



FULGOR SERVICE
SISTEMI DI AMPLIFICAZIONE

M6

Digital audio matrix with DSP

USER AND INSTALLATION GUIDE

V3.0

Software da 3.0.0.4
Firmware da 3.0.0.0

PRECAUTION OF USE



WARNING: To reduce the risk of electric shock, do not remove the cover (or rear panel). Inside, there are no parts that can be repaired by the user; Entrust the repair to qualified personnel.

CAUTION: To reduce the risk of fire or electric shock, do not expose this unit to rain or moisture.



This symbol, when displayed, indicates the presence of a non-insulated hazardous voltage inside the body of the device - sufficient voltage to pose a risk of electric shock.



This symbol, when displayed, indicates important operating and maintenance instructions in the enclosed text. Read the manual.

RECOMMENDATIONS:

All safety and operating instructions must be read before operating the appliance.

Keep the instructions:


Safety and operating instructions must be kept for future reference. This manual is an integral part of the product and must accompany it in case of any change of ownership. This will allow the new owner to know the instructions for installation, operation and safety.

Pay attention:

All warnings on the appliance and operating instructions must be followed accurately. Observe all warnings.

Follow the instructions:

All operating and user instructions must be followed.

Notes preceded by the symbol  contain important safety information: Read them carefully.

DETAILED SAFETY INSTRUCTIONS.

Water and humidity:

The appliance should not be used close to water (eg near baths, kitchen sinks, near pools, etc.).

Ventilation:

The appliance must be placed in such a way that its location does not interfere with the proper ventilation. For example, the appliance should not be placed on a bed, sofa cover, or similar surfaces that can block the ventilation openings or placed in a recessed installation such as a bookcase or cabinet that can prevent the flow of air, Air through the ventilation openings.

Heat:

The appliance must be located away from heat sources such as radiators, thermostats, clothes dryers, or other appliances that produce heat.

Power supply:

- The appliance must only be connected to the type of power described in the operating instructions or on the appliance.
- If the supplied plug does not match the socket, contact an electrician to install an appropriate socket.

Grounding or polarization:

- Precautions should be taken to ensure that grounding and polarization of the device are not affected.
- The metal parts of the equipment are connected to ground via the power cord.
- If the power socket does not have a ground connection, contact a qualified electrician to connect the grounding device through the terminal.
- For plastic equipment, periodically check the condition of the power supply.



Power Cord Protection:

The power supply cord must be installed so that it is not to be trampled or pinched by objects placed on or against, paying particular attention to wires and plugs that are wall-mounted.

Cleaning:

- When the unit is to be cleaned, dust can be removed using a compressed air jet or damp cloth.
- Do not clean the unit using solvents such as triethylene, paint thinners, fluids, alcohol, high volatility fluids or other flammable liquids.

Non-use Periods:

The power cord of the appliance must be disconnected from the socket if it is not used for a long time.

Intake of liquids or objects:

Care should be taken to avoid dropping objects and not leaking liquids into the body of the appliance through the grilles.

Safe use of the power line:

- When disconnecting the appliance, hold the plug and the socket securely.
- When the unit is not used for a prolonged period, stop power by pulling the plug out of the power outlet
- To avoid damaging the power supply line, do not pull the power cord and do not use a twisted cable.
- To avoid damaging the power cord of the apparatus, make sure that it is not being trodden or crushed by heavy objects.

Moving the unit:

Before each shift, make sure the drive is off. The power cord must be removed from the socket as well as the unit's connections with other lines.

Do not disassemble the unit:

Do not attempt to disassemble or repair the unit yourself. For any problem that can not be resolved with the help of this manual, contact a qualified technician or contact our company www.fulgorservice.it

Malfunctions:

For any malfunctions contact our company (www.fulgorservice.it).

IMPORTANT SAFETY RULES:

- Install by following the instructions.
- Never open the equipment: inside there are no user-serviceable parts.
- If you notice a strange smell coming from the appliance, turn it off immediately and disconnect the power cord.
- Do not obstruct the ventilation grilles of the appliance.
- Avoid working overloading the unit for extended periods of time.
- Do not force commands (buttons, controls, etc.)
- For safety reasons, do not unscrew the plug-in connection. The ground connection is necessary to safeguard operator safety
- Use only the connectors and accessories specified by the manufacturer.
- The equipment must be kept away from:
 - ☐ Damp places
 - ☐ Direct exposure to heat sources (such as sunlight).
 - ☐ Unsuitable ventilation
- In the presence of lightning storms or when the apparatus is not in use, unplug the power plug from the socket.
- To prevent the risk of fire and electric shock, keep the equipment away from splashes and drops. Above the apparatus should not be placed vases or other objects containing liquids.
- FULGOR SERVICE s.n.c. Disclaims any liability for incorrect installation of the unit.

GUARANTEES AND RETURN:

The product is equipped with a guarantee of operation and compliance with its specifications, as stated by the manufacturer. The warranty is 24 months from the date of purchase. Faults detected within the warranty period, attributable to defective materials or construction defects, must be promptly reported to your dealer or distributor, enclosing the purchase date documentation and the description of the defect type found. Failures caused by improper use or tampering are excluded from the warranty. Fulgor Service s.n.c.



Establishes by means of return verification the declared defect, related to proper use, and the effective validity of the guarantee; It then provides for the replacement or repair of the products, but does not however oblige any compensation for direct or indirect damages resulting from the defect.



M644

DAW in real time 6 Input on 4 Out

DESCRIPTION

The M6 digital workstation is equipped with 6 balanced audio input (XLR) fully configurable and addressable to one or more of the 4 balanced outputs (XLR).

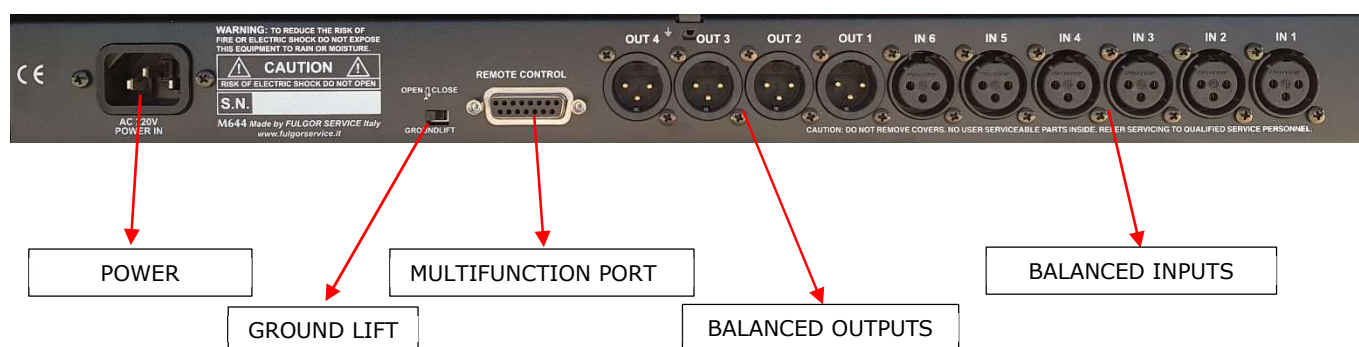
Main electrical characteristics:

- 6 balanced inputs with female XLR connectors
- 4 balanced output with male XLR connectors
- Maximum input level 8Vpp
- Maximum output level 8Vpp
- Input amplification: from -20dB to +50dB
- Phantom power +24 V can be activated independently on each channel via software
- 24 bit analog/digital conversion
- Less than 6w consumption
- 20 Digital volume controls (RS485)
- 32 Preset selectable and actionable remotely (RS485)
- 6 fully configurable remote analog volume controls
- 6 fully configurable panel volume controls with precision potentiometers
- RS232 serial line for configuration and setting via PC (Windows)

Main software features:

- Gain control for each input (± 50 dB)
- Phase control for each input
- Compressor for each input
- Equalization with 3 configurable parametric filters for each input
- 6x4 matrix with adjustable attenuations
- Configurable automixer with 5 logical parameters
- NOMA function (total output level attenuation with automatic control according to the actual inputs open simultaneously)
- Double antilarsen selectable for each output
- 1 delay for each output settable from 0 to 64 meters
- Equalization with 6 parametric filters configurable for each output
- Noise-Gate on each output
- Gain control for each output (-60/+6dB)
- Phase control for each output
- Maximum-minimum configuration of the potentiometer that can be associated with one or more of the inputs or outputs
- Block diagram summary screen of the running configuration
- RS485 enabling/disabling
- Display of inputs and output status (VuMeter) in each window of the work environment and virtual keys to enable/disable the inputs and outputs (Muting)
- Display of the preset control and accessori functions window (name change, save to disk, load from disk, set password, default, exit, resources control and save) in each window of the work environment





