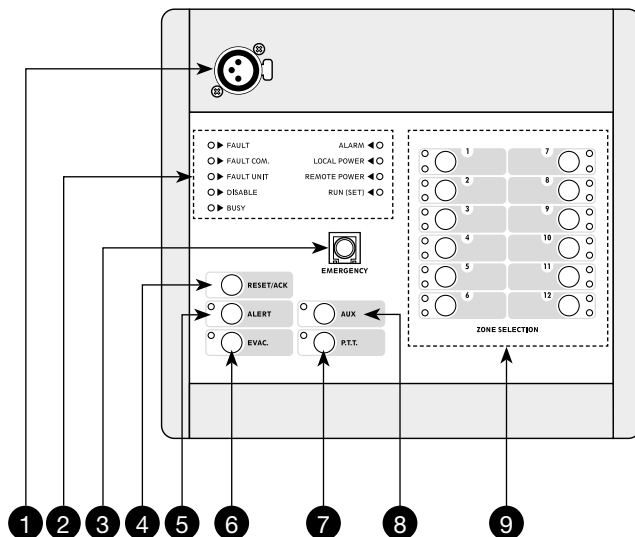


VA-FMC-512

VA-FMC-512 with 12 zone keys

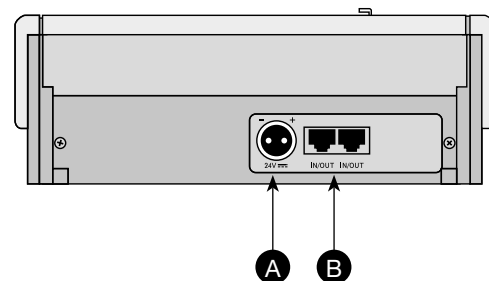


Front view

- 1 Socket for microphone (not included)*
- 2 Status-indicator LED
- 3 Emergency key
- 4 Key for interrupting message/failure buzzer
- 5 Key for sending out pre-recorded alert message
- 6 Key for sending out pre-recorded evacuation messages
- 7 Call key
- 8 Key for calling up pre-set messages
- 9 Zone-selection keys with status-indicator LED

* Each station must be completed with an additional microphone to be chosen from among the two following models:

- VA-MG-001, dynamic gooseneck microphone
- VA-MH-001, dynamic hand-held microphone with P.T.T.

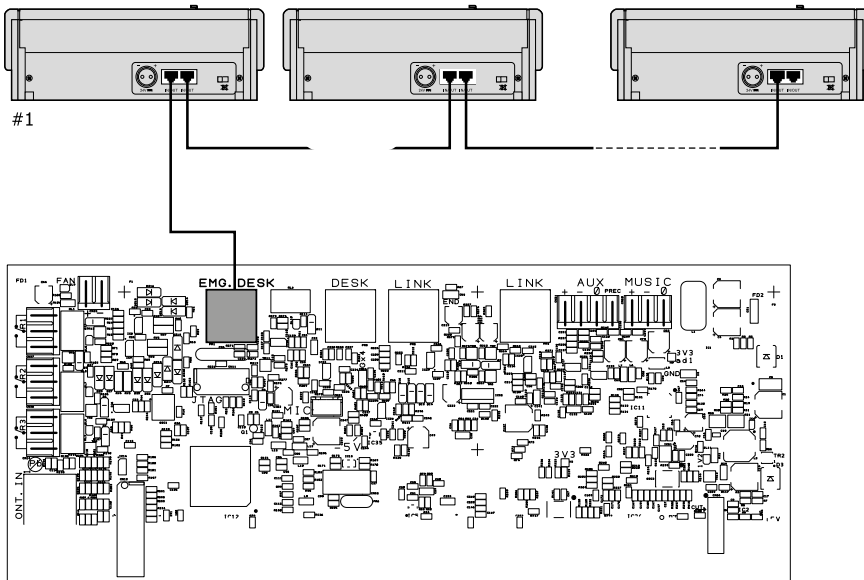


Rear view

- A Connector for external 24 VDC power supply
- B IN/OUT connectors

1. Connections

The station must be connected to the Emergency Desk of the VA-500 system. It is possible to connect up to 4 remote stations in cascade formation by means of the IN/OUT (C) sockets provided for this purpose, which can be used as inputs or outputs as required. Special attention must be paid to assigning correctly the logical addresses to each station. The connections to the stations are made by means of CAT5e SF/UTP shielded cable and a shielded STP connector.

