

GENIO MOBILE

PROFESSIONAL
LED COLOURCHANGER

- GB
- I
- D
- F
- E
- P



Vi ringraziamo per aver acquistato un prodotto SGM.

Per ottenere i migliori risultati dal suo utilizzo, vi preghiamo di leggere attentamente questo manuale di istruzioni. Al suo interno troverete le informazioni tecniche e le specifiche d'uso del prodotto. Nelle pagine in appendice troverete inoltre schemi e diagrammi destinati all'assistenza tecnica.

Nell'ottica di qualità SGM, è possibile che l'Azienda apporti migliorie ai suoi prodotti, per cui consigliamo di allegare il manuale al prodotto stesso e di trascrivere il numero di serie nell'ultima pagina della copertina: utilizzando il presente manuale con un apparecchio fabbricato prima o dopo la sua stampa, potrebbero esserci discrepanze fra l'apparecchio e quanto riportato nel Manuel stesso.



Thank you for buying an SGM product.

To obtain the best results, please carefully read this instruction manual in which you will find technical information and specifications for use of the product, as well as diagrams for technical service in the appendix.

In light of SGM quality, the company may make improvements to its products. Therefore, we recommend that the manual be attached to the product and the serial number copied onto the back cover: using this manual with equipment manufactured before or after its printing, might show discrepancies between the equipment and the information listed in the manual.

Wir danken Ihnen für den Kauf eines Produkts von SGM.

Zur Erzielung der besten Resultate bei der Benutzung bitten wir Sie, die vorliegende Bedienungsanleitung aufmerksam zu lesen. Darin finden Sie die technischen Informationen sowie die Anweisungen für die Benutzung des Produkts. Im Anhang befinden sich außerdem die Schaltpläne und Diagramme für den Kundendienst.

SGM behält sich das Recht vor, Verbesserungen an den Produkten vorzunehmen und deshalb empfehlen wir, die Bedienungsanleitung dem Produkt stets beizulegen und die Seriennummer auf der letzten Seite des Umschlages einzutragen. Bei der Verwendung dieses Handbuchs mit einem Gerät, das vor oder nach der Drucklegung produziert wurde, können sich Abweichungen zwischen Gerät und dem Inhalt des Handbuchs ergeben.

Nous vous remercions d'avoir acheté un produit SGM.

Pour optimiser son utilisation, nous vous prions de bien vouloir lire attentivement cette notice où vous trouverez les informations techniques et les caractéristiques d'utilisation du produit. En outre, vous trouverez également, dans les pages en appendice, les schémas et les diagrammes concernant l'assistance technique.

Le concept de qualité SGM, lui permet d'améliorer continuellement ses produits et c'est pourquoi nous vous conseillons de joindre la notice au produit et d'inscrire le numéro de série sur la page de couverture. En effet, si on l'utilise avec un appareil fabriqué avant ou après son impression, il peut y avoir des différences entre l'appareil et ce qui figure dans la notice.

Les estamos sumamente agradecidos por haber elegido un producto SGM.

Para obtener los mejores resultados, les rogamos leer detenidamente el presente manual de instrucciones. El mismo contiene las informaciones técnicas y las indicaciones de uso del producto. Las páginas anexas contienen además los esquemas y diagramas necesarios para la asistencia técnica.

Para mantener la calidad SGM, es posible que la Empresa aporte mejoras sus productos, por ello les aconsejamos conservar el manual junto con el aparato correspondiente y escribir su número de serie en la última página del manual; si en cambio se utiliza el presente manual con un aparato frabricado antes o después de su impresión, es probable que existan discrepancias entre el aparato y las indicaciones del mismo.

Table of Contents

SYMBOLS USED.....	3
CHANGES TO THIS MANUAL	4
GENERAL WARNINGS	4
GENERAL WARRANTY CONDITIONS	5
1 INTRODUCTION.....	6
1.1 MAIN FEATURES	6
LEDS	6
LENSES.....	6
FUNCTION.....	6
CONTROL SIGNALS.....	6
MICRO COMPUTER.....	7
MOTORS	7
1.2 GENIO MOBILE FUNCTIONS	8
USITT DMX 512.....	8
COOLING	8
COLOUR.....	8
LEDS	8
DIMMER.....	8
SHUTTER.....	8
MACRO	8
MEMORIES	8
DISPLAY.....	8
SOFTWARE UPDATE	9
REMOTE INFRARED CONTROL.....	9
1.3 MECHANICAL SPECIFICATIONS	10
1.4 ELECTRICAL SPECIFICATIONS.....	11
USER INTERFACE.....	11
LENSES.....	11
LEDS	11
1.5 OPTIONAL ACCERORIES	11
2 INSTALLATION	12
2.1 UNPACKING THE FIXTURE	12
2.2 INSTALLING THE FIXTURE ON A SUPPORT STRUCTURE	13
2.3 POSITIONING THE FIXTURE	13
2.4 INSTALLING THE METAL HANDLE FIXING PLATE.....	14
2.5 INSTALLING VIA THE FAST-LOCK "G" CLAMPS	15
2.6 INSTALLING VIA THE "ALISCAF" CLAMP.....	16
2.7 WALL MOUNTING.....	17
2.8 INSTALLING OPTIONAL LENSES.....	18
REMOVING / INSTALLING THE FRONT LENS PLATE.....	18
2.9 POWER CORD CONSTRUCTION	20
2.10 CONSTRUCTION OF THE SIGNAL CABLE	21
2.11 SIGNAL CABLE WIRING CONNECTIONS.....	21
2.12 CONSTRUCTION OF THE DMX TERMINATION.....	22
2.13 INFRARED REMOTE CONTROL.....	23
2.14 RS-232 CONNECTION	23
2.15 UPGRADING FIRMWARE	24
3 MICRO COMPUTER CONTROL	25
3.1 MICROCOMPUTER "CONTROL"	25
3.2 NAVIGATING THE MENU	25
3.3 STRUCTURE OF THE MENU.....	26
3.4 ADDRESSING	28

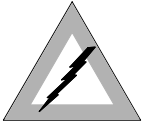
3.5	PAN MOVEMENT	28
3.6	PAN MINIMUM POSITION	28
3.7	PAN MAXIMUM POSITION	29
3.8	TILT MOVEMENT	29
3.9	TILT MINIMUM POSITION	29
3.10	TILT MAXIMUM POSITION	29
3.11	SWAP	29
3.12	COLOR BALANCE.....	30
3.13	BALANCE	30
3.14	ELAPSED TIME METER.....	30
3.15	INPUT SIGNAL	31
3.16	PAN AND TILT CONTROL.....	31
3.17	DISPLAY BRIGHTNESS.....	31
3.18	DMX DELAY	31
3.19	DAY OF THE WEEK.....	31
3.20	TIME.....	32
3.21	SETTING DEFAULT PARAMETERS	32
3.22	RESETTING DEFAULT PARAMETERS	32
3.23	TEST FUNCTION	33
3.24	HEAD AND MOTORS CARD TEMPERATURE	33
3.25	CONFIGURING AS MASTER.....	33
3.26	CONFIGURING SLAVES	33
3.27	ENABLING-DISABLING THE SCHEDULER	34
3.28	INTERNAL PROGRAM PLAYBACK	34
3.29	PROGRAMMER.....	34
3.30	SCHEDULER.....	34
3.31	ERROR MESSAGE.....	35
4	CONTROL CHANNELS	36
4.1	CONTROLLING THE FIXTURE VIA DMX.....	36
	DIMMER CHANNEL CH 2	36
	RED CHANNEL CH 3	36
	GREEN CHANNEL CH 4	36
	BLUE CHANNEL CH 5.....	36
	STROBE CHANNEL CH 1.....	37
	MACRO CHANNEL CH 7.....	37
	COLOUR MODE CHANNEL CH 8	37
	CTC (COLOUR TEMPERATURE CORRECTION) CHANNEL CH 6	37
	MSPEED (MOVEMENT SPEED) CHANNEL CH 13	38
5	OPERATING THE FIXTURE	40
5.1	WHITE BALANCING	40
5.2	COLOUR TEMPERATURE CONTROL (CTC CHANNEL)	40
5.3	INFRARED (IR) USE.....	40
5.4	STAND ALONE PROGRAMMING	41
5.5	PROGAMMING GENIO MOBILE.....	41

Symbols used

This manual uses graphic symbols to emphasize any hazards during the operation work described.



THIS SYMBOL INDICATES A GENERAL HAZARD



THIS SYMBOL INDICATES ELECTRIC SHOCK RISK



THIS SYMBOL INDICATES A HOT SURFACE



THIS SYMBOL MEANS "DO NOT PLACE THE UNIT ON INFLAMMABLE PARTS OR MATERIAL"

Changes to this manual

SGM has an on-going product development policy, so the information printed in this manual may not be completely up to date.

If any doubts arise regarding the topics covered in this manual or should any further help be required, our online services (internet-server www.sgm.it) are available 24 hours a day. In the FAQ section of the technical assistance zone, answers can be found to numerous common queries: fixtures, firmware and manuals can also be downloaded whenever required.

General Warnings

Read the instructions in this handbook carefully, as they give important information regarding safety during installation, use and maintenance.

Be sure to keep this instructions manual with the fixture, in order to consult it in the future. If the fixture is sold or given to another operator, make certain he or she also receives the manual, to be able to read about its operation and follow the relative instructions.



- THIS UNIT IS NOT FOR HOME USE, **ONLY PROFESSIONAL APPLICATIONS.**
- AFTER HAVING REMOVED THE PACKAGING, CHECK THAT THE FIXTURE IS NOT DAMAGED IN ANY WAY. IF IN DOUBT , DON'T USE IT AND CONTACT AN AUTHORIZED SGM TECHNICAL SERVICE CENTRE.
- PACKAGING MATERIAL (PLASTIC BAGS, POLYSTIRENE FOAM, NAILS, ETC) MUST NOT BE LEFT WITHIN CHILDREN'S REACH AS IT CAN BE DANGEROUS.
- THIS FIXTURE MUST ONLY BE OPERATED BY ADULTS. DO NOT ALLOW CHILDREN TO TAMPER OR PLAY WITH IT.
- ELECTRICAL WORK NECESSARY FOR INSTALLING THE FIXTURE MUST BE CARRIED OUT BY A QUALIFIED ELECTRICIAN OR EXPERIENCED PERSON. (CAREFULLY READING THIS MANUAL).
- NEVER USE THE FIXTURE UNDER THE FOLLOWING CONDITIONS:
 - IN PLACES SUBJECT TO EXCESSIVE HUMIDITY
 - IN PLACES SUBJECT TO VIBRATIONS OR DUMPS
 - IN PLACES WITH A TEMPERATURE OVER 45° OR LOWER THAN 2°C
- PROTECT THE FIXTURE FROM EXCESSIVE DRYNESS OR HUMIDITY (IDEAL CONDITIONS ARE BETWEEN 35 AND L'80%).
- DO NOT DISMANTLE OR MODIFY THE FIXTURE.
- MAKE CERTAIN THAT NO INFLAMMABLE LIQUIDS, WATER OR METAL OBJECTS ENTER THE FIXTURE.
- SHOULD ANY LIQUID BE SPILLED ON THE FIXTURE, DISCONNECT THE POWER SUPPLY FROM THE FIXTURE IMMEDIATELY.
- IN THE EVENT OF SERIOUS OPERATING PROBLEMS, STOP USING THE FIXTURE IMMEDIATELY AND EITHER CONTACT THE NEAREST SGM SALES POINT FOR A CHECK OR CONTACT THE MANUFACTURER DIRECTLY.
- WAIT AT LEAST 30 MINUTES FROM THE FIXTURE'S POWER OFF BEFORE OPENING THE COVER.
- NEVER TRY TO REPAIR THE FIXTURE YOURSELF. REPAIRS BY UNQUELIFIED PEOPLE COULD CAUSE DAMAGES OR FAULTY OPERATIONS. CONTACT YOUR NEAREST AUTHORIZED SERVICE CENTRE.
- WHEN CARRYING OUT ANY WORK, ALWAYS COMPLY SCRUPULOUSLY WITH ALL THE NORMS (PARTICULARLY REGARDING SAFETY) CURRENTLY IN FORCE IN THE COUNTRY IN WHICH THE FIXTURE'S BEING USED.
- DO NOT PLACE THE UNIT ON INFLAMMABLE PARTS OR MATERIAL.

