

GIOVE CA20-CA21 USER MANUAL

MULTIROOM DOMOTICA AUDIO - VIDEO

Linea
GIOVE

Index

Giove CA20 and Giove CA21 main units

----- Front panel	pag 3
----- Rear panel and connections	pag 3
----- Giove CA20 wiring	pag 4
----- Giove CA21 wiring	pag 5
----- Giove CA20/CA21 setup	pag 6

Giove RC20 zone controller

----- Giove RC20 user manual	pag 8
----- Giove CA20/CA21 setup	pag 10
----- Giove CA20/CA21 advanced setup	pag 11

Giove CA20/CA21 system, final test

----- Testing the Giove CA20 system	pag 12
----- Testing the Giove CA21 system	pag 13

Particular applications and optionals

----- Giove CA3MKII wiring	pag 14
----- Connecting a booster amplifier	pag 16
----- Connecting the Aux IN	pag 17
----- Connecting the PC20	pag 18
----- Giove USB wiring and use	pag 19
----- Slave or Mirror wiring	pag 20
----- Connecting 2 Giove CA20/CA21	pag 22
----- Scene socket wiring	pag 23
----- Installing the in-wall components	pag 24
----- RC20 antenna wiring	pag 25

Examples

----- Audio distribution in a home using a Giove CA20 system	pag 26
----- Audio/video distribution in a home using a CA20 main unit and a video matrix Giove CA3MKII	pag 27

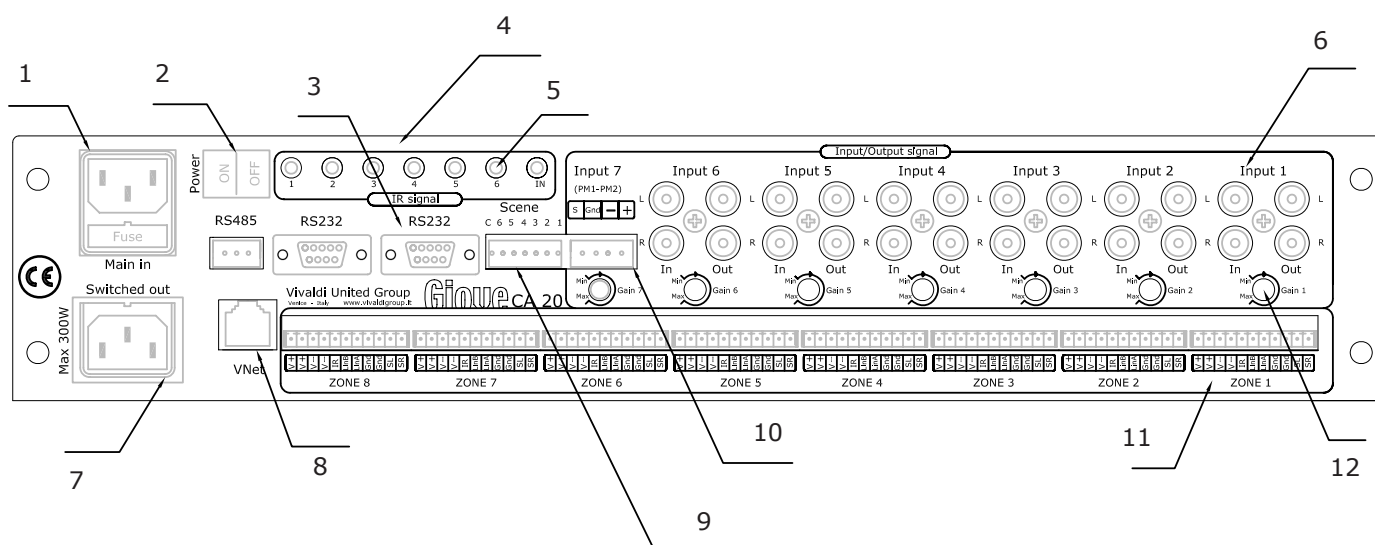
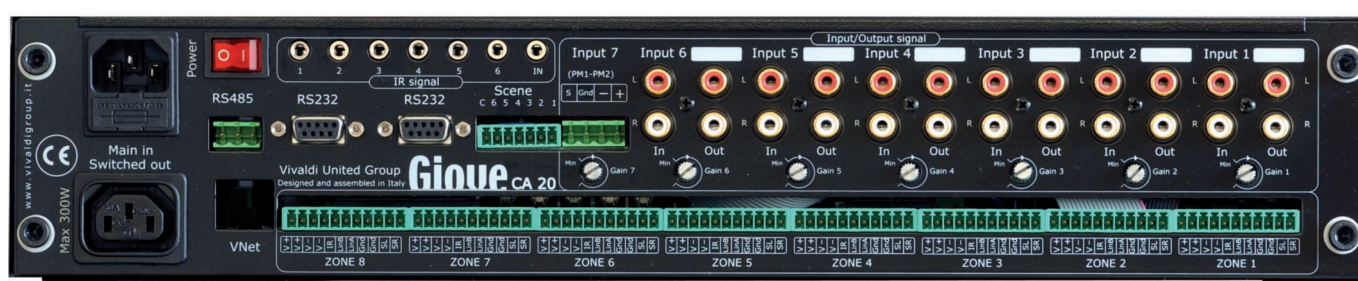
Appendixes

----- IR codes	pag 28
----- Firmware versions	pag 29

Front panel

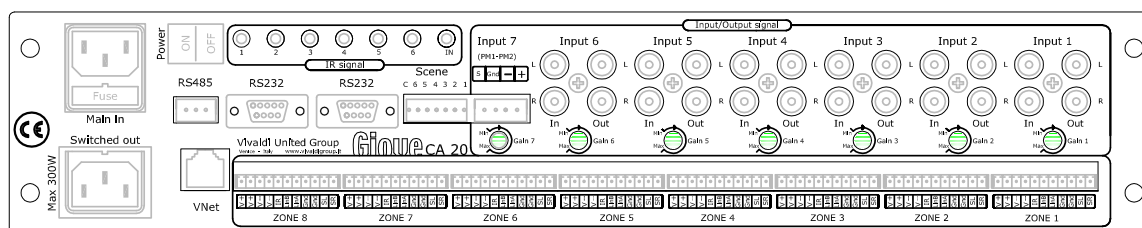


Rear panel

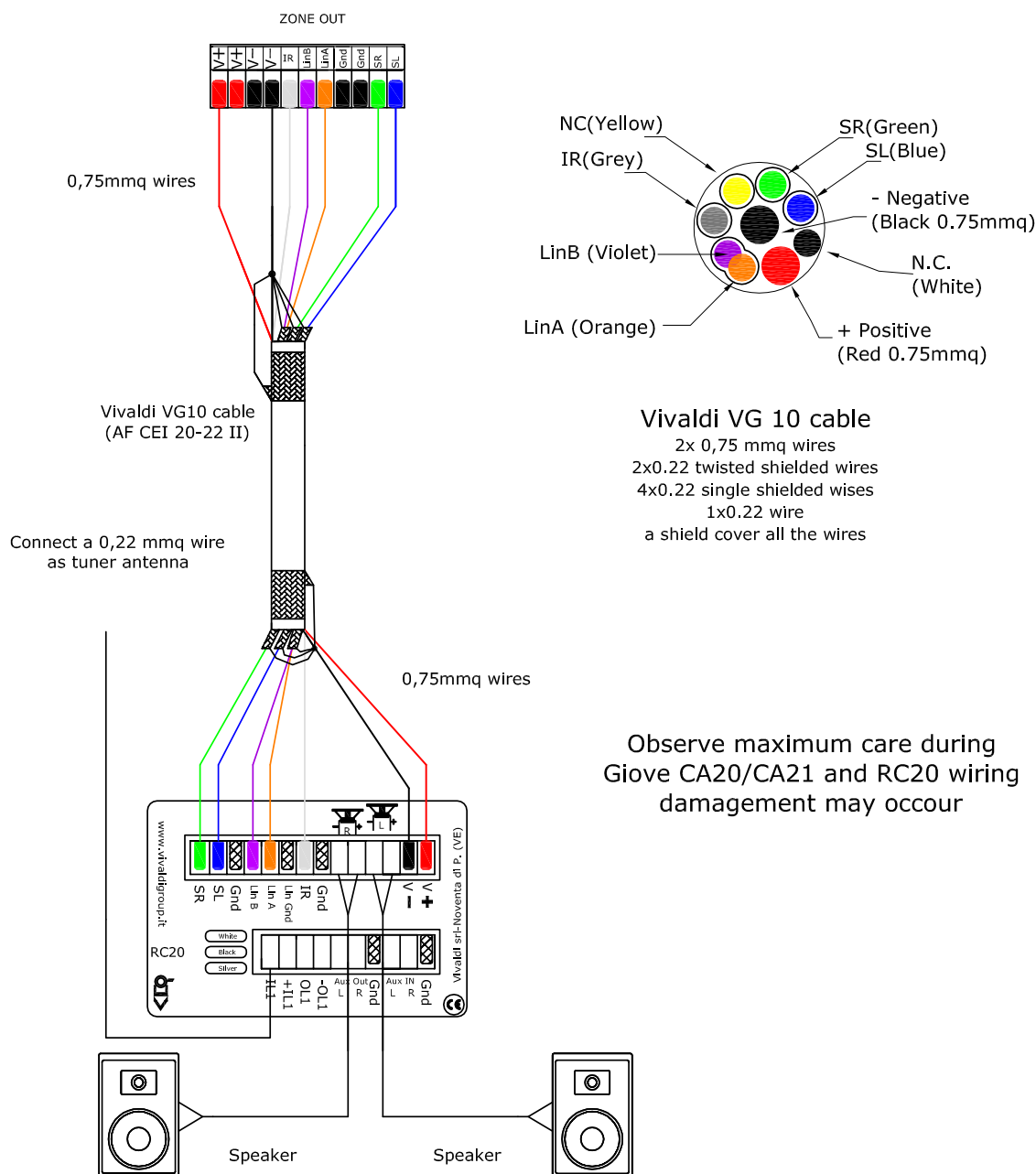


- 1_220Vac power supply socket
- 2_Main power switch
- 3_RS232 port socket
- 4_IR control outputs, for SIR-1 emitters or similar
- 5_IR control output #6 (for SKY HD decoders)
- 6_Source line inputs
- 7_Switched 220Vac output socket
- 8_LAN (Optional)
- 9_Scene socket
- 10_PM1 PM2 micro input
- 11_RC20 control outputs
- 12_Input sensitivity controls