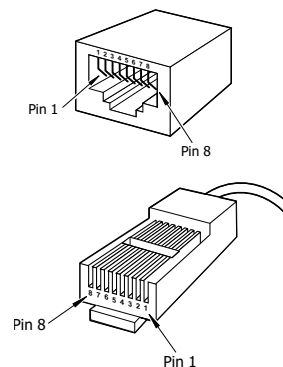


For these cables EIA/TIA T568A and EIA/TIA T568B (and the associated RJ45 connectors) standards require the pinouts and colour schemes shown in the table below. The table also shows the pinouts for the IN/OUT connectors (B).

Attention! Cross-cables are not permitted. All the connectors must be shielded RJ45 connector

Connection diagram T568B STANDARD:

Pin	T568A (Colour)	T568B (Colour)	IN/OUT (Function)
1	White/Orange	White/Green	Audio +
2	Green	Orange	Audio -
3	White/Orange	White/Green	GND
4	Blue	Blue	Not connected
5	White/Blue	White/Blue	Not connected
6	Orange	Green	+VDC
7	White/Brown	White/Brown	Serial +
8	Brown	Brown	Serial -
Shield	Shield	Shield	GND



1.1. Sizing

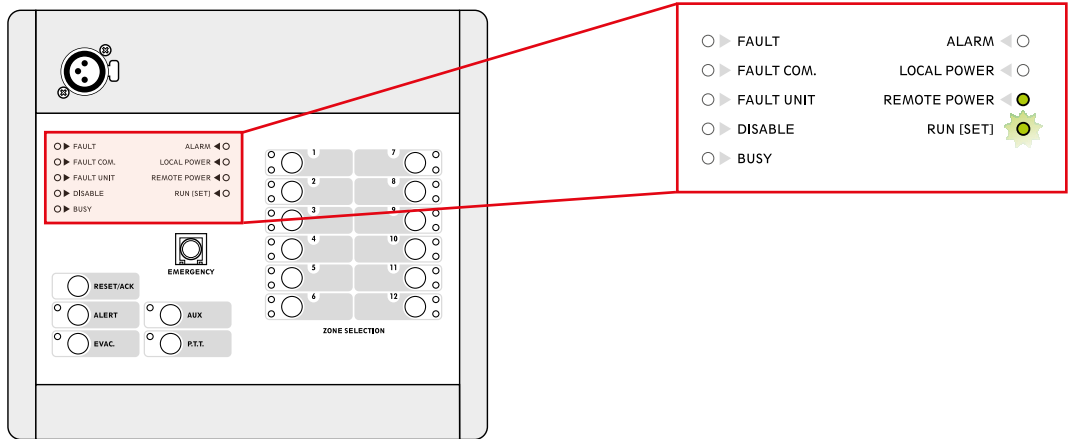
Using shielded CAT5e SF/UTP cable, it is possible to apply the following limits:

- 1 station = total length max. 300 m
- 2 stations = total length max. 200 m
- 3 stations = total length max. 100 m

For systems with more than three stations connected to them, at distances greater than those indicated above, each station will also have a local power supply providing a continuous stabilised current of 24 VDC/500 mA, using the socket provided for this purpose on the rear (A).