ALWAYS INSIST ON ORIGINAL SPARE PARTS BEING FITTED

General Warranty Conditions

- This unit is guaranteed for 24 months from the date of purchase against manufacturing material defects.
- Breakdown caused by carelessness and improper use is excluded.
- The guarantee is no longer valid if the unit has been tampered with or repaired by unauthorized personnel.
- Replacement of the fixture is not foreseen by the guarantee.
- External parts, knobs, switches, removable parts and lamps are excluded from the guarantee.
- Transport costs and related risks are borne by the fixture's owner.
- The guarantee is valid to all effects only on presentation of the guarantee certificate to the manufacturer or to the nearest SGM technical assistance centre.
- Always quote the unit's serial number and model when contacting your reseller for information or assistance.

Protect the environment: don't throw packing material into your garbage can return it to your SGM retailer or take it to the nearest special waste collection point.

1 INTRODUCTION

1.1 Main Features

Compact, agile and able to ensure even, perfectly controllable wash lighting generated by **16 high power Luxeon LEDs**.

All this is offered by **SGM's Genio Mobile**, a reliable high-tech colour changing fixture with features that make it ideal for applications in buildings, museums, art galleries and shopping centres.

Thanks to its **motorized Pan and Tilt** and to a protection rate **IP65**, Genio Mobile is also a practical flexible unit, so indispensable for theatre and TV lighting professionals.

LEDS

Genio Mobile fixtures use LED (Light Emitted Diode) technology as a light source. A series of LED points mounted on a matrix enables to generate an evenly distributed light beam, suitable for illuminating large areas. The three types of LED (Red, Green and Blue) that make up the matrix enable to realize and control any colour of light beam, with perfectly balanced colour at all times.

LENSES

Each Genio Mobile LED is fitted with an interchangeable high efficiency lens. The lens matrices available enable to project light beams with the following projection angles:

- 8 °
- 25 °

FUNCTION

- RGB colour mixing
- Linear Dimmer
- Adjustable strobe effects
- Colour rainbow effect on pre-programmed Macros
- Motorized Pan and Tilt movement
- Pan 540°
- Tilt 270°
- Setting via on-board microcomputer viewable on display
- Adjustable display brightness
- LED power reduction in the event of overheating
- Elapsed time meter for each colour channel Red, Green, Blue
- General fixture operating time meter
- Master/Slave capabilities

CONTROL SIGNALS

- DMX 512 or RS 232 input signal
- Stand-alone operation with built-in programming
- Independent day to day control of the on-board programs on a weekly basis
- Independent operation of systems with up to 30 fixtures, via Master – Slave links
- Infrared (IR) remote controlled

MICRO COMPUTER

- Fixture personalization according to the type of installation
- Test functions for each effect
- Fixture addressing via the unit's display
- Access menu for on-board programming functions
- Menus for access to calendar and event scheduling programming functions
- Firmware upgrade through DMX

MOTORS

- 2 stepper motors for the movements of PAN and TILT that absorb 12 watt (6 watt each)

1.2 Genio Mobile Functions

USITT DMX 512

All the Genio Mobile functions can be controlled via USITT standard DMX 512 serial digital signals, or via RS 232 serial signals. Genio Mobile generates a proprietary data transmission protocol when systems run directly by on-board programming of a Master-Slave nature are used. Genio Mobile requires six channels to control all its attributes. All parameters are controlled and programmed by an on-board MOTOROLA DSP 56F 803 processor.

COOLING

The radiator on the rear panel of the LED matrix ensures correct convection cooling. A self-adjusting internal temperature system ensures continuous operation even in critical thermal conditions.

COLOUR

Three groups of Red, Green and Blue LEDs make up the matrix that generates Genio Mobile's light beam. Their layout in the matrix ensures that the emitted light can be controlled as far as Colour, Intensity and Temperature are concerned. Genio Mobile's colour generation system is therefore based on the concept of additive colour mixing, where the sum of the various intensities of Red, Green and Blue, (RGB) enables to create any other colour with the required tone or saturation.

LEDS

The source of the Genio consists in 3-Watt LUXEON LEDs, each generating a maximum luminosity of 80 lumen.

DIMMER

The electronic control of the luminous intensity of the LEDs ensures precise emission adjustment, without colour or colour temperature variation over the entire range from 0 to 100 %, in a regular uniform manner.

SHUTTER

The shutter control parameter ensures instant light beam opening and closing effects. The characteristics of the LEDs allow to obtain strobe effects with adjustable or random flash power and rate with exceptional precision and intensity, thanks to the lack of any mechanical form of beam blackout.

MACRO

The Macro parameter allows to select via DMX a series of preset on-board colour and dimmer (or combined) effects whenever they are required. Rainbow effects with different speeds and random or Colour-dimming and Color-strobe, can be enabled without having to be programmed beforehand.

MEMORIES

Comprehensive programming can be carried on-board the fixture, thus enabling playback in a fully stand-alone status without the aid of external DMX control. It's also possible to program playback times and modes in the space of 24 hours, with a 7-day repetitive cycle.

Complete stand-alone systems can be realized, with absolutely no external controls and up to 30 fixtures; with operating times and modes programmed and controlled using Master/Slave connections.

One Show made up of ten scenes can be programmed on each fixture.

DISPLAY

Genio Mobile has a 2 lines 16 characters display for user-friendly navigation through the fixture's setting, diagnosis and programming menus. Flip, Dimm (brightness) and ON/OFF functions are available to facilitate consultation and use.



SOFTWARE UPDATE

The fixture's software can be updated from a Personal Computer via RS 232 serial or USB connector cable. (not included) Updating allows to improve the fixture's performance through time. Genio Mobile software will be available on the SGM web site.

REMOTE INFRARED CONTROL

Genio Mobile can be controlled not only through the DMX 512 signal, widely used in the lighting entertainment field, but also through an easy Infrared remote controller able to handle all the functions available on the fixture.

The use of the Infrared remote controller finds its application in the architectural field such as shopping centers, malls, or museum where is not strictly necessary a DMX lighting desk to handle the fixtures and that can result difficult to understand to those operators not accustomed to such specific devices.

1.3 Mechanical specifications

Fixture made up of a twin body: Base + Head.

The base is made up of a die-cast unit containing the power supply, display, three buttons and two watertight cable glands for mains supply and DMX cables.

Genio mobile can be floor-mounted (or on any other flat surface) without fixing, remaining steady no matter what the angle of the head.

Concerning the truss or wall mounting applications, the fixture is supplied with an additional handle plate provided with fixing point either for wall mounting or clamps for trussing.

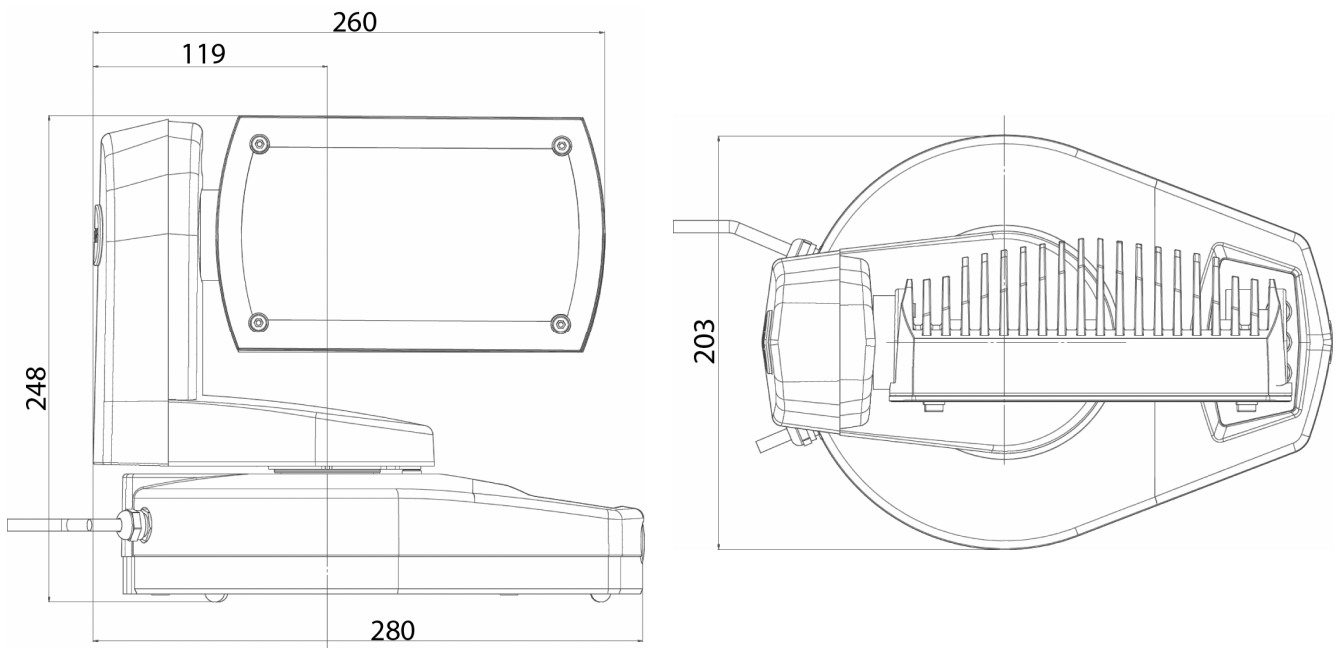
The head is made up of a radiator (in drawn aluminium), on which the LED matrix and lenses are fitted. The head can be moved in relation to the base: PAN 540° and TILT 270°.