Giove CA20 wiring

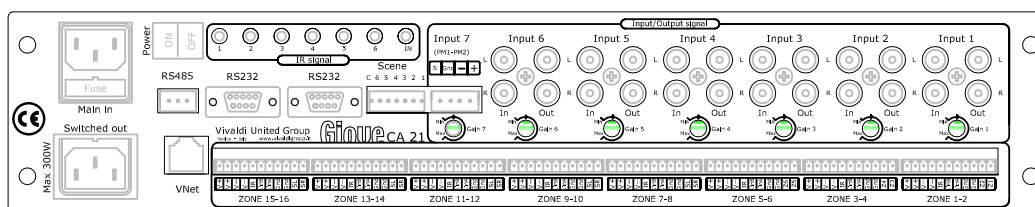


How to connect a Giove RC20 to a Giove CA20 main unit

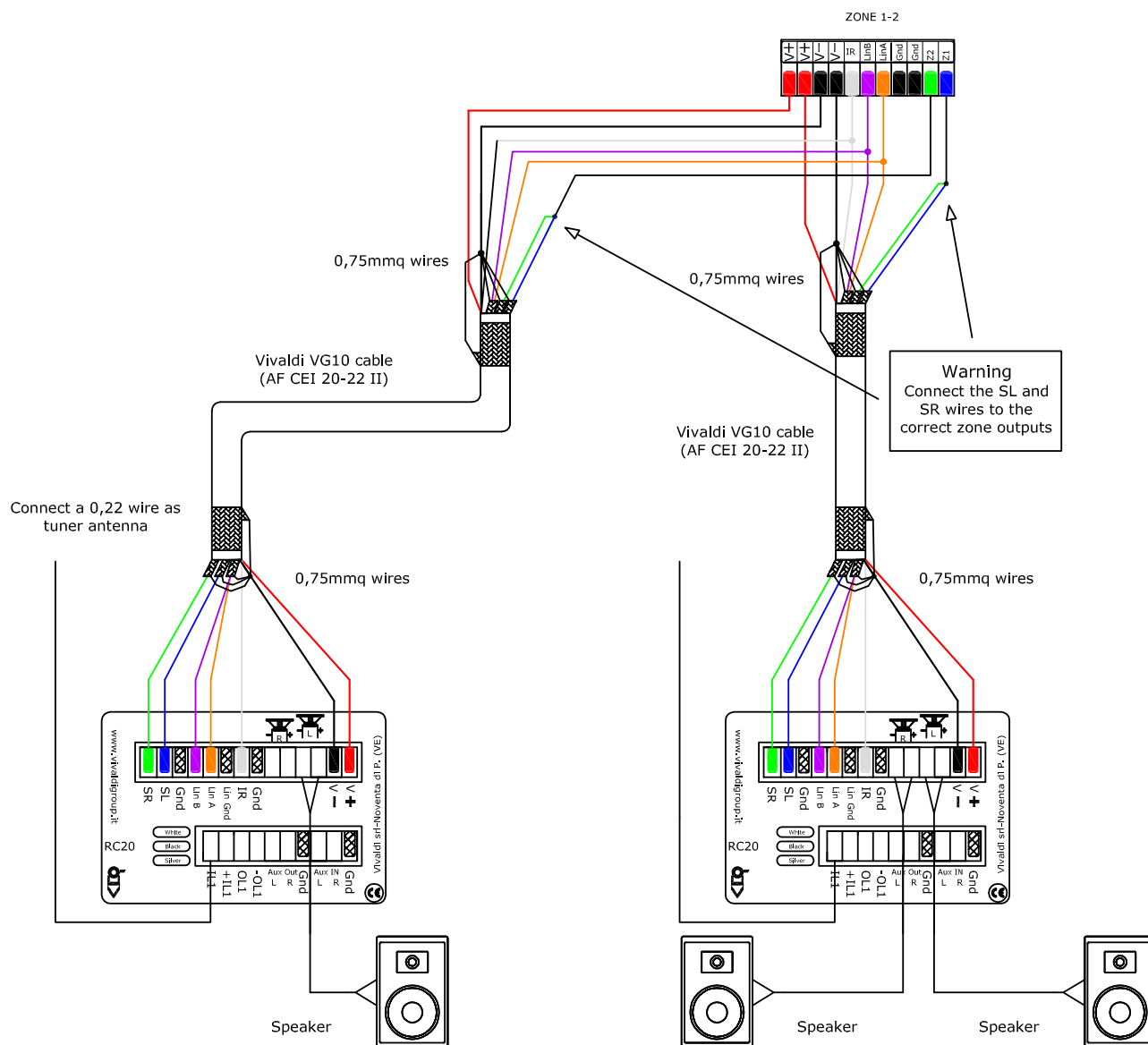


Noise reiecting and correct operating of Giove CA20 are guaranteed only by using VG10 cable. Other cables may not allow correct operation of CA20-RC20 systems. Cable routing must be executed in accordance with laws, GR2 300/500V cables must not routed with other cables. Max 16 RC20 for every Giove CA20 main unit.

Giove CA21 wiring



How to connect the Giove RC20s to a Giove CA21 main unit



Giove CA21 (16 zones) wiring. Observe maximum attention in wiring. RC20 controllers must be set in accordance with the zones where they are connected (refer to page 16 for detailed instructions). Max 16 RC20s for every Giove CA21 main unit can be connected. It is possible to connect up to 40 Giove RC20s to a Giove CA21 system, but it is necessary to use a booster supply (Giove AL10) to connect more than 16 RC20s to such a system.

Giove CA20/CA21 setup

CA20 Setup is required to ensure correct operation.
Press MENU' key, the following screen will appear:

OVERSIGHT	->
CONSTRAINMENTS	->
SETUP	->
LANGUAGE	ENG ->
INFO	->

Rotating the encoder and pressing, it is possible to select the following menu.

OVERSIGHT

Selecting this the function, display shows how many RC20s are connected to the system and how many are switched on or off.

Selecting CS DETAILS, it is possible to check parameters of every RC20 connected to the CA20.
It is not possible to modify any parameter.

CONSTRAINMENTS

Selecting this the function, display shows how many RC20s are connected to the system and how many are switched on or off; selecting the correct ID it is possible to control the parameters of every RC20 connected.

LANGUAGE

This menu enables selection of languages, among those available, pushing the encoder repeatedly.

INFO

Shows unit type and firmware version.

SETUP

Selecting SETUP the following screen will appear:

ADDRESSING	->
SCENE INPUTS	->
INFRARED	->
CLOCK	->
IR ACQUISITION	->

Rotate and phsh the encoder to select a function.

ADDRESSING.

If more than one CA20/CA21 is present in the same system, different CA20s must be addressed with different IDs.

Selecting CONTROLS it is possible to set slave and mirror configurations.

SLAVE ADDR.	->
SLAVE CONFIGS	->
MIRROR ADDR.	->
MIRROR CONFIGS	->

SLAVE configuration

In SLAVE mode a RC20 imposes its parameters to all the others.

Parameters to be imposed can set in SLAVE CONFIGS and are ON/OFF, CHANNEL, VOLUME, HIGH, LOW, TUNING.

If the RC20s are connected in parallel, CHANNEL must always be selected.

In SLAVE CONFIGS menu it is possible to choose the parameters.

In SLAVE ADDR menu it is possible to select the RC20 master and the slaves and to activate the group; it is possible to create and use a maximum of 6 groups.

Every group is composed of a master and up to 4 slaves.

Remember that a CA20 unit can accept up to 8 RC20 as normal zones and another 8 RC20s as sub-zones.

A CA21 unit can accept up to 16 RC20 as normal zones and another 24 RC20s as subzones.

Giove CA20/CA21 setup

MIRROR configuration

In MIRROR mode all the RC20 copy the selected parameters to the others.

E.g. a variation in volume on an RC20 is transferred to each RC20 in the same group if the volume parameter is selected in the MIRROR.CONFIG menu.

Parameters to be copied can be set in MIRROR CONFIGS and are ON/OFF, CHANNEL, VOLUME, TONES, TUNING.

If the RC20s are connected in parallel, CHANNEL must always be selected.

RC20s can also be mirrored if they are connected to different zones.

For the MIRROR operating mode all other instructions given in the previous chapter are still valid.

E.g. in a home you can have a bedroom with an attached bathroom, in this case it is possible to set a group between the bedroom RC20 and the bathroom RC20.

In "mirror addr" menu you have to select the group and the RC20 IDs and to activate the group, in the "mirror configs" menu select only "source".

In this way every RC20 can be switched on or off, the volume and tones can be increased or decreased separately but the source will be the same.

It is possible to use in mirror RC20s wired to the same CA20 socket or wired to different sockets (zones).

To connect RC20s to the same socket refer to schematics on pages 20 and 21.

Scene Inputs

In this menu it is possible to assign a preset, stored in CA20 memory, to a contact on the CA20 rear side

16 presets are available, 6 are assignable to each of the 6 contacts.

All the 16 presets can be activate by means of a computer or a domotic system, via RS232 port.

Infrared

Here it is possible to activate the IR outputs, there are 6 of them on the rear panel.

Modulation frequency of IR signal can be set between 30 to 44 Khz to use devices that use non european IR standards.

It is also possible to set IR modulation frequency from 30 Khz to 44 Khz.

If it is impossible to know the exact frequency of your remote, leave default 38 Khz.

EXTERNAL INPUT is not used, it is reserved for future implementation.

IR output #6 is reserved for digital SKY HD receiver; set freq. to 38 Khz to use it.

To use analogic SKY receiver, insert optional adapter and set freq. to 30/31 Khz

Clock

Set the hour and day from this menu, these settings are necessary to ensure internal timer correct operating.

RC20s refer to CA20/CA21 internal clock.

An internal battery ensures clock operating also in the case of loss of AC supply.

IR Acquisition

From this menu it is possible to store the IR codes used in sources from 1 to 4, on their submenus.

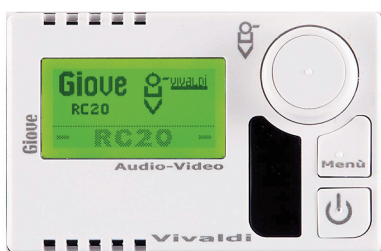
Select IR NUMBER to access the code to store, referring to the table on page 29.


Select ACQUIRE, send an IR code to an RC20 within 4 seconds.

Selecting PLAY it is possible to test the IR code just stored; this code will be immediately sent to a CA20 active IR OUT.

CA20 and CA21 units can store up to 50 IR codes, codes that are not directly activated by source submenus can be activated by use of RS232 port.

Giove RC20 user manual



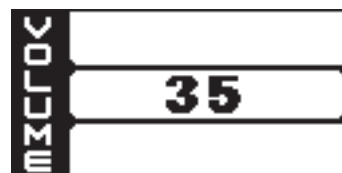
Switch the RC20 On or Off with a single, short pressing of  key.

Menu key enables movement between three menus: VOLUME, INPUT, SETUP.

After ten seconds of inactivity the RC20 will show the page on figure beside (spot page).

VOLUME menu

It is possible to set Volume between 0 to 50, rotating the encoder. Output maximum level is always controlled by a preference in RC20 advanced configuration menu. Pushing encoder insert muting function, a second pressure restores volume to previous level.



Menù INPUT

Input menu enables to choose source input; rotate the encoder and press to confirm. Source appear on display in following sequence:

- 1 CD
- 2 DVD
- 3 TV
- 4 DVR
- 5 AUX1
- 6 AUX2
- 7 MP3
- AUX IN
- TUNER



Numeric inputs 1 to 6 are present on RC20 back panel.

MP3 input read files present on the USB pendrive inserted on the front slot.

AUX IN is the local input, signal must be connected directly on RC20 rear socket.

It can be a Line signal source as a CD or MP3 player, or the Giove USB optional player.

TUNER input will play the local tuner signal.

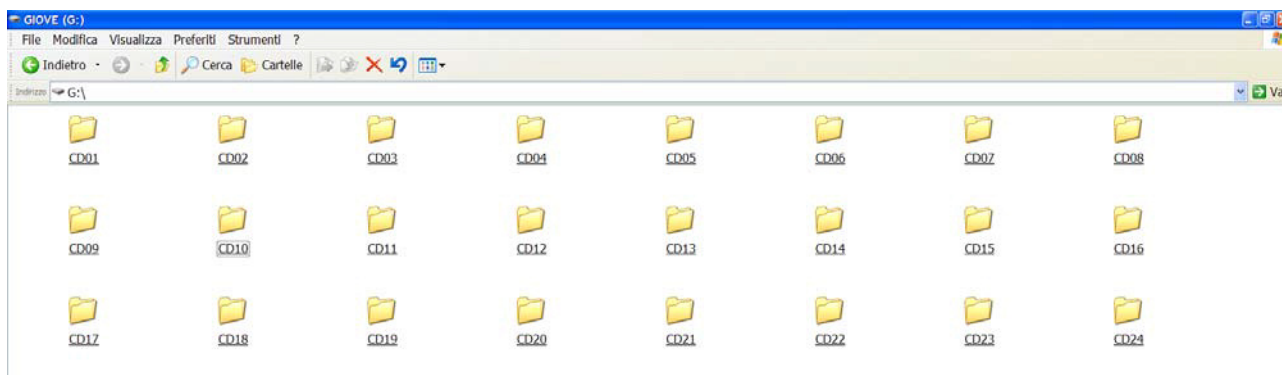
MP3 Input

MP3 input enables playing of MP3 files stored on a Pendrive, inserted on the USB plug, placed in front of the Giove.

