

VIVALDI

USER AND INSTALLATION MANUAL

FREEMK3 - FREENETMK3
FREESOURCEMK3



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1 WARNING

The present device has been designed and manufactured to guarantee personal safety. Improper use may cause electroshock or expose to fire hazard. Security measures integrated in the unit are effective if the user observes use, installation and maintenance procedures mentioned below.

- Follow all advice and instructions reported on the product..
- Disconnect the product from the power supply before cleaning. Do not use liquid or spray cleaners. Clean with a damp cloth.
- Do not use the product next to liquids.
- Do not place the product on unstable surfaces to prevent fall damages.
- Do not drop the product.
- Do not obstruct side and front slots to guarantee proper ventilation and reliable operation of the product and prevent overheating.
- Use the product only with power according to this manual's specifications. For any doubts on available power check this manual.
- Do not place any object on the power cable and place it in order to avoid trampling.
- Do not insert any object inside the product through the ventilation slots to prevent contact with hazardous voltage parts or short circuit, causing fire or electroshock.
- Unplug and contact qualified staff in the following circumstances:
 - Plug or power cables are damaged or torn.
 - The product came into contact with liquids.
 - The product has been exposed to rain or water.
 - The product is not working properly even following the operation instructions.

Set only the commands indicated in the operation instructions: wrong settings may damage the product or require a qualified technician's intervention to restore normal operation.

- The product has fallen or the frame is damaged.
- If an evident alteration of the product's performance is reported, contact Vivaldi's Tech Support.

Vivaldi S.R.L. reserves to update any time this document without warning.

2 GENERAL DESCRIPTION

FREEmk3, FREENETmk3, FREESOURCEmk3 and iFREE are devices with integrated sources and amplifier, compatible with 503/504/507 etc. electrical in-wall boxes with the available adapters, depending on brand and model of frame in which they will be installed.

FREEmk3, FREENETmk3, FREESOURCEmk3 and iFREE require 3 modules of the civil standard boxes.

WARNING: Vivaldi does not guarantee compatibility with all civil standards available on the market.

FREEmk3, FREENETmk3, FREESOURCEmk3 and iFREE feature FM e DAB+ radio tuners, USB port (file reading only from USB drive, no hard disk, smartphone, etc.), Bluetooth receiver for audio streaming from a mobile device (eg. smartphone), two stereo audio inputs for external audio sources, and a microphone capsule for voice messages to other FREEmk3, FREENETmk3, FREESOURCEmk3 and iFREE in the system. The amplification is provided by a class D digital stereo amplifier, which develops a maximum power of 25W per channel at 4 Ω (except FREESOURCEmk3). FREENETmk3, FREESOURCEmk3 and iFREE have been conceived to cover one single zone with one device. For systems that consist of more than one zone, consider putting one FREEmk3, FREENETmk3 or iFREE in each zone.

Each FREEmk3, FREENETmk3, FREESOURCEmk3 and iFREE is supplied with TCIR5 infrared remote controller. With this remote it is possible to control all the physical commands available in the front panel, navigate through the pages and access all menu sections.

FREEmk3 model implements a communication protocol that allows, with the connection of FREECONTROL mini server (optional) through RS485, the control of the system via Giove iControl App, as well as the full Intercom functionality.

FREENETmk3, FREESOURCEmk3 and iFREE implement a brand new communication protocol through RS485 that allows, in combination with CA28L/CA28+ main units or iCONTROL4.1L/iCONTROL4.0+ servers (optional), the creation of a complete multiroom audio system, completely customisable and controllable via App. Intercom functionality is available too.

3 PACKAGE CONTENT

3.1 FREEMK3 MODEL



TCIR5W



Pila Li CR2032



Quick start guide

3.2 FREENETMK3 MODEL



TCIR5W



Pila Li CR2032



Quick start guide

3.3 FREESOURCEMK3 MODEL



TCIR5W



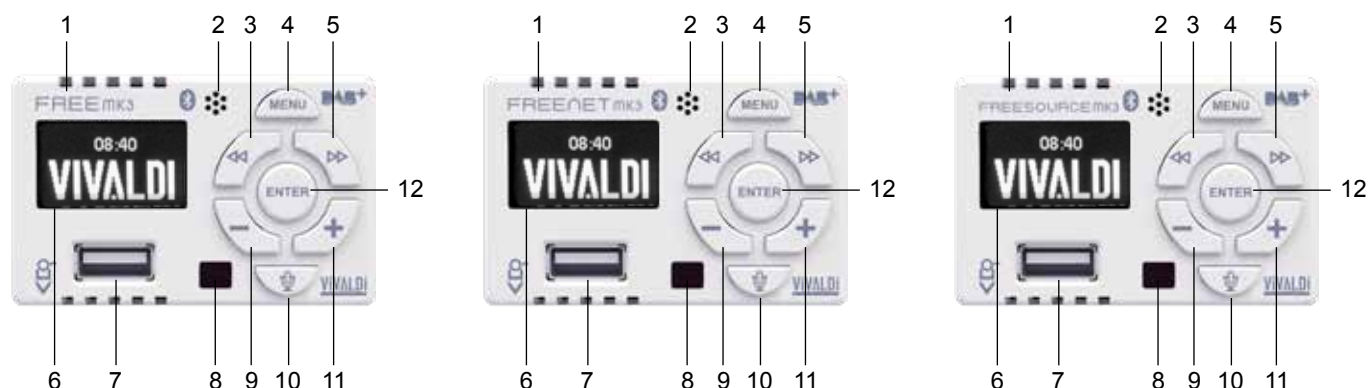
Pila Li CR2032



Quick start guide

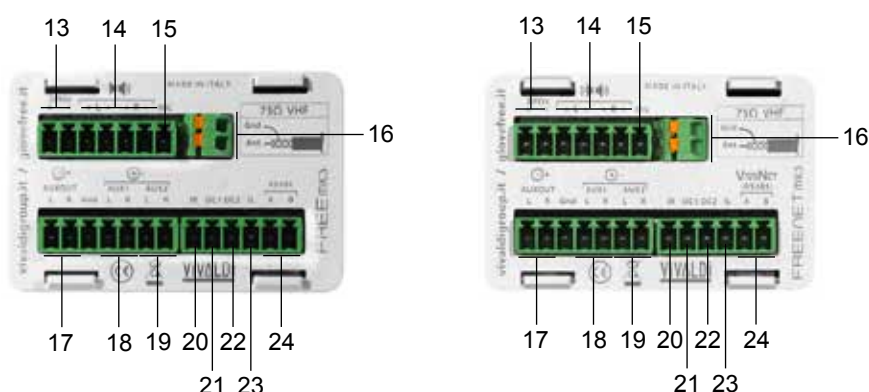
4 DEVICES DESCRIPTION

4.1 FREEMK3 - FREENETMK3 - FREESOURCEMK3 FRONT



1. Blue LED, only active during Boot;
2. Microphone capsule for intercom/paging functionalities (see Chapter 6.2.9);
3. Left arrow key << for menu navigation and specific operations in each source;
4. MENU key. Long press for 2 seconds to access the main menu screen (see Chapter 6.2, 6.3);
5. Right arrow key >> for menu navigation and specific operations in each source;;
6. OLED Display;
7. USB type A port for mass storage devices (see Chapter 6.2.4);
8. IR receiver, receives IR commands from TCIR5 remote control or from other remote controllers (can be used to redirect IR signals thanks to IR output);
9. “ – ” key, decrease volume level and control specific menu functions;
10. MICROPHONE key, activates intercom. In menu navigation use this key to go “BACK” within the menu sections (see Chapter 6.2.8, 6.2.9);
11. “ + ” key, increase volume level and control specific menu functions;
12. ENTER key. Press and hold for 2 seconds to switch the device ON/OFF. In menu navigation use this key as “ENTER” key. During playback press this key to switch between “MUTE/Playback” modes.

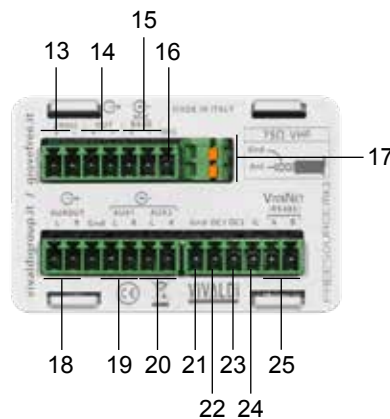
4.2 FREEMK3 - FREENETMK3 REAR



13. + and – pins for power supply. Allowed power from 12 to 24 VDC;
14. Speaker outputs: +/- Left channel and +/- R channel. Power audio signal outputs, minimum impedance 4Ω;
15. MIC pin. Connect in parallel between more devices in the system to use intercom functionality (see Chapter 6.2.8 and 6.2.9);
16. ANT pins. Connect the device to the centralized TV antenna system with a 75Ω impedance coaxial antenna cable (see Chapter 6.2.2);

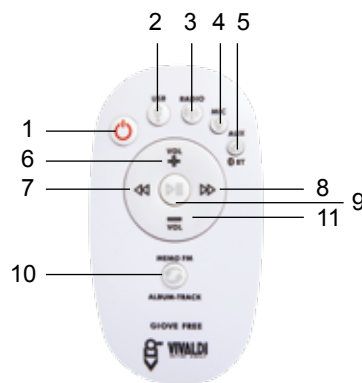
- 17. L and R pins, AUXOUT (Line Out);
- 18. AUX1 IN, L and R channel pins. Input sensitivity 1 Vrms, impedance 10 K Ω (see chapter 6.2.5);
- 19. AUX2 IN, L and R channel pins. Input sensitivity 1 Vrms, impedance 10 K Ω (see Chapter 6.2.6);
- 20. IR pin. Carries the InfraRed signal received from the front receiver. Can be connected to an IR signal distribution bus, like Vivaldi CA20/21 or CA28;
- 21. OC1 pin for Intercom calls control between multiple devices (Digital I/O, see Chapter 6.4.5);
- 22. OC2 pin (Digital I/O, see Chapter 6.4.5);
- 23. IL pin (Digital I/O). Command VIVALDI optional accessories and devices in combination with FREEmk3 and FREENETmk3 (see Chapter 6.4.5);
- 24. A and B pins for RS485 communication bus for connecting CA28L/+ main unit (FREENETmk3), iCONTROL server (FREENETmk3), or FREECONTROL mini server and CA20/21 matrix (FREEmk3);

4.3 FREESOURCEMK3 REAR



- 13. + and – pins for power supply. Allowed power from 12 to 24 VDC;
- 14. + and – pins, balanced mono audio output;
- 15. + and – pins, balanced MIC input;
- 16. MIC pin. Connect in parallel between more devices in the system to use intercom functionality (see Chapter 6.2.8 and 6.2.9);
- 17. ANT pins. Connect the device to the centralized TV antenna system with a 75 Ω impedance coaxial antenna cable (see Chapter 6.2.2);
- 18. L and R pins, AUXOUT (Line Out);
- 19. AUX1 IN, L and R channel pins. Input sensitivity 1 Vrms, impedance 10 K Ω (see chapter 6.2.5);
- 20. AUX1 IN, L and R channel pins. Input sensitivity 1 Vrms, impedance 10 K Ω (see chapter 6.2.6);
- 21. IR pin. Carries the InfraRed signal received from the front receiver. Can be connected to an IR signal distribution bus, like Vivaldi CA20/21 or CA28;
- 22. OC1 pin for Intercom calls control between multiple devices (Digital I/O, see Chapter 6.4.5);
- 23. OC2 pin (Digital I/O, see Chapter 6.4.5);
- 24. IL pin (Digital I/O). Command VIVALDI optional accessories and devices in combination with FREESOURCEmk3 (see Chapter 6.4.5);
- 25. A and B pins for RS485 communication bus for connecting CA20/21 main unit or iCONTROL server;