Material resistant to weather and any acts of vandalism (shatter-proof glass)

PROTECTION RATE: IP65

WEIGHT: 5,3 Kg

DIMENSIONS:



1.4 Electrical specifications

- Luminous power: **65 Watt**
- Power absorbed: **90 Watt**
- Full-range PFC power supply (does not distort the mains power supply): **90-270V AC, 50-60 Hz**

USER INTERFACE

- 2 lines Display with 16 alphanumerical digits
- control panel with three buttons

LENSES

Lenses mounted on an interchangeable plate (all the lenses are in a single block) with various beam apertures:

- 10°
- 25°

LEDS

- 4 led Blue Luxeon 3 Watt
- 8 led Verde Luxeon 3 Watt
- 4 led Rosso Luxeon 3 Watt

1.5 Optional Accerrories

- Aliscaf Clamp
- Safety chain

2 INSTALLATION

2.1 Unpacking the fixture

During unpacking, make certain that all the necessary parts have been received and that the fixture has not been damaged during transport. Should there be any problems, contact the local authorized SGM distributor immediately.

Only the customer, in fact, can claim eventual damages in the fixture caused by the transportation.

- Genio Mobile fixture
- Warranty Label
- User manual
- Additional fixing handle plate
- 8° Lens Kit
- Safety Chain

DO NOT DESPERD THE PACKING ELEMENTS.

THE PACKING ELEMENTS (PLASTIC BAGS, FOAM, NAILS, ETC.), MUST NEVER BE LEFT NEAR CHILDREN, AS DANGEROUS. USE THE ORIGINAL PACKAGE IN CASE OF FIXTURE RETURN TO THE MANUFACTURER FOR REPAIR OR MAINTENANCE SERVICE, IT HAS BEEN SPECIFICALLY MADE TO PROTECT THE FIXTURE DURING THE TRANSPORT.

2.2 Installing the fixture on a support structure

Read the following safety information before proceeding with the installation of the fixture:



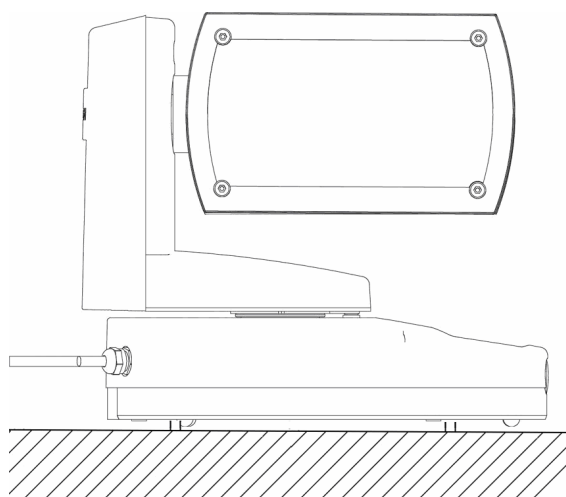
- ONLY FOR PROFESSIONAL APPLICATIONS.
- DO NOT PLACE THE UNIT NEAR SOURCES OF HEAT
- INSTALL THE FIXTURE IN A WELL VENTILATED PLACE.
- NEVER USE THE FIXTURE UNDER THE FOLLOWING CONDITIONS:
 - IN PLACES SUBJECT TO EXCESSIVE HUMIDITY
 - IN PLACES SUBJECT TO VIBRATIONS OR DUMPS
 - IN PLACES WITH A TEMPERATURE OVER 45° OR LOWER THAN 2°C



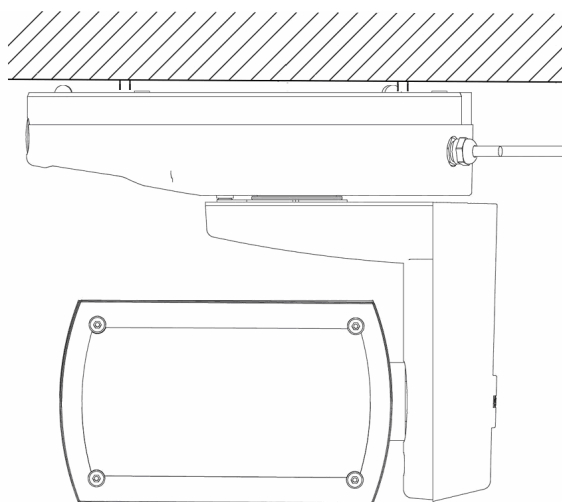
- DO NOT PLACE THE UNIT ON INFLAMMABLE PARTS OR MATERIAL.
- PROTECT THE UNIT FROM EXCESSIVE HUMIDITY (IDEAL VALUES ARE BETWEEN 35 AND 80%).
- AVOID INFLAMMABLE LIQUIDS, WATER OR METALLIC OBJECT ENTERING THE FIXTURE.

2.3 Positioning the fixture

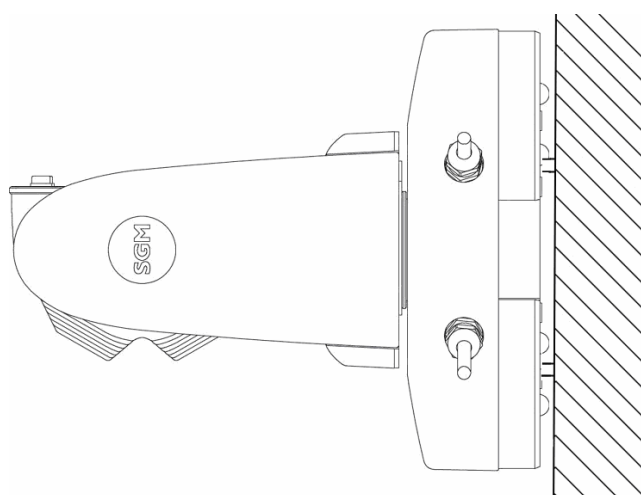
Can be installed in any position.



OK



OK

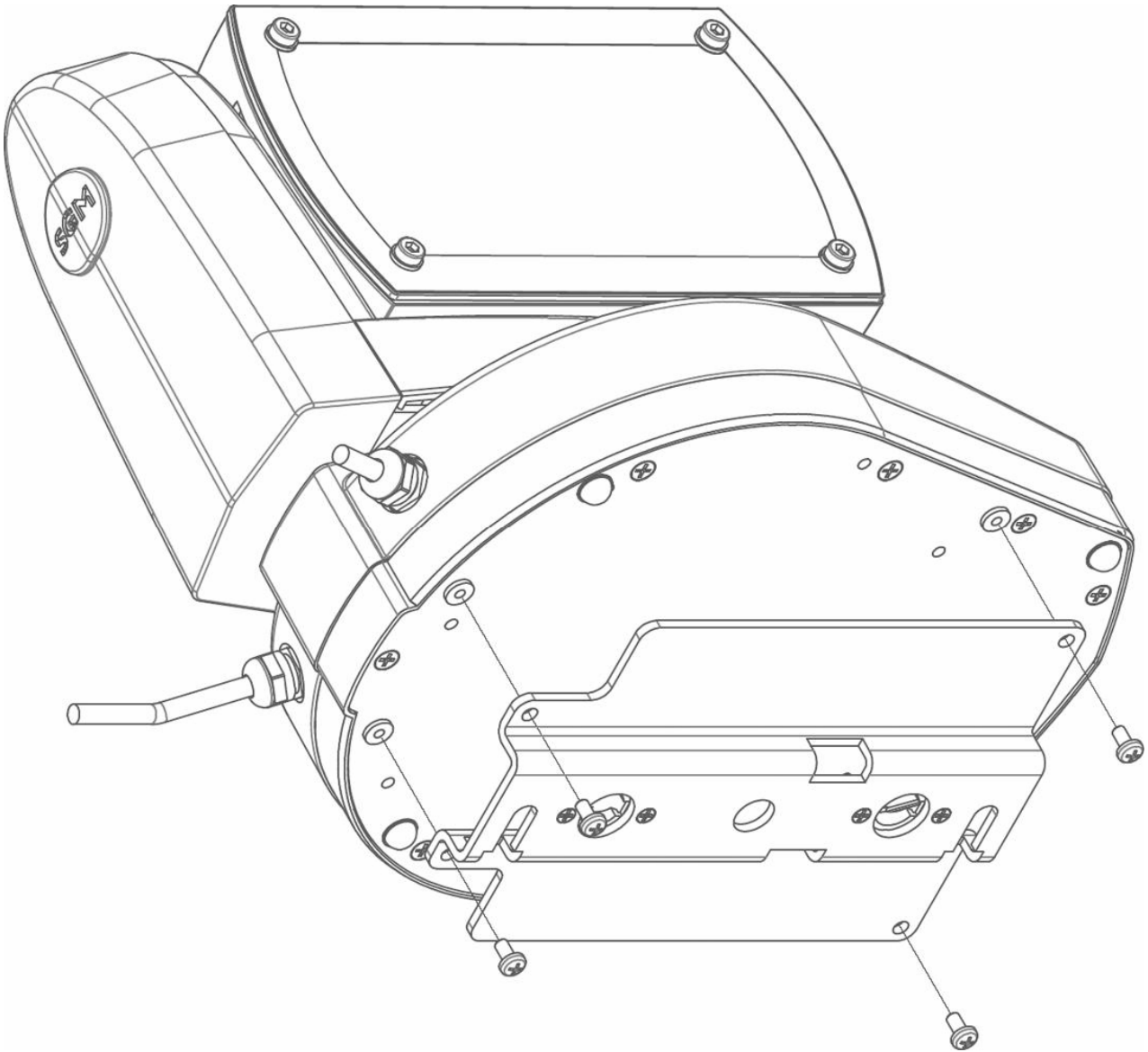


OK

2.4 Installing the bracket

Genio Mobile Mobile is an automated colour-changing fixture suitable for use in decorative/architectural and show lighting. The type of installation can therefore be varied according to its use.

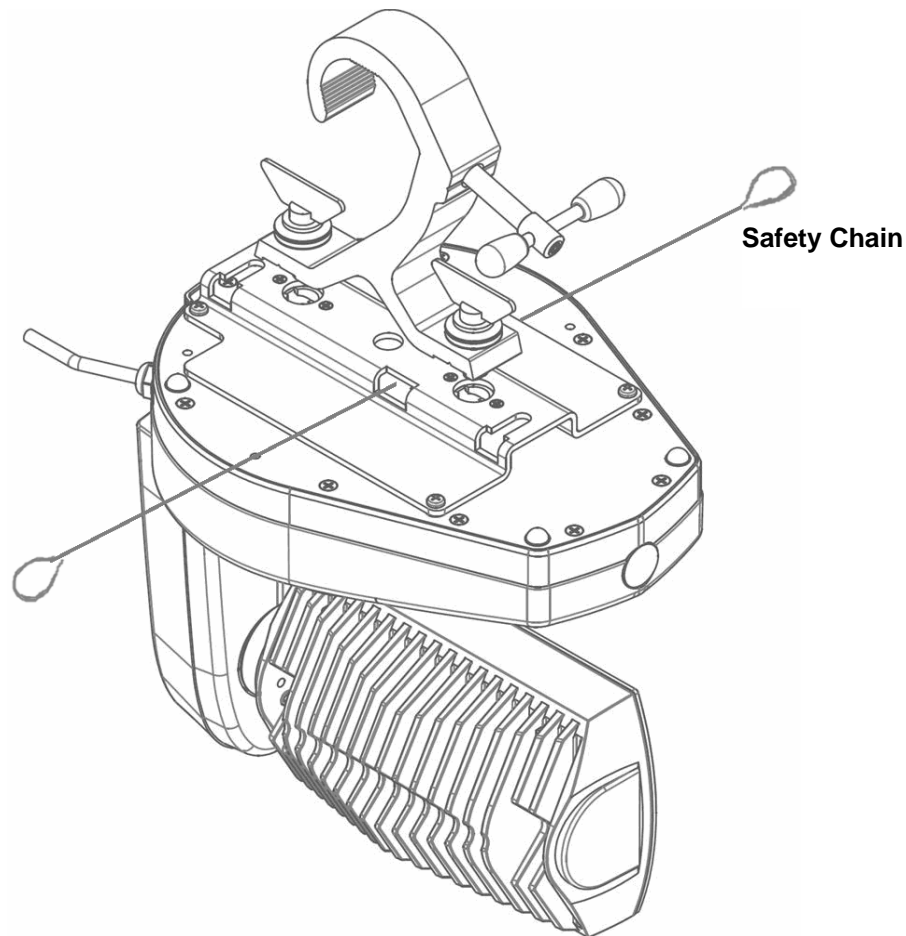
Genio Mobile can be permanently mounted, in the case of fixed installations, by means of a bracket supplied along with the fixture, where it will be possible to fit clamps or any other accessories used for trussing or wall mounting purposes.