SOFTWARE

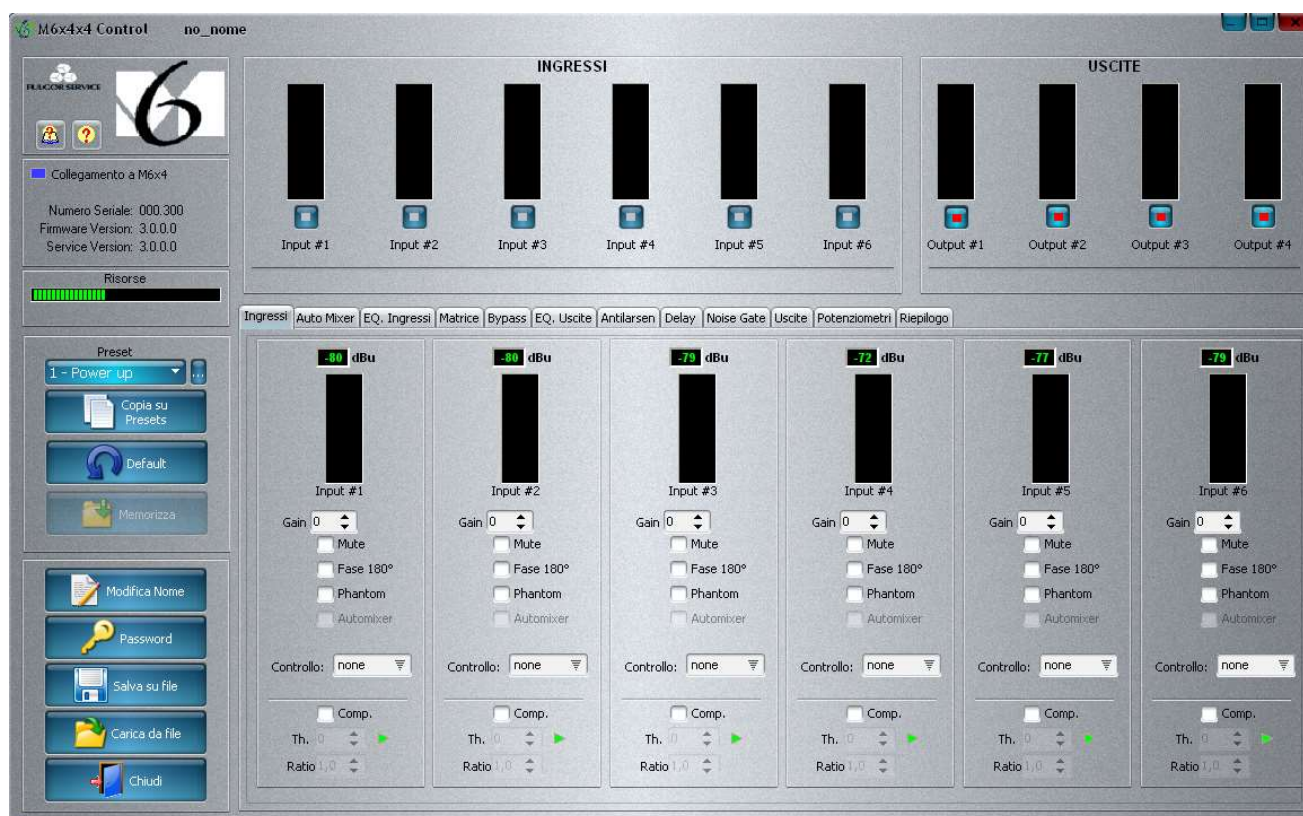
WELCOME WINDOW



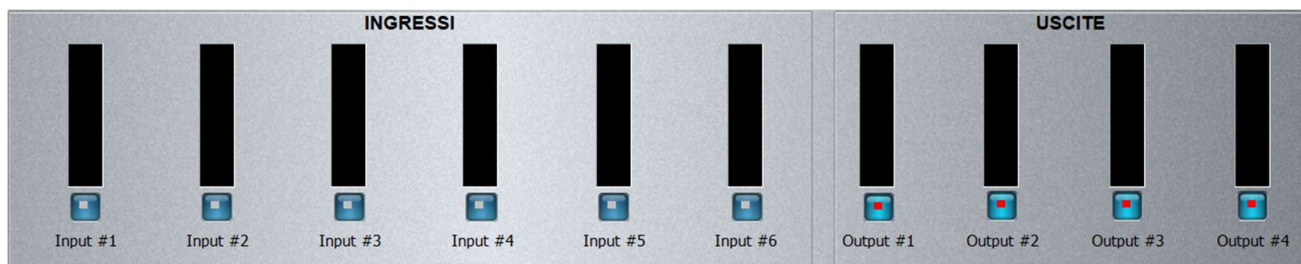
From this window it is possible to select the serial port to connect to the matrix, or perform an off-line configuration, that is, without the device being connected.

MAIN WINDOW

You can access this window or from off-line configuration or by connecting to the device.



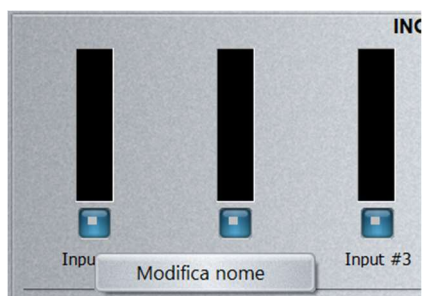
Detail



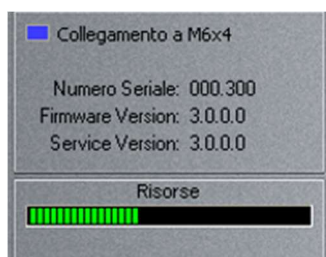
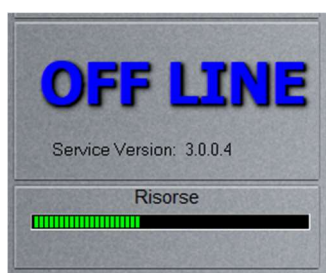
This window is always visible in any work environment you are; it is thus possible to check inputs and output level and enable/disable the muting function.

In the example shown all inputs are open while all the output are in muting condition.

To assign a name to an input or output, right-click on the input or output itself.



Clicking in the tab "Modifica nome" you can assign one.



Monitor for connection status (ON-LINE o OFF-LINE), serial, service version (software running on PC), firmware (of the device) and total DSP resources



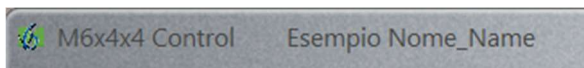
From this section it is possible to choose and/or save the presets, select the factory configuration (default) and save.

- It is necessary to save frequently in order not to risk losing the change made; when it is stored the tab is partially obscured.

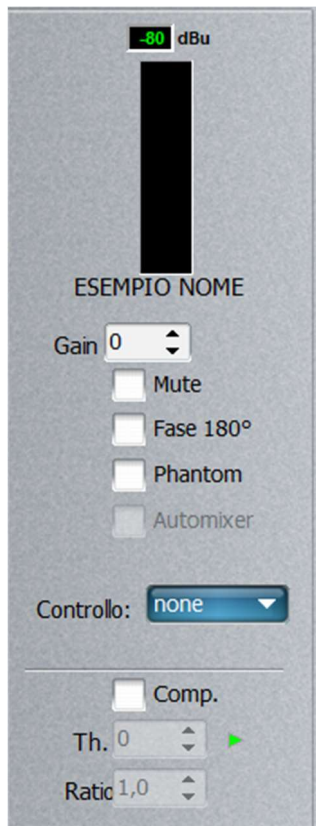


From this section it is possible to change the project name, assign a new password (default ****), save the project on the computer, upload a project from the computer or close the work section.

- When you change the project name it is shown on the upper left side of the work environment



Inputs Tab



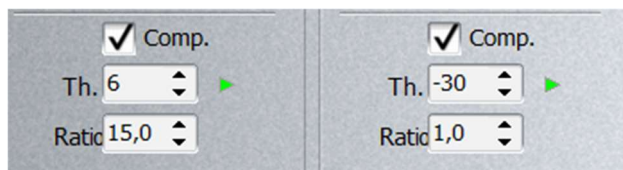
For each input it is possible to adjust/select:

- Gain by writing the value or pressing the up-down buttons (min -50 dB max +50dB)
- Mute
- Phase
- 24V Phantom power
- Managed by automixer
- Controlled by a local or remote potentiometer
- Activate the dynamics compressor

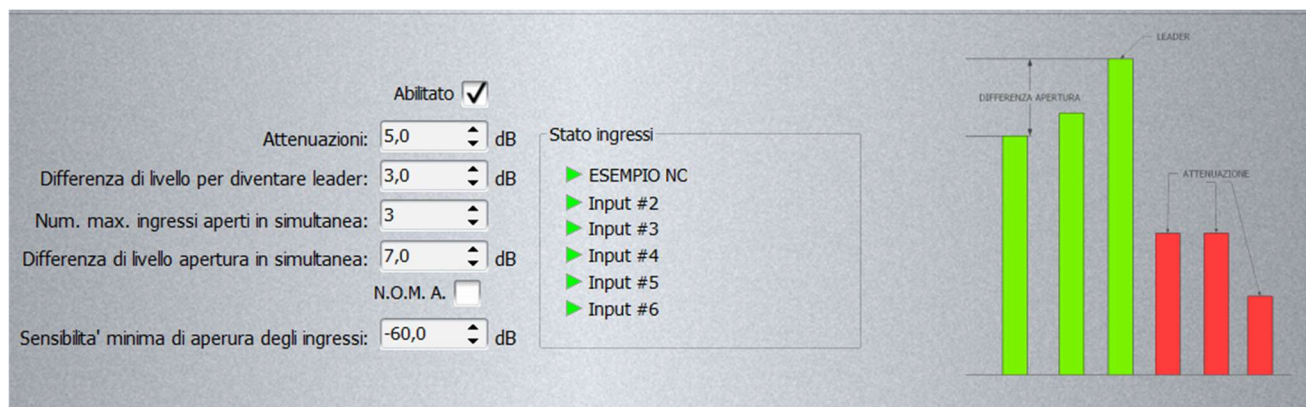
☞ When the automixer is not active, the relevant tab is partially obscured and therefore CANNOT be selected.

☞ It is possible to control both inputs and outputs with an internal or external potentiometer and it is also possible to assign multiple inputs/outputs to a single potentiometer. It is necessary to calibrate the potentiometers.

☞ When the dynamics compressor is active, the relevant operation light (triangle near the Th value) indicated whether the input is open (green) or closed (red). The working range is between -30dB and +6dB (Th treshold, or operating treshold) with a compression level (Ratio) variable from 1 (1:1) to 15 (15:1).