Follows these simple rules to enable MP3 player correct operation.

__MP3 files may maintain original name.

__MP3 files must be stored inside folders named CD01, CD02, CD03, CD04, CD05, CD06, etc, until CD99 as shown below.



Giove RC20 user manual

- __Files stored outside folders will be ignored by the MP3 player.
 - __Folders can contain up to 99 files.
 - __File format must be MP3, maximum bit rate 192 kbps.
 - __Maximum pendrive capacity 8Gb
 - __MP3 title shown by the RC20 may not be the same as the file name, but the ID3 tag. therefore the title may not be shown by the RC20 or may be different in the file name.
 - __ID3 tag is a structure subject to evolution, a definitive standard is not yet been defined.
- To enable the MP3 reader to correctly recognize the song title, today it has necessary to follow ISO-8859-1 as font standard.

IR function

A submenu IR is selectable by pushing encoder immediately after source selection, only on 1 to 4 sources. From this menu it is possible to send IR codes, previously stored on the CA20/CA21 unit (see pag.7), to control audio devices also when remotes are not available.

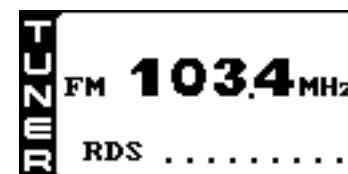


Internal TUNER

After selecting Tuner source it is possible to search for the correct frequency by rotating the encoder. Push the encoder to scroll and select pre stored memories (M1 to M8). Pushing the encoder another time after M8 it is possible to scroll manually all the frequencies, excluding automatic tuning (MAN appears on display instead of M8).

To store a frequency in a memory, select desired memory, rotate the encoder until the station is found, then press the encoder and keep it pressed for more than 4 sec.

Memories are stored also in the absence of AC supply.



SET UP menu

Enter this menu to control the following functions:

High: Treble (High tones +/- 10 dB)

Low: Bass (Low tones +/- 10 dB)

Loud: Loudness compensation

Egu: Access to equalizer setting

Timer: Access to internal timer.



Other Features

- __A 220Vac output supply socket is present on CA20/21 rear side, when at least one RC20 is switched on the socket is active, 20 seconds after the last RC20 is turned off the socket is also turned off.
- __Only 4 sources are provided by an IR menu, (CD, DVD, TV, DVR) the AUX1 and AUX2 sources do not have any submenu.

Giove CA20/CA21 setup

RC20s setup procedure is necessary to give a unique address that will be recognizable by the central unit.

- _ Switch off the central unit.
- _ Connect to the central unit the RC20 to be set up.
- _ Switch on the central unit and wait a few seconds for RC20 reboot.
- _ Switch on the RC20 keeping the on/off button pressed.
- _ Press "MENU" three times, until you find setup menu, rotate the encoder (Volume knob) to find "LOUD".
- _ Press the encoder.
- _ Release On/OFF key, display show "config", to indicate configuration menu.
- _ display shows the term Id and a number between 1 to 40, (1 by default for brand new RC20).
- _ Check that the Id is set to the same number as the zone where the RC20 is connected; to change the Id rotate the encoder until the correct number is found.
- _ Store the configuration pressing On/OFF key.
- _ Proceed to other RC20s storing the correct Id to each one.
- _ After the last Id is stored, shut off the CA20 and leave off for about 20 seconds, then switch on.
- _ Giove system is ready to use.

At pages 12 and 13 you will find a complete procedure to set and test a Giove CA20/CA21 system.

SYSTEM ADDRESSES

- _ To address a Giove CA20 system, RC20 Ids from 1 to 8 must correspond to the zones where they are connected; in the case of Master/Slave or Mirror configurations, auxiliary RC20s can be addressed from 9 to 16.
- _ To address a Giove CA21 system, RC20 Ids from 1 to 16 must correspond to the zones where they are connected; in the case of Master/Slave or Mirror configurations, auxiliary RC20s can be addressed from 17 to 40.

Configuration menu

Configuration menu also enables setups other than Id changes.

- | | |
|----------------|--|
| TIMER ON/OFF : | #1: timer On. #0: timer OFF.
timer function enables setting a time when the RC20 will be turned on and another to switch the RC20 off. |
| ATTEN. VOL : | from 1 to 3.
this function consists of limiting the maximum power of an RC20.
1 is the default value and consists of minimum attenuation, (Maximum power).
3 is the maximum attenuation, (Minimum power), about one half of the maximum RC20 power. |
| R LCD ON : | from 0 to 3.
display backlight level with RC20 on.
On value 3 auto shut off of backlighting is inserted |
| R LCD OFF : | from 0 to 3.
display backlight level with RC20 off. |

Giove CA20/CA21 advanced setup

Advanced setup enables setting some particular RC20 parameters.

Modification of these parameters is recommended only to advanced users, the wrong setup of some parameters may not enable correct operating of RC20.

To access the advanced menu:

_Switch on the RC20 keeping the on/off button pressed.

_Press "MENU" three times, until you find setup menu, rotate the encoder (Volume knob) to find "EQU".

_Press the encoder to access the equalizer screen.

_Press the encoder 6 more times to find the last equalizer band (16 Khz) and press the "menu" key.

_Release On/OFF key, display show "config", to indicate configuration menu.

_Now it is possible to scroll the parameters pressing the "menu" key.

_Change the values rotating the encoder.

_To save the situation press "on/off" key.

_To exit without modification press the encoder.

Advanced setup parameters

__ID	RC20 ID
__TIMER ON/OFF	#1: timer On. #0: timer OFF.
__Att Volume	Max Volume level (see page 10)
__R Lcd ON	display backlight level with RC20 on (see page 10).
__R Lcd OFF	display backlight level with RC20 off (see page 10).
__Led in ON	internal backlight level with RC20 on.
__Led in OFF	internal backlight level with RC20 off.
__IR out ON	IR on with RC20 on. ON=1
__IR out OFF	IR on with RC20 off. ON=1
__Out func.	Turn the Aux Out ON or OFF
__ST/MN State	Internal tuner Mono/Stereo automatic selection
__Mono Force	Force the internal tuner to Mono state
__RDS Extend	RDS text scrolling On or OFF
__Spot Page	If this data is "0" the RC20 don't show the spot page (see pag 8)
__Date Spot	Showing Hour and day On or OFF
__PWR Memory	RC20 recall default values every restart
__Radio M1	Internal tuner memory 1
__Radio M2	Internal tuner memory 2
__Radio M3	Internal tuner memory 3
__Radio M4	Internal tuner memory 4
__Radio M5	Internal tuner memory 5
__Radio M6	Internal tuner memory 6
__Radio M7	Internal tuner memory 7
__Radio M8	Internal tuner memory 8
__IR EN Vol+	Enable IR code Vol+
__IR EN Vol-	Enable IR code Vol-
__IR EN CH+	Enable IR code CH+
__IR EN CH-	Enable IR code CH-
__IR EN PWR	Enable IR code PWR
__IR EN HIGH+	Enable IR code HIGH+
__IR EN HIGH-	Enable IR code HIGH-
__IR EN LOW+	Enable IR code LOW+
__IR EN LOW-	Enable IR code LOW-
__IR EN LOUD	Enable IR code LOUD
__IR EN EQ	Enable IR code EQ
__IR EN RAD+	Enable IR code RAD+
__IR EN RAD-	Enable IR code RAD-
__BUSY	Enable PRIORITY function in IR receiving 1 or 0. Priority enabled IR=0 Priority disabled IR=1.
__LCD LUM	Only for CA20/CA21 firmware below 2.1. Contrast setup 0,1,2. (only for second generation RC20).

Testing the Giove CA20 system

Foreword:

To test the system in a safe and effective way some conditions are necessary.

- 1) State of the art RC20 wiring.
- 2) USB pendrive correctly filled and inserted in the CA20 USB front slot.
- 3) At least one source connected to the main unit e.g. a CD player.

__Connect only the Zone 1 socket to the CA20, it means that only the first RC20 is connected.

__Turn ON the main unit and wait for about 1 minute, until the front buttons are working.

__Check the OVERSIGHT function, the display show that one RC20 is present and no RC20s are ON.

__Check CONSTRAINTMENTS, the RC20 number 1 parameters must be visible.

__Turn ON the RC20 and check that the sources Tuner, MP3 and the source connected (CD in our example) are present.

__Connect Zone 2 to the main unit.

__Go to the RC20 just connected and set the ID as follows.

__Switch on the RC20 keeping the on/off button pressed.

__Press "MENU" three times until you find setup menu, rotate the encoder (Volume knob) to "LOUD".

__Press the encoder.

__Release On/OFF key, display shows "config", to indicate configuration menu.

__display shows the term Id and a number between 1 and 40, (1 by default for brand new RC20).

__Select "2" rotating the encoder.

__Store the setup pressing ON/OFF key.

__The RC20 will reboot, switching off, then on and finally off again; wait for a few seconds. Check the correct RC20 working as done with the previous RC20.

__Go back to the main unit and check the OVERSIGHT function, it must show 2 RC20s connected.

__Check the CONSTRAINTMENTS function, it must show the RC20 number 2 parameters.

__Repeat this procedure for all the RC20s.

For the first 8 RC20s, each one must be connected to a socket and addressed with the number of the socket where it is connected.

Testing the Giove CA21 system

Foreword:

The CA21 main unit has 16 zone output on 8 sockets, so the procedure to test the system is slightly different from the procedure explained for a CA20 system, but the initial conditions are the same.

- 1) State of the art RC20 wiring.
- 2) USB pendrive correctly filled and inserted in the CA21 USB front slot.
- 3) At least one source connected to the main unit e.g. a CD player.