1. The bracket can be installed on the bottom of the fixture by means of the 4 screws supplied as standard along with the fixture.

2.5 Installing via the Fast-Lock "G" clamps

The Genio Mobile can be hung on any support or truss structure using Fast-Lock "G" clamps. There are no indications against using any particular position for the clamps in the fixture's base.



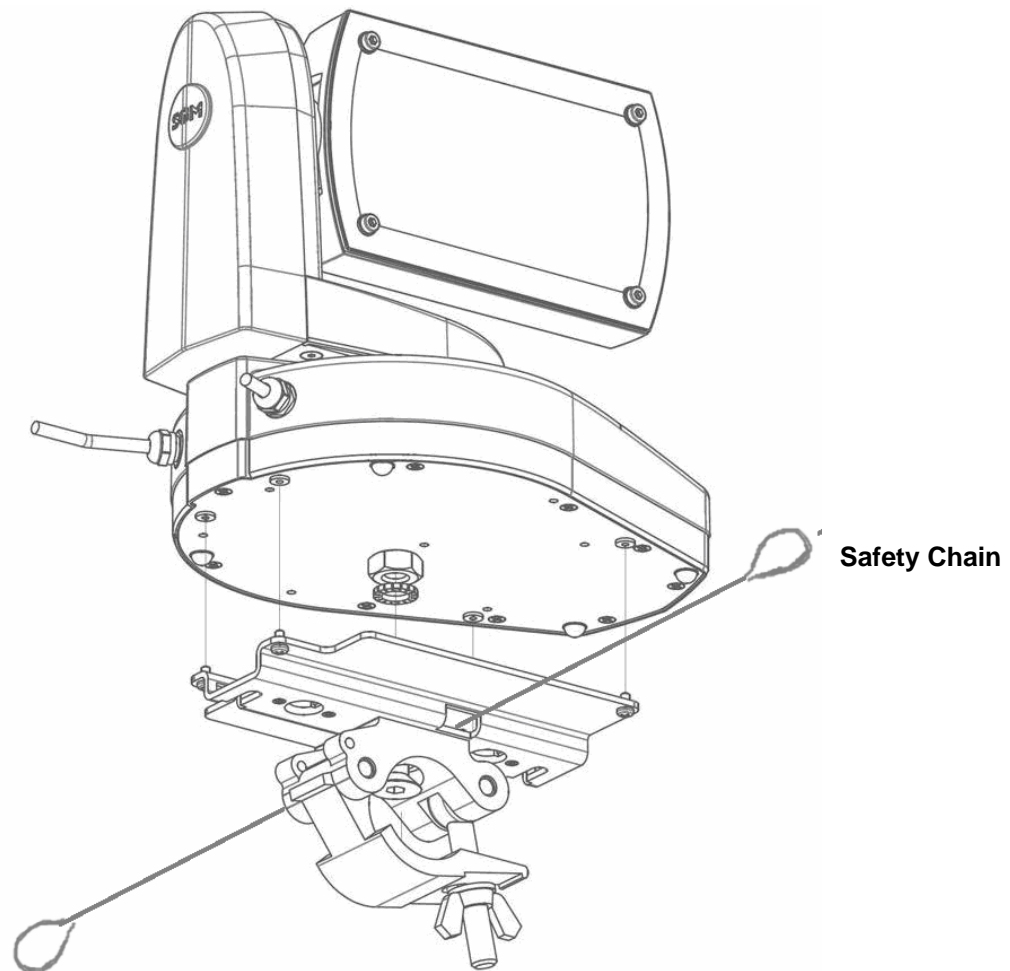
1. Insert the quick-lock fasteners of the Fast-Lock "G" clamp into the respective holes on the bracket.
2. Tighten the quick-lock fasteners fully clockwise.
3. Pull the safety-chain through the holes on the bottom of the base and over the trussing system or a safe fixation spot.
4. Insert the end in the carabine and tighten the safety screw.



The installation of the fixture has to be built and constructed in a way that it can hold 10 times the weight for 1 hour without any harming deformation.

- Overhead mounting requires extensive experience, including amongst others calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the device. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.
- The fixture should be installed outside areas where persons may reach it, walk by or be seated
- The installation must always be secured with a secondary safety attachment, e.g. an appropriate safety cable.
- Never stand directly below the device when mounting, removing or servicing the fixture.
- The operator has to make sure the safety relating and machine technical installations are approved by an expert before taking the device into operation for the first time.
- These installations have to be approved by a skilled person once a year.

2.6 Installing via the "Aliscaf" clamp



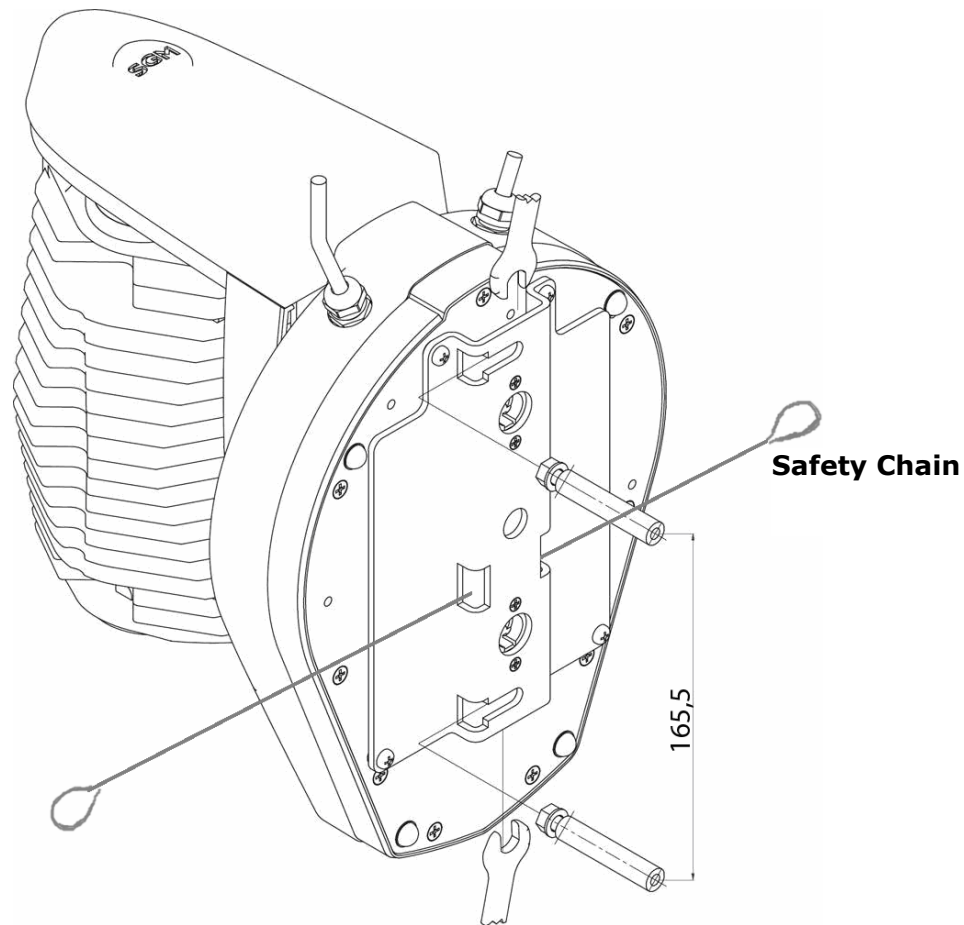
1. Screw the "Aliscaf" clamp to the bracket via a M12 screw, nut and washer
2. Install the metal handle fixing plate on the bottom of the fixture by means of the 4 screws supplied as standard along with the fixture.
3. Pull the safety-chain through the holes on the bottom of the base and over the trussing system or a safe fixation spot.
4. Insert the end in the carabine and tighten the safety screw.



The installation of the fixture has to be built and constructed in a way that it can hold 10 times the weight for 1 hour without any harming deformation.

- Overhead mounting requires extensive experience, including amongst others calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the device. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.
- The fixture should be installed outside areas where persons may reach it, walk by or be seated
- The installation must always be secured with a secondary safety attachment, e.g. an appropriate safety cable.
- Never stand directly below the device when mounting, removing or servicing the fixture.
- The operator has to make sure the safety relating and machine technical installations are approved by an expert before taking the device into operation for the first time.
- These installations have to be approved by a skilled person once a year.

2.7 Wall mounting



1. Perform 2 holes into the wall at a distance of 165,5 mm and insert two wall screw plug M6
2. Insert but not tighten two HEX screws M6 and washers into the wall plugs, paying attention to leave about 6mm gap across the head of the screw and the wall surface.
3. Install the bracket on the bottom of the fixture by means of the 4 screws supplied as standard along with the fixture.
4. Place the fixture beside the screws fitted in the wall in such a way that the head of the screws are in front of the holes located on the handle fixing plate.
5. Slide the fixture towards the screws
6. Tighten the screws by using a metric wrench size 10. (see the above picture for your reference)
7. Pull the safety-chain through the holes on the bottom of the base and over the trussing system or a safe fixation spot.
8. Insert the end in the carabine and tighten the safety screw.