4.4 INFRARED REMOTE CONTROLLER TCIR5



1. ON/OFF key, switch ON/OFF FREEmk3, FREENETmk3 or FREESOURCEmk3;
2. USB key, switch the device to USB source playback mode;
3. RADIO key, switch to FM or DAB+ radio source mode;
4. MIC key, switch between MIC IN and MIC OUT mode, in rotation;
5. AUX key, switch to AUX1, AUX2 and BLUETOOTH in rotation;
6. VOL + key, increase volume level;
7. Left arrow key << change tuner frequency/memory slot in FM/DAB+ radio source or navigate/skip track/folder in USB source mode;
8. Right arrow key >> change tuner frequency/memory slot in FM/DAB+ radio source or navigate/skip track/folder in USB source mode;
9. PLAY/PAUSE key, activate MUTE mode in any source mode, play/pause USB/Bluetooth playback;
10. MEMO FM key, change between frequency/memory slot modes in FM/DAB+ radio sources, or switch between track/folder/random navigation in USB source mode;
11. VOL – key, decrease volume level;

5 TECHNICAL SPECIFICATIONS

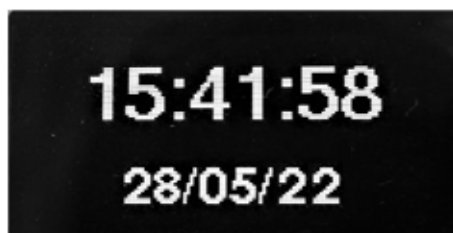
	FREEMK3	FREENETMK3	FREESOURCEMK3
Power supply voltage	12-24VDC	12-24VDC	12-24VDC
Maximum current draw	1A	1A	1A
Amplifier	digital class D, stereo	digital class D, stereo	-
Min output impedance L	4Ω	4Ω	-
Min output impedance R	4Ω	4Ω	-
Max output power L ch	25W/ 4Ω	25W/ 4Ω	-
Max output power R ch	25W/ 4Ω	25W/ 4Ω	-
Usb port type	A	A	A
Max usb current	300mA	300mA	300mA
Max capacity usb drive	16 GB	16 GB	16 GB
Usb drive file system	FAT16 o FAT32	FAT16 o FAT32	FAT16 o FAT32
Supported formats	MP3, WMA, AAC	MP3, WMA, AAC	MP3, WMA, AAC
FM radio range	87,5 MHz - 108,0 MHz	87,5 MHz - 108,0 MHz	87,5 MHz - 108,0 MHz
Dab + radio range	175,0 MHz - 238,0 MHz	175,0 MHz - 238,0 MHz	175,0 MHz - 238,0 MHz
FM radio memory slots	6	6	6
Dab radio memory slots	6	6	6

	FREEMK3	FREENETMK3	FREESOURCEMK3
RDS	Yes	Yes	Yes
Input impedance AUX1/ AUX2	10KΩ	10KΩ	10KΩ
Input sensitivity AUX1/ AUX2	1VRMS	1VRMS	1VRMS
Phantom power	-	-	11,5V on mic base input
Bluetooth	5.0	5.0	5.0
Bluetooth range*	8mt	8mt	8mt
RS485 (proprietary protocol)	57600,N,8,1	57600,N,8,1	57600,N,8,1
Hour format	24h	24h	24h
Date format	gg/mm/aa	gg/mm/aa	gg/mm/aa
Dimensions (w/sockets)	67x44x52 mm	67x44x52 mm	67x44x52 mm
Weight (w/sockets)	90g	90g	90g

* See WARNING note at Chapter 6.2.5

6 MENU PAGES DESCRIPTION

6.1 STANDBY



STANDBY page. When the device is powered, after system startup, the device will automatically display this page. Time and date (see Chapter 6.3.3) are updated by the internal clock which can be either set manually from the menu settings, or automatically when connected to a main unit (CA20/21/28) or a supervision system (FREECONTROL, iCONTROL4.1L or iCONTROL4.0+). The standby page view can be modified from the DISPLAY SETUP menu (see Chapter 6.3.1).

6.2 SOURCE MENU



SOURCE MENU page. When the device is ON, after holding MENU key for approximately 2 seconds. Press Enter key to access SOURCE menu. Press MICROPHONE key to go back to the previous page. After 2 minutes of inactivity, FREEmk3, FREENETmk3 or FREESOURCEmk3 will go back to the main page automatically.

6.2.1 SOURCES LIST

Sources list in FREEmk3, FREENETmk3 or FREESOUCEmk3. Scroll through available sources with + and – keys or with << and >>. Once in the desired source, press ENTER to select it. Available sources: FM RADIO, USB, BLUETOOTH, AUX1, AUX2 (on FREENETMK2, when in CA20MODE the additional sources will be displayed) MIC IN, MIC OUT. Press MICROPHONE key to go back to the previous page. After about 2 minutes of inactivity, FREEmk3, FREENETmk3 or FREESOUCEmk3 will automatically go back to the main page.

6.2.2 SORGENTE RADIO FM



FM RADIO source page. Receivable frequencies: from 87,5 MHz to 108,0 Mhz. The center of the screen will display the RDS information about the current radio station. On the right bottom corner, an “M” letter, followed by a number, indicates the current memory slot. Memory slots available: 6. To store a frequency in a memory slot proceed as follows:

1. Tune the frequency to reach the desired radio station (<< and >> keys);
2. Press and hold << and >> keys together for 2 seconds (“M” followed by the current memory slot starts flashing);
3. Select the desired memory slot with << and >> keys to reach the memory slot to overwrite;
4. Press ENTER key to confirm and store;
5. To activate the memory scroll mode press MENU key one time (MEMORY SELECTION) and use << and >> keys to navigate between the memory slots;
6. To switch between FREQUENCY SELECTION and MEMORY SELECTION modes press MENU key.

WARNING: each new memory save in one of the 6 slots will overwrite the frequency previously stored.

At the bottom of the screen a VU meter displays the audio signal level. The top bar displays, from left to right, time, current source and volume level. Briefly pressing the ENTER key activates and deactivates the MUTE function (symbol X at the top right near the volume value). Briefly pressing the MENU key switches to the VU meter display. Press the + and - keys to increase and decrease the listening volume from a minimum value of 0, which corresponds to MUTE, to a maximum value of 50. Press the MICROPHONE key to switch to microphone mode (see chapter 6.2.7 and 6.2.8). The horizontal bar at the bottom indicates the level of the incoming audio signal.

6.2.3 DAB+ RADIO SOURCE



DAB+ RADIO source page. Receivable frequencies from 175,0MHz to 238,0 MHz. Distinction between mono and stereo frequencies. On the top left corner, an “M” letter, followed by a number, indicates the current memory slot. Memory slots available: 6. Once DAB+ source is selected, the device will perform an automatic scan of the available frequencies. Once the carrier frequencies have been found, the device will download the services list for each carrier. This service list will be the list of digital radio stations available. If no carrier is found, the device will switch automatically to FM radio source mode. To store a DAB+ service (station) in a memory slot, proceed as follows:

1. Scroll through DAB+ services (stations) to reach the desired service;
2. Press and hold << and >> keys together for 2 seconds ("M" followed by the current memory slot starts flashing);
3. Select the desired memory slot with << and >> keys to reach the memory slot to overwrite;
4. Press ENTER key to confirm and store;
5. To activate the memory scroll mode press MENU key one time (MEMORY SELECTION) and use << and >> keys to navigate between the memory slots;
6. To switch between FREQUENCY SELECTION and MEMORY SELECTION modes press MENU key.

WARNING: each new memory save in one of the 6 slots will overwrite the frequency previously stored.

At the bottom of the screen a VU meter displays the audio signal level. The top bar displays, from left to right, time, current source and volume level. Briefly pressing the ENTER key activates and deactivates the MUTE function (symbol X at the top right near the volume value). Briefly pressing the MENU key switches to the VU meter display. Press the + and - keys to increase and decrease the listening volume from a minimum value of 0, which corresponds to MUTE, to a maximum value of 50. Press the MICROPHONE key to switch to microphone mode (see chapter 6.2.7 and 6.2.8). The horizontal bar at the bottom indicates the level of the incoming audio signal.

6.2.4 USB SOURCE



USB source page. It is possible to connect to the USB port only mass storage devices with FAT16 or FAT32 file system format. Maximum capacity allowed 8 GB. Reading and file playing starts from the first track in memory root, then in hierarchical order to the first track in the first folder (maximum 65534 folders) and so on. Supported audio formats: MP3, WMA, AAC.

WARNING: Vivaldi does not guarantee proper operation with USB drives of higher capacity than 8GB or with different file system than FAT16 or FAT32.

WARNING: Vivaldi does not guarantee proper operation if the USB drive contains different files and system formats than those mentioned above.

WARNING: it is not possible to connect active devices such as smartphones, mp3 readers or mass storage devices like hard disks. Using the USB port to charge any kind of device will cause bad operation and invalidate warranty.

WARNING: Vivaldi does not guarantee compatibility with all USB drives available in commerce, even if under the specifications mentioned above.

When inserting a USB drive in FREEmk2 and FREENETmk2, the device will automatically switch to USB source mode and start playing tracks from the USB drive. Same happens if the device is in standby. On the display, while playing, playing time, track title (if available), and playing information will be displayed. With >> or << keys scroll tracks if the note symbol is displayed, scroll folder if the folder symbol is displayed. Note symbol indicates random mode for music playing. Briefly pressing the ENTER key activates and deactivates the MUTE function (symbol X at the top right near the volume value). Briefly pressing the MENU key switches to the VU meter display. Press the + and - keys to increase and decrease the listening volume from a minimum value of 0, which corresponds to MUTE, to a maximum value of 50. Press the MICROPHONE key to switch to microphone mode (see chapter 6.2.7 and 6.2.8). The horizontal bar at the bottom indicates the level of the incoming audio signal.

This page is displayed when trying to switch to USB mode, but no USB drive is connected to the port of FREEmk2 and FREENETmk2.



This screen displays when the source menu selects the USB source but no flash drive is connected to the USB port of FREEmk3, FREENETmk3 and FREESOURCEmk3.

6.2.5 BLUETOOTH SOURCE



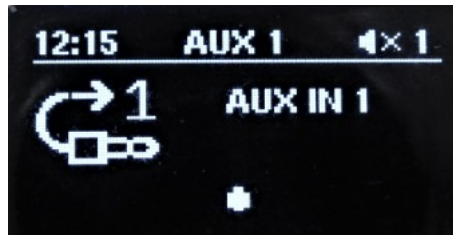
Bluetooth source page. FREEmk3, FREENETmk3 and FREESOURCEmk3 feature a Bluetooth 5.0 receiver for short range (8mt in free air) audio streaming transmission from a mobile device (eg. Smartphone, laptop). To enter pairing mode press MENU key. FREEmk3, FREENETmk3 and FREESOURCEmk3 will appear on the available devices list in your smartphone with a default name VIVALDI_ , followed by a random alphanumeric code. During pairing, a confirmation page appears on FREEmk3, FREENETmk3 and FREESOURCEmk3 display, press ENTER to confirm. The Bluetooth name can be changed by the user from BLUETOOTH SETUP page (see Chapter 6.4.2). Briefly pressing the ENTER key activates and deactivates the MUTE function (symbol X at the top right near the volume value). Briefly pressing the MENU key switches to the VU meter display. Press the + and - keys to increase and decrease the listening volume from a minimum value of 0, which corresponds to MUTE, to a maximum value of 50. Press the MICROPHONE key to switch to microphone mode (see chapter 6.2.7 and 6.2 .8). The horizontal bar at the bottom indicates the level of the incoming audio signal.

NOTE: Bluetooth range can be influenced by many external factors (wifi networks, physical obstacles between transmitter and receiver, transmitter's battery level...), hence the proper operation cannot be guaranteed.



