to 36 VDC power supply
- Audio line balanced at line level
- Addresses of stations 1 to 31 settable locally
- Priority levels 1 to 7 settable locally
- Inclusion of speech filter settable locally
- Fine adjustment of microphone sensitivity ( $\pm 4$  dB) by means of the rear-panel trimmer (C)
- Adjustment of audio output signal to 7 levels
- System busy indication
- Programmable zone selection keys (2) and ALL-Call key (3)
- Connection via STP cat. 5 cable

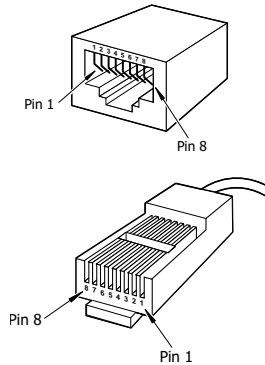
**Connections**

**Connection of the stations**

The stations are connected by means of direct Cat. 5 STP cables (no cross-cables). In accordance with EIA/TIA standard T568A and EIA/TIA standard T568B, the pin-out for these cables (and their RJ45 connectors) and the colour codes are:

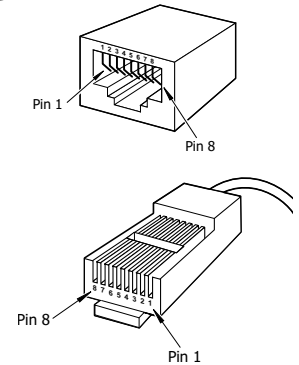
**Connection diagram T568A STANDARD**

- 1 White/ Green
- 2 Green
- 3 White/ Orange
- 4 Blue
- 5 White/ Blue
- 6 Orange
- 7 White/ Brown
- 8 Brown



**Connection diagram T568B STANDARD**

- 1 White/ Orange
- 2 Orange
- 3 White/ Green
- 4 Blue
- 5 White/ Blue
- 6 Green
- 7 White/ Braun
- 8 Brown

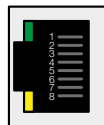


**Important!**

All the connectors must be shielded RJ45 type. Each station has two IN/OUT (B) input/output sockets. The pin-outs of these connectors are listed below.

**Connection diagram RJ45**

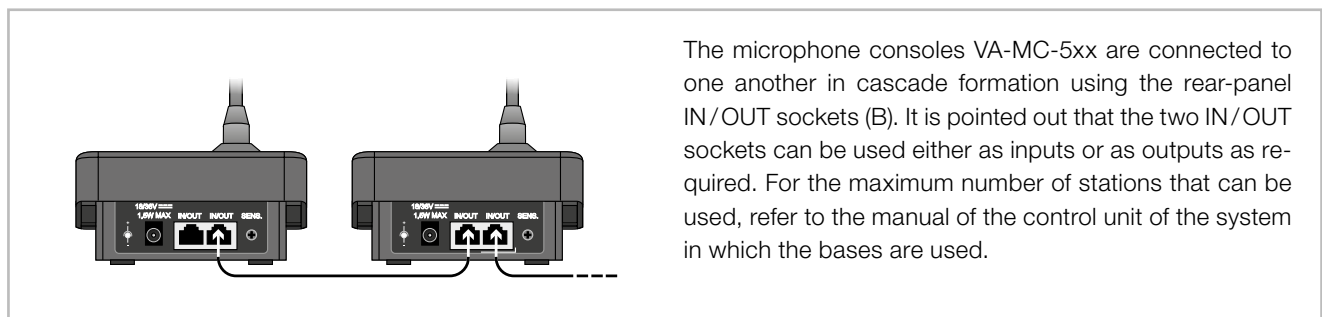
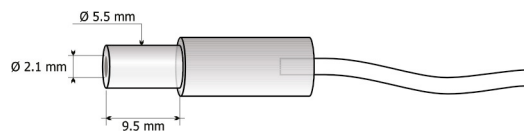
- 1 Audio +
- 2 Audio -
- 3 GND
- 4 Not connected
- 5 Not connected
- 6 VCC +
- 7 Serial +
- 8 Serial -
- Shield GND



**Socket for external power supply**

It is possible to apply the output of a separate power supply (connected to a wall socket) to the 18-36V socket (A) so as to power the base locally. The power supply unit must have a coaxial plug.

The central contact must correspond to the negative pole.



The microphone consoles VA-MC-5xx are connected to one another in cascade formation using the rear-panel IN/OUT sockets (B). It is pointed out that the two IN/OUT sockets can be used either as inputs or as outputs as required. For the maximum number of stations that can be used, refer to the manual of the control unit of the system in which the bases are used.

**Configuration**

To use the stations, it is necessary to set the addresses and the priority levels for each of them. It is also possible to change other parameters for a more effective use of the station. To set a given parameter, press the ALL key (3) and, at the same time, one of the zone keys (2) from 1 to 6. When the keys are released, the LEDs corresponding to the zones (1) from 1 to 6 will show the current value of the parameter while the microphone activation LED (4) will start to flash to indicate that the setting procedure is active. Alter the parameter as indicated below and, lastly, press the ALL key (3) again to save the setting and return to normal use.

**Station address**

Press the ALL key and the zone 1 key. the LEDs will indicate the currently stored address as shown in Table 1. To change the address, use the PTT (5) (address -) and LOCK (6) (address +) keys. The available range is from 1 to 31. To save your setting press ALL (3).