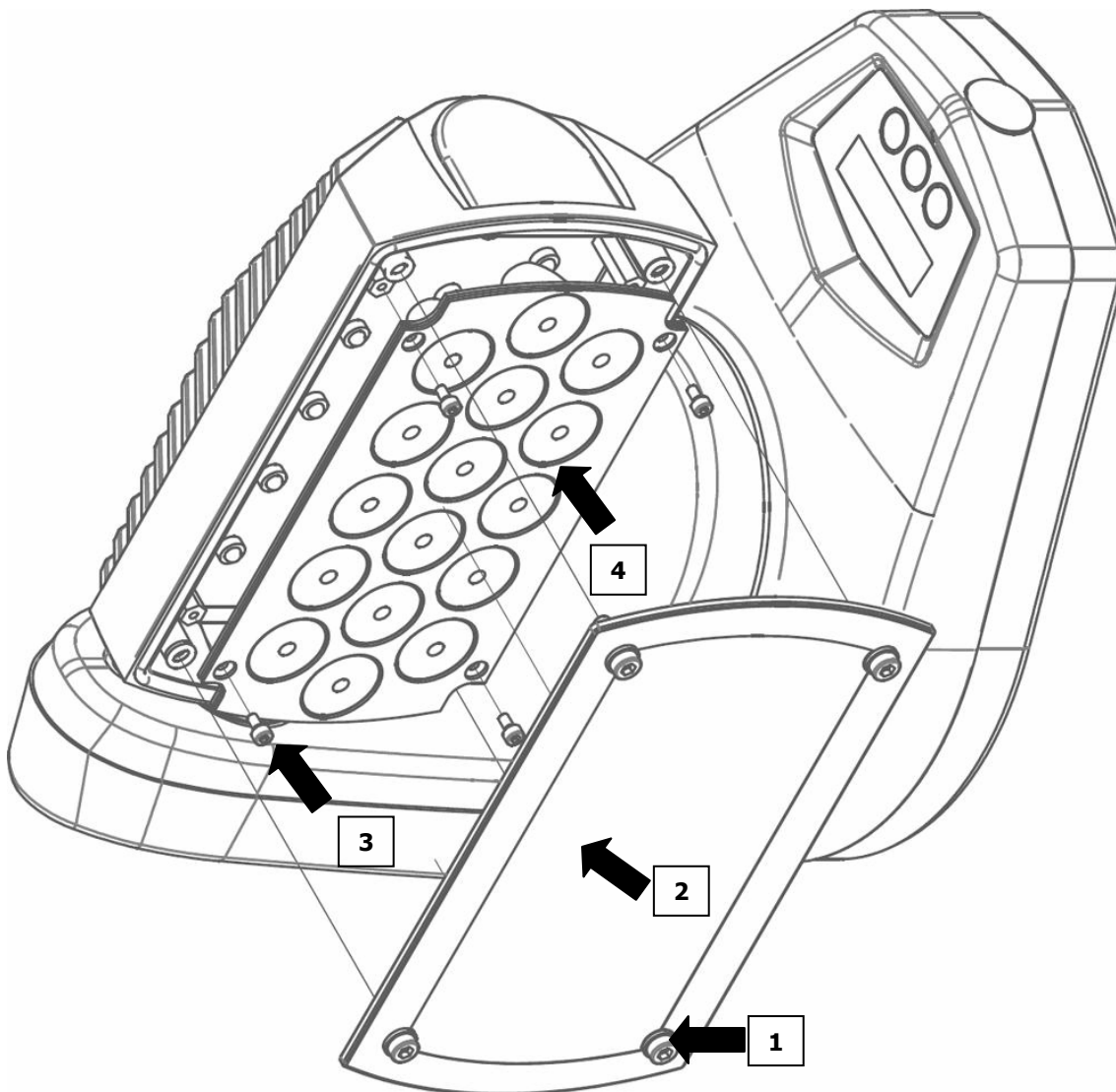
The installation of the fixture has to be built and constructed in a way that it can hold 10 times the weight for 1 hour without any harming deformation.

- Overhead mounting requires extensive experience, including amongst others calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the device. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.
- The fixture should be installed outside areas where persons may reach it, walk by or be seated
- The installation must always be secured with a secondary safety attachment, e.g. an appropriate safety cable.
- Never stand directly below the device when mounting, removing or servicing the fixture.
- The operator has to make sure the safety relating and machine technical installations are approved by an expert before taking the device into operation for the first time.
- These installations have to be approved by a skilled person once a year.

2.8 Installing optional lenses

Genio Mobile can be fitted with various types of front lenses, in order to obtain different beam aperture angles. The following procedure must be followed in the event of the front lenses having to be changed on the LED matrix.

REMOVING / INSTALLING THE FRONT LENS PLATE



Removal

- 1** Remove the 4 HEX screws located on top of the glass of the Genio Mobile's head, by using an Allen key metric size 3mm
- 2** Remove the Front Glass which give the access to the lens plate.
- 3** Remove the 4 HEX screws which are fixing the lens plate to the LED matrix underneath. Use an allen key metric size 2,5mm for the purpose.

Installing

Carefully avoid touching the single lenses that make up the set. Should this happen, clean it/them carefully with a soft dry cloth.

ATTENTION:

CAREFULLY AVOID TOUCHING THE LEDs – should this occur, clean them with a dry cloth, under no circumstances using solvents, products for removing grease, or abrasive objects.


- 4** Place the new Lens set , paying attention that LED matrix and lens plate are properly alligned.
- 3** Insert the 4 HEX screws 2,5mm. The screws should not be individually tighten but screwed in sequence and gently tighten when all of them are nearly ready to be finally fixed.
- 2** Clean the front glass with a soft dry cloth and place it back in position by fixing the 4 HEX screws 3mm

2.9 Power cord construction



DANGER! RISK OF ELECTRIC SHOCK.

Genio Mobile is a fixture having IP65 protection, so is already fitted with the power cable and the dedicated cable gland. Therefore, it requires its AC plug to be wired according to the local electrical regulation and following the indications below:

CABLE	PIN	SYMBOL	US	UK
White	Phase	"L"	Yellow / Copper	Red
Black	Neutral	"N"	Silver	Black
Green	Ground		Green	Green



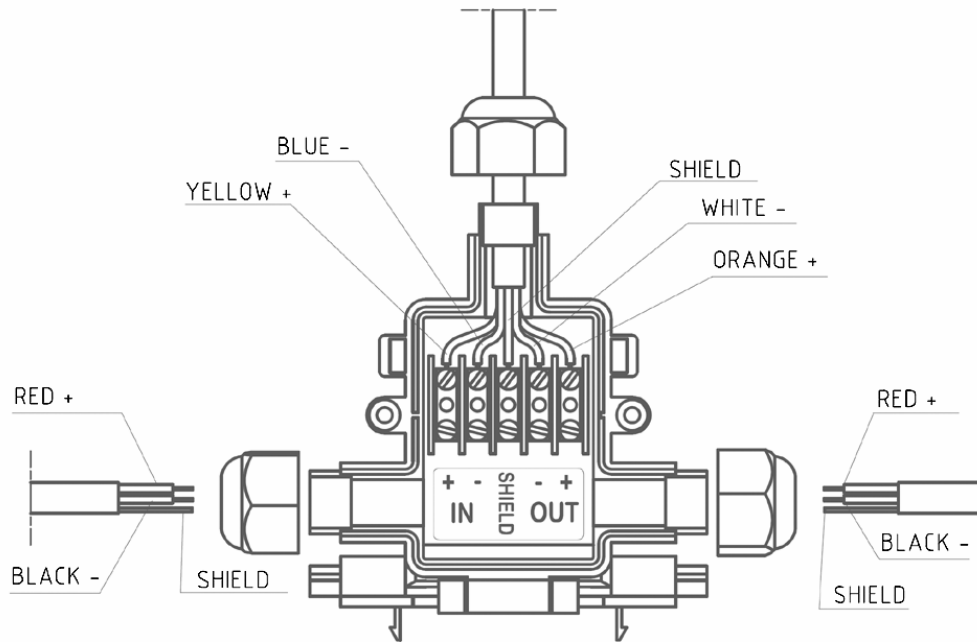
ATTENTION!!

- WIRING AND CONNECTION WORK MUST BE CARRID OUT BY EXPERIENCED QUALIFIED STAFF
- LUMINAIRE SHALL ONLY BE USED WITH RATED VOLTAGE AND FREQUENCY.
- CLASS ONE EQUIPMENT. IT MUST BE EARTHED.
- DO NOT POWER THE FIXTURE WITH DIMERS, AS THIS COULD DAMAGE THE ON-BOARD POWER SUPPLY
- BEFORE CONNECTING THE FIXTURE, MAKE CERTAIN THAT THE MAINS POWER SUPPLY IS THE SAME AS INDICATED ON THE FIXTURE ID'S PLATE.
- THE FIXTURE MUST BE PROTECTED BY A THERMAL/MAGNETIC CIRCUIT BREAKER.



2.10 Construction of the signal cable

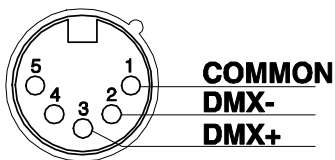
The DMX 512 input of Genio Mobile is made of an IP54 box containing the internal connection which will be used to wire the DMX signal IN/OUT cables.



For the connection use shielded cables in compliance with the EIA RS-485 specifications, having the following features:

- 2 conductors plus screen
- 120 ohm impedance- low capacity
- Max transmission speed 250 Kbaud.

2.11 Signal Cable wiring connections



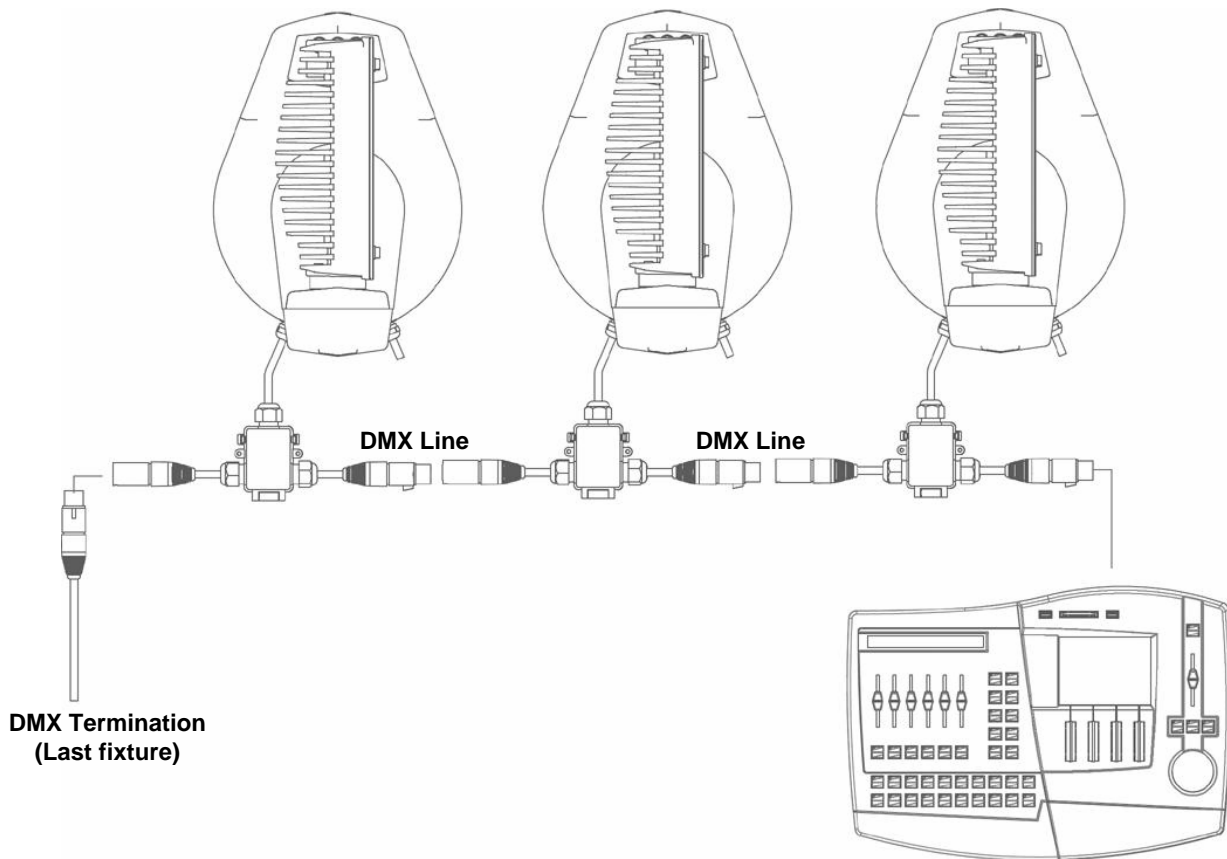
See illustration beside, taking care that the shield of the cable is connected to PIN 1.