Fulgor Service Automatic System



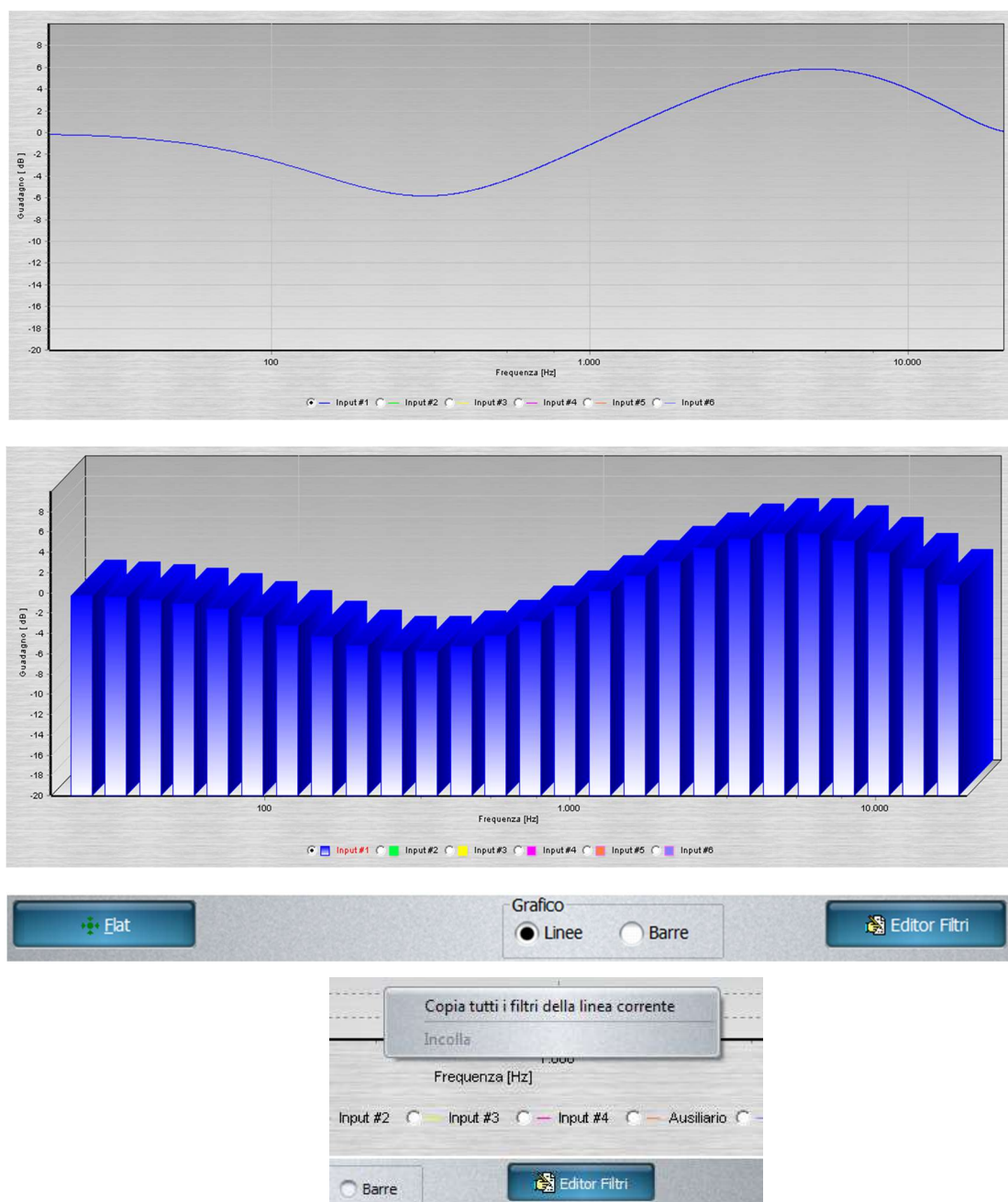
To activate the automatic control of the inputs, check the box "Abilitato".

From this section it is possible to check and/or modify the parameters of the automatic system developed by Fulgor Service and check the status of the inputs.

The example graph on the right shows the operating principle of the automation.

Parameter	Value	Function	Example
Attenuazioni	Negative (dB)	Set the attenuation to inputs that are not working	Settings -15dB; 15dB attenuation is applied to the inputs that are not working and that have the check mark on "automixer"
Differenza di livello per diventare leader	Positive (dB)	Settings -15dB; 15dB attenuation is applied to the inputs that are not working and that have the check mark on "automixer"	3dB setting; the working input with the tick on "automixer" are checked and the one that exceeds the other by 3dB becomes (in that moment) the leader
Num. max ingressi aperti in simultanea	Number	Settings -15dB; 15dB attenuation is applied to the inputs that are not working and that have the check mark on "automixer"	Setting 3; only 3 of the inputs that have the tick on "automixer" will be able to work simultaneously
Differenza di livello apertura in simultanea	Negative (dB)	It sets the maximum difference that the working inputs must have with respect to the leader to be actually open	Setting 7dB; if the inputs that have the tick on "automixer" reach a minimum level within 7dB respect to the leader (ex. the leader reaches -7 dB ► minimum opening level -14dB) they will be open, otherwise they will remain closed.
N.O.M.A.	Number of Open Microphones Attenuated	Keeps the output level constant depending on the number of microphones actually open	If a microphone is working, the system does not intervene, as you add (open) microphones, the system intervenes by decreasing the mixer output level in percentage to have a constant level
Sensibilità minima di apertura degli ingressi	dB	It decides what is the minimum level that an input must reach in order to be opened	-40dB setting; if the inputs with the check mark on "automixer" reach at least -40 dB they can be opened

INPUT EQ



From this section it is possible to view the equalization curve of the various inputs; by clicking on the name of an input, the relevant equalization curve is displayed.

☞ Each input has a different graph color

☞ It is possible to scroll the graph by using the mouse wheel

☞ It is possible to copy the equalization by right-clicking on the graph and pasting on the graph of another input (always using the right mouse button)

Clicking on the tab "Flat" the equalization of the displayed input is canceled

You can also choose to display the graph in a pseudo-tridimensional mode by clicking on "Barre"

Clicking on tab "Editor Filtri" the adjustment filters window opens

Filters Editor

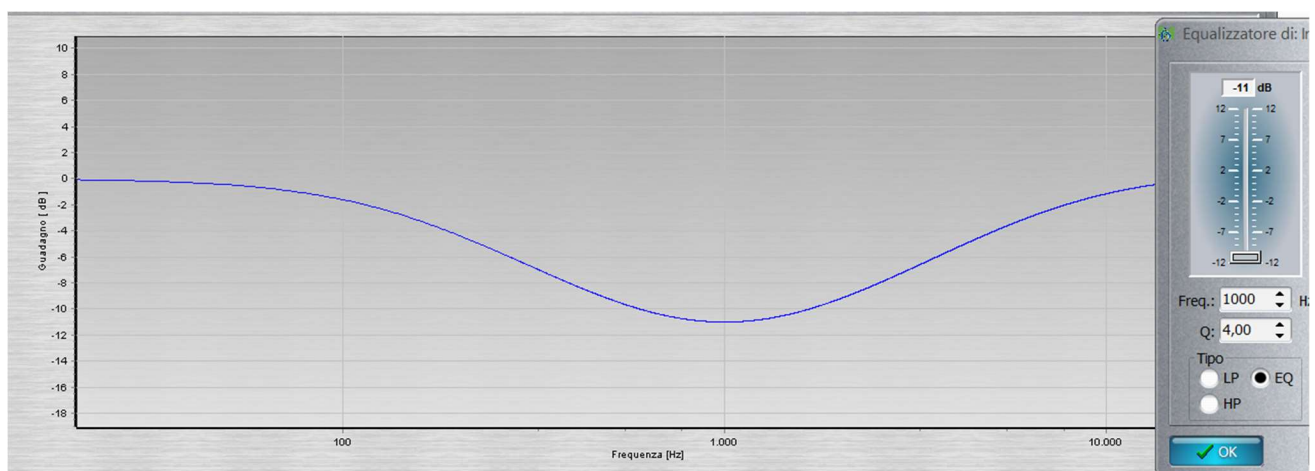
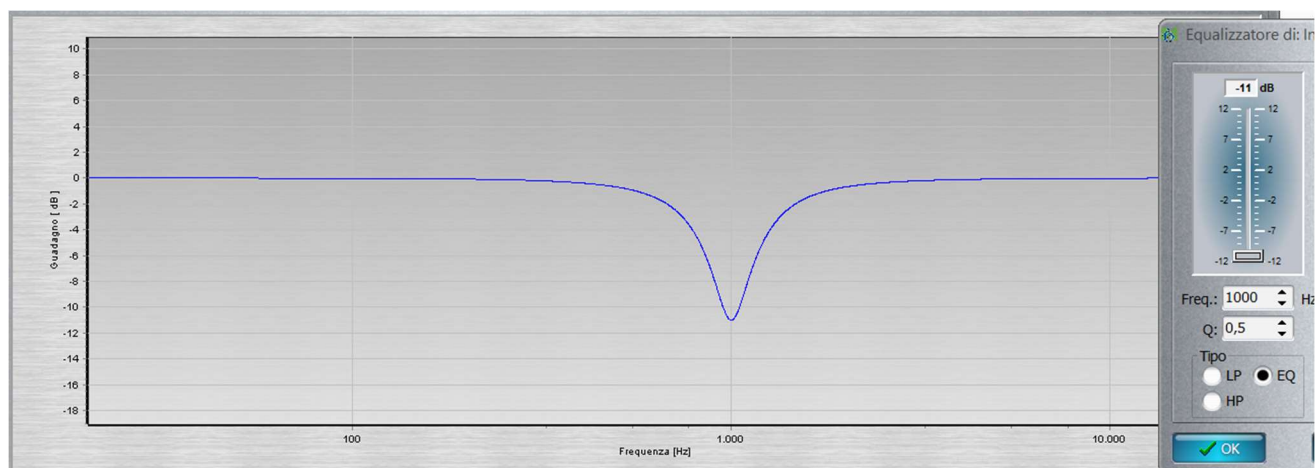


3 filters are available for each input:

It is possible to select the Frequency (Freq.), the merit factor (Q) that determines the slope and type of filter, i.e. low-pass (LP) – high-pass (HP) – parametric (EQ)

By choosing a low-pass or a high-pass the merit factor is raised automatically to 0,5

By choosing the parametric, the filter will have a slope directly proportional to the merit factor Q. A very low Q will give a narrow filter, vice versa it will give a wide filter.