__Connect only the first socket to the CA21, this means that the RC20 number 1 and 2 are connected.

__Go to the RC20 number 2; it is the one that has the SL and SR pins connected to the CA21 Z2 pin.

__Switch on the RC20 keeping the on/off button pressed.

__Press "MENU" three times until you find setup menu, rotate the encoder (Volume knob) to "LOUD".

__Press the encoder.

__Release On/OFF key, display shows "config", to indicate configuration menu.

__display shows the term Id and a number between 1 and 40, (1 by default for brand new RC20).

__Select "2" rotating the encoder.

__Store the setup pressing ON/OFF key.

__The RC20 will reboot, switching off, then on and finally off again; wait for a few seconds.

__Go back to the main unit and check the OVERSIGHT function, it must show 2 RC20s connected.

__Check the CONSTRAINTS function, it must show the RC20 number 1 and 2 parameters.

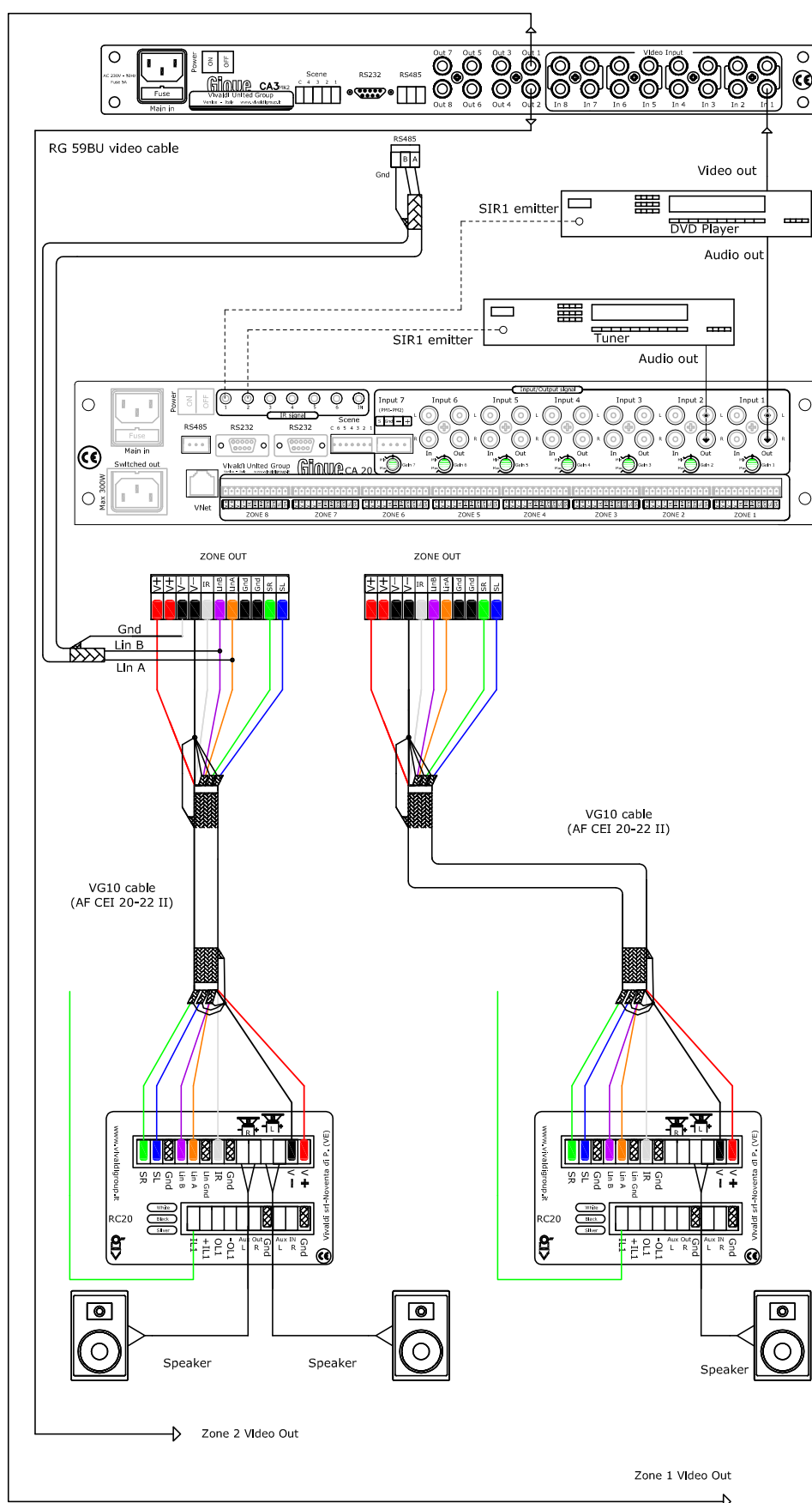
__Turn ON the RC20s and check that the sources Tuner, MP3 and the source connected (CD in our example) are present.

__For a brand new system it is not necessary to address the RC20 number 1, default address is 1 for all RC20s ship from Vivaldi factory.

__Repeat this procedure for all the RC20s; the next pair will be connected to the second socket and the addresses will be 3 and 4.

Pay maximum attention in connecting the RC20s SL and SR pins to the correct CA21 pin.

Giove CA3MK2 wiring

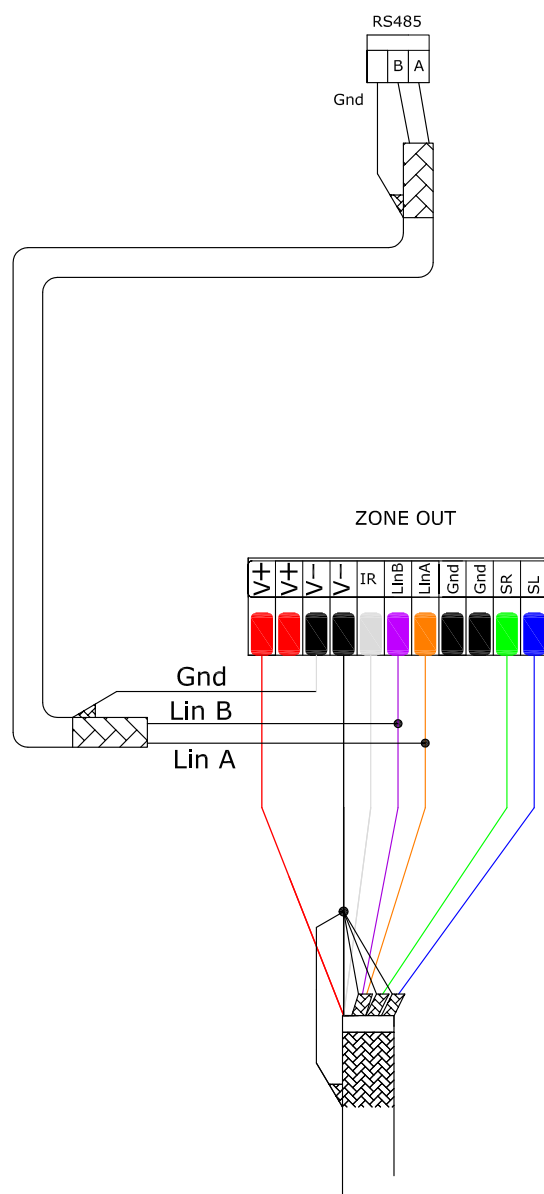


How to link a Giove CA3MKII to a Giove CA20.
See also the example on pag 27.

Giove CA3MK2 wiring

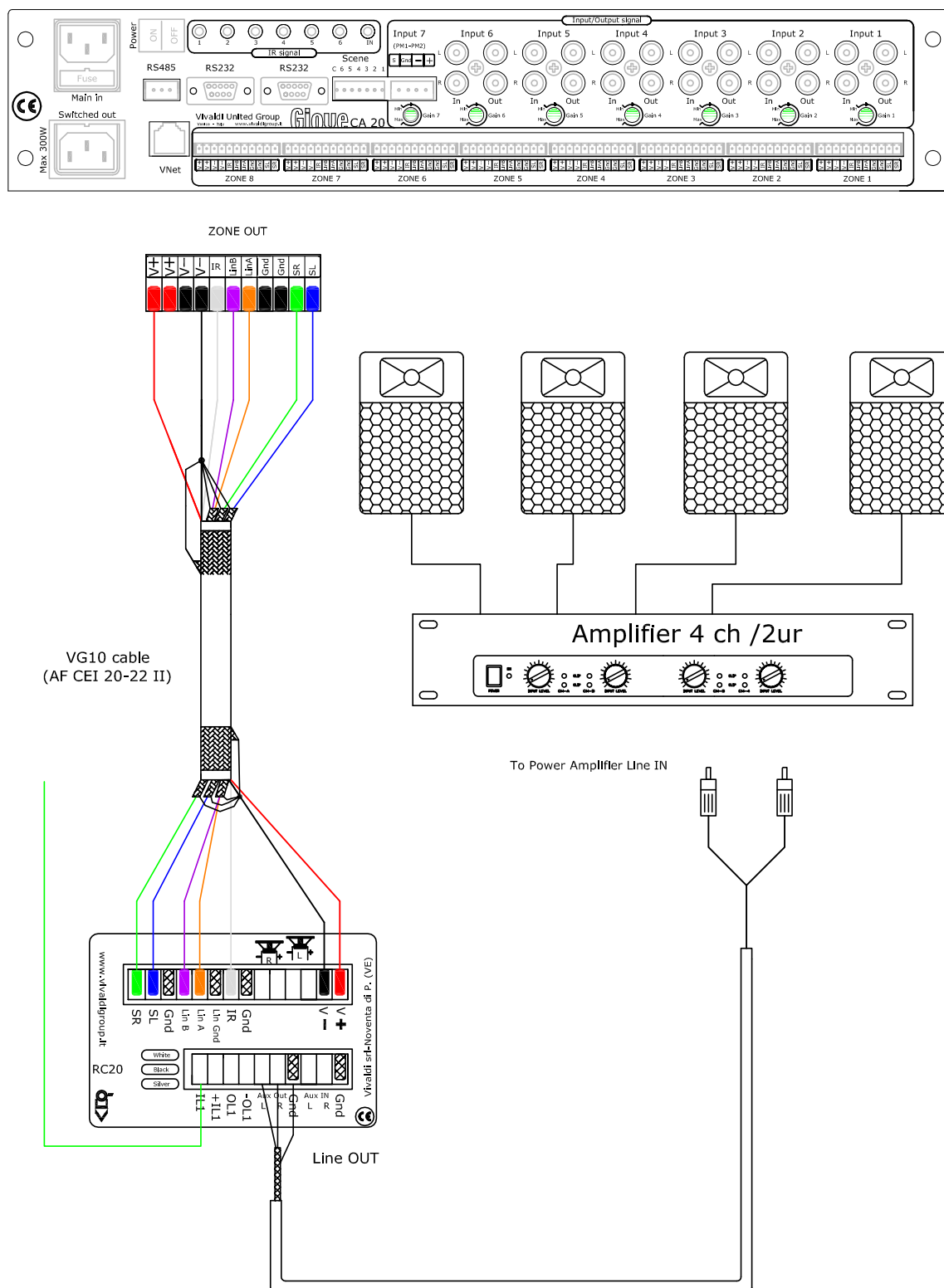
Connecting a CA3MKII to a CA20 enable you to obtain a complete audio/video control system. Selecting a source on an RC20, the CA20 automatically dialogues with CA3MKII to select the correct video source. Additional settings on the CA3MKII are not required, it is totally Plug and Play.

Connection between Giove CA20/21 and CA3MKII in detail



Connect the Giove CA3MKII to a Giove CA20/CA21 zone socket, using an empty socket or connecting the CA3MKII in parallel to a RC20 cable as shown.