ATTENTION!!!

The shield of the cable must NEVER be connected to the system's earth, as this would cause faulty fixture and controller operation.

Example of connection of the DMX line:

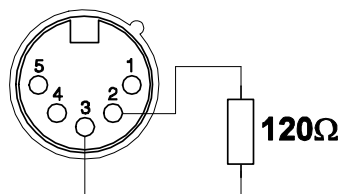


To avoid the risk of faulty operation, follow these indications:

- Maximum cable length:** 500 m
- Max. N° of fixtures connected:** 32 units
- Cable runs:** Avoid running cables alongside power supply lines.
- Termination:** A 120Ohm resistor between Pins 2 and 3 on the last fixture.

2.12 Construction of the DMX termination

The termination avoids the risk of DMX 512 signals being reflected back along the cable when they reaches the end of the line: under certain conditions and with certain cable lengths, this could cause them to cancel the original signals.
 The termination is prepared by soldering a 120Ohm 1/4 W resistor between pins 2 and 3 of the 5-pin male XLR connector (see diagram).

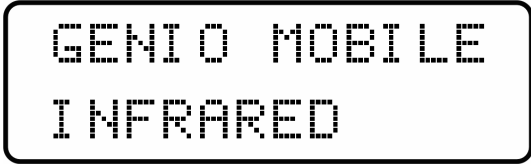




2.13 Infrared remote control

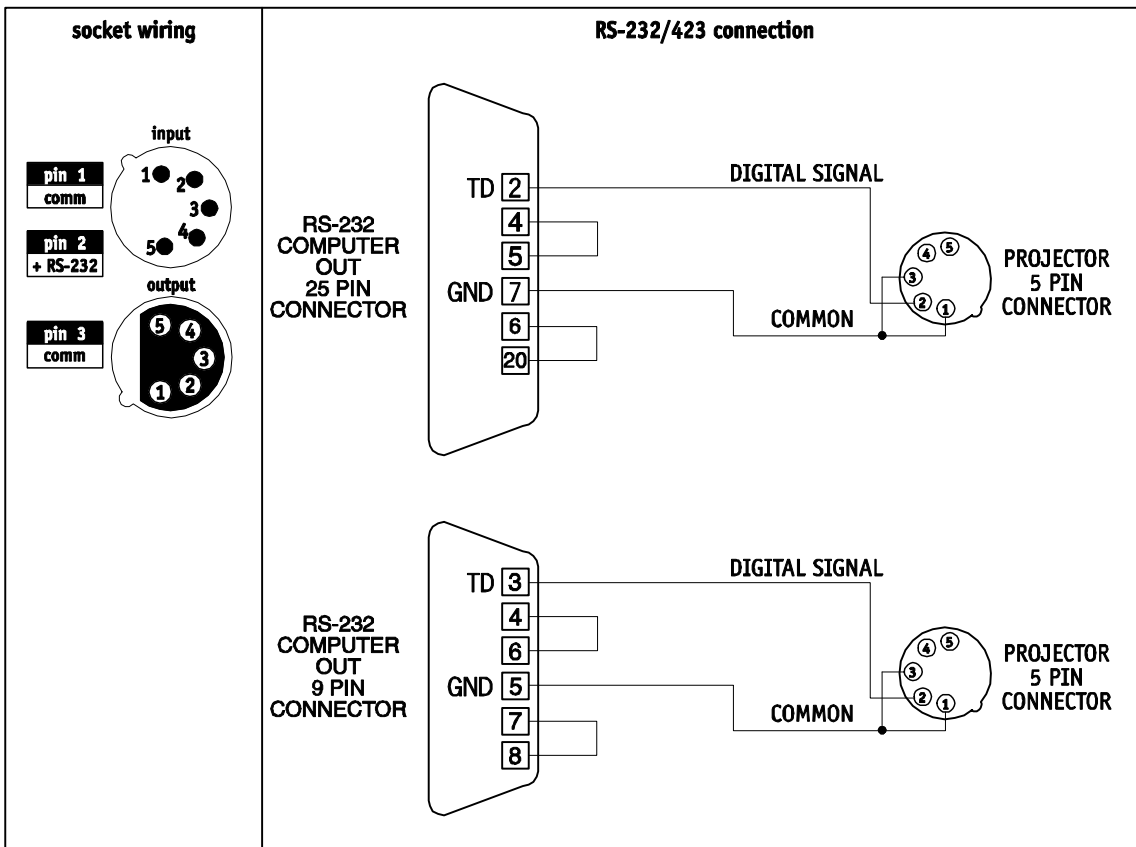
Genio Mobile can also be used through its remote IR control when the DMX line is not connected to the fixture.

The IR signal will be automatically detected without performing any particular setting, and the display will show the writing:



2.14 RS-232 Connection

For this connection, use good quality screened coax cable (RG58 50Ohms) to avoid problems with signal transmission and faulty fixture operation. Connectors must always be 5-pin XLRs. Refer to the diagram for wiring.



2.15 Upgrading Firmware

To update the firmware of the fixture you need:

- USB-DMX Driver to install the new hardware.
- USB-DMX cable to connect the unit to the PC .
- Updated software version.

Please follow the below procedure to perform the updating:

1. Install the USB-DMX driver on the PC you will use to download the software. The driver and the instructions to install it will be available in our web site www.sgm.it
2. Connect the USB-DMX cable from the PC to the fixture.
3. Download the software. The software is composed by an upd file and a file with extension .exe, by opening the file .exe the updating will be enabled automatically.

It will be possible to download the software from our web site www.sgm.it

3 MICRO COMPUTER CONTROL

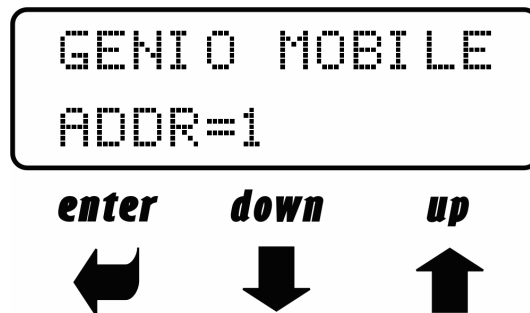


3.1 Microcomputer "Control"

Genio Mobile is fitted with a microcomputer that enables the best fixture customization to the type of installation. It is possible:

- To assign the starting address
- Run diagnostic checks controlling the correct functioning of the fixture
- Customization of some of the parameters
- Stand-Alone programming

3.2 Navigating the menu



The front control panel made of a display and three keys give an easy access to all the available settings of Genio Mobile.

- UP/DOWN KEYS:

Are used to scroll the various items in the menu. In the selected menu, they are used to change the required parameters.

- ENTER KEY:

Is used to access to the selected menu and, once the necessary changes have been made, is used to confirm them.

3.3 Structure of the Menu

This chapter covers all the functions that can be accessed by the microcomputer's menus. These functions allow to set the fixture according to one's needs, obtain information on its operation, test its various parts and lastly program it, if it has to be used in Stand-alone mode.

The Up and Down keys on the front control panel enable users to scroll through the various menu items. In the selected menu, they enable to modify the necessary parameters.

The ENTER key gives access to the selected menu, and once the necessary modifications have been carried out, enables changes to be confirmed.

Menu	Options	Description
GENIO 1.0	-	Initial item of menu
Addr	001 - 504	Fixture addressing
Pmove	Norm / Rev	Allows to set the PAN movement in normal direction (Norm) or in reverse direction (Rev). Default Configuration = Norm
PP_MIN	0	Allows to change the PAN minimum position in degrees Default Configuration = 0
PP_MAX	540	Allows to change the PAN maximum position in degrees Default Configuration = 540
Tmove	Norm / Rev	Allows to set the TILT movement in normal direction (Norm) or in reverse direction (Rev). Default Configuration = Norm
TP_MIN	0	Allows to change the TILT minimum position in degrees Default Configuration = 0
TP_MAX	270	Allows to change the TILT maximum position in degrees Default Configuration = 270
Swap	ON / OFF	Inverts the PAN control with the TILT control and vice versa Default Configuration = OFF
COLBALANCE	-	Access to the functions for setting the white balance
BALANCE	ON	Enables the white balance of the COLBALANCE menu
	OFF	Disables the white balance of the COLBALANCE menu
R_h	-	Red LED elapsed time reading menu. Can be reset
G_h	-	Green LED elapsed time reading menu. Can be reset
B_h	-	Blue LED elapsed time reading menu. Can be reset
L_h	-	Overall fixture elapsed time reading menu.
SIGN	DMX	DMX signal input. No need to be set, the fixture automatically detect the signal.
	RS 232	RS 232 signal input. No need to be set, the fixture automatically detect the signal.
SMD	16 bit / 8 bit	Allows to select the control type of PAN and TILT: 16 bit or 8 bit Default configuration = 16 bit
BRIGH	100 - 85 - 70 - 50 - 35 25 - 10 - 0 (%)	Allows to adjust display brightness Default configuration = 85 %
DMXDLY	0 - 998 (sec) - UNL	It's possible to decide for how many seconds the fixture's last channel status has to be held in the event of there being no DMX signal (default = UNL)
	UNL	Always maintains the last channel status even in the event of no DMX signal
DAY	MON - TUE - WED - THU - FRI - SAT - SUN	Sets the day of the week
CLOCK	Hh : mm : ss	Sets the on-board clock's hours, minutes and seconds
FACT	SET	Enables to set the fixture's Default work parameters
	OFF	FACT value during normal operation

Menu	Options	Description
PREV	SET	Allows to reset the values of the parameters set immediately before carrying out FACT=SET procedure
	OFF	PREV value during normal operation
TEST	-	Tests the correct operation of the physical channels of the fixture as chosen
TEMPERATUR	HEAD xx°C	Displays the current temperature of the head in degrees Centigrade
	HEAD xx°F	Displays the current temperature of the head in degrees Fahrenheit
	BASE xx°C	Displays the current temperature of the Base in degrees Centigrade
	BASE xx°F	Displays the current temperature of the Base in degrees Fahrenheit
MASTER	ON	Fixture in Master data transmission mode
	OFF	Master data transmission mode disabled
SLAVEID	1 - 29	Configures the slave number the fixture is assigned to
SCHEDL	ON	Gives access to the programming functions of the Scheduler
	OFF	Disables program playback as scheduled
PRGRUN	OFF	Disables program playback
	1	Enables playback of one of the program
PROGAMMER	-	Gives access to the programming functions of the programs
SCHEDULER	-	Gives access to the programming functions of the Scheduler
ADDR		Display default status after 8 seconds of not being used
UPDATING		Blinking message during software upgrading procedure.