MATRIX

The image shows two versions of a matrix configuration interface. The left version uses checkboxes for selecting connections between 6 inputs and 4 outputs. The right version uses sliders to adjust the gain of these connections. Both versions include buttons for resetting ('Azzerà tutto') and setting ('Imposta tutto') the matrix.

	Output #1	Output #2	Output #3	Output #4
Input #1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Input #2	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Input #3	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Input #4	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Input #5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Input #6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Azzerà tutto Imposta tutto

	Output #1	Output #2	Output #3	Output #4
Input #1	0	0	0	0
Input #2	0	0	0	0
Input #3	0	0	0	0
Input #4	0	0	0	0
Input #5	0	0	0	0
Input #6	0	0	0	0

Guadagni della matrice

From this section it is possible to direct one or more inputs to one or more outputs by selecting the intersections of the matrix "by putting a check mark".

For each intersection it is possible to attenuate the level

By clicking on the tab "Azzerà tutto", all the intersections are deleted (none on none)

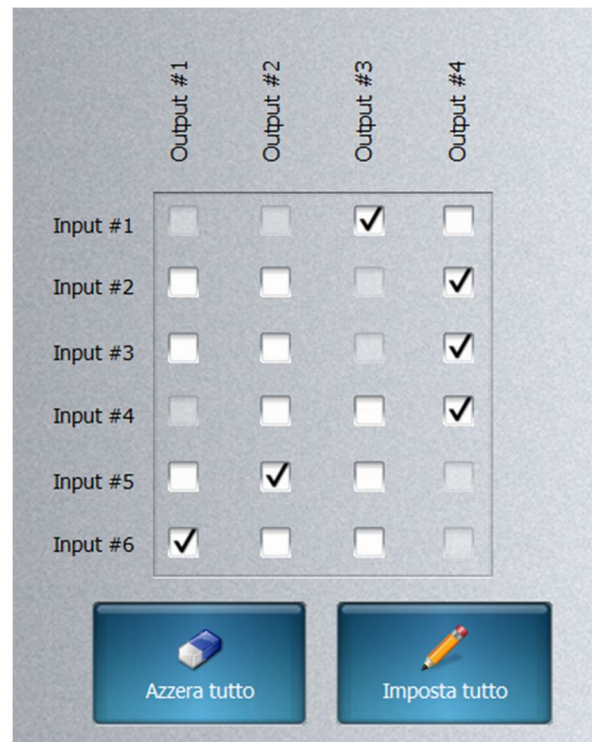
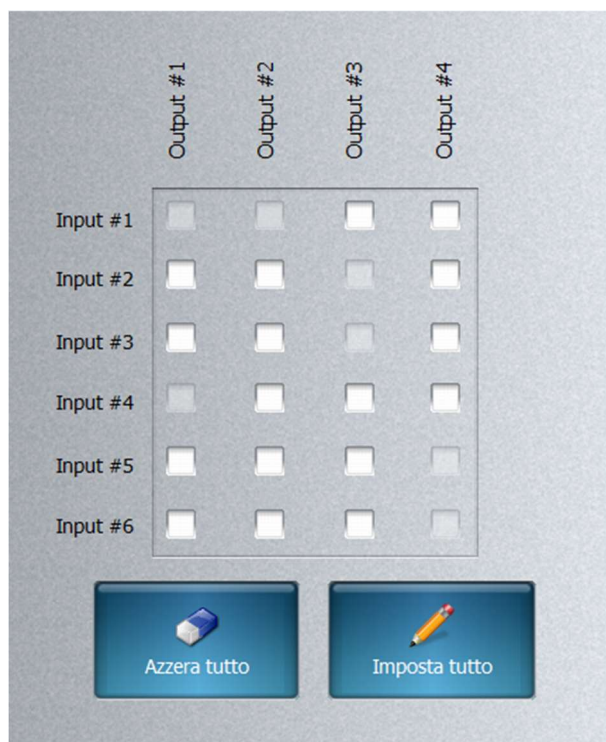
By clicking on the "Imposta tutto" all the intersections are created (all on all)

🔑 The gain of the matrix can only be attenuated, it is NOT possible to increase it.

🔑 By right-clicking it is possible to change the inputs/outputs names.



BYPASS



From this section it is possible to direct one or more input to one or more output by selecting the intersections of the bypass matrix "by putting a check mark". This Bypass matrix skips the entire effects path (equalizer – antilarsen - noise gate and delay) by directly connecting the inputs to the outputs.

By clicking on the tab "Azzerà tutto", all the intersections are deleted (none on none)

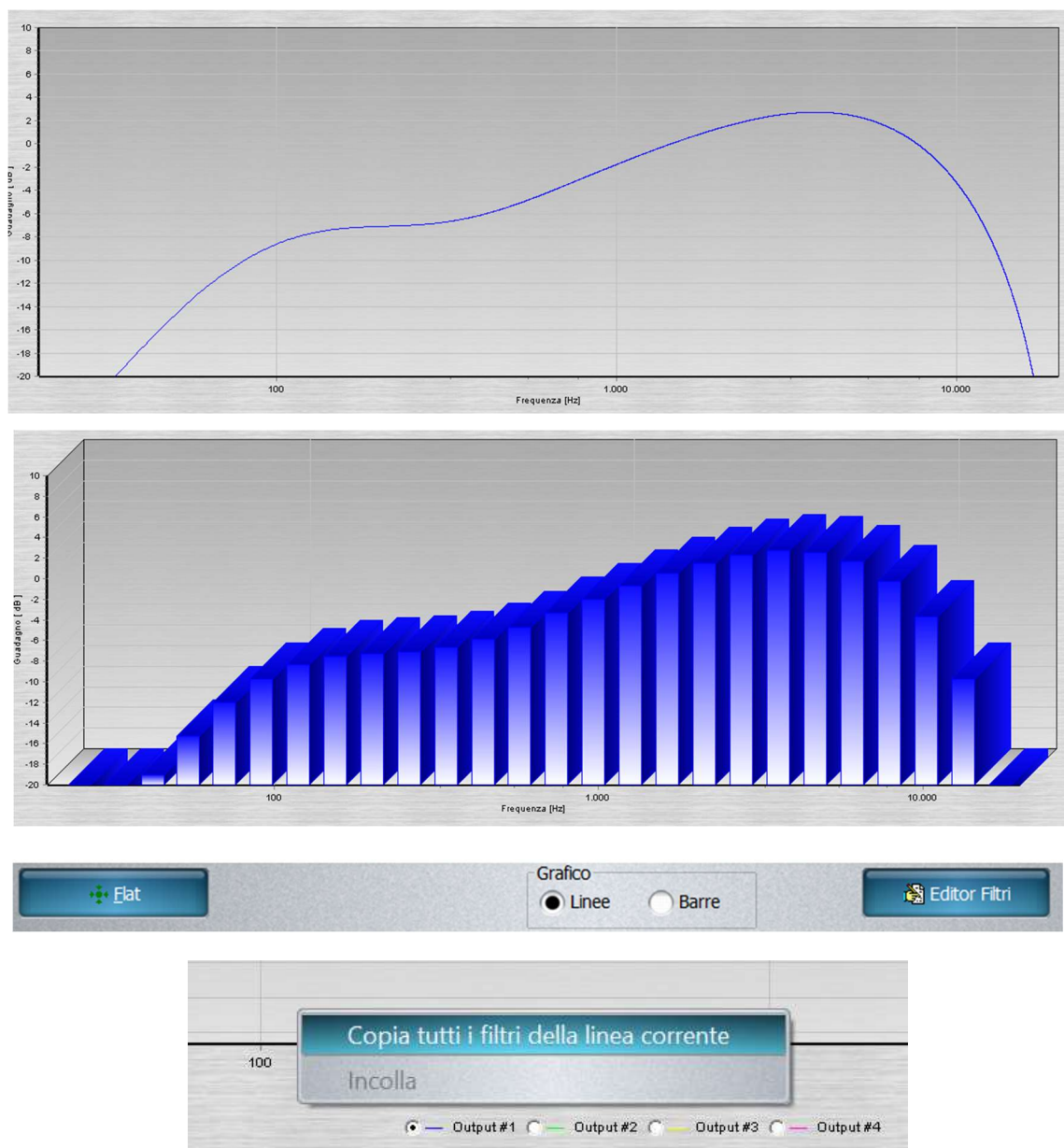
By clicking on the "Imposta tutto" all the intersections are created (all on all)

☞ The intersections previously occupied by the matrix are not availables

☞ By right-clicking it is possible to change the inputs/outputs names.



OUTPUTS EQ



From this section it is possible to display the equalization curve of the various outputs; by clicking on the name of an output, the relevant equalization curve is displayed.