2. Operating instructions

The microphone station is equipped with a set of LED's for signalling the operating states of the system:



● FAULT	yellow	This indicates a generic «failure status» within the system. See the FAULTS menu of the VA-500 to identify the failed components.
● FAULT COM.	yellow	This indicates a lack of communication of data between the station in question and the VA-500. See the FAULTS menu of the VA-500 to identify the failed.
● FAULT UNIT	yellow	This indicates a generic failure of the station in question. See the FAULTS menu of the VA-500 to identify the failed components.
● DISABLE	yellow	This signals an active «disabled status». It indicates the presence of at least one zone to which sending of emergency messages is not envisaged.
● BUSY	yellow	This LED flashes on stand-by: it indicates that another station with a lower priority is occupying the system. Flashing: during a broadcast call, it indicates the duration of the chime signal. Steady ON: this indicates that another station with a higher priority is occupying the system.
● ALARM	Red	This indicates an «alarm status» existing within the system.
● LOCAL POWER	green	This indicates the presence of the local DC power supply applied to the external socket of the station.
● REMOTE POWER	green	This indicates the presence of the power supply provided by the VA-500 through the CAT5 cable.
● RUN / SET	green	Flashing: this indicates that the station is working correctly and operating normally. Steady: this indicates that the station configuration stages is active (SET).

N.B.: For further information about the operating states of the system, consult the «Operating conditions and Terminology» section of the VA-500 operating instruction. Various different types of use can be identified:

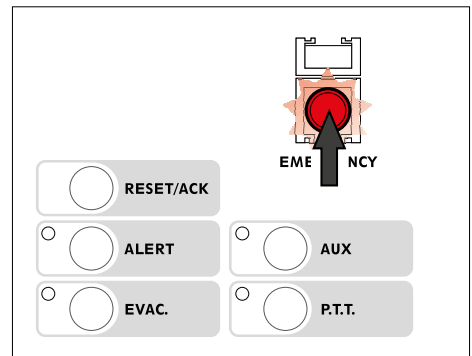
- Sending of emergency messages in the live mode
- sending of pre-recorded evacuation/alert messages
- Broadcast calls
- Zone selection
- AUX function for calling up pre-configured messages
- Resetting of emergency messages

2.1. Manual emergency activation

Protected by a cover: as soon as the emergency procedure has been activated, the system switches automatically to the All-Call mode. It is possible to activate the emergency procedure only if the priority conditions as assigned enable this.

An existing emergency status can be stopped only from a station with a higher priority. The red LED indicates the conditions of the system:

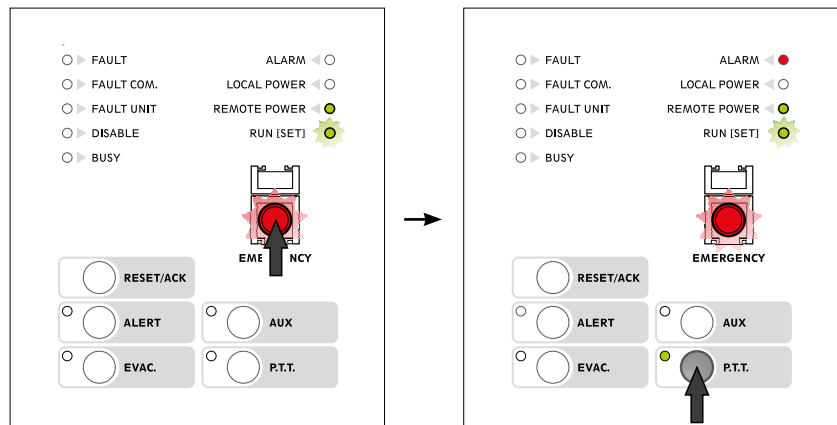
- off = manual emergency procedure de-activated.
- flashing = manual emergency procedure activated by another station. The P.T.T., ALERT, EVAC, RESET and AUX keys are not operational.
- steady ON = manual emergency activated by the station. The P.T.T., ALERT, EVAC, RESET and AUX keys can be used to manage the emergency.



2.2. Sending live emergency messages

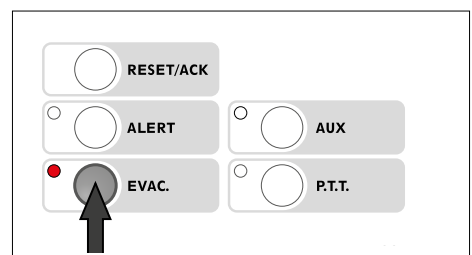
After activating the emergency procedure, press the P.T.T. key: the red ALARM LED will light up. The green P.T.T. LED will also light up and it will be possible to speak into the microphone.