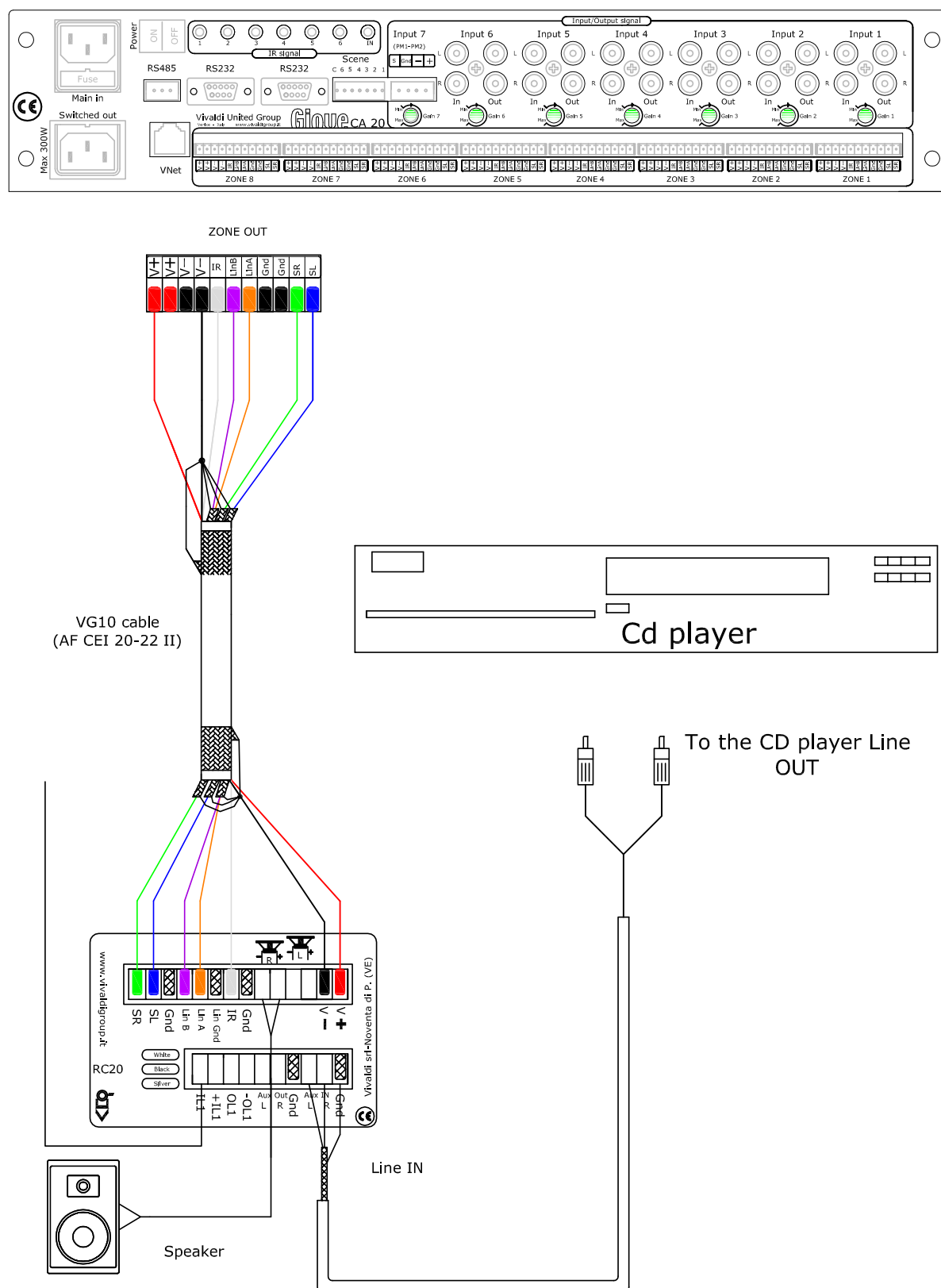
connecting a booster amplifier



RC20 AUX-Out can drive a booster amplifier to cover large areas, it is also possible to connect speakers on the RC20 speaker socket.

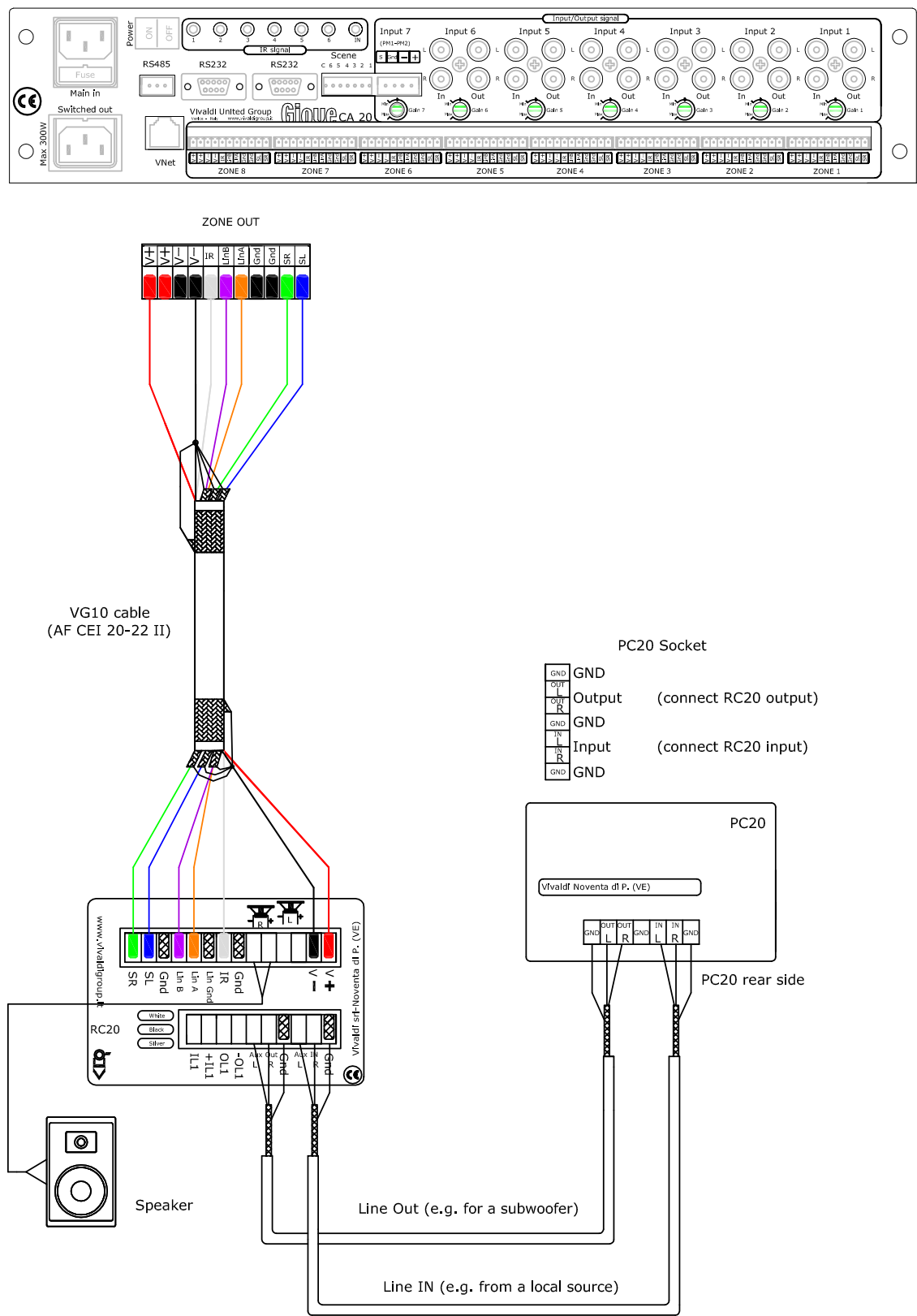
Volume, equalizer and tone controls act on both outputs at the same time.

Connecting the Aux IN



Select AUX-In from Input menu to play a local source.

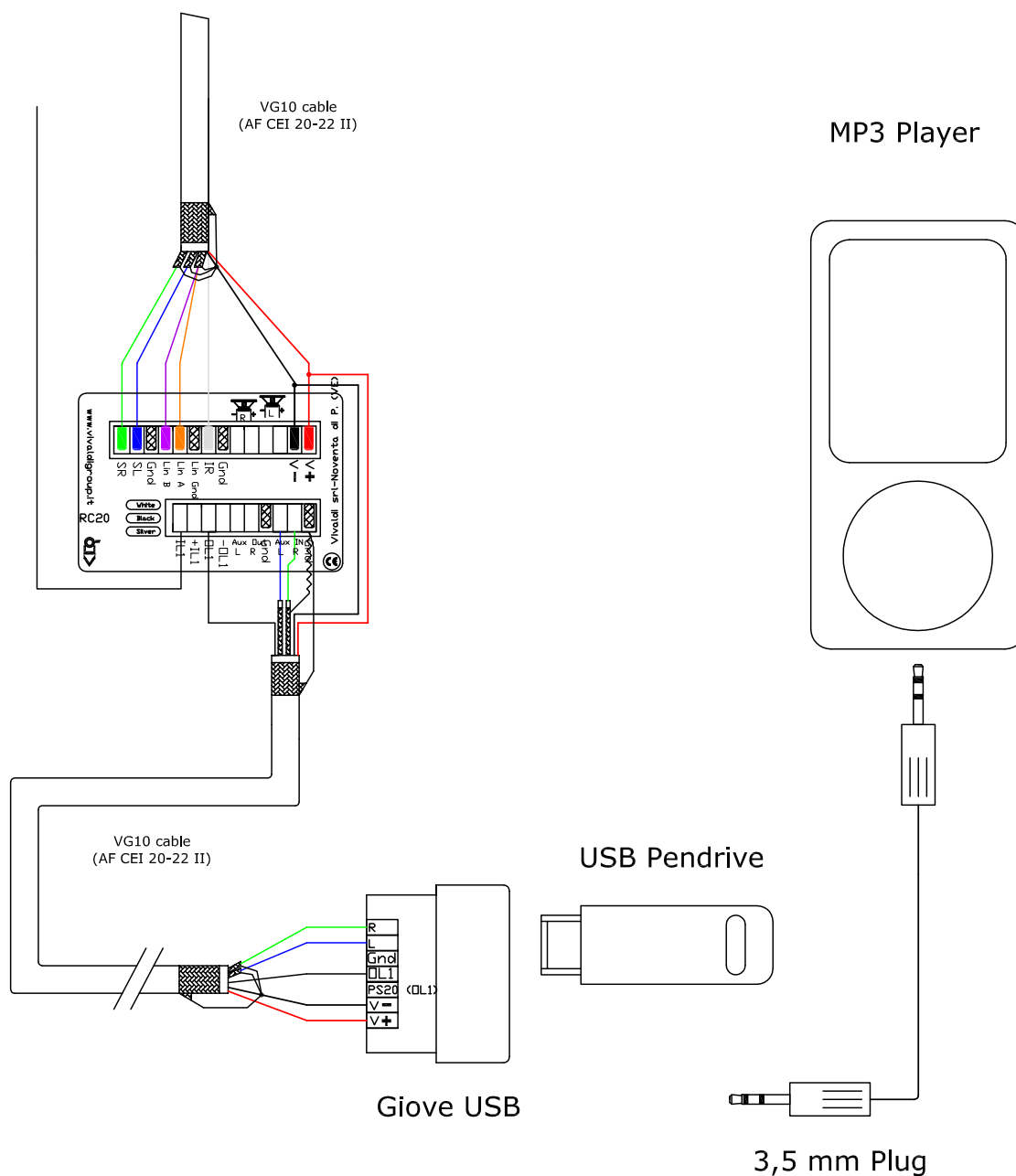
Connecting the PC20



PC20 is a module designed to locate RC20 AUX In and AUX Out to a more convenient position. PC20 has 4 RCA plugs on its front panel and must be connected to the smallest RC20 socket, using high quality well shielded audio cable, such as microphone cable or similar.