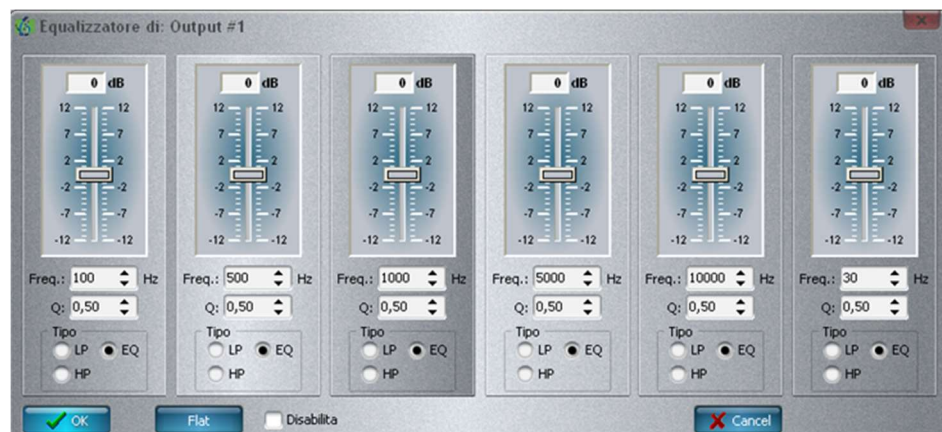
- ☞ Each output has a different graph color
- ☞ It is possible to scroll the graph by using the mouse wheel
- ☞ It is possible to copy the equalization by right-clicking on the graph and pasting it on the graph of another output (always using the right mouse button)

By clicking on tab "Flat" the output equalization is deleted

You can also choose to display the graph in a pseudo-tridimensional mode by clicking on "Barre"

By clicking on the tab "Editor Filtri" the adjustment filters windows opens.

Filter Editor

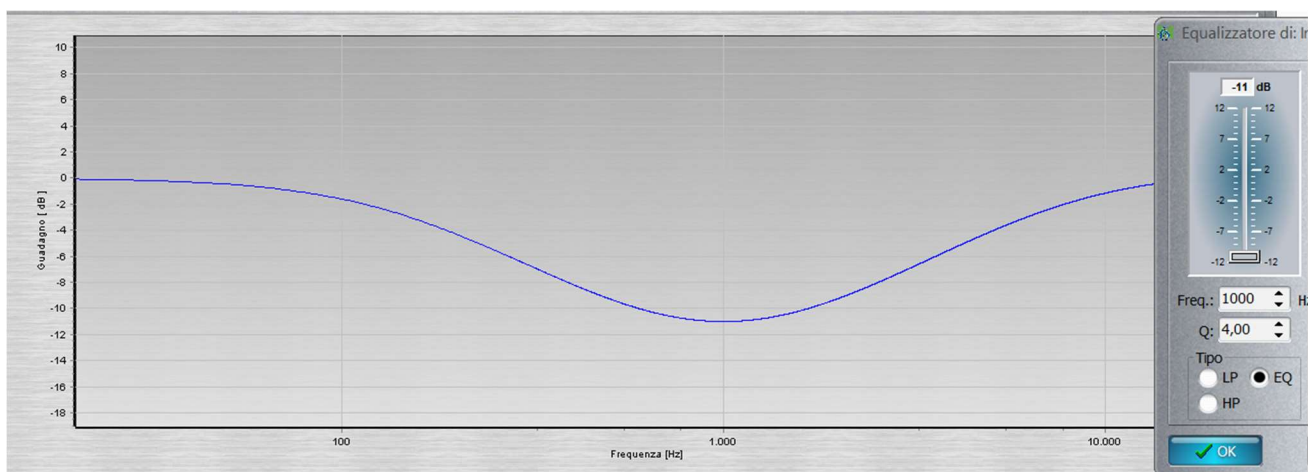
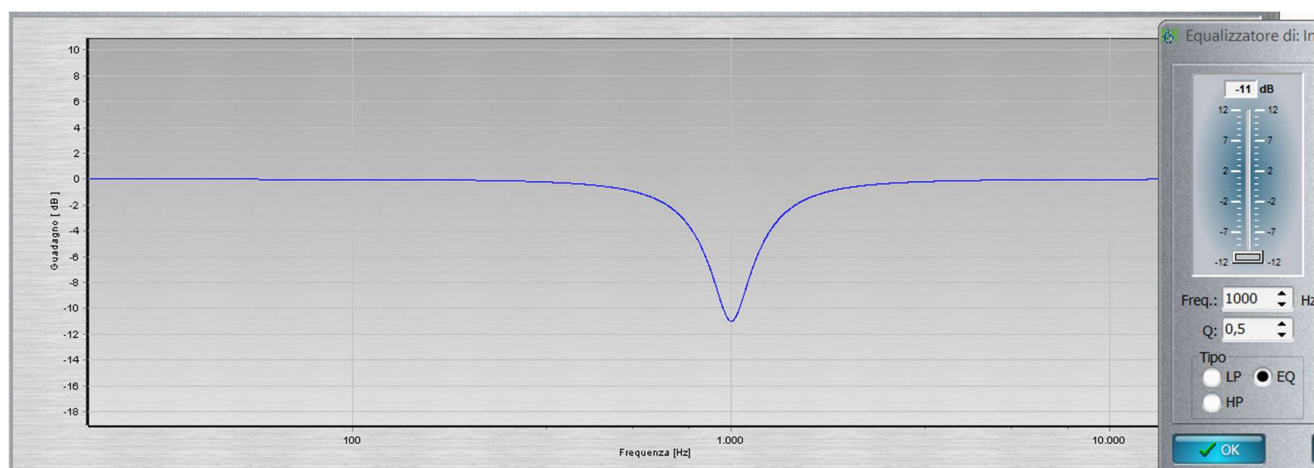


6 filters are available for each outputs:

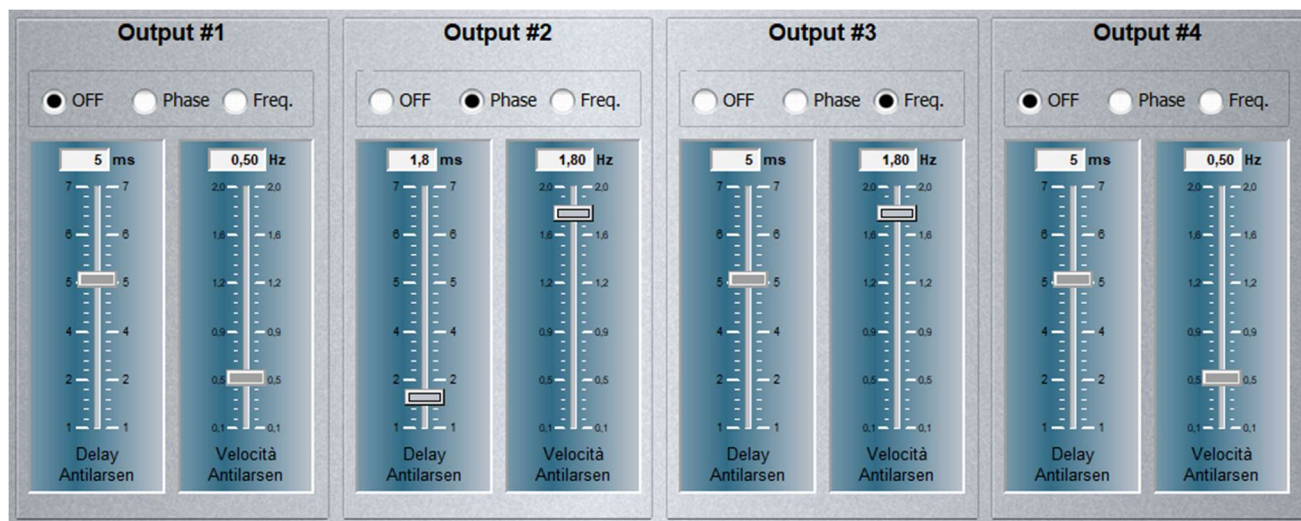
It is possible to select the Frequency (Freq.), the merit factor (Q) that determines the slope and the type of the filter, i.e. low-pass (LP) – high-pass (HP) – parametric (EQ)

By choosing a low-pass or a high-pass the merit factor is automatically raised to 0,5

By choosing the parametric, the filter will have a slope directly proportional to the Q merit factor. A very low Q will give a narrow filter, vice versa it will give a wide filter



ANTILARSEN



From this section it is possible to enable an antilarsen for each output.