The P.T.T. key has priority over any pre-recorded messages being sent out. To terminate the live emergency message, release the P.T.T. key and press the EMERGENCY key again, taking care to close the cover again.



2.3. Sending pre-recorded emergency messages

To send pre-recorded alert or evacuation messages stored in the memory of the VA-500, after activating the emergency mode press ALERT or EVAC to send out the alert message or the evacuation message. The ALARM LED will light up and the corresponding yellow LED (ALERT) or red LED (EVAC) will light.



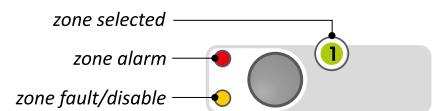
2.4. Broadcast calls

It is also possible to make a live call without the emergency mode. To do this, simply press the P.T.T. key and speak into the microphone. Activation will be confirmed by the corresponding green LED lighting up. To end the call, release the key. Note:

- Before making a broadcast call, check the status of the BUSY LED to see whether the line is being used by another station. After pressing the P.T.T. key, wait for the yellow BUSY LED to extinguish (it flashes while the chime tone is sounding).
- In the broadcast mode, the VA-FMC-512 station will always have a higher priority than any other broadcasting sources connected to the VA-500.

2.5. Zone selection

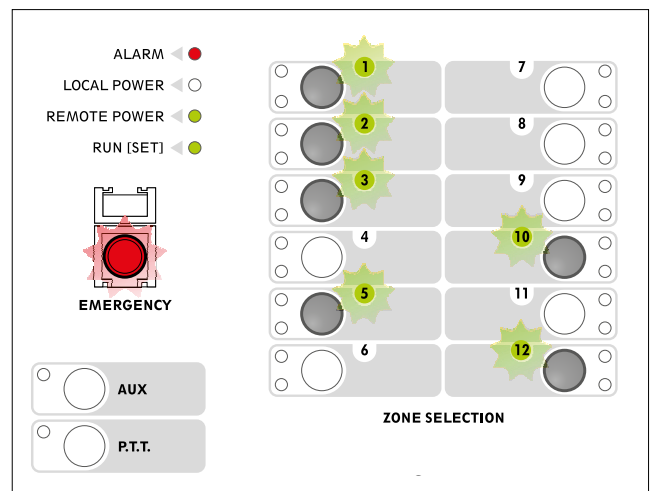
The VA-FMC-512 has a key pad to be used for pre-selecting one or more zones to which handsfree messages can be sent or prerecorded messages can be sent / reset. Each key has three LEDs that indicate the status of the zone concerned:



LED	Colour	Status	Indication
● Zone selected	green	Flashing	Zone selected
		Steady ON (in an emergency status) with the «zone alarm» LED illuminated	Live emergency announcement being sent out
		Steady ON (in the broadcasting status) of emergency messages is not envisaged.	Live announcement being broadcast
● Zone alarm	red	Flashing	ALERT message being sent out
		Steady ON, with the «zone selected» LED OFF station.	EVAC message being send out
● Zone fault / disable	yellow	Flashing	-Line failed or -Line not available due to amplifier failure
		Steady ON	Line set in «disabled status»

• To send selective live messages

After activating the emergency mode, press the keys corresponding to the zones concerned. Only the green LED's of the selected zones will light up to indicate the booking, while the others will extinguish. Press the P.T.T. key and hold it down. The green and red LED's corresponding to the activated zones will light up and remain steady ON and it will be possible to speak into the microphone to send the handsfree emergency message only to the zones that have been selected (in the example these are zones 1-2-3-5-10-12). On releasing the key, the All-Call mode will be activated automatically (all the green LED's will flash).