Giove USB wiring and use

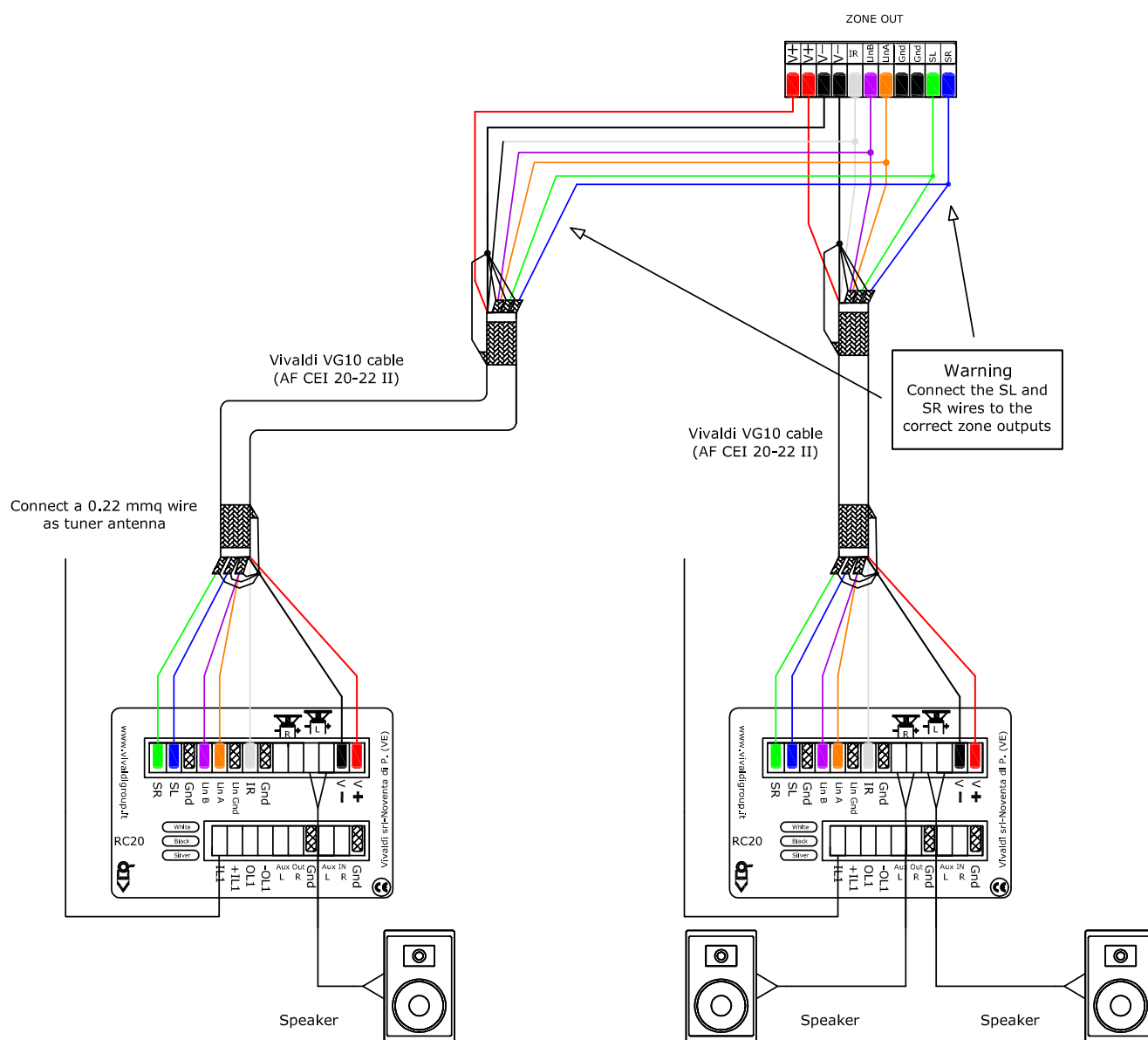
Giove USB is an optional for RC20s, it enables you to use a local USB pendrive to play MP3 music files or an audio Line signal source.



- ___ Wire the Giove USB as shown.
- ___ Select "Aux IN" on the RC20.
- ___ Use a 3,5 mm plug to play an external source
- ___ It is possible to play a Line level or a headphone signal.
- ___ Inserting the plug the MP3 reader will be disconnected.

Slave or Mirror wiring

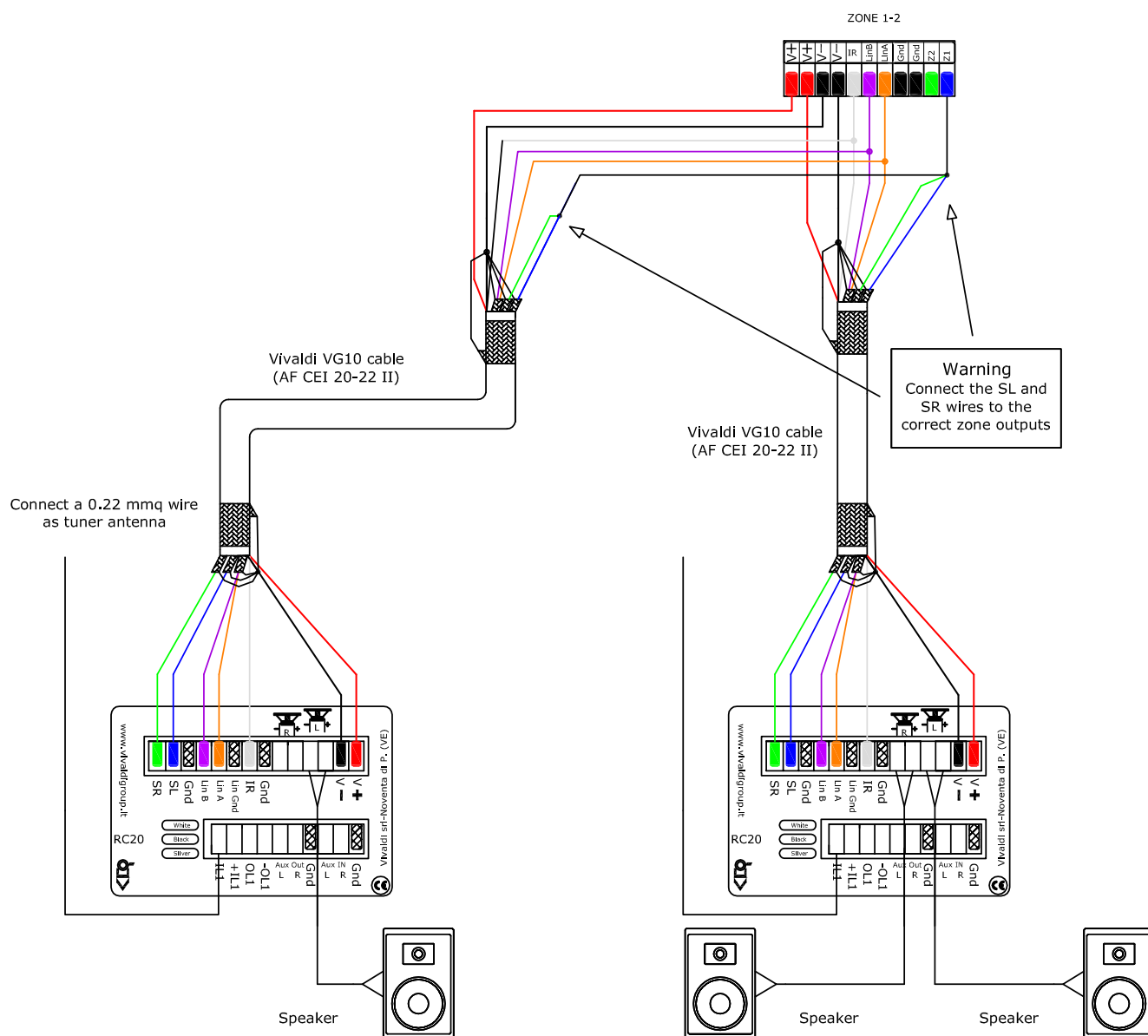
Giove CA20 main units



Follow this scheme to connect more RC20s in parallel, to a CA20 (Mirror or Slave configuration). It is not necessary to route all the cables to the main unit, in many cases it can be more convenient to wire an RC20 to another than going to the main unit with only one cable (see examples on pages 26 e 27, main bedroom and bathroom). Pay close attention to SL and SR signals, they represent the only difference between the CA20 and CA21 Slave/Mirror wiring. To address the RC20s refer to page 6.