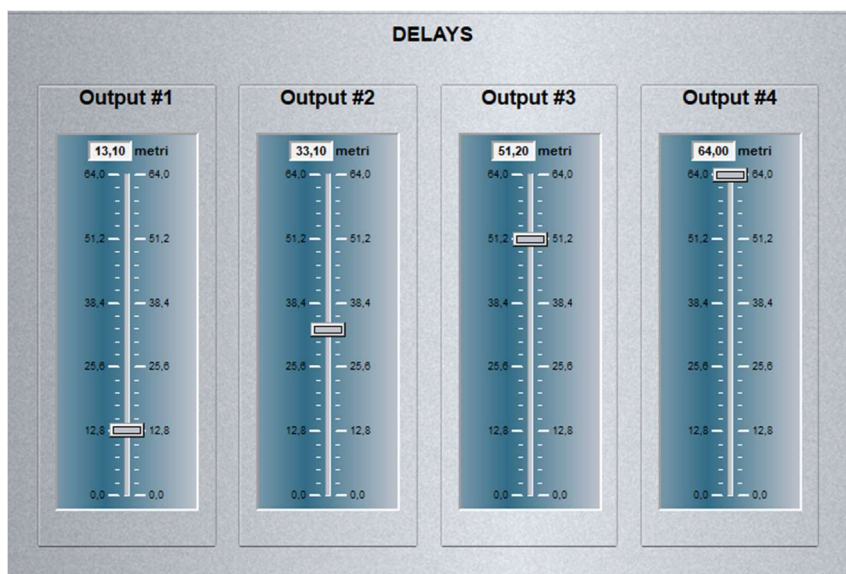
Phase type antilarsen bases its functioning on phase modulation managed by an algorithm developed by Fulgor Service

Freq type antilarsen (Frequency) bases its functioning on the frequency shift managed by an algorithm developed by Fulgor Service, which uses the principle of traditional analog antilarsen

👉 With Phase antilarsen it is suggested to set the "Delay Antilarsen" to 1,8ms. and the "Velocità (speed) Antilarsen" to 1,80Hz

👉 With Freq antilarsen Freq the "Delay Antilarsen" is locked and the "Velocità (speed) Antilarsen" should be adjust between 1 and 1,80Hz

DELAY

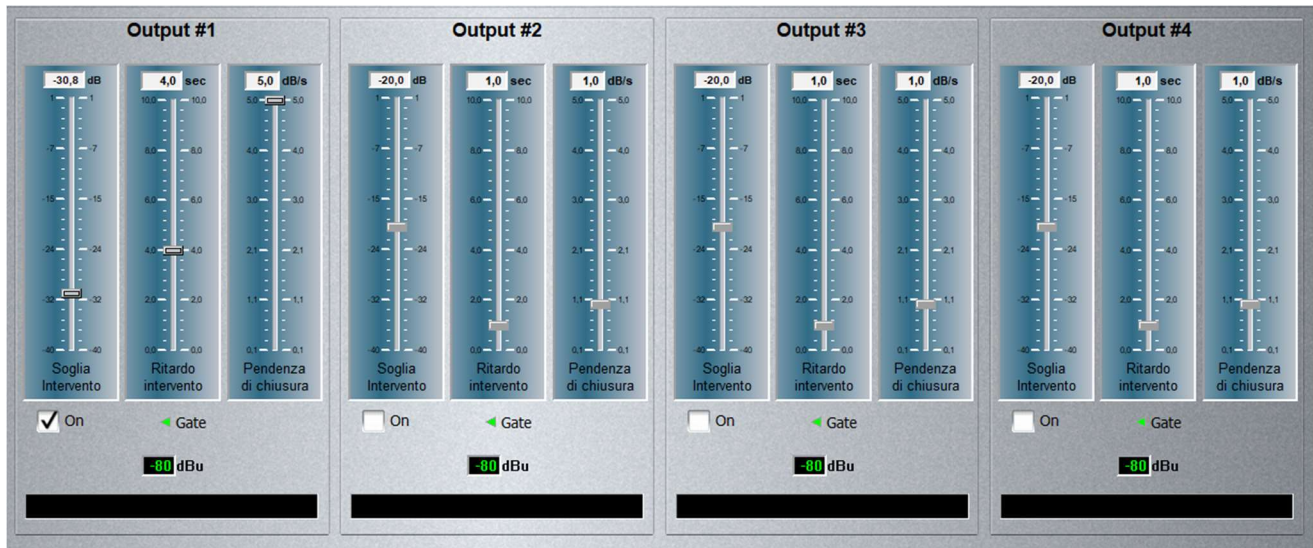


From this section it is possible to enable a delay for each output.

The delay is expressed in meters to facilitate the calculation (reference temperature 20°C)

👉 The maximum delay that can be set is 64 meters equal to approximately 186ms

NOISE GATE



From this section it is possible to enable a noise gate for each output by clicking on "on".

The adjustment parameters allow you to set the functioning minimum level, the delay in intervening and the "speed" with which it intervenes.

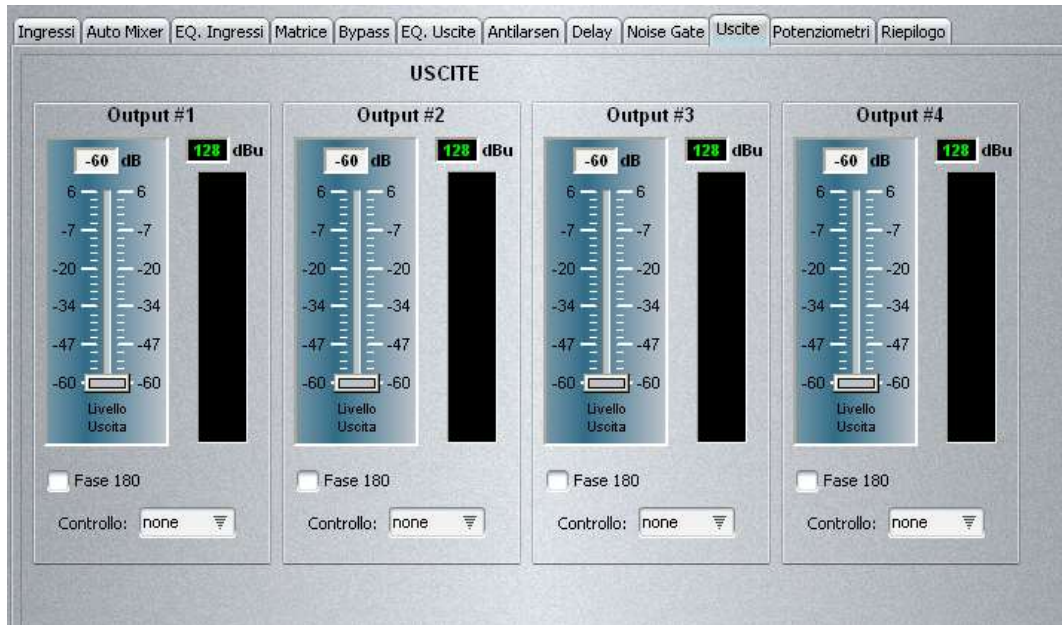
"Soglia Intervento": between -40dB and +1dB; the noise gate intervenes when it reaches or below the selected threshold

"Ritardo Intervento": between 0dB and 10dB; once the threshold has been reached, the noise gate waits for a time equal to the value selected before intervening

"Pendenza di Chiusura": between 0,1 and 5 expressed in dB/sec; once the threshold has been reached and the selected time has elapsed, the noise gate closes the output with a slope equal to the chosen one; this parameter can also be considered as closing speed since the higher it is, the faster the minimum level is reached.

- 👉 When the noise gate intervenes, the light next to the writing Gate changes color
- 👉 Under the adjustment sliders there is a VuMeter of the output

OUTPUTS



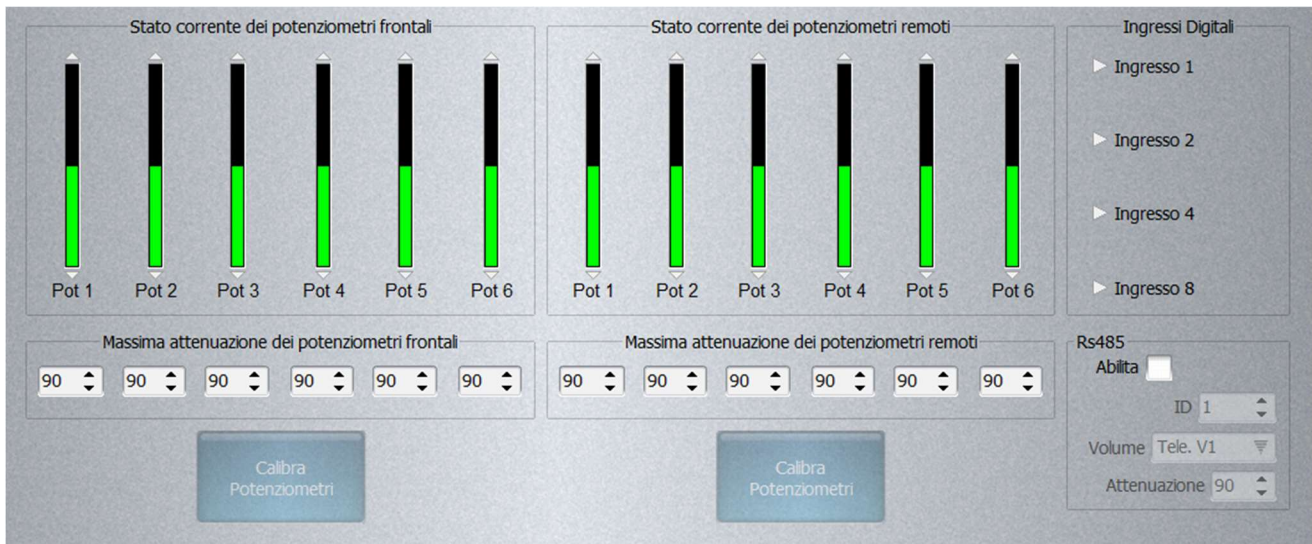
From this section it is possible to adjust the level of each output.

As for the inputs, it is possible to invert the phase (check-mark on "Fase 180") and decide, if necessary, which potentiometer they should be controlled from.

The level is adjustable between -60dB and +6dB

 Next to the slider is the VuMeter of the relevant output

POTENTIOMETERS




From this section it is possible to adjust the intervention level of each potentiometer both internal (front) and external (remote).


The level that can be set is between 1 and 90 and expressed in dB

The chosen level represents the maximum attenuation that the potentiometer brings to that input or output.