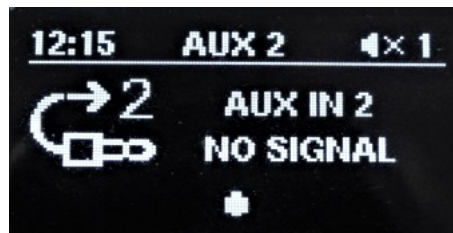
Bluetooth playback page. This page displays artist/track/album information, as well as battery and signal levels. At the bottom of the page a signal level bar is visualized.

6.2.6 AUXIN 1 SOURCE



AUXIN 1. FREEmk3, FREENETmk3 and FREESOURCEmk3 feature two stereo line inputs, named AUX1 e AUX2. At the AUX1 input it is possible to connect any audio source at line level (1 Vrms). Briefly pressing the ENTER key activates and deactivates the MUTE function (symbol X at the top right near the volume value). Briefly pressing the MENU key switches to the VU meter display. Press the + and - keys to increase and decrease the listening volume from a minimum value of 0, which corresponds to MUTE, to a maximum value of 50. Press the MICROPHONE key to switch to microphone mode (see chapter 6.2.7 and 6.2 .8). The horizontal bar at the bottom indicates the level of the incoming audio signal (VU meter).

6.2.7 AUX 2 SOURCE



AUXIN 2. FREEmk3, FREENETmk3 and FREESOURCEmk3 feature two stereo line inputs, named AUX1 e AUX2. At the AUX1 input it is possible to connect any audio source at line level (1 Vrms). Briefly pressing the ENTER key activates and deactivates the MUTE function (symbol X at the top right near the volume value). Briefly pressing the MENU key switches to the VU meter display. Press the + and - keys to increase and decrease the listening volume from a minimum value of 0, which corresponds to MUTE, to a maximum value of 50. Press the MICROPHONE key to switch to microphone mode (see chapter 6.2.7 and 6.2 .8). The horizontal bar at the bottom indicates the level of the incoming audio signal.

6.2.8 MIC INPUT SOURCE



MIC INPUT source page. It is possible to communicate between more FREEmk3, FREENETmk3 and FREESOURCEmk3 connected to each other. More specifically, MIC INPUT source allows to listen to the incoming audio signal on MIC input pin(see Chapter 4.2, section 15). Activating MIC INPUT source in one FREEmk3, FREENETmk3 or FREESOURCEmk3 and MIC OUTPUT source on another (see Chapter 6.2.8) FREEmk3, FREENETmk3 or FREESOURCEmk3, activates the monitoring of the zone set on MIC OUTPUT source.

WARNING: VIVALDI SRL is exempt from any improper use of this function.

Although this source can be selected manually from the sources menu, FREEmk3, FREENETmk3 and FREESOURCEmk3 switches automatically to this source when is called from another device connected to it. Briefly pressing the ENTER key activates and deactivates the MUTE function (symbol X at the top right near the volume value). Briefly pressing the MENU key switches to the VU meter display. Press the + and - keys to increase and decrease the listening volume from a minimum value of 0, which corresponds to MUTE, to a maximum value of 50. Press the MICROPHONE key to switch to microphone mode (see chapter 6.2.7 and 6.2 .8). The horizontal bar at the bottom indicates the level of the incoming audio signal (VU meter).

6.2.9 MIC OUTPUT SOURCE



MIC OUTPUT source page. It is possible to communicate between more FREEmk3, FREENETmk3 and FREESOURCEmk3 connected to each other. More specifically, MIC OUTPUT source allows to use the integrated front microphone capsule (see Chapter 4.1, section 2) to send a voice message to one or more devices connected to MIC pin (see chapter 4.2, section 15). MIC OUTPUT source can be selected from the sources menu, or can be activated directly from any source or even in stand-by mode pressing MICROPHONE key on FREEmk3, FREENETmk3 e FREESOURCEmk3 . With FREEmk3, if the device is not connected to FREECONTROL smart controller, pressing MICROPHONE key opens microphone communication towards all the other FREEmk3 connected to it. Press again MICROPHONE key to close the communication. After closing communications each FREEmk3 sets to its previous status. If MICROPHONE key is held during the call, the communication will be open until the key will be released.



With FREEmk3, FREENETmk3 and FREESOURCEmk3, briefly press MICROPHONE key to enter microphone mode: Use + and – keys to select which RS485 bus ID (device) will be called (FREENETmk3 or FREESOURCEmk3). Once the desired ID has been selected (ALL call also available), pres ENTER key to call.



When the following page is visualized on the screen and the ID number is flashing, microphone communication is open towards the selected ID. Press MICROPHONE key again to close communication. Hold MICROPHONE key to open microphone communication towards the last RS485 bus ID selected (FREEmk3, FREENETmk3 or FREESOURCEmk3 connected to the system). In this case when the key is released, the communication will be closed.

NOTE: with FREENETmk3 and FREESOURCEmk3 it is possible to make addressed microphone calls (from A to B) only if the system includes CA20 / 21 / 28L / 28 + main unit iCONTROL4.0L /iCONTROL4.0 + control server. If these devices are not present, it will only be possible to make collective microphone calls, that is from one device call all the others and vice-versa. With FREEmk3 it is possible to make addressed microphone calls only if FREECONTROL smart controller is present in the system. Otherwise it will only be possible to make collective microphone calls.

6.3 SETUP MENU



SETUP menu page. To reach this page press MENU key (2 sec), then press >> key. Press ENTER key to access the setup menu.

6.3.1 DISPLAY MENU

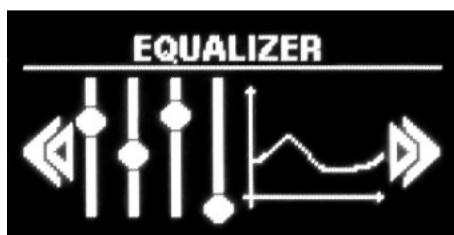


DISPLAY SETUP page in SETUP menu. From this menu it is possible to change the information displayed when the device is in stand-by. It is possible to choose between 8 visualizations:

1. DIGITAL CLOCK (default option) – digital clock with date;
2. DIGITAL CLOCK BIG – big, seven segments digital clock;
3. ANALOG CLOCK – analog clock;
4. PIXEL – a single pixel flashes in the middle of the screen;
5. WEATHER INFO – weather information (only FREENETmk3 with iCONTROL4.0+)
6. ROOM TEMPERATURE – room temperature visualization (only FREENETmk3 with iCONTROL4.0+)
7. TEMPERATURE CONTROLLER – temperature controller (only FREENETmk3 with iCONTROL4.0+)
8. VIVALDI LOGO– big Vivaldi logo;

Once selected the desired visualization, press ENTER key to confirm. Check the setting by switching the device to stand-by mode.

6.3.2 EQUALIZER



EQUALIZER setting page. FREEmk3, FREENETmk3 and FREESOURCEmk3 feature a modern DSP that allows to adjust the tone of the audio signal output by working on seven different frequency bands. Press the ENTER key to enter the settings screen.



EQUALIZER settings. The EQ contains 7 frequency bands: 63Hz, 125Hz, 250Hz, 800KHz, 2.5KHz, 7KHz, 12KHz. It is possible to adjust each frequency band from a minimum value of - 10 dB to a maximum value of + 10 dB. Use << and >> keys to move from one band to another. Use the + and - keys to change the value of the selected band. Once the changes have been made, confirm by pressing the ENTER key. Default values of all frequency bands: 0dB.

6.3.3 CLOCK MENU



CLOCK SETUP page in SETUP MENU. FREEmk3, FREENETmk3 and FREESOURCEmk3 have an integrated clock that allows the visualization of time and date on the stand-by screen. On FREEmk3, FREENETmk3 and FREESOURCEmk3 date and time can be set manually and stored as long as the device is powered. If the device is connected to a CA20/21/28L/28+ main unit or to iCONTROL4.1L/iCONTROL4.0+ smart server (only on FREENETmk3 and FREESOURCEmk3), or to FREECONTROL (FREEmk3), date and time will be automatically updated and taken from the matrix CA20/21 or from the web in case of smart servers/controllers. Setting a proper time and date allows the use of ALARM MENU functionality (ALARM, see Chapter 6.3.5). Press ENTER key to enter clock setup.



TIME SETUP page. On this page time can be set manually. Use << and >> keys to select hours and minutes. Use + and - keys to change the selected parameter. Once all the changes have been made, confirm by pressing ENTER key.



DATE SETUP page. On this page date can be set manually. Use << and >> keys to select day, month, year. Use + and - keys to change the selected parameter. Once all the changes have been made, confirm by pressing ENTER key

6.3.4 INFO



SYSTEM INFORMATION page on SETUP menu. On FREEmk3, FREENETmk3 and FREESOURCEmk3 all the system information can be visualized in this menu section. Press ENTER to access the information pages.



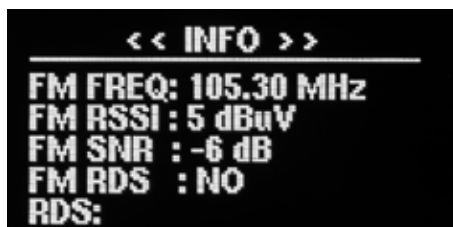
INFO page 1. This page reports the company name, website, device model and firmware version. Press << and >> or + and – keys to move between the pages.



INFO page 2. This page reports the current firmware version, release date and hardware version. Press << and >> or + and – keys to move between the pages.



INFO page 3. This page reports the physical address for Vivaldi technical support use, the device's ID on RS485 bus, the RS485 bus status (VivaNET). The bus status will be IDLE if the RS485 bus is inactive. This page displays also the packet latency (in ms) on the RS485 bus and a time counter from the last packet received (in ms). Press << and >> or + and – keys to move between the pages.



INFO page 4. This page reports information about the current FM/DAB frequency, signal level, Signal to Noise Ratio (SNR) and RDS service availability. When FREEMmk3, FREENETmk3 and FREESOURCEmk3 is on FM RADIO or DAB+ source and this screen is visualized, it is possible to choose between the available stations with TCIR5 remote control (included) pressing << and >> key. Press << and >> or + and – keys to move between the pages.



INFO page 5. This page reports the current Bluetooth name, and the Bluetooth module's MAC address, the name of the device currently connected (eg. Smartphone), the connection and streaming status (PLAY or PAUSE). Press << and >> or + and – keys to move between the pages.



INFO page 6. This page reports the current source's signal level on each channel, expressed in dB. Press << and >> or + and – keys to move between the pages.



INFO page 7. Reports the CPU serial numbers, and the serial ID of the Bluetooth device and other informations about CPU. Press << and >> or + and – keys to move between the pages.

6.3.5 ALARM MENU



ALARM page on SETUP menu. With ALARM functionality, it is possible to set automatic wake-up or shutdown times on FREEmk3, FREENETmk3 and FREESOURCEmk3. It is also possible to set the source to be played and the volume level when the device wakes up automatically. Press ENTER to access the settings.



POWER ON TIME page. Use << and >> keys to move between parameters and pages. Use + and – keys to modify the selected parameter. Once done, press ENTER key to confirm.

POWER ON TIME: set the auto wake-up time. Default value: 00:00.

ENABLE: if ON, the automatic wake-up function will be active, if OFF the function is disabled. Default value: OFF;

VOLUME: set the volume level (from 0 to 50) at automatic wake-up. If the setting is on LAST, the device will switch on at the same volume level it was switched off. Default value: LAST;

SOURCE: set the source (RADIO FM, DAB+, USB, BLUETOOTH, AUX 1, AUX 2, MIC IN, MIC OUT) to be selected at automatic wake-up. If the setting is on LAST, the device will switch on at the same sources it was switched off. Default value: LAST;



POWER OFF TIME setting page. Use << and >> keys to move between parameters and pages. Use + and – keys to modify the selected parameter. Once done, press ENTER key to confirm.

POWER OFF TIME: set the automatic shutdown time. Default value: 00:00.