3.4 Addressing

This menu gives access to fixture addressing functions.

Addr=xxx

1. Use the UP/DOWN keys to find the "Addr" menu
2. Press "Enter" to confirm the choice. The text on the display will begin to flash.
3. Use the UP/DOWN keys to select the required start channel.
4. Press "Enter" to confirm the choice.

Genio Mobile uses 13 DMX channels, then a total amount of 39 individual fixtures can be addressed for each single DMX 512 Universe.

Herebelow are reported all the DMX addresses which can be assigned to each fixtures patched into a DMX Universe.

Genio Mobile N°	DMX Address	Genio Mobile N°	DMX Address	Genio Mobile N°	DMX Address	Genio Mobile N°	DMX Address	Genio Mobile N°	DMX Address
1	001	9	105	17	209	25	313	33	417
2	014	10	118	18	222	26	326	34	430
3	027	11	131	19	235	27	339	35	443
4	040	12	144	20	248	28	352	36	456
5	053	13	157	21	261	29	365	37	469
6	066	14	170	22	274	30	378	38	482
7	079	15	183	23	287	31	391	39	495
8	092	16	196	24	300	32	404		



ATTENTION : Avoid to daisy-chain more than 32 fixtures for each DMX line !
Should this be necessary, then is recommended the use of a DMX signal buffer or splitters in order to keep a good strenght of the signal along the DMX line.

3.5 PAN Movement

This menu allows to set the PAN movement. To set the normal movement (Norm) or reverse movement (Rev), proceed as follows:

Pmove=Norm

1. Use the UP/DOWN keys to find the "Pmove = Norm" menu
2. Press "Enter" to confirm the choice. The text on the display begins to flash.
3. Use the UP/DOWN keys to select the options "Norm" or "Rev".
4. Press "Enter" to confirm the choice.

3.6 PAN Minimum position

This menu allows to change the PAN minimum position. To change the minimum position proceed as follows:

PP_MIN=0

1. Use the UP/DOWN keys to find the "PP_MIN = 0" menu
2. Press "Enter" to confirm the choice. The text on the display begins to flash.
3. Use the UP/DOWN keys to change in degrees the minimum position of PAN.
4. Press "Enter" to confirm the choice

3.7 PAN Maximum position

This menu allows to change the PAN maximum position. To change the maximum position proceed as follows:

PP_MAX=540

1. Use the UP/DOWN keys to find the "PP_MAX = 540" menu
2. Press "Enter" to confirm the choice. The text on the display begins to flash.
3. Use the UP/DOWN keys to change in degrees the maximum position of PAN.
4. Press "Enter" to confirm the choice

3.8 TILT Movement

This menu allows to set the TILT movement. To set the normal movement (Norm) or reverse movement (Rev) proceed as follows:

Tmove=Norm

1. Use the UP/DOWN keys to find the "Tmove = Norm" menu
2. Press "Enter" to confirm the choice. The text on the display begins to flash.
3. Use the UP/DOWN keys to select the options "Norm" or "Rev".
4. Press "Enter" to confirm the choice.

3.9 TILT Minimum position

This menu allows to change the TILT minimum position. To change the minimum position proceed as follows:

TP_MIN=0

1. Use the UP/DOWN keys to find the "TP_MIN = 0" menu
2. Press "Enter" to confirm the choice. The text on the display begins to flash.
3. Use the UP/DOWN keys to change in degrees the minimum position of TILT.
4. Press "Enter" to confirm the choice

3.10 TILT Maximum position

This menu allows to change the TILT maximum position. To change the maximum position proceed as follows:

TP_MAX=270

1. Use the UP/DOWN keys to find the "TP_MAX = 270" menu
2. Press "Enter" to confirm the choice. The text on the display begins to flash.
3. Use the UP/DOWN keys to change in degrees the maximum position of TILT.
4. Press "Enter" to confirm the choice

3.11 Swap

This menu allows to invert the control of PAN with the control of TILT and vice versa. To change the control proceed as follows:

Swap=0FF

1. Use the UP/DOWN keys to find the "Swap = OFF" menu
2. Press "Enter" to confirm the choice. The text on the display begins to flash.
3. Use the UP/DOWN keys to choose the status "ON" or "OFF".
4. Press "Enter" to confirm the choice.

3.12 Color Balance

This menu gives access to the setting of Genio Mobile's white balance. If it's necessary to work with a fixed colour temperature, this menu must be used.

COLBALANCE

1. Use the UP/DOWN keys to find the "COLBALANCE" menu
2. Press "Enter" for approximately six seconds.
3. "Rblnc=100%" will appear on the display and the Genio Mobile will switch on at maximum RGB values

Rblnc=60%

4. Press "Enter" again and "Rblnc=" will begin to flash
5. Use the UP/DOWN keys to adjust the new maximum value required for the Red channel.
6. Press "Enter" to confirm the choice.

Gblnc=100%

7. Use the UP key to select "Gblnc=100%"
8. Press "Enter" again and "Gblnc=" will begin to flash
9. Use the UP/DOWN keys to adjust the new maximum value required for the Green channel.
10. Press "Enter" to confirm the choice.

Bblnc=98%

11. Use the UP key to select "Bblnc=100%"
12. Press "Enter" again and "Bblnc=" will begin to flash
13. Use the UP/DOWN keys to adjust the new maximum value required for the Blue channel.
14. Press "Enter" to confirm the choice.

15. Press "Enter" for approximately six seconds to exit the COLORBALANCE menu.

3.13 Balance

The "Balance" menu allows to enable or disable the white balance, previously set using the COLORBALANCE menu

BALANC=ON

1. Use the UP/DOWN keys to find the "BALANC=OFF" menu
2. Press "Enter" and the displayed text will immediately begin to flash
3. Use the UP/DOWN keys to choose ON or OFF status
4. Press "Enter" to exit the BALANC menu

3.14 Elapsed time meter

This menu gives access to the display of running time of the single channels (Red, Green and Blue). It's also possible to reset the elapsed time meter when the LED matrix is replaced. The "L_h" menu gives access to the display of the fixture's total operating time and can't be reset

R_h=278

1. Use the UP/DOWN keys to find the "R_h" menu to display the operating time of all the Red LEDs

R_h=0

Resetting the Elapsed Time Meter

1. hold the ENTER key pressed down for approx. 6', until R_h flashes
2. Use the UP/DOWN keys to find set the elapsed time meter at zero
3. Press "ENTER" to confirm

Use the same procedure for "G_h" (Green) and "B_h" (Blue).

3.15 Input Signal

This function is used to view the type of input signal is detected by the fixture; DMX 512 or RS-232. The signal cannot be choose as an option, but is automatically set according to input signal presence.

SIGN=DMX

1. Use the UP/DOWN keys to find the "Sign=DMX" menu
2. The display will show the type of signal detected at present

3.16 PAN and TILT control

This function allows to choose the type of control for PAN and TILT: 16 bit or 8 bit. To choose the type of control that you want to use, proceed as follows:

SMD=16BIT

1. Use the UP/DOWN keys to find the "SMD=16 bit" menu
2. Press "Enter" to confirm the choice. The text on the display will begin to flash.
3. Use the UP/DOWN keys to select the control at "16 bit" or at "8 bit".
4. Press "Enter" to confirm the choice.

3.17 Display brightness

Operators can select one of the brightnesses available for the Genio Mobile (standard or very low). This option was included for theatre and television use, where excessive brightness can be disturbing. To adjust display brightness, proceed as follows:

BRIGHT=85%

1. Use the UP/DOWN keys to find the "Bright" menu
2. Press "Enter" to confirm the choice. The text on the display will begin to flash.
3. Use the UP/DOWN keys to select the required option from those available.
4. Press "Enter" to confirm the changes.

3.18 DMX delay

It's possible to decide for how many seconds the fixture must hold the last operating status if there is no DMX signal. "Delay" time can be set between 0 and 998 seconds. If set at UNL, the fixture will hold its standby status for an unlimited time. This function is indispensable in the event of the DMX signal being accidentally interrupted. To set the required time, proceed as follows:

DMXDLY=20

1. Use the UP/DOWN keys to find the "DMXDLY" menu
2. Press "Enter" to confirm the choice. The text on the display will begin to flash.
3. Use the UP/DOWN keys to select the required length of time. If UNL (unlimited) is set, the last valid operating status is held no matter for how long the DMX signal is missing.
4. Press "Enter" to confirm the changes.

3.19 Day of the week

It is of fundamental importance to set the day of the week on the Genio Mobile if it has to be used later in Stand-alone mode.

DAY=TUE

1. Use the UP/DOWN keys to find the "DAY" menu
2. Press "Enter" to confirm the choice. The text on the display will begin to flash.
3. Use the UP/DOWN keys to select the current day of the week.
4. Press "Enter" to confirm.

3.20 Time

It's just as important to set Genio Mobile's on-board clock if it has to be used later in Stand-alone mode.

C 12:06:20

1. Use the UP/DOWN keys to find the "C" (Clock) menu
2. Press "Enter" to confirm the choice. The first two numbers (relative to the hours) will begin to flash on the display.
3. Use the UP/DOWN keys to select the current time (the hour – from 00 to 23).
4. Press "Enter" to move the setting from the hours to the minutes
5. Use the UP/DOWN keys to select the current time (the minutes – from 00 to 59).
6. Press "Enter" to move the setting from the minutes to the seconds
7. Use the UP/DOWN keys to select the current time (the seconds – from 00 to 59).
8. hold "Enter" pressed down for approx. 6sec. to confirm the new time

3.21 Setting default parameters

This enables to set the default parameters:

FACT=SET

FACT=OFF

1. Use the UP/DOWN keys to find the "FACT" menu.
2. Press "Enter" to confirm the choice. The text on the display will begin to flash.
3. Use the UP/DOWN keys to select the "FACT=SET" and press "Enter"
4. Press "Enter" to set the default parameters shown in the table. "FACT=OFF" appears on the display.

Menu item	Default parameter
ADDR	001
PMOVE	NORM
PP_MIN	0
PP_MAX	540
TMOVE	NORM
TP_MIN	0
TP_MAX	270
SWAP	OFF
BRIGHT	40%
DMXDLY	UNL

3.22 Resetting default parameters

This enables to reset the parameter values set immediately before the FACT=SET operation. In other words, if the default parameters have been set by mistake, this operation allows to revert to the values set previously.

PREV=SET

PREV=OFF

1. Use the UP/DOWN keys to find the "Prev" menu
2. Press "Enter" and hold it down for a few seconds to confirm the choice. The text on the display will begin to flash.
3. Use the UP/DOWN keys to select "PREV=SET"
4. Pressing "Enter" in this mode resets the values, cancelling the FACTORY DEFAULT operation. In the meanwhile, PREV stops flashing and the message that appears is PREV=OFF

3.23 Test function

Using the test menu, it's possible to test the correct operation of the channels that control the Genio Mobile.