• To send pre-recorded messages

After activating the emergency mode, press the keys corresponding to the zones concerned. Only the green LED's of the selected zones will light up to indicate the booking. Then press ALERT or EVAC to send the alert or evacuation message only to those zones that have been selected. Activation will be confirmed by the red LED corresponding to the zones in question:

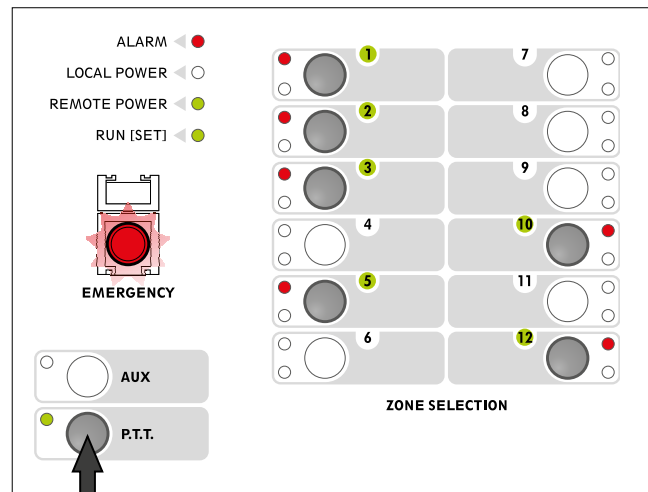
LED steady ON = EVAC

LED flashing = ALERT

Once the message has been sent out, the All-Call mode will be activated automatically (all the green LED's will flash).

• To send selective messages in the broadcast mode

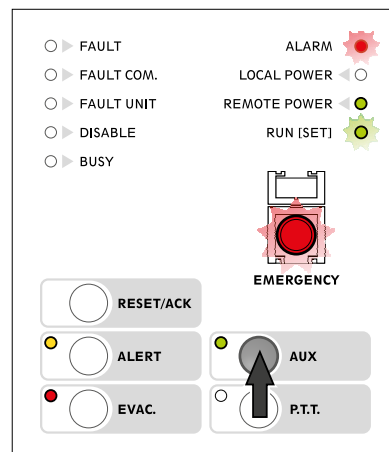
Select the required zones. The LEDs corresponding to the selected zones will light up. Then follow the instructions provided under point "Broadcast calls" on page 5. The zone LEDs will light up steadily to confirm the activation.



2.6. AUX function

The AUX function can be used to call up a specific combination of messages/broadcasting zones set previously via the VA-500. To do this, enter the emergency mode then press the AUX key. The green AUX LED will light up to confirm activation. The red ALARM LED and those indicating the type of message sent (ALERT or EVAC) will light up to indicate the existing alarm. If a VA-FMC-512 station is used, the LEDs referred to the zones concerned will also light up.

Once the messages have been sent out, press EMERGENCY again to leave the emergency mode, then close the cover again.



2.7. RESET/ACK function

The RESET/ACK key has multiple functions depending on the status of the system:

Message RESET (RESET function)

- ALL-CALL: When there is an on-going alarm and with the station in the emergency mode, hold the RESET/ACK key down for 2 seconds. This will enable the messages to be stopped, although the system will remain in an emergency status.
- PARTIAL: when there is an on-going alarm and with the station in the emergency mode, select the zones to be muted and hold the RESET/ACK key down for 2 seconds.

Resetting the failure acknowledgement buzzer (ACK function)

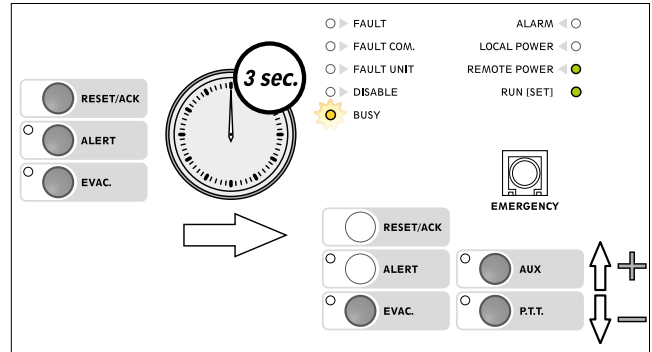
- In the event of failures with the station on stand-by, press the RESET/ACK key briefly. The buzzer will be reset only on the actual base, while the LEDs corresponding to the failure in question will remain ON.
- In the event of failures, press the EMERGENCY key to enter the emergency mode. Then press the RESET/ACK key briefly. The buzzer will be reset on all the devices of the system. The LEDs referred to the failure in question will in any case remain ON.