ENABLE: if ON, the automatic shutdown function will be active, if OFF the function is disabled. Default value: OFF;
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6.4 ADVANCED SETUP MENU



ADVANCED SETUP page in SETUP MENU. Press ENTER to access the advanced settings configuration page. This menu is password protected to avoid unauthorized access.

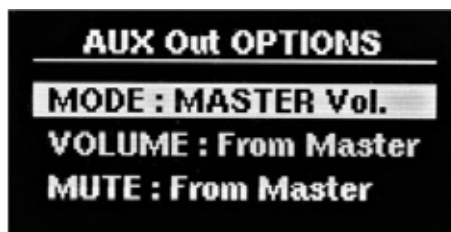


The default password to access ADVANCED SETUP MENU is: 4 7 2 0 and cannot be modified. Use << and >> keys to move between the boxes, + and – keys to set the number (0 to 9). Press ENTER to confirm the password and access the advanced settings menu.

6.4.1 AUDIO SETUP



AUDIO SETUP page on ADVANCED SETUP menu. In this page it is possible to configure all the audio parameters of FREEmk3, FREENETMmk3 e FREESOURCEmk3, such as amplifier settings (not available on FREESOURCEmk3), AUX OUT and microphone input options. Press ENTER to access this section.



AUX OUT OPTIONS page. Use << and >> keys to move between the parameters and pages. Use + and – keys to adjust the selected parameter. Once done, press ENTER to confirm and save the settings. **MODE:** MASTER Vol. Indicates that the AUX OUT output level is dependant on the master volume of the device. FIXED Vol. Indicates that the output level on AUX OUT will be set at a fixed value. This value can be set in the option below (VOLUME). Default value: Master Vol. .

VOLUME: when MODE is set on FIXED Vol., sets the volume level of AUX OUT output.

MUTE: in From Master, AUX OUT output will be muted together with the power output, in No Mute, when the power output is muted, AUX OUT won't be muted.

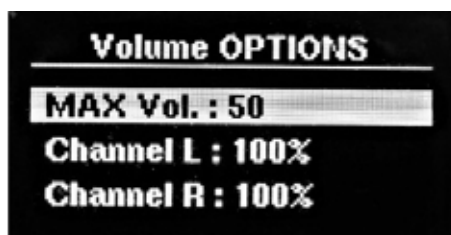


Amplifier OPTIONS page. Use << and >> keys to move between the parameters and pages. Use + and – keys to adjust the selected parameter. Once done, press ENTER to confirm and save the settings.

MN MODE: in ALL STEREO, both the power output and AUX OUT output of FREEmk3 and FREENETmk3 will be stereo. In AMPLI + PRE, both outputs will be mono. In ONLY AMPL, the power output will be mono, while the AUX OUT will be stereo. Default value: ALL STEREO.

POWER: Enable or disable the amplifier. Default value: ON.

PWR SAVE: Shuts the amplifier down when no signal is detected on the selected source. Default value: ON.

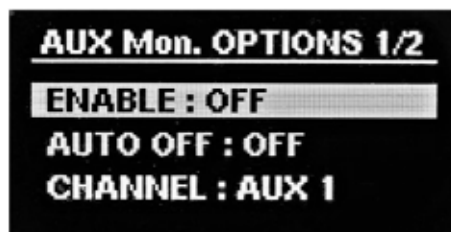


VOLUME OPTIONS page. Use << and >> keys to move between the parameters and pages. Use + and – keys to adjust the selected parameter. Once done, press ENTER to confirm and save the settings.

MAX Vol.: Set the maximum volume level reachable by the user (keypad or remote control). Values from 0 to 50.

Channel L: Adjust the output level of Left channel power output (Balance functionality). Default value: 100%.

Channel R: Adjust the output level of Left channel power output (Balance functionality). Default value: 100%.

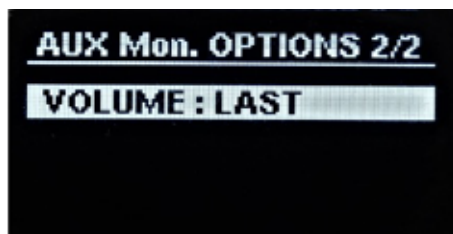


AUX MONITORING OPTIONS page 1/2. Use << and >> keys to move between the parameters and pages. Use + and – keys to adjust the selected parameter. Once done, press ENTER to confirm and save the settings.

ENABLE: in ON, allows automatic wake-up FREEmk3, FREENETmk3 and FREESOURCEmk3, when signal is detected on one auxiliary input (AUX 1 or AUX 2, can be selected in CHANNEL parameter). Default value: OFF.

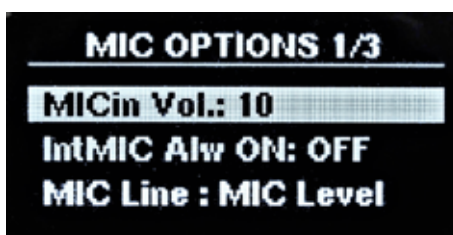
AUTO OFF: in ON, (ENABLE must be ON), after approximately 120 seconds without any signal on the selected input, FREEmk3, FREENETmk3 and FREESOURCEmk3 will shut down automatically. If OFF, the device will stay always ON, even with no detected signal. Default value: OFF.

CHANNEL: choose on which channel the signal detection for automatic wake-up will be active. Select AUX 1 to activate the detection on AUX 1 channel, AUX 2 to activate the detection on AUX 2 channel pins. Default value: AUX1.



AUX MONITORING OPTIONS page 2/2. Use << and >> keys to move between the parameters and pages. Use + and – keys to adjust the selected parameter. Once done, press ENTER to confirm and save the settings.

VOLUME: value range LAST/0-50. Allows to set the volume level when automatic wakeup is enabled on FREEmk3, FREENETmk3 and FREESOURCEmk3 AUX 1 or AUX 2. If on LAST, FREEmk3, FREENETmk3 and FREESOURCEmk3 will switch on at the last volume set before switching off. Default value: LAST.

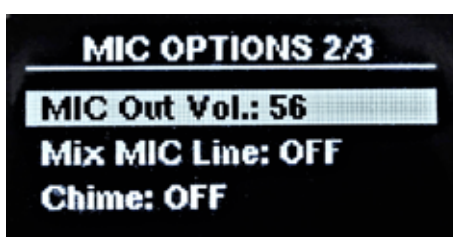


MIC OPTIONS page 1/3. Use << and >> keys to move between the parameters and pages. Use + and – keys to adjust the selected parameter. Once done, press ENTER to confirm and save the settings.

MICin Vol.: values from 0 to 50. Set the volume level of MIC IN source FREEmk3, FREENETmk3 and FREESOURCEmk3 is called from another device connected to it. Default value: 10.

IntMIC Alw ON: if ON the microphone capsule will always be active in any source or status of FREEmk3, FREENETmk3 and FREESOURCEmk3. Default value: OFF.

MIC Line: on MIC LEVEL, the MIC IN sensitivity is adjusted to microphone level inputs, ideal for multiple connection between FREEmk3, FREENETmk3 and FREESOURCEmk3 in order to use microphone call functionality. On LINE LEVEL, the input sensitivity of MIC pin will be lowered by 6 dB to match the level of AUX 1 and AUX 2 inputs. This way, MIC pin can be used as a third, optional Mono AUX input. Default value: MIC Level.

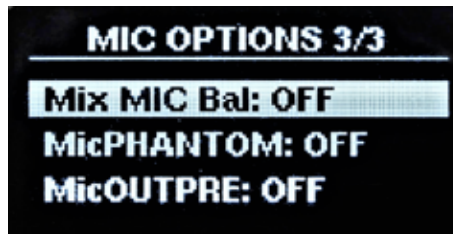


MIC OPTIONS page 2/3. Use << and >> keys to move between the parameters and pages. Use + and – keys to adjust the selected parameter. Once done, press ENTER to confirm and save the settings.

MIC Out Vol.: sets the output level of MIC OUTPUT source, values from 0 to 50. Default value: 50.

Mix MIC Line: allows to mix MIC source to any other source at the same time. Default value: OFF.

Chime: enables the automatic chime tone (Bell). If ON INPUT, the call tone will be played only when the device receives a call, if ON OUTPUT, the call tone will be played only when the device is making a call. If on BOTH, the tone will be played both at incoming and outgoing calls. Default value: OFF.



MIC OPTIONS page 3/3. Use << and >> keys to move between the parameters and pages. Use + and – keys to adjust the selected parameter. Once done, press ENTER to confirm and save the settings.

Mix MIC Bal (only on FREESOURCEmk3): mix MIC BASE balanced input with any other source at the same time. Default value: OFF.

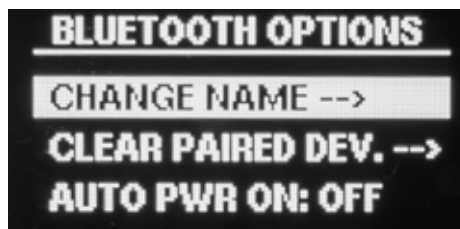
MicPHANTOM (only on FREESOURCEmk3): activates Phantom power on MIC BASE balanced input channel. Phantom power: 11,5 V. Default value: OFF.

MicOUTPRE: allows to listen to the in-built microphone in the same device that is performing the call. Local voice announcement functionality. Default value: OFF.

6.4.2 BLUETOOTH SETUP



BLUETOOTH SETUP page on ADVANCED SETUP menu. In this page it is possible to configure the Bluetooth parameters of FREEEmk3, FREENETmk3 and FREESOURCEmk3. Press ENTER to access this section.



BLUETOOTH OPTIONS page. Use << and >> keys to move between the parameters and pages. Use + and – keys to adjust the selected parameter. Once done, press ENTER to confirm and save the settings.

CHANGE NAME: change the device's Bluetooth name. This name will be visualized during devices scan on your mobile device. Press ENTER key to access the setup page.

CLEAR PAIRED DEV.: wipes the memory that contains the list of paired devices. Press ENTER key to perform the wipe.

DFU MODE (only for SERVICE personnel): updates the Bluetooth module's firmware. Default value: OFF.

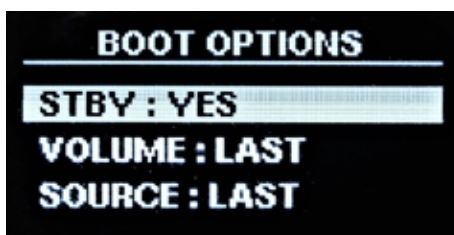


CHANGE NAME page. By default, the name is VIVALDI_ (followed by an automatically generated alphanumeric code). Use << and >> keys to move between the spaces. Use + and – keys to scroll characters and symbols. The maximum number of characters/symbols is 13. Once done, press ENTER to confirm.

6.4.3 BOOT SETUP



BOOT SETUP page on ADVANCED SETUP menu. In this page it is possible to configure the start-up parameters of FREEmk3, FREENETmk3 and FREESOURCEmk3. Press ENTER key to access this section.



BOOT SETUP page. FREEmk3, FREENETmk3 and FREESOURCEmk3 allow to set some parameters that will be automatically performed whenever the power is interrupted. Use << and >> keys to move between the parameters and pages. Use + and – keys to adjust the selected parameter. Once done, press ENTER to confirm and save the settings.

STBY: on YES, once the power is back after an interruption, FREEmk3, FREENETmk3 and FREESOURCEmk3 will be automatically put in stand by mode. on NO, once the power is back after an interruption FREEmk3, FREENETmk3 and FREESOURCEmk3, will automatically set the source and volume level specified in the next options. On LAST, the device will set the last source and volume level set before the interruption. Default value: YES.

VOLUME: set the volume level at automatic startup after a power interruption. Values 0 to 50, if on LAST, the device will set the and volume level set before the interruption. Default value: LAST.