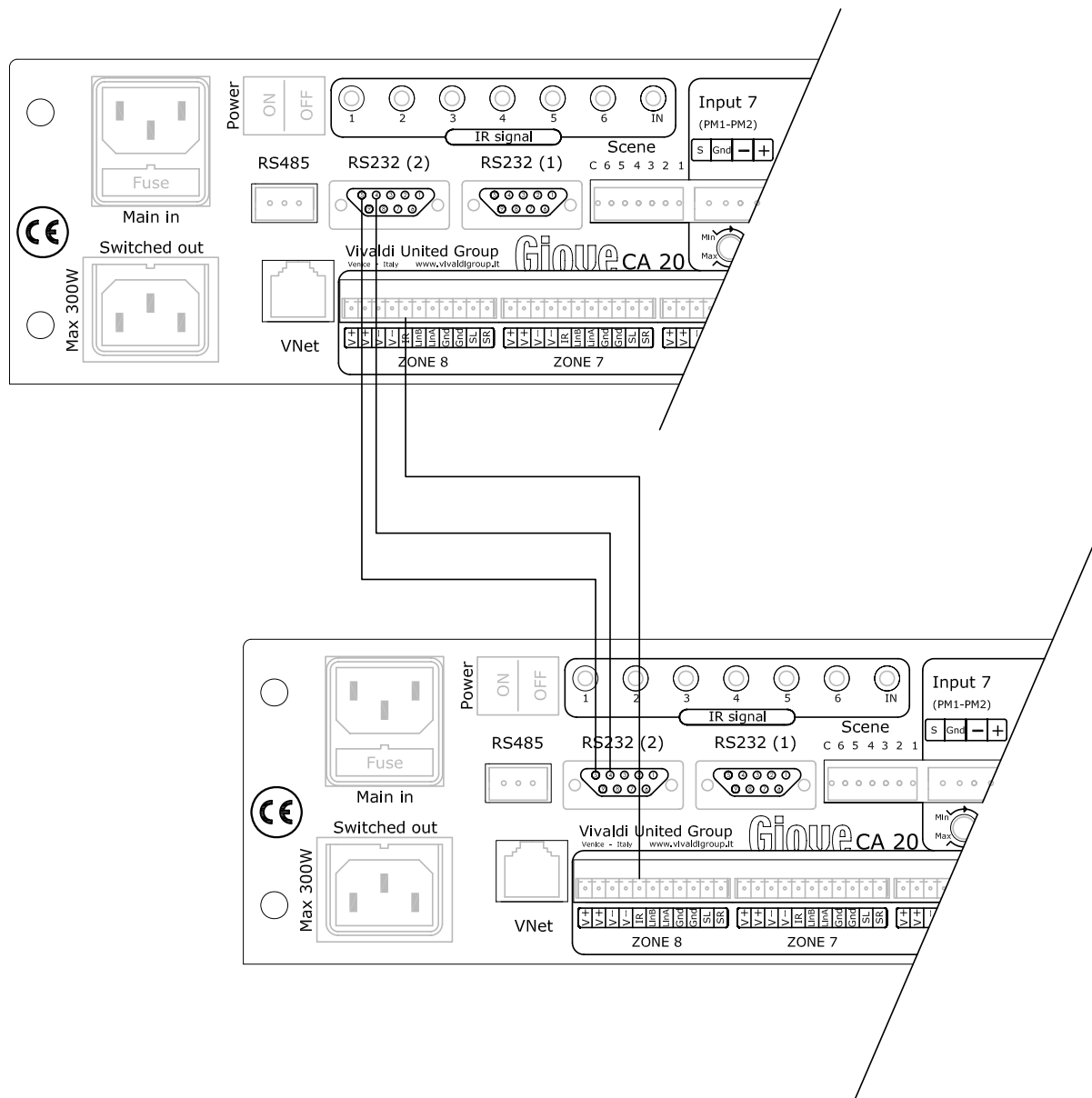
Slave or Mirror wiring

Giove CA21 main units



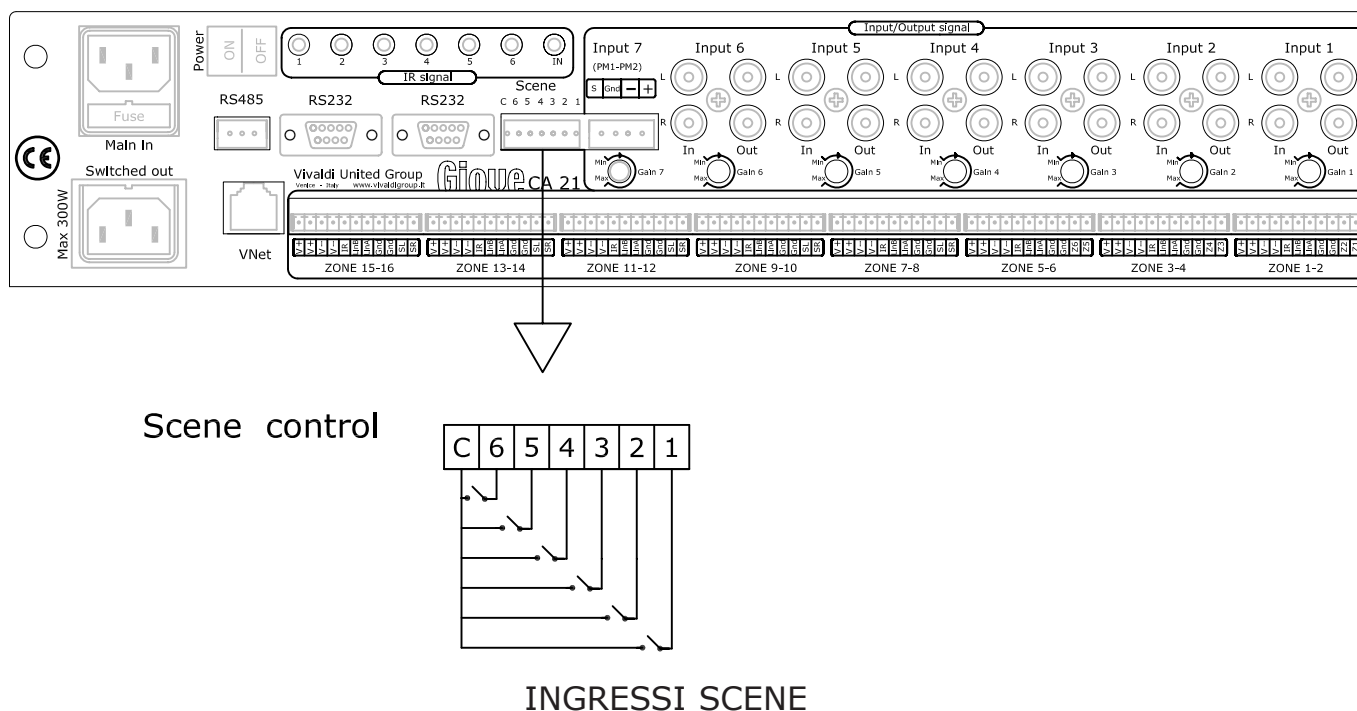
Follow this scheme to connect more RC20s in parallel, to a CA21 (Mirror or Slave configuration). This scheme is an example; it shows how to connect 2 RC20s to the first Zone of a CA21. Pay close attention to SL and SR signals, they represent the only difference between the CA20 and CA21 Slave/Mirror wiring. To address the RC20s refer to page 6.

Connecting 2 Giove CA20/CA21



Following this scheme it is possible to use two or more main units, using the IR signals and the switched outputs together.

Scene socket wiring



By default a Giove main unit stores 16 presets.

A "preset" is a set of values, volume, channel, loudness etc for one or more RC20s that can be recalled at the same time on the system.

Up to six Presets can be assigned to the contacts on the unit rear side.

On the "SETUP" menu, selecting "SCENE INPUT" and "SCENE #1" (to set pin n°1 of the socket), select the preset to assign to the scene (contact) and activate it selecting the ON/OFF tag.

It is possible to directly recall a preset using the RS232 socket.

16 default presets are available:

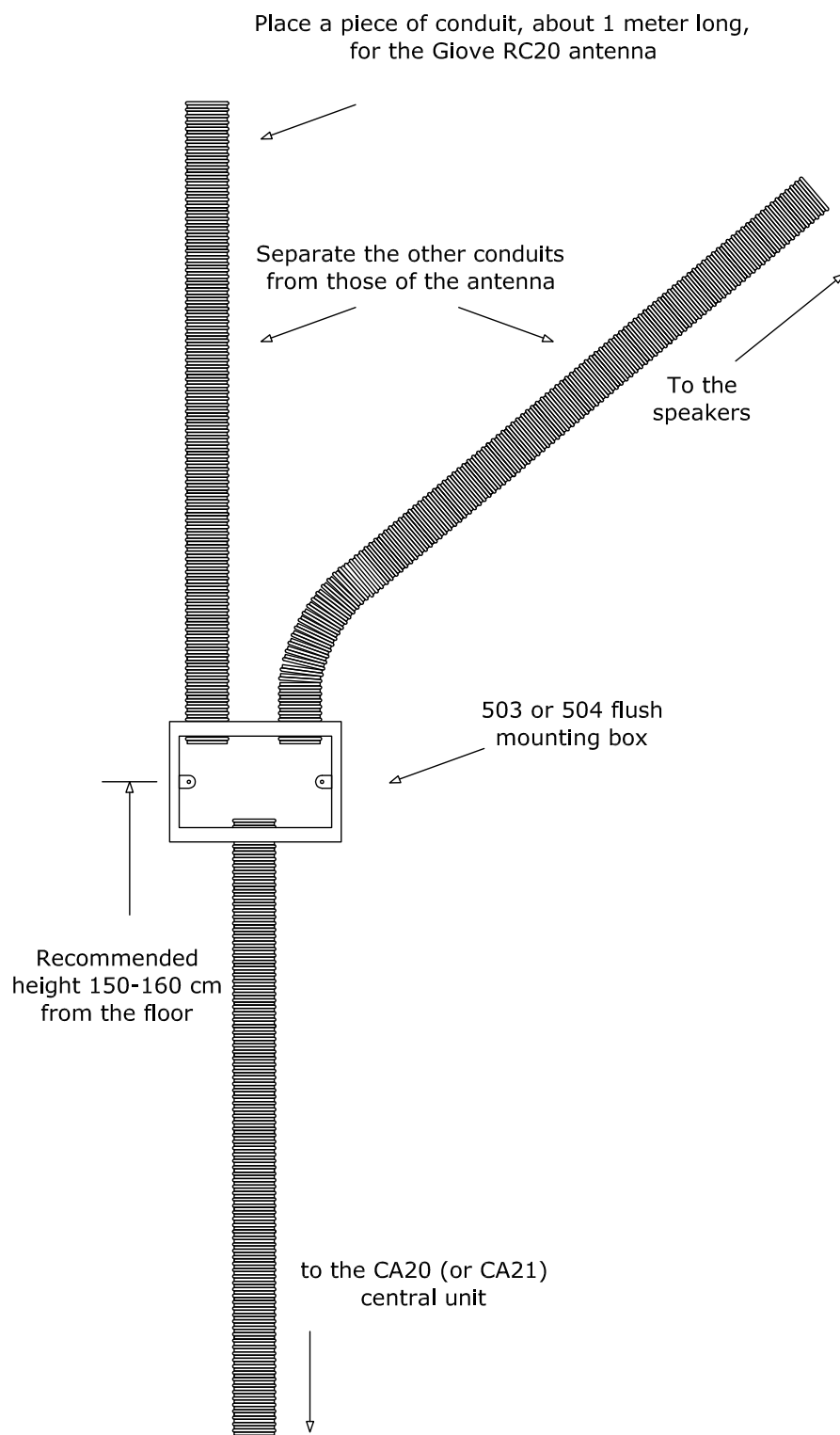
Presets from 1 to 15 recall various volume and source configurations.

Presets from 16 switch off the system.

- ___Preset 1 switch on RC20's from 1 to 16 at the same parameters they are switched off.
- ___Preset 2 switch on RC20's from 1 to 16 selecting MP3 input.
- ___Preset 3 switch on RC20's from 1 to 16 selecting MP3 input and volume 20.
- ___Preset 4 switch on RC20's from 1 to 16 selecting MP3 input and volume 35.
- ___Preset 5 switch on RC20's from 1 to 16 selecting tuner input.
- ___Preset 6 switch on RC20's from 1 to 16 selecting tuner input and volume 16.
- ___Preset 7 switch on RC20's from 1 to 16 selecting tuner input and volume 32.
- ___Preset 8 switch on RC20's from 1 to 16 selecting Cd input.
- ___Preset 9 switch on RC20's from 1 to 16 selecting Cd input and volume 16.
- ___Preset 10 switch on RC20's from 1 to 16 selecting Cd input and volume 32.
- ___Preset 11 switch on RC20's from 1 to 4 at the same parameters they are switched off.
- ___Preset 12 switch on RC20's from 1 to 5 at the same parameters they are switched off.
- ___Preset 13 switch on RC20's from 1 to 6 at the same parameters they are switched off.
- ___Preset 14 switch on RC20's from 1 to 7 at the same parameters they are switched off.
- ___Preset 15 switch on RC20's from 1 to 8 at the same parameters they are switched off.
- ___Preset 16 switch off all the RC20's.

To modify the presets it is necessary to use a PC connected to the Giove by a serial RS232 cable and the Vivaldi PC program "Giove KProgram20". (optional).

Installing the in-wall components for Giove RC20 controllers

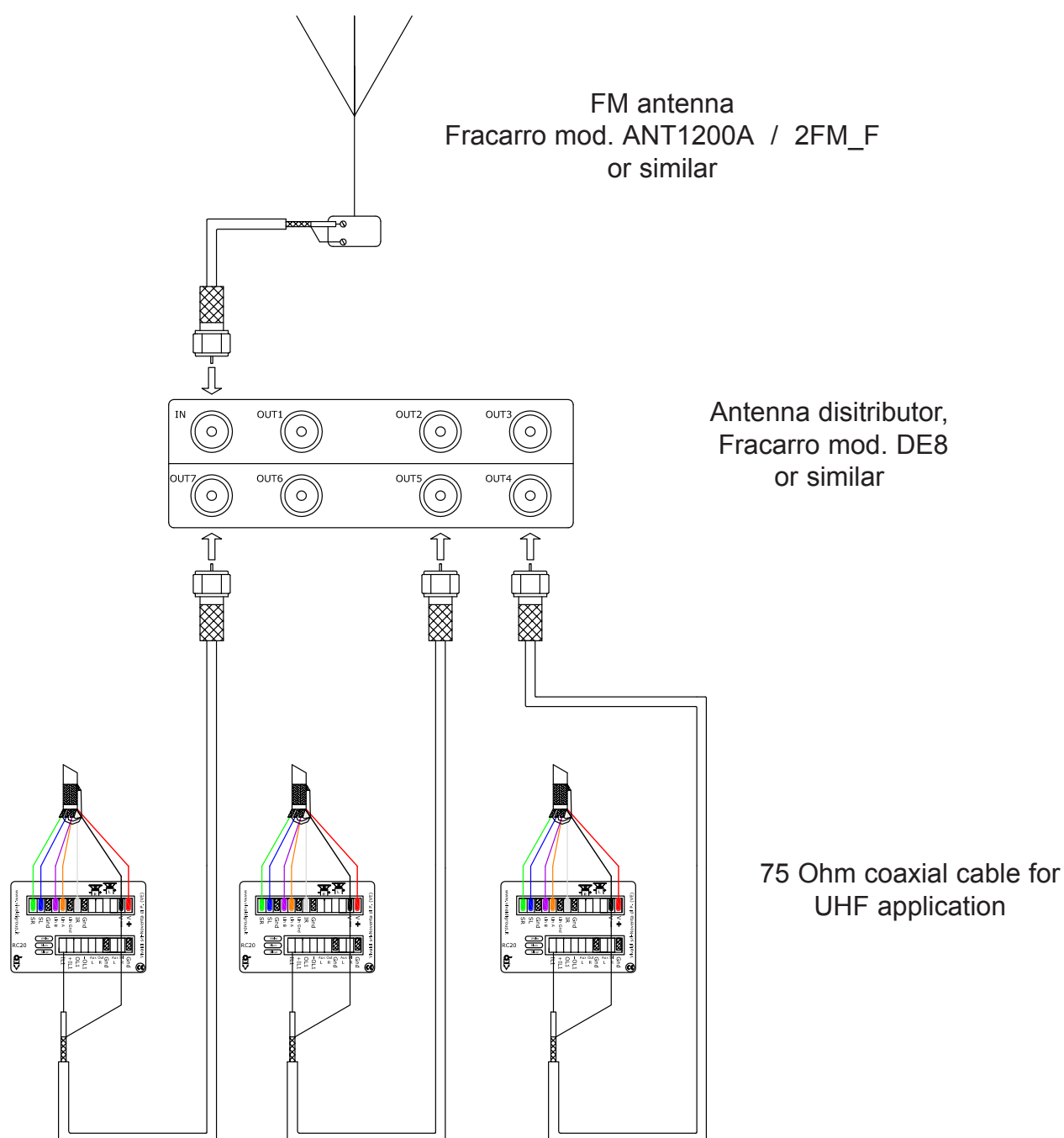


Here we show a typical example of in-wall set up for an RC20.