3. Setting

3.1. Address

Each station must have its own individual address. To set these addresses press the ALERT, EVAC and RESET/ACK keys simultaneously, holding them down for more than 3 seconds.

When the RUN/SET LED stops flashing and remains steady ON, release the keys. There are 7 addresses at disposal, from 1 to 7. Press the EVAC. key. The LED's will show the current address setting (factory default setting: 1). To change an address, hold the EVAC key down, then press AUX (to increase the number) or P.T.T. (to decrease it). The LED's corresponding to the addresses are shown in the following table.



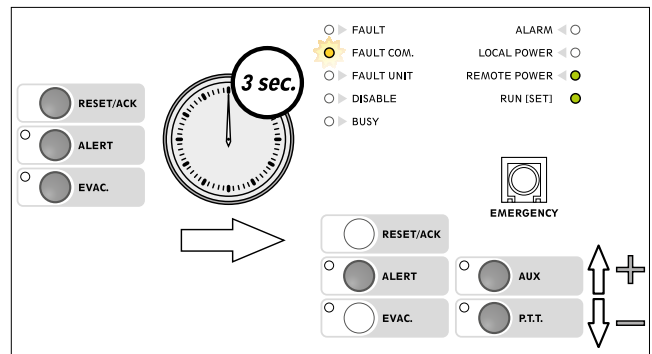
		ADDRESS						
		1	2	3	4	5	6	7
LED	○ ► FAULT	○ ► FAULT	○ ► FAULT	○ ► FAULT	○ ► FAULT	○ ► FAULT	○ ► FAULT	○ ► FAULT
	○ ► FAULT COM.	○ ► FAULT COM.	○ ► FAULT COM.	○ ► FAULT COM.	○ ► FAULT COM.	○ ► FAULT COM.	○ ► FAULT COM.	○ ► FAULT COM.
	○ ► FAULT UNIT	○ ► FAULT UNIT	○ ► FAULT UNIT	● ► FAULT UNIT	● ► FAULT UNIT	● ► FAULT UNIT	● ► FAULT UNIT	● ► FAULT UNIT
	○ ► DISABLE	● ► DISABLE	● ► DISABLE	○ ► DISABLE	○ ► DISABLE	● ► DISABLE	● ► DISABLE	● ► DISABLE
	● ► BUSY	○ ► BUSY	● ► BUSY	○ ► BUSY	● ► BUSY	○ ► BUSY	● ► BUSY	● ► BUSY

To leave the Settings mode and save the settings made, press the ALERT, EVAC and RESET / ACK keys again. The RUN/SET key will start flashing again. If you do NOT want to save the changes made, simply wait for the timeout (about 10 seconds), after which the previous settings will be restored.

3.2. Priority

To set the priority of a station, it is necessary to press the keys ALERT, EVAC and RESET/ACK simultaneously for more than 3 seconds. When the RUN/SET LED stops flashing and remains steady ON, release the keys. There are seven priority levels at disposal (from 8 = lowest priority to 14 = highest priority).

On pressing the ALERT key, the LEDs will indicate the current priority setting (default factory setting: 8). To change the priority, hold the ALERT key down and press AUX (to increase the number) or P.T.T. (to decrease it). The LEDs corresponding to each priority level are shown in the following table. To leave the settings mode and save the changes made, press the ALERT, EVAC and RESET/ACK keys again: the RUN/SET LED will start flashing again.