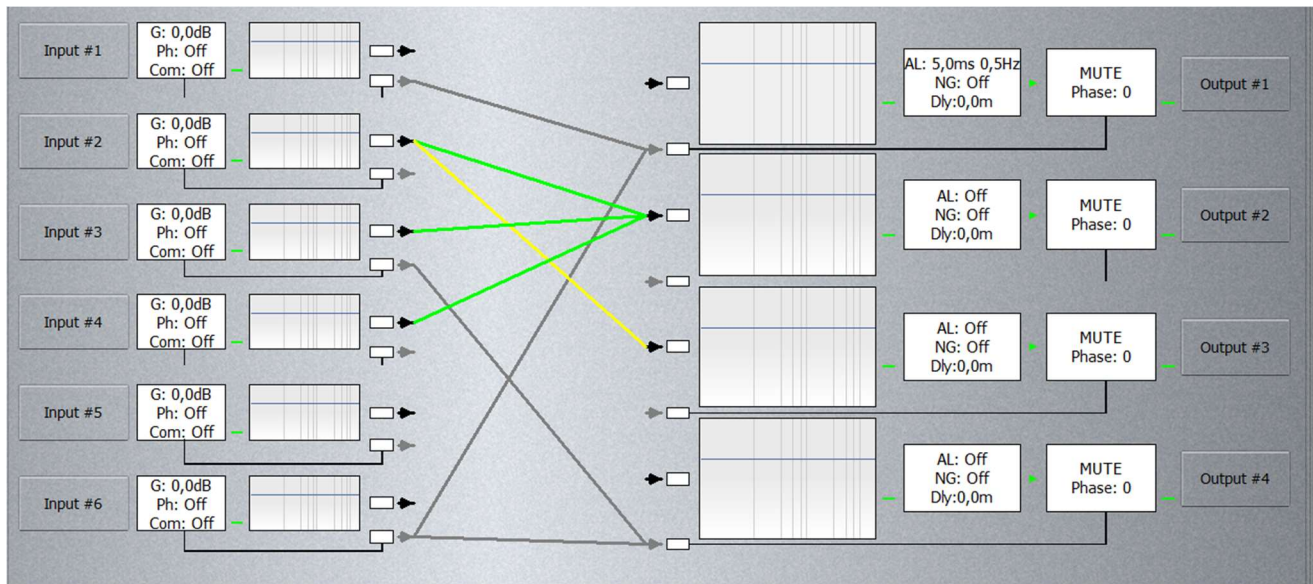
The window "Ingressi Digitali" is used to monitor, if it is installed, on which preset is the RP6 panel

The RS485 window is used to enable (check mark) the parameters of RS485 protocol

 You must calibrate the potentiometers by setting them to the maximum and clicking on the tab "Calibra Potenziometri"

 By enabling RS485 the RP6 panel will no longer work (binary preset switching)

RECAP



From this section it possible to control the flow of signals between inputs and outputs to get a global vision "at a glance"

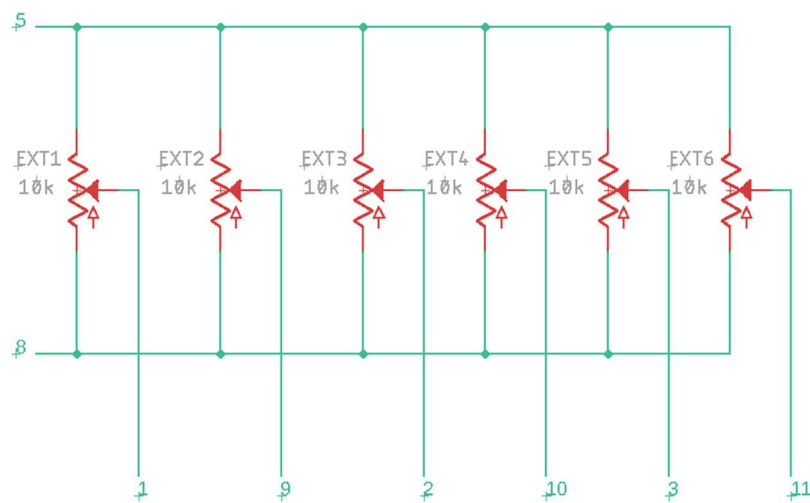
- 👉 The matrix connections are highlighted with the colors of respective output equalizers
- 👉 Bypass matrix connections are highlighted in gray color
- 👉 To exit click on ESC

REMOTE CONTROL




1	POT EXT 1	9	POT EXT 2
2	POT EXT 3	10	POT EXT 4
3	POT EXT 5	11	POT EXT 6
4	RS485 A	12	RS485 B
5	10 V	13	GND
6	PRESET 1	14	PRESET 2
7	PRESET 4	15	NC
8	GND		

EXTERNAL POTENTIOMETERS DIAGRAM



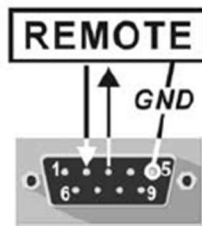
The preset control via RP6 takes place with binary logic on 3 contacts for a maximum, then, of 7 presets that can be recalled.

To recall a preset, the corresponding contact/s must be brought to a low level.

 If the contact is momentary, when the device is switched on, it is positioned on Preset 1 (PowerUp)

IF PIN 6	IF PIN 14	IF PIN 7	RECALL PRESET
0 (PIN 8)	-	-	1
-	0 (PIN 8)	-	2
0 (PIN 8)	0 (PIN 8)	-	3
-	-	0 (PIN 8)	4
0 (PIN 8)	-	0 (PIN 8)	5
-	0 (PIN 8)	0 (PIN 8)	6
0 (PIN 8)	0 (PIN 8)	0 (PIN 8)	7

PC CONNECTION



2	RxD
3	TxD
5	GND
7	
8	

Impostazioni:

Baud rate: 19200 Parità: nessuna
Data bits: 8 Stop bits: 1

Use an RS232 female-female cable with a DB9 connector.

- 👉 Use good quality USB-SERIAL adapters
- 👉 Use the latest version of Fulgor Service Software
- 👉 The default password is 123456

ACCESSORIES

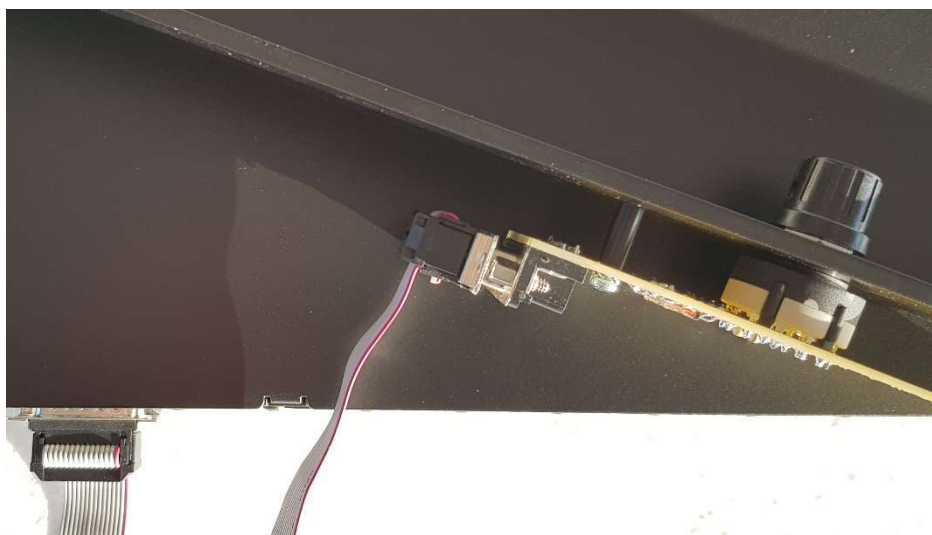
RP6



Connect RP6 using the falt cable supplied on the DB15 "Remote Control" socket

The RP6 panel supplied allows you to select the first 6 preset.

- 👉 For the first 3 preset there is a "standard" screen printing
- 👉 The preset LEDs light up simultaneously to those on the front panel
- 👉 The switch is mechanical, therefore the preset remains in the panel position even the device is restarted; without RP6 the device always is on Preset 1 on restart



M CONTROL (Optional)



Equipment included in M Control:

- Color Smart Display with touch screen on interface
- Metal cabinet
- Power supply
- DB15 connector

- ☞ Enable RS485 from the main window of the software!
- ☞ When RS485 is enabled, the binary preset control NO LONGER works
- ☞ When requesting the M Control, specify your needs(recallable preset number preset, volume control)
- ☞ If a pre-wired cable is required, request it when ordering
- ☞ The supplied power supply is capable of powering 2 panels (which will be connected via an RJ45-RJ45 cable)
- ☞ The interface circuit can be powered with any AC or DC power supply between 9V and 12V. If you use a DC power supply for the first display and you need another one for the second (distance between the panels such that the power supply on the second is insufficient) make sure that the polarities are the same on the first and the second
- ☞ To control the input and/or output volume it is necessary to choose that they are controlled by a virtual potentiometer (TeleV1...).

RS485 Note

Communication with the devices in question takes place on an asynchronous serial line configured as 8 data bits, 1 stop bit and no parity.

The baud rate is equal to 38400 bits/sec.

The electrical standard of the device is a duly terminated RS485 bus.

The bus can be up to 800 meters long.

The terminations are nothin more than a resistor of suitable value (100 ohm) placed at the beginning and at the end of the RS485 bus.

The pick-up points inside the bus (also called stubs) MUST NOT be longer than 50cm.

The following pins are used in the DB15 remote control connector:

Pin 4: Hot Pole (or signal A) of the RS485 serial line

Pin 12: Cold Pole (or signal B) of the RS485 serial line

Pin 15: If connected to pin 4, 100 ohm termination is performed.

The general format of a string for controlling the devices in question is shown below:

:ddmmccxxxx<CR>

Where:

dd - Address of the destination device in hexadecimal [1..1E]

mm - Address of the sending device in hexadecimal [1..1E]

cc - Command code, see below.

xxxx - Command detail, it may not even be there, if the command doesn't have it.

<CR> - is the carriage return character (13 decimal, 0x0D hexadecimal or \n).

PRESET CHANGE

To select the preset 2, use the string :0102CP01 and the carriage return character.