It is important to note that there is one tube only for the antenna, for a good result in receiving radio signals it is important to place the antenna (a single unshielded wire 1 meter long) vertically and far from other wires.

Use a conduit only for the antenna and route it as far as possible from the others.

RC20 antenna wiring

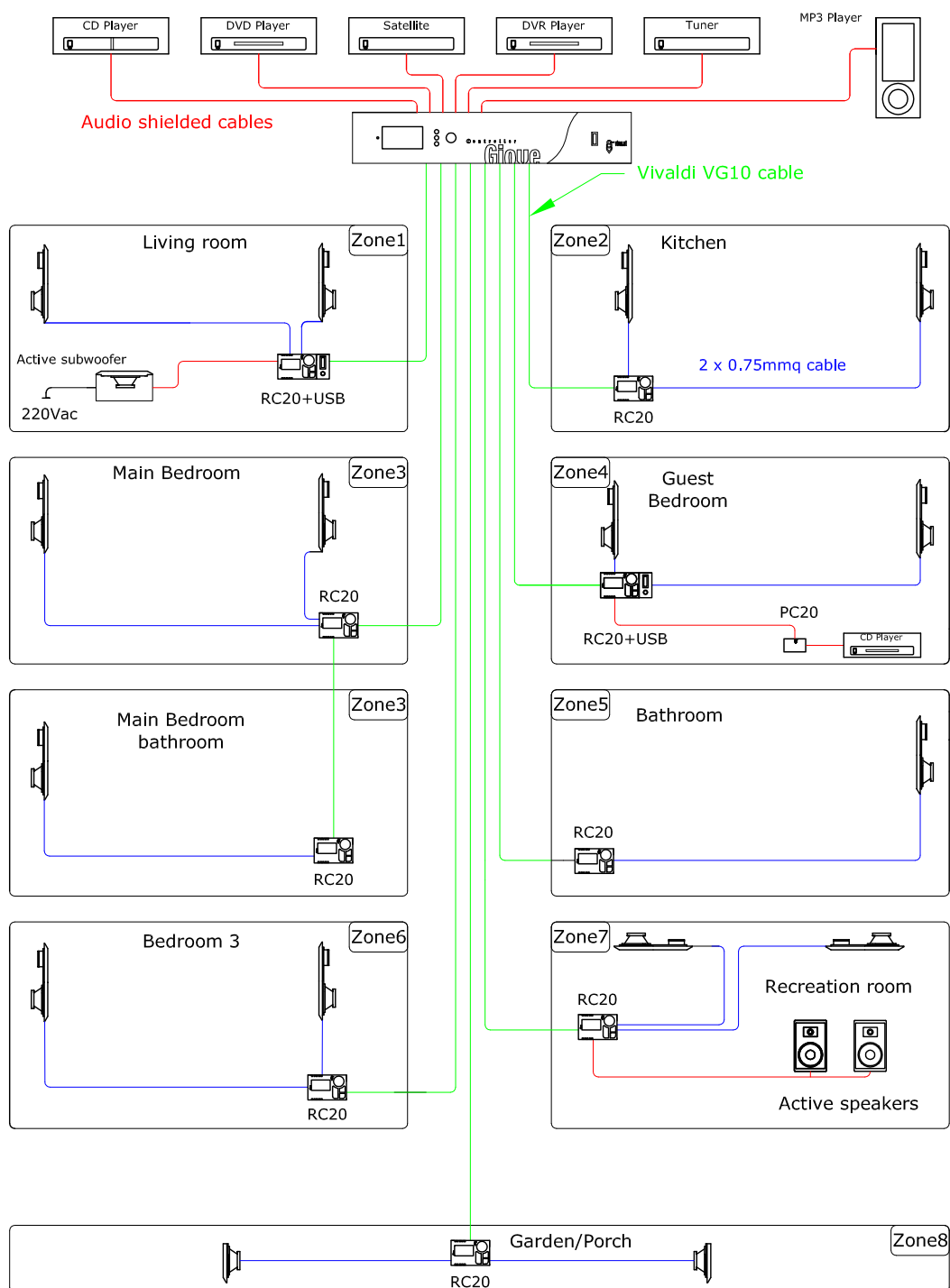


In particular situations such as concrete buildings or low parts of houses it can be difficult to receive FM signals.

The figure shows an example of FM signal distribution.

The material shown is typical in the Italian market

Audio distribution in a home using a Giove CA20 system

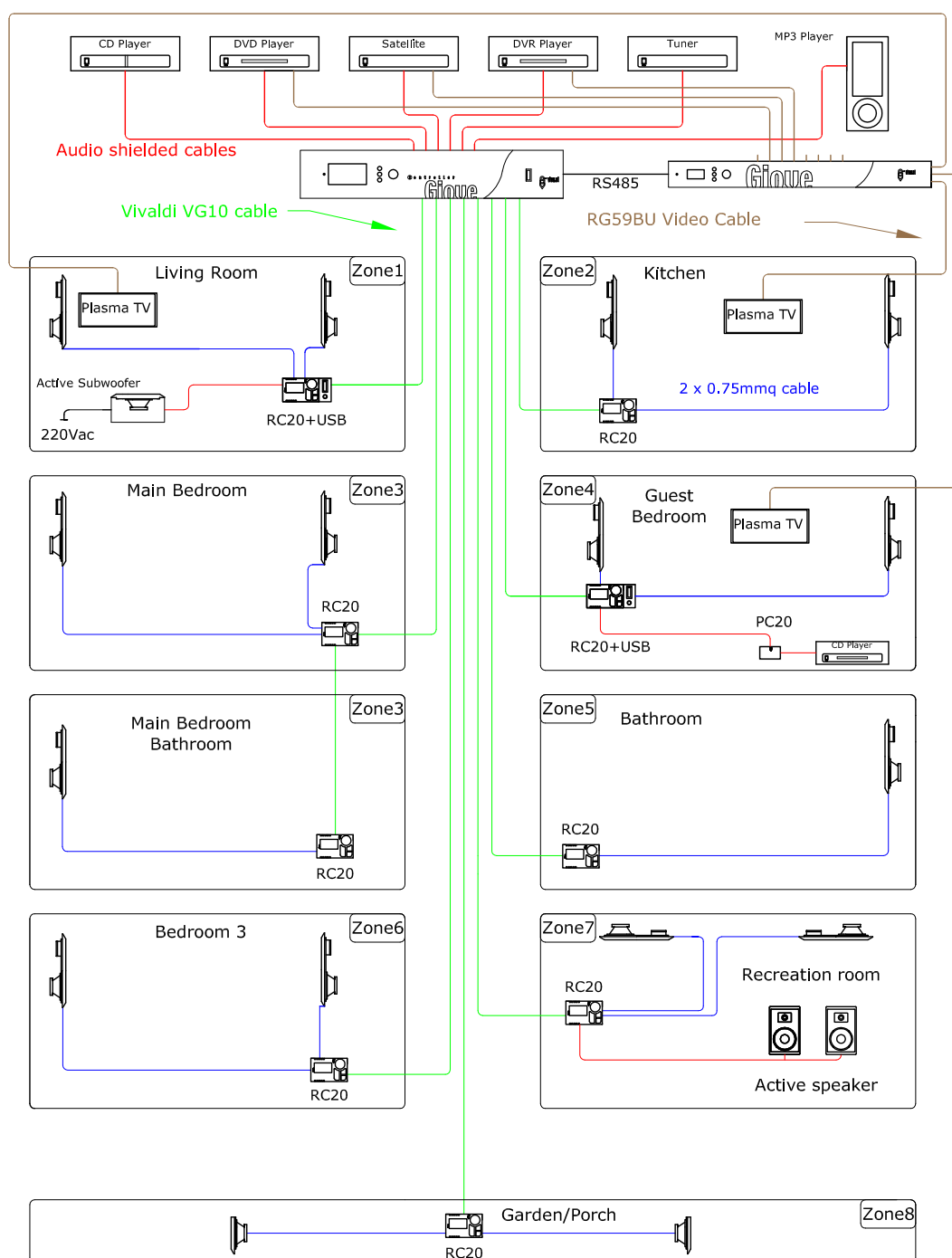


On the example shown a CA20 is fitted with 8 zones (RC20) plus a subzone in mirror mode with the main bedroom.

In the Living Room it an active subwoofer is placed and in the recreation room there are 2 active speakers.

Microemitters SIR1 or SIR2 are omitted for clarity

Audio distribution in a home using a Giove CA20 main unit and a video matrix Giove CA3MKII

























In this example video distribution is added to the traditional audio multiroom distribution.

In this way it is possible to have the use of video sources, other than audio.

Selection of video sources is totally automatic, for example selecting the DVD on the RC20 both the audio and video signals will be set and it will be possible to see the video on a TV and listen to the audio on the loudspeaker wired to the RC20.

IR codes

SYMBOL	DESCRIPTION	CD	DVD	TV	DVR
	ON/OFF	01	11	21	31
	PLAY	02	12		32
	STOP	03	16		
	PAUSE	06	13		33
	Back Track	05	15		35
	Skip Track	04	14		34
	Back Disc	08			
	Skip Disc	09			
	N.N.	07	17		
	UP			22	37
	DOWN			25	40
	Aux Input			23	
	Input 1			26	
	Input 2			27	
	Input 3			28	
	Input 4			29	
	Input PC			24	
	HDD/DVD				36
	REC				38
	Stop REC				39
			18		
			19		

This shows correspondence between IR symbols and numbers, as required to store IR.
The symbols are present on the CD,DVD, TV and DVR submenus on the RC20.

Firmware versions

CA20 and CA21 main unit are shipped to the customers equipped with default firmware 2.2b. Other different firmware can be installed for particular purposes and must be required at the time of the order.

Here there is a table that shows the differences among all the versions:

2.2b Default firmware, enables using CA3MKII and PM2 microphone.

2.3 Modified firmware for PA message purpose.

It enables some message function, such play messages stored on the USB pendrive, launching the scene it is possible also to play MP3 files containing alarms, commercial messages etc. For a detailed description and use see the manual of this firmware version.

2.3 HDMI Modified firmware for automatic use of HDMI matrixes

It is possible to order this firmware for several matrixes such as Spatz X-44 or X-44 1.3. Specify the desired matrix at the time of the order, we will be glad to estimate the cost and availability.

Firmware 2.3 do not allow use of PM2 microphone.



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