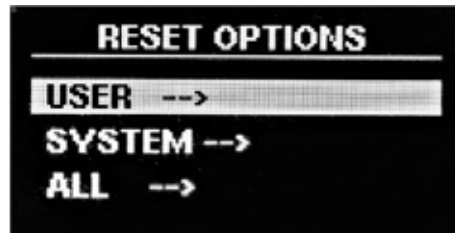
SOURCE: allows you to set the source where the FREEmk3, FREENETmk3, and FREESOURCEmk3, (when STBY is set to NO). You can set any device source. If LAST, the device turns on in the source where it was when it was turned off. Default: LAST.

NOTE: this function is only available if OC2 pin is disabled. OC2 EN: DISABLE (see Chapter 6.4.5)

6.4.4 RESET OPTION



RESET OPTION page on ADVANCED SETUP menu. From this page it is possible to reset FREEmk3, FREENETmk3 and FREESOURCEmk3. Press ENTER key to access this section.



RESET OPTION page. Use << and >> keys to move between the parameters and pages. Use + and – keys to adjust the selected parameter. Once the reset type has been selected, press ENTER to confirm. – **USER**: this option restores all the parameters in SETUP menu (source, volume, display setup, EQ, date/time and alarm setup) to default values.

SYSTEM: this option restores all the parameters in ADVANCED SETUP menu (audio setup, bluetooth setup, boot setup, O/C setup and Vivanet setup) to default values.

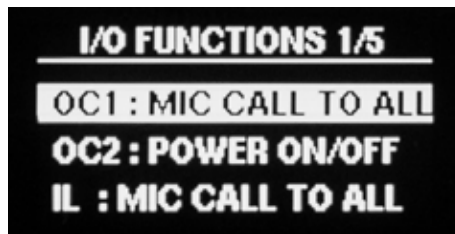
ALL: performs both the resets above, USER and SYSTEM, together.

NOTE: FREEmk 3 , FREENETmk3 e FREESOURCEmk 3 can be restored in any moment and status by pressing << , >> and MENU keys for 15 seconds, the blue LED will start flashing. When the display switches off, release the keys. The device will reboot.

6.4.5 I/O SETUP



I/O SETUP page on ADVANCED SETUP menu. FREEmk3, FREENETmk3 and FREESOURCEmk3 have 3 socket pins named OC1, OC2 and IL. These pins are three bi-directional open collectors that allow several functionalities to perform operations between several Vivaldi devices and accessories connected between each other. Press ENTER key to access this section.



Functions settings screen OC1, OC2 and IL

1. DISABLED : No active function
2. MIC CALL O/C : INPUT, OUTPUT or BOTH allows to make, receive an external call via the MIC signal. In HYBRID mode the first person to make the call temporarily becomes MASTER and the remaining SLAVE.
3. MIC CALL TO ID1 : INPUT only, if closed to GND, forces the call addressed on the bus to ID 1
4. MIC CALL TO ALL : INPUT only, if closed to GND, forces the call addressed on the bus to all IDs (general call)
5. POWER ON/OFF : In LEVEL mode: INPUT, OUTPUT or BOTH allows to make, receive an external power on/off. In HYBRID mode the first to make the call temporarily becomes MASTER and the remaining SLAVE. In PULSE Mode: INPUT only, if closed to GND, toggle the device status (Stby/Operation)
6. POWER STATUS : OUTPUT only, Open-Collector (max 100ma), GND if the device is on.
7. POWER STATUS INV : OUTPUT only, Open-Collector (max 100ma), GND if the device is off.
8. INCREASE VOL. Only INPUT, if closed to GND, increases the volume by one or more steps (if maintained)
9. DECREASE VOL. Only INPUT, when closed to GND, reduces the volume by one or more steps (if maintained)
10. NEXT FUNC. >> : INPUT only, if closed to GND, advances to the next track/album if in USB or only the track in BLUETOOTH
11. PREV FUNC. << : INPUT only, if closed to GND, come back to the previous track/album if in USB or only the track in BLUETOOTH
12. PLAY USB : INPUT only, if closed to GND, momentarily switch to USB source until release
13. PLAY AUX1 : INPUT only, if closed to GND, momentarily switches to AUX 1 source until release
14. PLAY AUX2 : INPUT only, if closed to GND, temporarily switches to AUX 2 source until release

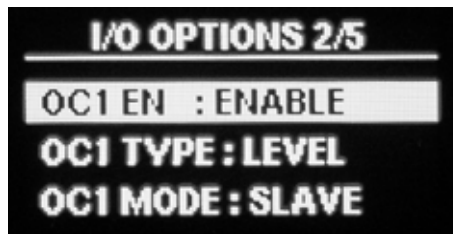
N.B.: For the functions MIC CALL TO ID1 and MIC CALL TO ALL MUST be present a MASTER Supervisor in the RS485 BUS, who can manage correct calls (e.g. FREECONTROL)

Functions of the Default:

OC1 : MIC_CALL O/C

OC2 : POWER ON/OFF

IL : POWER STATUS

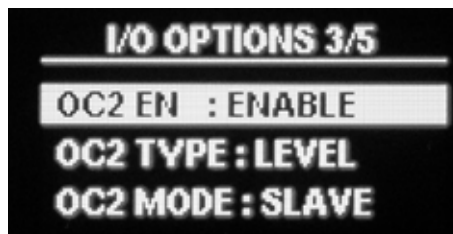


I/O OPTIONS page 1. OC1 pin, connected in parallel between several FREEmk3, FREENETmk3 and FREESOURCEmk3 allows the collective microphone call between the devices. Use << and >> to move between the parameters. Use + and – keys to change the parameter's value. Press ENTER to confirm.

OC1 EN: on ENABLE, OC1 pin is activated. On DISABLE, OC1 pin is disabled. Default value: ENABLE.

OC1 TYPE: on LEVEL, OC1 pin is enabled. On PULSE, OC1 is disabled. Default value: LEVEL.

OC1 MODE: on HYBRID, FREEmk3, FREENETmk3 and FREESOURCEmk3 can both perform and receive a microphone call from other devices connected to it. On MASTER, FREEmk3, FREENETmk3 and FREESOURCEmk3 can only perform and not receive a microphone call from other devices connected to it. On SLAVE, FREEmk3, FREENETmk3 and FREESOURCEmk3 cannot perform the microphone call, but only receive it from other devices connected to it. Default value: HYBRID.

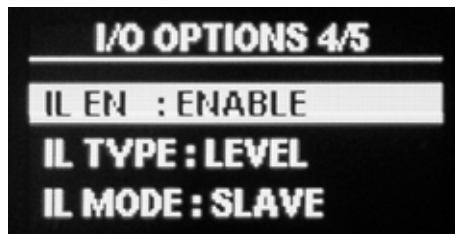


I/O OPTIONS page 2. OC2, connected in parallel between several FREEmk3, FREENETmk3 and FREESOURCEmk3 allows to remotely turn ON/OFF the device (via a stable/unstable clean contact), or to simultaneously switch ON/OFF more devices connected to it. Use << and >> to move between the parameters. Use + and – keys to change the parameter's value. Press ENTER to confirm.

OC2 EN: on on ENABLE, OC2 pin is activated. On DISABLE, OC2 pin is disabled. Default value: ENABLE.

OC2 TYPE: SIMULTANEOUS ON/OFF SWITCH: if all the devices connected are set to LEVEL, when a device is switched on, all the other devices will switch on automatically. When a device switches off, all the other device will switch off. On PULSE, each FREEmk3, FREENETmk3 and FREESOURCEmk3 controls only itself. REMOTIZED ON/OFF SWITCH: on LEVEL, by short-circuiting GND and OC2 through a stable contact, it is possible to switch the device ON/OFF remotely (when the contact is short-circuited to ground, the device will stay on. When this contact is open, the device will switch off). On PULSE, by short-circuiting GND and OC2 through an unstable contact, it is possible to switch the device ON/OFF remotely (when the contact is short-circuited to ground, the device will stay on. When this contact is open, the device will switch off). Default value: LEVEL.

OC2 MODE: on HYBRID, with two or more FREEmk3, FREENETmk3 and FREESOURCEmk3 connected with each other, the first device that switches on will automatically acquire MASTER status, hence it will control the ON/OFF switching for all the other devices. On MASTER, the device will control the ON/OFF switching on all the other devices set to SLAVE or HYBRID mode, and cannot be controlled by any other device. On SLAVE, the device can only be switched on/off by other MASTER or HYBRID devices. Default value: HYBRID.



I/O OPTIONS page 3. IL pin, connected in parallel between several FREEmk3, FREENETmk3 and FREESOURCEmk3 allows to remotely turn ON/OFF the device (via a stable/unstable clean contact), or to simultaneously switch ON/OFF more devices connected to it, or control Vivaldi accessories. Use << and >> to move between the parameters. Use + and – keys to change the parameter's value. Press ENTER to confirm.

IL EN: on ENABLE, IL pin is activated. On DISABLE, IL pin is disabled. Default value: ENABLE.

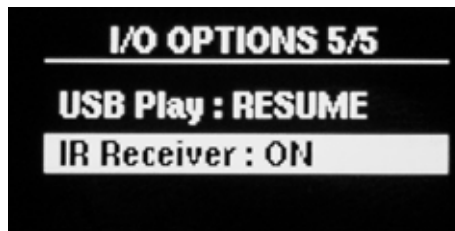
IL TYPE: SIMULTANEOUS ON/OFF SWITCH: if all the devices connected are set to LEVEL, when a device is switched on, all the other devices will switch on automatically. When a device switches off, all the other device will switch off. On PULSE, each FREEmk3, FREENETmk3 and FREESOURCEmk3 controls only itself.

REMOTIZED ON/OFF SWITCH: on LEVEL, by short-circuiting GND and OC2 through a stable contact, it is possible to switch the device ON/OFF remotely (when the contact is short-circuited to ground, the device will stay on. When this contact is open, the device will switch off). On PULSE, by short-circuiting GND and OC2 through an unstable contact, it is possible to switch the device ON/OFF remotely (when the contact is short-circuited to ground, the device will stay on. When this contact is open, the device will switch off).

Default value: LEVEL.

IL MODE: on HYBRID, with two or more FREEmk3, FREENETmk3 and FREESOURCEmk3 connected with each other, the first device that switches on will automatically acquire MASTER status, hence it will control the ON/OFF switching for all the other devices. On MASTER, the device will control the ON/OFF switching on all the other devices set to SLAVE or HYBRID mode, and cannot be controlled by any other device. On SLAVE, the device can only be switched on/off by other MASTER or HYBRID devices. Default value: HYBRID.

NOTE: to control VIVALDI accessories (eg. PS7, PS20, EPF,...) IL pin parameters must be set to default values.



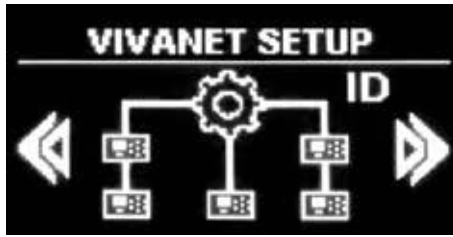
I/O OPTIONS page 4. This menu page contains some settings when the device is on USB source while being controlled by OC2 contact. It is also possible to enable/disable the IR signal receiver.

The menu allows you to set the behavior of the USB source when it is turned off/on by OC2 contact and to enable/disable the built-in infrared receiver. Use + and – keys to change the parameter's value. Press ENTER to confirm.

USB Play: on RESUME, when FREEmk3, FREENETmk3 and FREESOURCEmk3 is switched ON/OFF by OC2 while on USB source, the playback from the USB drive will be resumed from the last status before being switched off. On RESTART, when FREEmk3, FREENETmk3 and FREESOURCEmk3 is controlled by OC2 while on USB source, the playback from the USB drive will resume from the beginning. Default: RESUME..

IR Receiver: If ON, the built-in IR infrared receiver on the device will be active. If OFF, the IR infrared receiver built-in on the device will be disabled.