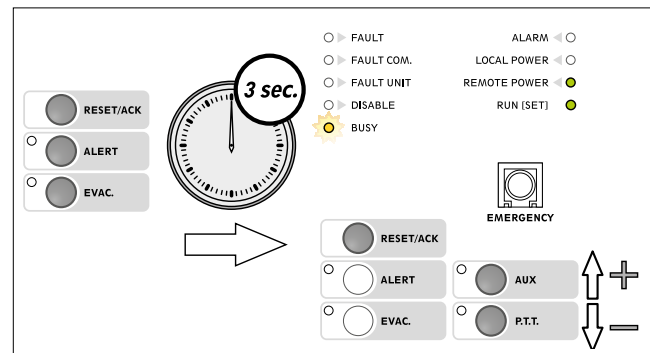


		PRIORITY						
		8	9	10	11	12	13	14
LED	○ ► FAULT	○ ► FAULT	○ ► FAULT	○ ► FAULT	○ ► FAULT	○ ► FAULT	○ ► FAULT	○ ► FAULT
	● ► FAULT COM.	● ► FAULT COM.	● ► FAULT COM.	● ► FAULT COM.	● ► FAULT COM.	● ► FAULT COM.	● ► FAULT COM.	● ► FAULT COM.
	○ ► FAULT UNIT	○ ► FAULT UNIT	○ ► FAULT UNIT	○ ► FAULT UNIT	○ ► FAULT UNIT	○ ► FAULT UNIT	○ ► FAULT UNIT	○ ► FAULT UNIT
	○ ► DISABLE	○ ► DISABLE	● ► DISABLE	● ► DISABLE	○ ► DISABLE	○ ► DISABLE	○ ► DISABLE	● ► DISABLE
	○ ► BUSY	● ► BUSY	○ ► BUSY	● ► BUSY	○ ► BUSY	● ► BUSY	○ ► BUSY	○ ► BUSY

If you do NOT want to save the changes made, simply wait for the timeout (about 10 seconds), after which the previous settings will be restored. Note: The priority level set determines the operational status both in emergencies and in broadcasting conditions.

3.3. P.T.T. Toggle

To set the P.T.T. key in the toggle mode, press the ALERT, EVAC and RESET/ACK keys simultaneously and hold them down for more than 3 seconds. When the RUN/SET LED stops flashing and remains steady ON, release the keys. On pressing the RESET/ACK. key, the LEDs will show the current setting (default factory setting: toggle OFF). To change the status, hold the RESET/ACK. key down and press AUX (to activate the toggle mode) or the P.T.T. key (to de-activate it). The LED's corresponding to the modes are shown in the following table.



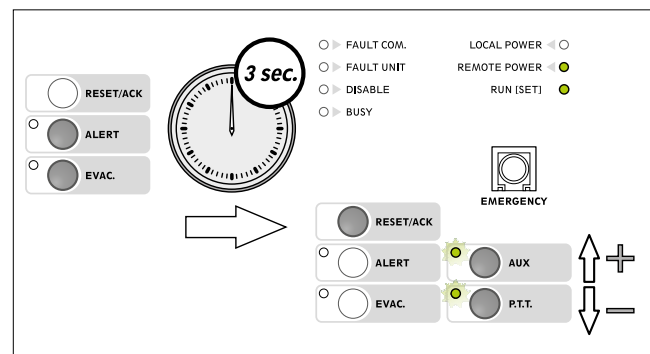
To leave the settings mode and save the changes made, press the ALERT, EVAC and RESET/ACK keys again: the RUN/SET LED will start flashing again. If you do NOT want to save the changes made, simply wait for the timeout (about 10 seconds), after which the previous settings will be restored.

	Toggle off	Toggle on
LED	<input type="radio"/> ► FAULT	<input type="radio"/> ► FAULT
	<input type="radio"/> ► FAULT COM.	<input type="radio"/> ► FAULT COM.
	<input type="radio"/> ► FAULT UNIT	<input type="radio"/> ► FAULT UNIT
	<input type="radio"/> ► DISABLE	<input checked="" type="radio"/> ► DISABLE
	<input checked="" type="radio"/> ► BUSY	<input type="radio"/> ► BUSY

3.4. Microphone sensitivity

When the station is close to the speakers, it is possible that acoustic feedback may occur, resulting in a hissing noise from the loudspeakers (Larsen effect). To avoid this, it is necessary to lower the sensitivity of the microphone. To set the sensitivity of the microphone, press the ALERT and EVAC keys simultaneously and hold them down for more than 3 seconds. When the RUN/SET LED stops flashing and remains steady ON, release the keys.

Holding the EVAC. key down, press AUX to increase the sensitivity of the microphone or P.T.T. to decrease it.