01 is the target device address, in this case M6, the number that identifies the destination device can be changed in the appropriate box in the potentiometers window.

02 is the sending device address.

CP is the code needed to change preset

01 is the selected preset, in this case 2.

And finally you will need a return character (13 decimal, 0x0D hexadecimal or \n).

EXAMPLE:

string	Preset	answer
:0102CP00\n	1	:0201CP00cr
:0102CP0F\n	16	:0201CP0Fcr
:0102CP1D\n	30	:0201CP1Dcr

VOLUME CHANGE

To select and change the volume 2 use the string :0102CV0180 and the carriage return character 01 is the target device address, in this case M6, the number that identifies the destination device can be changed in the appropriate box in the potentiometers window.

02 is the sending device address.

CV is the code needed to change volume

01 is the selected volume, in this case il Tele. V2

80 is the medium volume (128 decimal).

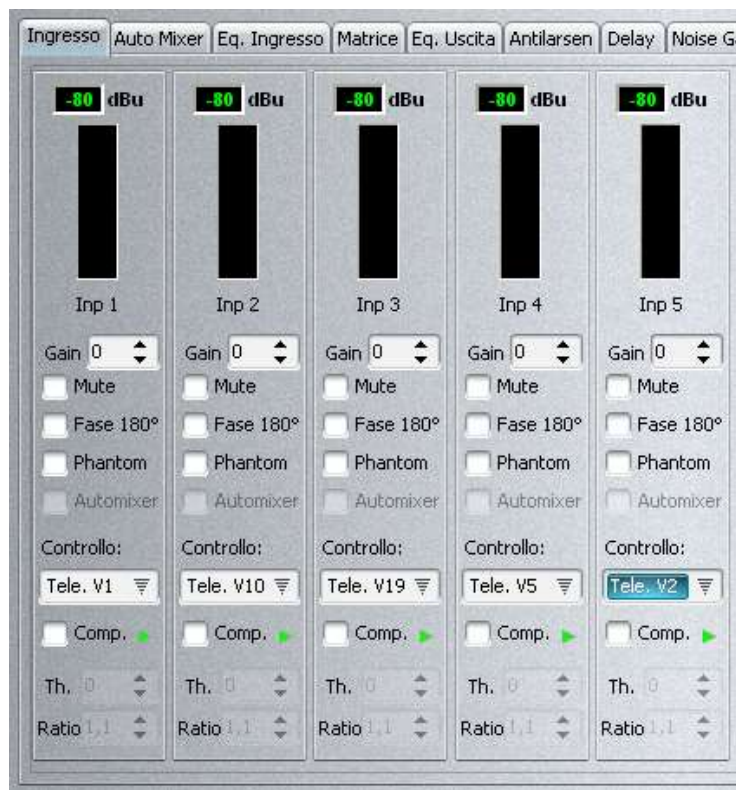
And finally you will need a return character (13 decimal or 0x0D hexadecimal).

In this case we have set the volume of Tele. V2 in half exact.

EXAMPLE:

string	Potentiometer	answer
:0102CV0180\n	Tele. V2, volume 128 dec.	:0201CV0180cr
:0102CV0DFF\n	Tele. V15, volume 255 dec	:0201CV0DFFcr
:0102CV13B5\n	Tele. V20 ,volume 181 dec	:0201CV13B5cr

As shown in the following image, input 5 will undergo the volume change since the Tele. V2 is selected in the "Controllo" field.



Note: in all strings it is necessary to use hexadecimal values (except the carriage return character).

The volume value can vary from the minimum value 00 (0 decimal) to the maximum value FF (255 decimal)

WARRANTY CERTIFICATE

Dear Customer,

We are pleased to inform you that it has been transposed into Italian law, through Legislative Decree no. 24 of 2 February 2002, a Community directive on sales and consumer protection.

This Directive makes a distinction between consumer goods for private use and those used exclusively in the professional field.

In particular, the new standard applies only to consumer goods for private use, and consequently consumer goods used in the course of their professional or business activities will be guaranteed according to the normal general sales rules provided by the civil code.

In both cases, FULGOR SERVICE, by virtue of the quality of its products, applies a 24 months warranty period.

Warranty management

As Directive 1999/44 / EC represents a high level of consumer protection, the decree governs certain aspects of sales contracts concluded between **the consumer and the seller** and guarantees relating to the consumer goods sold.

For the purpose of the Legislative Decree, it is understood that:

For Consumers any natural person who purchases consumer goods for use solely in the private sector and hence outside his or her professional or business activity;

For Seller, any natural or legal person, whether public or private, who uses one of the above-mentioned contracts in the course of his or her business or professional activity;

For the sake of consumption any mobile goods, with express exclusion of the forced sale of goods; Water and gas, when not packaged for sale in a volumetric volume or in a specified quantity.

Consumers are entitled to rights under applicable national legislation governing the sale of consumer goods. The warranty does not affect these rights.

The warranty is valid in all EU Member States.

According to the new legislation, any claim by the consumer to the warranty must be submitted to the retailer and / or point of sale at which the product was purchased.

FULGOR SERVICE has also set up a toll-free number 800-804067. By calling this number we will be able to collect your reports regarding warranty issues and possibly arrange direct return / repair methods.

The number is active from Monday to Friday (excluding holidays), from 8am to 12.30pm and from 14am to 5pm in the winter months and from 7.30am to 12.30pm during the summer months (July and August)

GUARANTEE CLAUSES

The product is guaranteed for a period of 24 (twenty-four) months from the date of purchase. Warranty means repairing or replacing equipment that is defective in the sales contract (and generally product information), the warranty is free of charge and excludes shipping costs for the Consumer.

The warranty is valid only if this warranty certificate, completed in all its parts by the buyer and accompanied by a valid proof of purchase (copy of the invoice or tax receipt for the consumer), is presented to the Of the request for intervention. The non-compliant product must be returned to the original packaging, complete with all accessories.

The serial number on the product must not be erased or made unreadable, since the warranty is invalid.

The warranty does not apply in the case of damage caused by improper use, use or installation that does not comply with the instructions given, tampering, product or serial numbering, accidental or negligent damage to the buyer with particular reference to the outside parts. It also does not apply in case of faults due to connections of the device at voltages other than those indicated or sudden changes in the mains voltage to which the appliance is connected, as well as in case of faults caused by liquid infiltration, fire, discharges Inductive / electrostatic or discharge caused by lightning, overvoltages or other phenomena outside the device.

Warranty includes parts subject to wear after use, batteries when supplied, connectors and connectors, connectors, external parts and plastic supports, which do not have manufacturing defects.

They are excluded from the warranty: periodic checks, software updates, settings, maintenance.

After the warranty period has expired, the assistance will be charged by charging the replaced parts, labor and transport costs, according to the rates in force.

The guarantee is provided by: FULGOR SERVICE snc., Via Caduti del lavoro 58, 19021 Arcola - La Spezia.

For each dispute, the Forum of La Spezia will have sole jurisdiction.



CONSUMER DATA

Fill in every part and join the product. In the case of warranty, please always enclose a copy of the valid **proof of purchase** and send the product to the following address: FULGOR SERVICE snc., Via Caduti del lavoro 58, 19021 Arcola La Spezia or fax 01 87 952326.

Surname _____	Name _____
Parish/Religious Institute/other _____	
Street _____	
Zip Code _____	City _____ Prov _____
Tax code and VAT _____	

PRODUCT DATA

MODEL _____	SERIAL NUMBER _____	FREQ.MHz _____
DATE OF PURCHASE __ / __ / __ N. INVOICE _____ RESELLER _____		

Information pursuant to Legislative Decree no. 196 of 2003 ("Personal Data Protection Code")
Dear Customer,

We inform you that FULGOR SERVICE, pursuant to art. 13 of Legislative Decree 196/2003, will process your data provided by you in compliance with the legislation on the protection of the processing of personal data. The disclosure of the data is optional but any refusal to provide them will result in the impossibility of performing the obligations arising out of the repair service of which you are a party (Article 13, paragraph 1, letter C, Legislative Decree 196 of 2003). The personal data you provide is collected by electronic means and processed, including by means of electronic means, directly and / or through delegated third parties (repair and delivery company) for the following purposes:

- purposes related to the execution of the service and the management of the repair and return of the products sent for repair.

In any case, your data will not be disclosed (if not to a repair or redemption company) or sold to third parties. Within FULGOR SERVICE the data can only be acquired by persons specifically assigned to the Information Systems, Administration and Accounting, Customer Service departments.

According to art. 7 of Legislative Decree 196/2003 You have the right, at any time, to obtain from the Data Manager the information on the processing of your data, the manner and purpose and the logic applied to it.

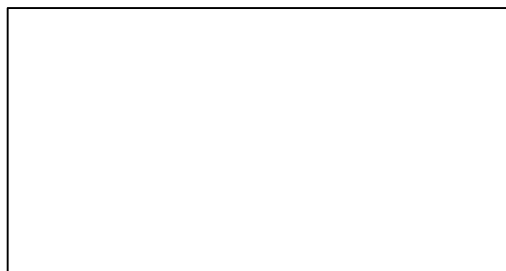


The Data Controller is the legal representative of FULGOR SERVICE snc., Via Caduti del lavoro 58, 19021 Arcola - La Spezia. www.fulgorservice.it

Date _____

signature_____

Stamp and signature of the reseller




The symbol of a jar of a trash trimmed by a cross indicates that the product should not be disposed of with other household waste at the end of the life cycle, but be collected separately. In order to avoid any damage to the environment and human health due to the presence of hazardous substances, you are encouraged to give such waste to the distributor / retailer when purchasing a new product or by handing over to designated collection centers By local authorities. Penalties are provided for abusive disposal of these products.