6.4.6 VIVANET SETUP



VIVANET SETUP page on ADVANCED SETUP menu. In this page it is possible to configure the settings of RS485 bus. Press ENTER key to access this section.



VIVANET SETUP page 1. From this page it is possible to set the address of FREEmk3, FREENETmk3 and FREESOURCEmk3 on RS485 bus, as well as enable/disable the RS485 port. Use << and >> to move between the parameters. Use + and – keys to change the parameter's value. Press ENTER to confirm.

RS485 ADD: set the unique physical address of the device on the RS485 bus to which it is connected. Available addresses: 60 (from ID 1 to ID 60). Default value: 1.

BUS: on ENABLE, the device's RS485 port is enable. On DISABLE, the RS485 port is disabled. Default value: ENABLE.

NOTE: when FREEMK 3 is connected to a CA20/21 main unit, the RS485 bus will automatically adapt to the main unit's own protocol.



VIVANET SETUP page 2. From this page it is possible to perform an automatic or manual address configuration for all the FREEmk3, FREENETmk3 and FREESOURCEmk3 connected to the RS485 bus.

START AUTO BUS CFG: starts an automatic address configuration procedure for every single device connected to the RS485 bus. By pressing ENTER key, the first address available on the bus will be automatically assigned to each device. Press ENTER to confirm and set the address. The remaining addresses available will be assigned to the other devices (the address must be confirmed on each device).

START MAN. BUS CFG: starts the manual address configuration for every single device connected to the RS485 bus. By pressing ENTER key, the manual address selection page will be displayed on each device (select the desired address with + and – keys). Once selected the address for each device, press ENTER key to confirm.

NOTE: in order to perform the procedures mentioned above, all the devices must be properly connected via RS485 bus, and must NOT be connected to any external supervision/control system (iControl4.0+, iControl4.1L, Freecontrol). Once the configuration is done, the RS485 bus can be reconnected.

6.4.7 FIRMWARE UPDATE



ADVANCED SETUP screen menu that identifies the page FIRMWARE UPGRADE FREEmk3, FREENETMK3 and FREESOURCEmk3.

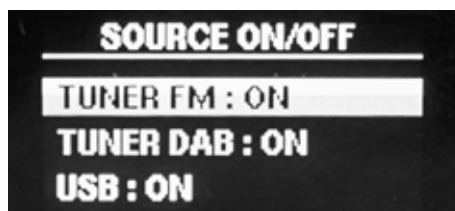


FIRMWARE UPDATE on ADVANCED SETUP menu. FIRMWARE UPDATE page. FIRMWARE UPDATE: connect a USB drive containing the bin file of the latest firmware version available. The most recent firmware version can be downloaded from our website <http://vivaldigroup.it/it/area-riservata> . The USB drive must be formatted in FAT32 file system type.

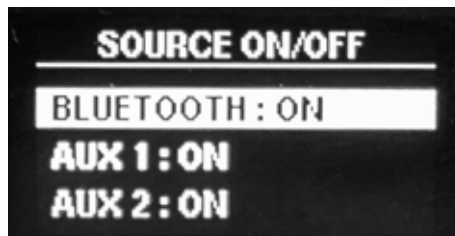
6.4.8 SOURCE E SETUP



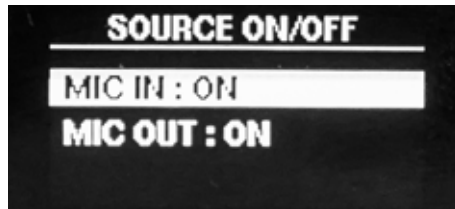
ADVANCED SETUP menu screenshot that identifies the SETUP sources page of FREEmk3, FREENETMK3 and FREESOURCEmk3.



On this screen you can turn off FM TUNER, DAB TUNER, USB sources by changing the value to OFF with the + and -keys. Sources in OFF will no longer appear in the SOURCE MENU source list. By default all sources are active (ON).



On this screen you can turn off the BLUETOOTH, AUX1, AUX2 sources by changing the value to OFF with the + and -keys. Sources in OFF will no longer appear in the SOURCE MENU list.
By default all sources are active (ON).



On this screen you can turn off MIC IN sources, MIC OUT by changing the value to OFF with the + keys and -. Sources in OFF will no longer appear in the SOURCE MENU source list.
By default all sources are active (ON).

7 ADAPTER ASSEMBLY

7.1 AD1



<https://www.youtube.com/watch?v=02gGS1-hURQ>

7.2 AD2



<https://www.youtube.com/watch?v=S76XFWgrWO0>



<https://www.youtube.com/watch?v=h6-l8iCHYWg>

7.3 AD3



<https://www.youtube.com/watch?v=m3v1XL9iMck>

7.4 AD4



<https://www.youtube.com/watch?v=2yqWcVNFCII>

7.5 AD6



<https://www.youtube.com/watch?v=SIK8eWV0fAc>

7.6 AD7



<https://www.youtube.com/watch?v=q8cNN6Q98bw>



https://www.youtube.com/watch?v=Am8_auQZMSM

7.7 AD8



<https://www.youtube.com/watch?v=3XsAKIk2qVY>

7.8 AD9



<https://www.youtube.com/watch?v=kjF5Qb11g9o>

7.9 AD10



<https://www.youtube.com/watch?v=OR7LXJFVzDI>

7.10 AD12



<https://www.youtube.com/watch?v=7PwWmx2BA8k>

7.11 AD13



<https://www.youtube.com/watch?v=l2oHq6BWZow>

7.12 AD14



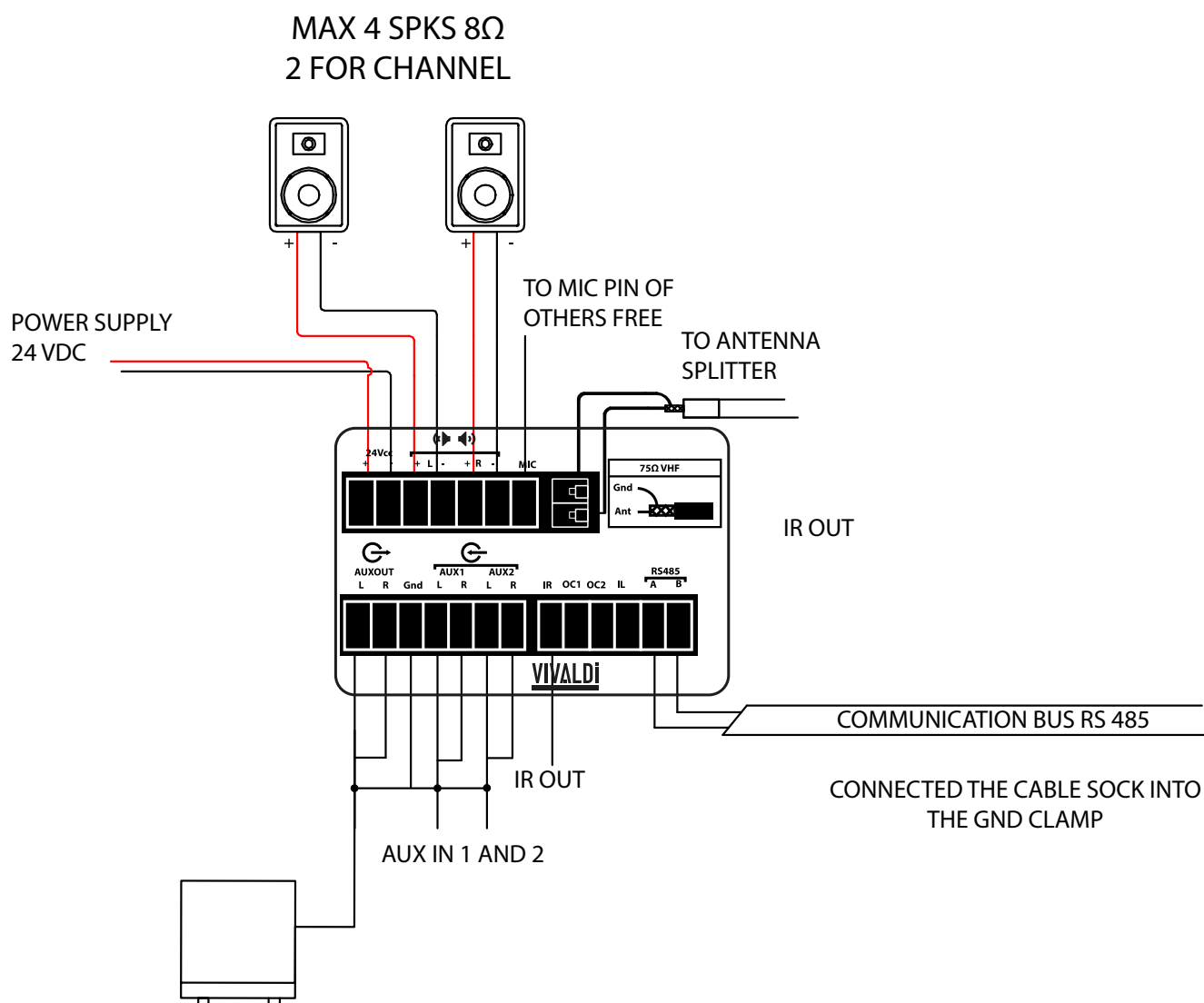
<https://www.youtube.com/watch?v=iFapwex1Ak>

8 WALL MOUNTING AND TEMPERATURES OPERATING

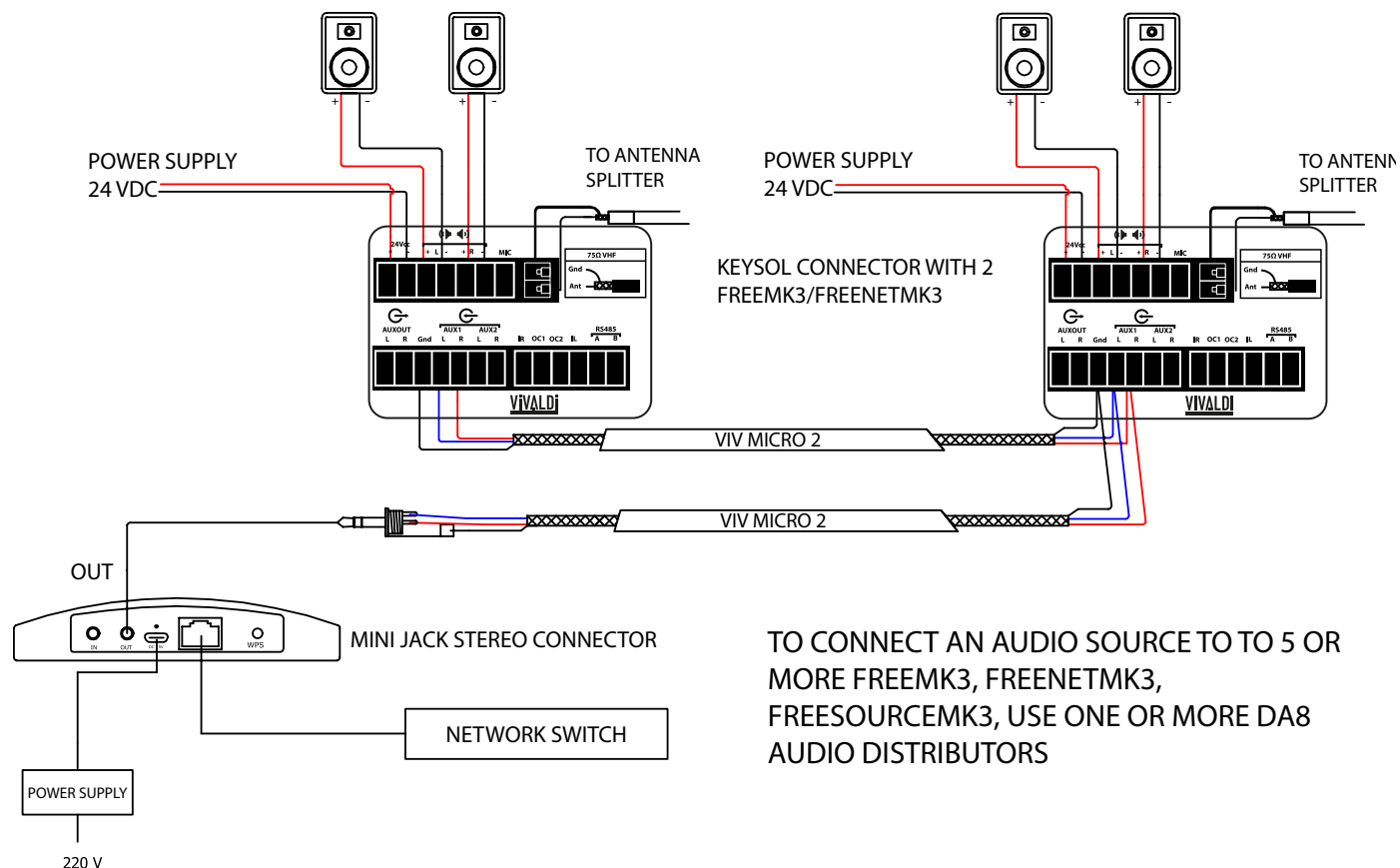
The device must be fixed through the appropriate adapter to the support of the chosen civil series, and using screws in equipment attach it to the recessed box at a height not exceeding 2mt. It is recommended not to mount it under temperature/humidity detectors. The recommended operating temperature is 5 to 35 °C.