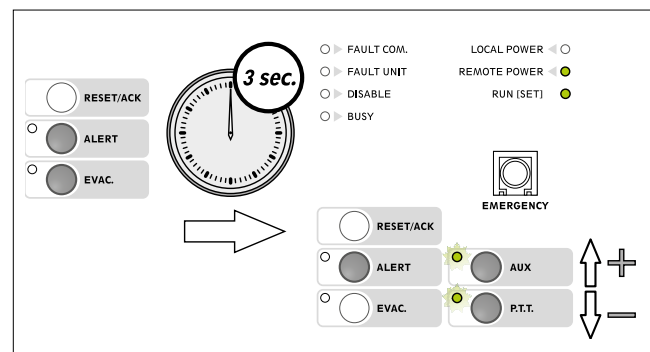
The appropriate LED's will flash to indicate that the adjustment is being made.

Once the (minimum or maximum) limits have been reached, the LED's will remain steady ON. To leave the settings mode and save the changes made, press the ALERT and EVAC keys again. If you do NOT want to save the changes made, simply wait for the timeout (about 10 seconds), after which the previous settings will be restored.

3.5. Output level

To set the output level, press the ALERT and EVAC keys simultaneously and hold them down for more than 3 seconds. When the RUN/SET LED stops flashing and remains steady ON, release the keys. Holding the ALERT key down, press AUX to increase the output level or P.T.T. to decrease it.

The appropriate LED's will flash to indicate that the adjustment is being made. Once the (minimum or maximum) limits have been reached, the LED's will remain steady ON. To leave the settings mode and save the changes made, press the ALERT and EVAC keys again. If you do NOT want to save the changes made, simply wait for the timeout (about 10 seconds), after which the previous settings will be restored.



3.6. LOW-CUT filter

To set the LOW-CUT filter, press the ALERT and EVAC keys simultaneously and hold them down for more than 3 seconds. When the RUN/SET LED stops flashing and remains steady ON, release the keys.

Press the RESET/ACK. key. The LED's will indicate the current settings:

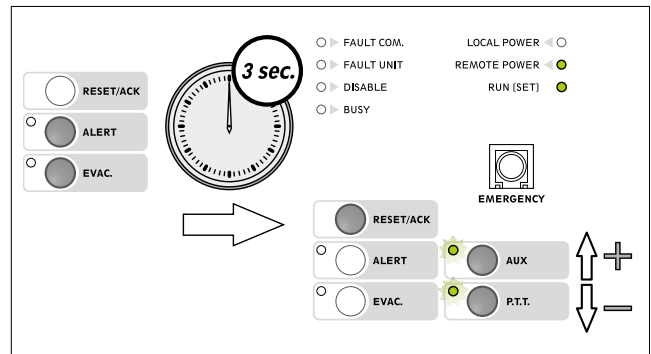
AUX LED ON = filter ON

P.T.T. LED ON = filter OFF

Holding the RESET/ACK key down, press AUX to activate the filter or P.T.T. to de-activate it.

To leave the settings mode and save the changes made, press the ALERT and EVAC keys again. The RUN/SET LED will start flashing again. If you do NOT want to save the changes made, simply wait for the timeout (about 10 seconds), after which the previous settings will be restored.

Note: To check the effects of the changes described under points 4.3 to 4.6 above, a normal call so as to listen to your own voice is recommended.



Note for INSTALLERS:

While installing and configuring the system, it may be necessary to mute the failure signalling buzzer temporarily. To do this, there is a switch (11) on the rear panel, which has to be positioned with a small screwdriver. Remember to re-activate the buzzer after completing the operations.

Technical data

Number of selectable zones	12 zones
Power supply	24 VDC
Maximum absorption (24 VDC)	130 mA
Typical output level	300 mV
Distortion	< 1%
S/N ratio	> 60 dB
S/N ratio (weighted "A")	> 65 dBA
Frequency response	130-19'000 Hz

Low-cut filter	-3 dB / 380 Hz
Dimensions (W x H x D)	230 x 80 x 200 mm
Weight	1.55 kg
Certificate	EN 54-16 (DoP: CPR-63-19-025)
Colour	Dark grey
Material	Plastic

Dimensions in mm