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
LED 1	•		•		•		•		•		•		•		•		•		•		•		•		•		•		•		•
LED 2		•	•			•	•			•	•			•	•			•	•			•	•			•	•			•	•
LED 3				•	•	•	•					•	•	•	•					•	•	•	•				•	•	•	•	
LED 4								•	•	•	•	•	•	•	•								•	•	•	•	•	•	•	•	
LED 5																•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
LED 6																															

**Priority**

Press the ALL key (3) and the zone 2 key: the LEDs will indicate the currently stored priorities according to Tab.1. To change the priorities use the PTT (5) (priority -) and LOCK (6) (priority +) keys. The available range is from 1 to 7. To exit and save your settings press ALL (3).

**Microphone sensitivity**

Press the ALL and zone 3 keys: LEDs from 1 to 6 will show the currently stored sensitivity value with an indication of the Vu-meter type. To change the level of sensitivity use the PTT (5) (sensitivity -) and LOCK (6) (sensitivity +) keys. When the level is at its lowest all the LEDs will be extinguished. At its highest they will all be illuminated. During this setting procedure, the microphone line will be active to enable live testing. To exit saving your setting press ALL (3).

**Speech filter**

Press the ALL key and the zone 4 key: the LEDs will indicate the status of the currently stored filter.

LED 1 ON = speech filter excluded

LED 2 ON = speech filter included

To change the setting use the PTT (5) and/or LOCK (6) keys.

To exit saving your setting press ALL (3).

**Programming the keys**

It is possible to associate several zones with a single call key (2) so as to speed up selection of groups of zones. To set this function press the ALL key and the zone 5 key: the microphone LED (4) will flash slowly; now press the key corresponding to the zone to be programmed: the microphone LED will start to flash rapidly and the LEDs of the zones currently associated with the key you have chosen will light up (according to the default setting, each key is associated with a single zone). Now select the zones to be associated with the chosen key by pressing the zone keys. To unselect a zone simply press the relevant key. To exit saving your settings press the ALL key (3). To exit without saving press PTT (5) or LOCK (6) ( exiting may take a few seconds).

### Programming the ALL key

By default, the ALL key (3) is the All-call key. It is, however, possible to assign a smaller group of zones to this key. To set this function press the ALL key and the zone 6 key. The microphone LED (4) will start to flash and all 36 zones will be automatically associated with the ALL key. The LED's in question (those present on the station and on the expansion modules) will light up. This will enable you to return to the default setting. To exit saving the default setting press ALL, otherwise select the zones to be associated with the ALL key (3) by pressing the appropriate keys. To unselect a zone simply press the relevant key. To exit saving your setting press ALL, to exit without saving press PTT (5) or LOCK (6) (exiting may take a few seconds).

### Programming the PTT/LOCK keys

By default, with no zones selected, the PTT and LOCK key recall the zones associated to ALL key. In order to disable this feature, simply press the ALL and LOCK keys and select with PTT key the desired operation mode:

LED 1 ON: Recall of the ALL key is disabled.

LED 2 ON: Factory default.

Press the ALL key (3) to save setting.

## Operating instructions

### Selecting the zones

Before proceeding to activate the microphone, it is necessary to select the zones to which you wish to send an announcement. To do this, press the zone keys (2) or, as an alternative, press ALL (3) on the stations or on the expansion module. The zone LEDs will light up to confirm that the selection has been made. To unselect areas simply press their keys.

**Important!** Keys programmed for groups of zones can only be selected, not unselected. Unselection is a time-dependent function. If about 12 seconds pass since the last selection without the microphone being activated, the station will automatically cancel all the selections.

### Calls

Once the selections have been completed, press PTT (5) (hold down key) or LOCK (6) (toggle key) to activate the zones and the microphone line through the control unit. The latter will signal to the station the set of zones that can be activated, and these will be shown by the zone LEDs (1). Upon completion of the call release the PTT key or press the LOCK key again.

NOTE: If the PTT key or the LOCK key are pressed without selecting any zones, a call will be made automatically to all zones. Throughout the activation the LED will remain steady on.

### System busy signal

Activation of a station is signalled to all the others by the flashing of the LEDs ("BUSY" status). If a second station attempts activation, the control unit will manage the conflict in one of the following two ways:

- If the active station has the same or a higher priority than the second one, the control unit will inhibit activation of the second station.
- If the active station has a lower priority than the second one, the control unit will de-activate the first station and activate the second one. Consequently, the microphone activation LED (4) on the first station will change from steady ON to flashing ("BUSY" status) while the activated zones will be shown on the second station and the LED (4) will light up steadily.

**Technical data**

**Model VA-MC-506**

Number of selectable zones	6 zones
Power supply	18–36 VCC/VDC
Maximum absorption (24 VDC)	16 mA
Frequency response (LCF = OFF)	100–14'000 Hz
Speech filter	-10 dB
Audio output level	Max. 2.2 V
Dynamics limiter	Yes
Dimensions (W x H x D)	116 x 60 (416) x 200 mm
Weight	0.6 kg
Certificate	EN 54-16 (DoP: CPR-63-19-025)
Colour	Dark grey
Material	Plastic

**Model VA-MC-512**

Number of selectable zones	12 zones
Power supply	18–36 VCC/VDC
Maximum absorption (24 VDC)	22 mA
Frequency response (LCF = OFF)	100–14'000 Hz
Speech filter	-10 dB
Audio output level	Max. 2.2 V
Dynamics limiter	Yes
Dimensions (W x H x D)	116 x 60 (416) x 200 mm
Weight	0.6 kg
Certificate	EN 54-16 (DoP: CPR-63-19-025)
Colour	Dark grey
Material	Plastic

**Dimensions in mm**