9 CONNECTION DIAGRAMS

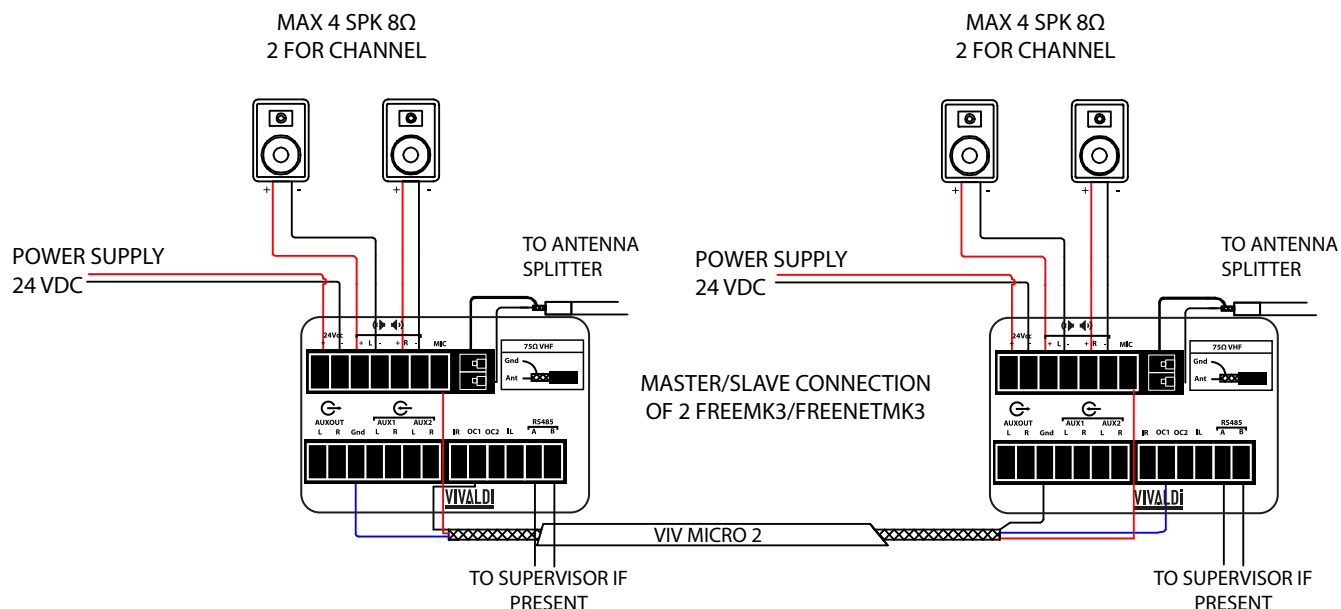
9.1 BASE CONNECTION FREEMK3/FREENETMK3



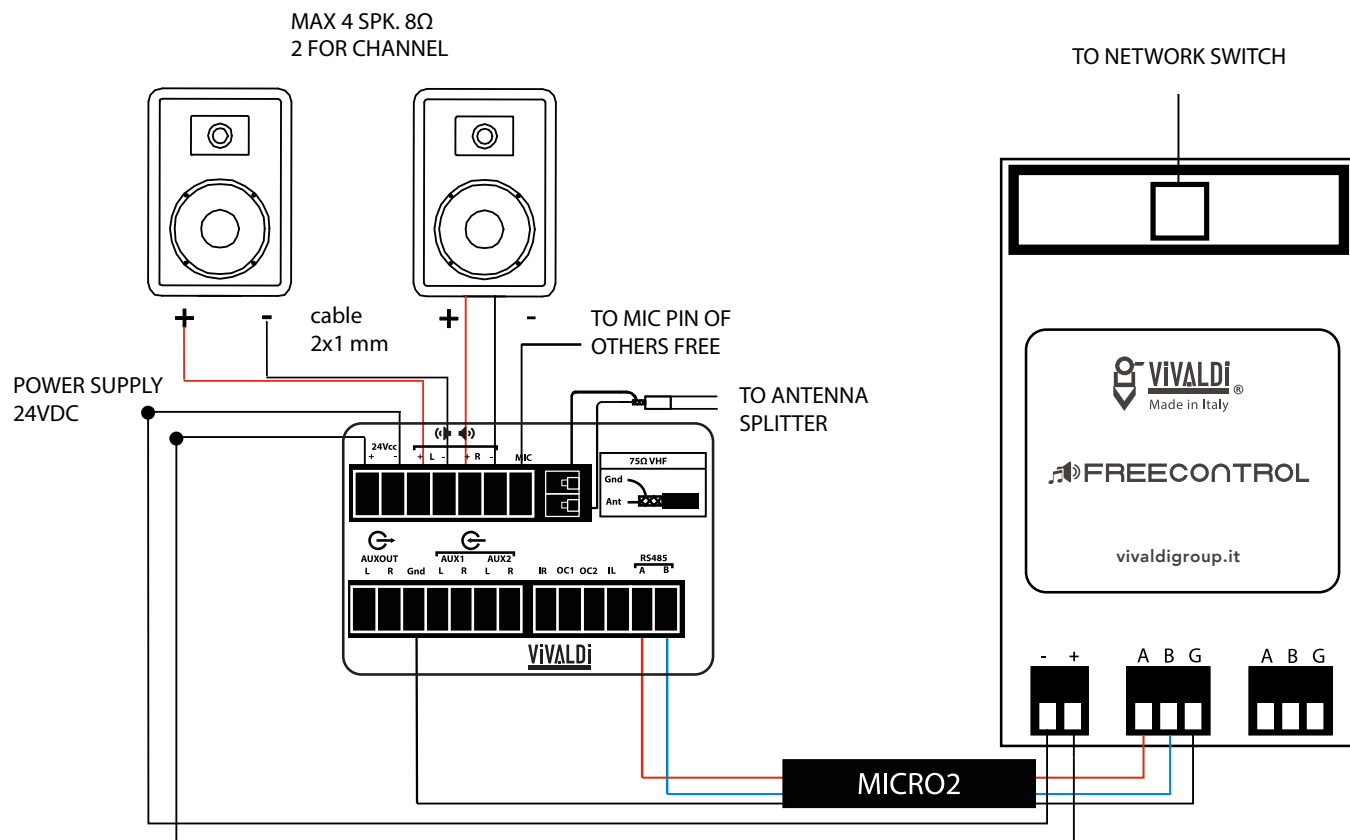
9.2 KEYSOL CONNECTION OR EXTERNAL SOURCE ON FREEMK3/FREENETMK3



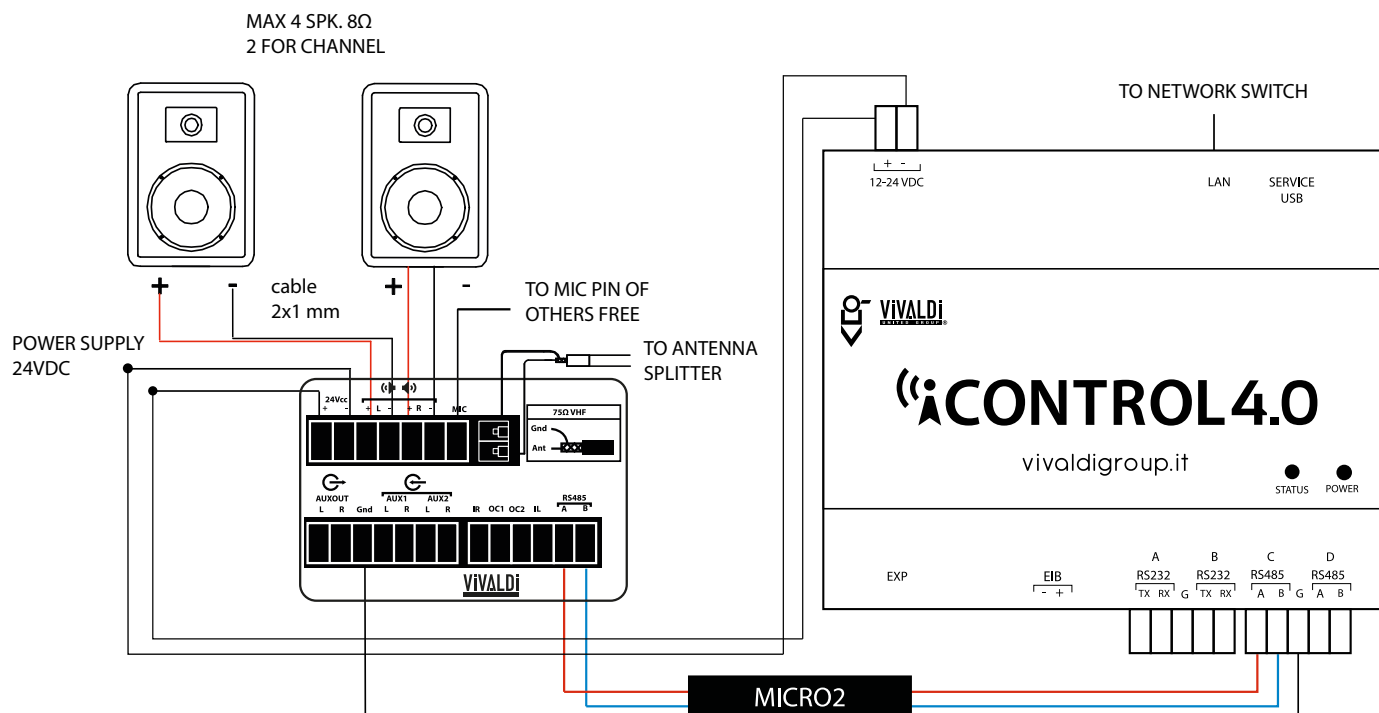
9.3 MICROPHONE CONNECTION FREEMK3/FREENETMK3



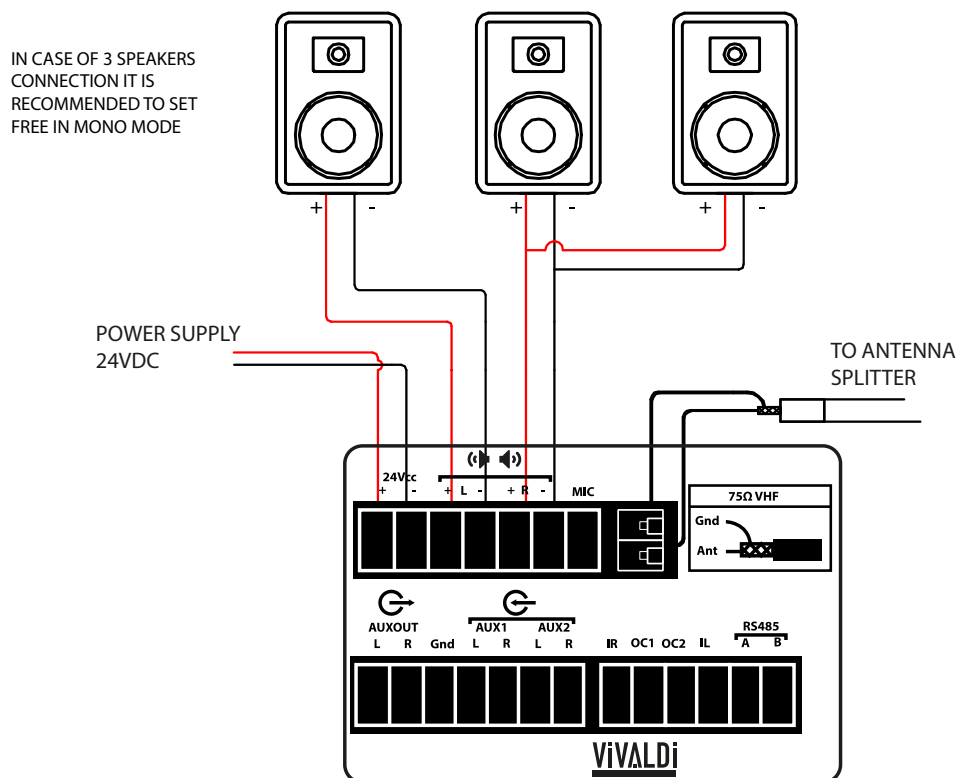
9.4 FREEMK3 CONNECTION WITH FREECONTROL



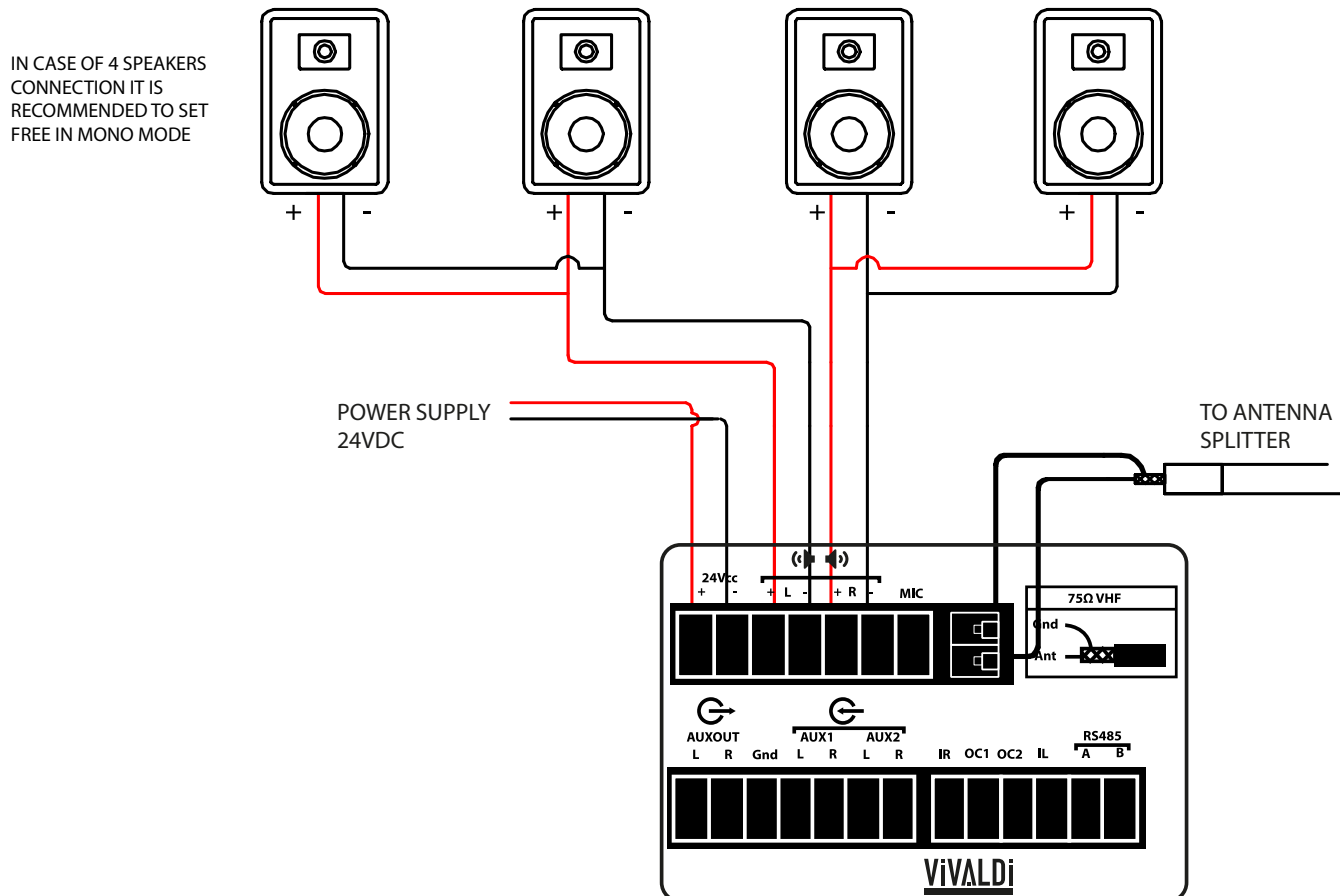
9.5 FREENETMK3 CONNECTION WITH ICONTROL4.0+



9.6 CONNECTION OF 3 SPEAKERS ON FREEMK3 FREENETMK3

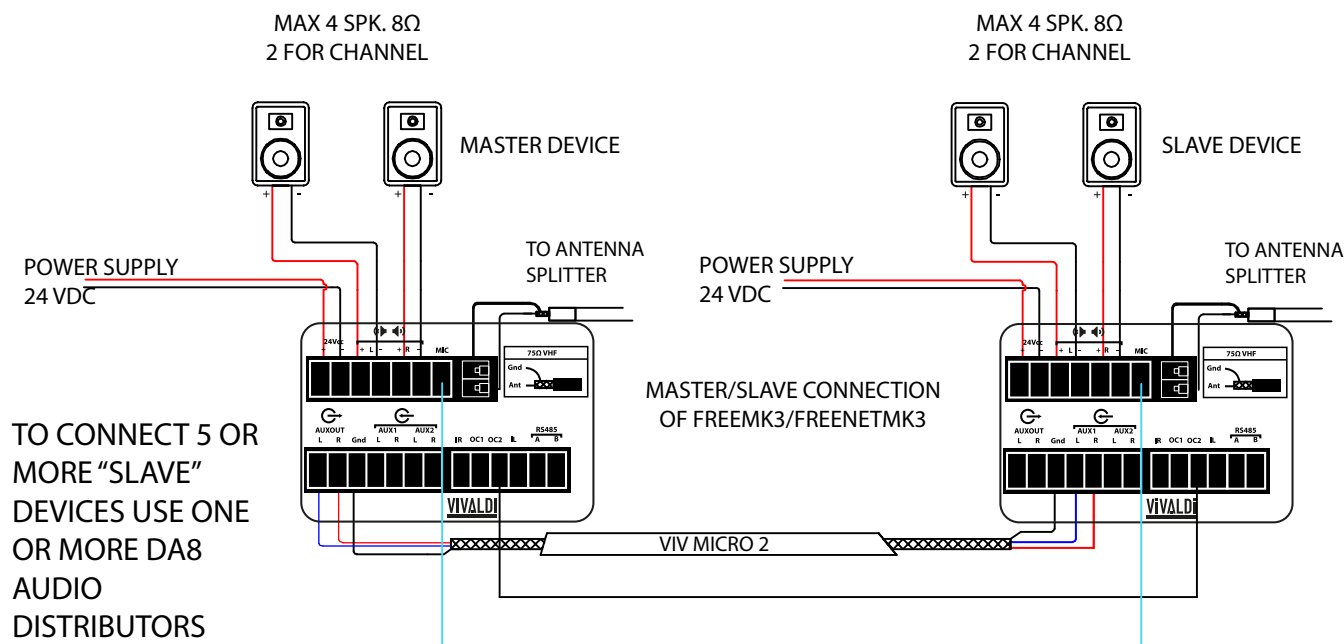


9.7 CONNECTION OF 4 SPEAKERS ON FREEMK3/FREENETMK3

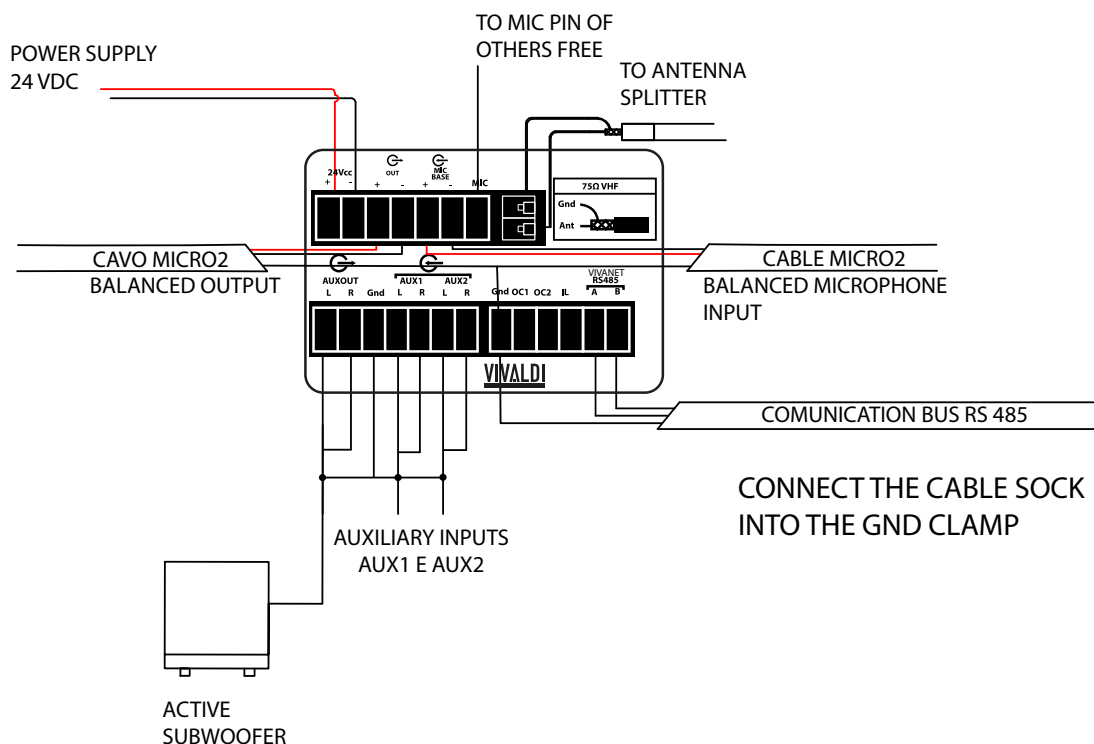


9.8 MASTER/SLAVE CONNECTION OF FREEMK3/FREENETMK3

FOR OC2 PIN SETTINGS SEE
PARAGRAPH 6.4.5



9.9 BASE CONNECTION FREESOURCE



10 NOTE

[illegible]

VIVALDI

FOREIGN WARRANTY

Country terms. The term and warranty may vary by country and may not be the same for all products. Warranty terms and conditions for a specific product can be determined first by locating the appropriate country where the product was purchased, then identifying the type of product.

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