TEST=BLUE

1. Use the UP/DOWN keys to find the "TEST" menu
2. Press "Enter" and hold it down for a few seconds to confirm the choice. The text on the display will begin to flash.
3. Use the UP/DOWN keys to select the physical channel to be tested (ALL - PAN - TILT - SHUTT - DIMMR - RED - GREEN - BLUE - CTC)
4. Press "Enter" and the selected text will begin to flash, running a test routine on the chosen channel.
5. Press "Enter" again to exit the routine being run and choose another channels to be tested
6. Keep "Enter" pressed down for a few seconds if you wish to exit the TEST menu

3.24 Head and motors card temperature

The TEMPERATUR menu is used to view the current temperature of the Genio Mobile's head and motors card.

TEMPERATUR

1. Use the UP/DOWN keys to find the "TEMPERATUR" menu
2. Press "Enter" and the "HEAD=xx°C" menu, that shows the current temperature of the head in degrees Centigrade, will be immediately displayed.
3. Using the UP/DOWN keys, it's possible to display the temperature in degrees Centigrade or Fahrenheit of the head and the motors card.
4. Press "Enter" to exit the TEMPERATUR menu

HEAD=21.0°C

3.25 Configuring as Master

When a system with several interconnected fixtures has to be used in Stand-alone mode, there has to be one MASTER fixture, able to control the other fixtures, via appropriate on-board programming.

MASTER=ON

1. Use the UP/DOWN keys to find the "MASTER" menu
2. Press "Enter" and the displayed text will immediately begin to flash
3. Use the UP/DOWN keys to choose ON or OFF status
4. Press "Enter" to exit the MASTER menu

3.26 Configuring Slaves

When a system with several interconnected fixtures has to be used in Stand-alone mode, there has to be one MASTER fixture, whereas each of the fixtures controlled by it must be individually configured with its own SLAVE number. In the event of the same ID being used for several fixtures, they will not be able to be controlled individually by the MASTER program.

SLAVEID=12

1. Use the UP/DOWN keys to find the "SLAVEID" menu
2. Press "Enter" and the displayed text will immediately begin to flash
3. Use the UP/DOWN keys to choose the required ID (from 1 to 29)
4. Press "Enter" to exit the SLAVEID menu and confirm

3.27 Enabling-Disabling the Scheduler

The Scheduler allows to organize and run the fully automatic playback of a series of Events on a weekly basis, including the preset programs on the MASTER fixture. The Scheduler is enabled as follows:

SCHEDL=0N

1. Use the UP/DOWN keys to find the "SCHEDL" menu
2. Press "Enter" and the displayed text will immediately begin to flash
3. Use the UP/DOWN keys to choose ON or OFF status
4. Press "Enter" to exit the SCHEDL menu and confirm

3.28 Internal program playback

Each fixture can be programmed with 1 Programs of 10 scenes. The programs are enabled using the PRGRUN menu.

PRGRUN=1

1. Use the UP/DOWN keys to find the "PRGRUN" menu
2. Press "Enter" and the displayed text will immediately begin to flash
3. Use the UP/DOWN keys to choose the required programs from 1 to 2, or OFF to stop the playback of a current program.
4. Press "Enter" to exit the PRGRUN menu and confirm.

3.29 Programmer

The Programmer menu allows to carry out Genio Mobile's on-board programming for any stand-alone operation without external DMX control. The "Programmer" menu also allows to program a maximum of 29 SLAVE fixtures connected to the MASTER fixture with the on-board programming.

The fundamental stages of the Genio Mobile's programming are as follows:

1. Entering the "PROGRAMMER" menu
2. Choosing the Program number
3. Choosing the scene number
4. Choosing the number of Slaves (if any) involved in the scene
5. Setting scene parameters
6. Choosing the scene times
7. Choosing the fade times
8. Optional scene disabling and enabling

The "Stand-Alone Programming" chapter describes all the operations necessary for programming in detail.

3.30 Scheduler

The Scheduler menu gives access to the programming of "events" able to run the playback of programs previously prepared on-board the Genio Mobile, with the necessary times and modes. There are 48 events and each one can control the start and stop time of a program day by day on a weekly basis.

The fundamental stages of programming the Scheduler are as follows:

1. Entering the Scheduler menu
2. Choosing the event number
3. Choosing the program number
4. Choosing the day,
5. hours and minutes of the event's start
6. hours and minutes of the event's end
7. Optional event disabling and enabling

The "Stand-Alone Programming" chapter describes all the operations necessary for Scheduler programming in detail.

3.31 Error message

Error message	Description
NO SIGNAL	No signal on the DMX input.
SIGNAL ERROR	Signal on DMX input disturbed.

4 CONTROL CHANNELS

4.1 Controlling the fixture via DMX

The following table shows the control channels of the Genio Mobile 3 and Genio Mobile 5 and relative on-board patch.

Channel DMX	Function	Description
Ch 1	Shutter/Strobe	Shutter and strobe functions are adjustable and random. Pulse Functions
Ch 2	Dimmer	Luminous intensity control
Ch 3	Red	Continuous Red saturation control 0-100%
Ch 4	Green	Continuous Green saturation control 0-100%
Ch 5	Blue	Continuous Blue saturation control 0-100%
Ch 6	CTC	Continuous colour temperature control
Ch 7	Macro	Macro functions
Ch 8	Mod_Colore	White balance control
Ch 9	Pan_H	PAN High Byte for function at 8 bit. It is sent only this byte.
Ch 10	Pan_L	PAN Low Byte for positioning at 16 bit
Ch 11	Tilt_H	TILT High Byte for function at 8 bit. It is sent only this byte.
Ch 12	Tilt_L	TILT Low Byte for positioning at 16 bit
Ch 13	Mspeed	Movement speed controlled by cross-fade Slowest Fastest

DIMMER CHANNEL CH 2

DMX Value	Central value	Description
0 - 255		Linear intensity adjustment 0 - 100 %

RED CHANNEL CH 3

DMX Value	Central value	Description
0 - 255		Linear Red saturation adjustment 0 - 100 %

GREEN CHANNEL CH 4

DMX Value	Central value	Description
0 - 255		Linear Green saturation adjustment 0 - 100 %

BLUE CHANNEL CH 5

DMX Value	Central value	Description
0 - 255		Linear Blue saturation adjustment 0 - 100 %

STROBE CHANNEL CH 1

DMX Value	Central Value	Description
0 - 7		Shutter closed
8 - 15		Shutter open
16 - 151		Linear Strobe frequency adjustment from 1 to 20 Hz
152 - 159		Pulse open effect low speed
160 - 167		Pulse open effect medium speed
168 - 175		Pulse open effect high speed
176 - 183		Pulse close effect low speed
184 - 191		Pulse close effect medium speed
191 - 199		Pulse close effect high speed
200 - 207		Random strobe effect low speed
208 - 215		Random strobe effect medium speed
216 - 223		Random strobe effect high speed
224 - 255		Shutter open

MACRO CHANNEL CH 7

DMX Value	Central Value	Description
0 - 7	4	NO MACRO
8 - 15	12	MACRO 1 Rainbow Slow - Stand Time 5 sec
16 - 23	20	MACRO 2 Rainbow Medium - Stand Time 5 sec
24 - 31	28	MACRO 3 Rainbow Fast - Stand Time 5 sec
32 - 39	36	MACRO 4 Rainbow Slow - NO Stand time
40 - 47	44	MACRO 5 Rainbow Medium - NO Stand time
48 - 55	52	MACRO 6 Rainbow Fast - NO Stand time
56 - 63	60	MACRO 7 Rainbow Very slow - NO Stand time
64 - 70	68	MACRO 8 Random Colour Slow
71	71	Store Colour mode enable
72 - 79	76	MACRO 9 Random Color Medium
80 - 87	84	MACRO 10 Random Color Fast
88 - 95	92	Not applicable
96 - 103	100	Not applicable
104 - 111	108	Not applicable
112 - 119	116	Not applicable
120 - 136	128	Not applicable

COLOUR MODE CHANNEL CH 8

DMX Value	Central Value	Description
0 - 63	32	White balance disabled (Full Colour)
64 - 189	127	White balance enabled (Balanced)
190 - 250	220	White balance disabled (Full Colour)
251 - 255	253	Store a new white balance

CTC (COLOUR TEMPERATURE CORRECTION) CHANNEL CH 6

DMX Value	Central Value	Description
0 - 19	10	OFF
20 - 255	138	From Cold + 2000 K° to Warm - 2000 k° compared to balanced white or not

MSPEED (MOVEMENT SPEED) CHANNEL CH 13

DMX Value	Mspeed times in seconds	DMX Value	Mspeed times in seconds	DMX Value	Mspeed times in seconds
0 - 3	Controller cross fade	39	187	75	137
4	243	40	185	76	135
5	241	41	184	77	134
6	240	42	182	78	133
7	238	43	181	79	131
8	236	44	179	80	130
9	234	45	178	81	129
10	233	46	176	82	128
11	231	47	175	83	126
12	229	48	173	84	125
13	227	49	172	85	124
14	226	50	171	86	122
15	224	51	169	87	121
16	222	52	168	88	120
17	221	53	166	89	119
18	219	54	165	90	117
19	217	55	164	91	116
20	216	56	162	92	115
21	214	57	161	93	114
22	213	58	159	94	112
23	211	59	158	95	111
24	209	60	157	96	110
25	208	61	155	97	109
26	206	62	154	98	108
27	205	63	153	99	106
28	203	64	151	100	105
29	202	65	150	101	104
30	200	66	149	102	103
31	199	67	147	103	101
32	197	68	146	104	100
33	195	69	145	105	99
34	194	70	143	106	98
35	192	71	142	107	97
36	191	72	141	108	95
37	189	73	139	109	94
38	188	74	138	110	93

DMX Value	Mspeed times in seconds	DMX Value	Mspeed times in seconds	DMX Value	Mspeed times in seconds
111	92	141	59	175	29
112	91	142	58	176 - 177	28
113	90	143	57	178	27
114	88	144	56	179	26
115	87	145	55	180 - 181	25
116	86	146	54	182	24
117	85	147	53	183 - 184	23
118	84	148	52	185 - 186	22
119	83	149	51	187	21
120	82	150	50	188 - 189	20
121	80	151	49	190 - 191	19
122	79	152	48	192	18
123	78	153	47	193 - 194	17
124	77	154	46	195 - 196	16
125	76	155 - 156	45	197 - 198	15
126	75	157	44	199 - 200	14
127	74	158	43	201 - 202	13
128	73	159	42	203 - 205	12
129	72	160	41	206 - 207	11
130	70	161	40	208 - 210	10
131	69	162	39	211 - 213	9
132	68	163 - 164	38	214 - 216	8
133	67	165	37	217 - 219	7
134	66	166	36	220 - 223	6
135	65	167	35	224 - 227	5
136	64	168 - 169	34	228 - 232	4
137	63	170	33	233 - 239	3
138	62	171	32	240 - 255	2
139	61	172	31		
140	60	173 - 174	30		

5 OPERATING THE FIXTURE

5.1 White Balancing

Genio Mobile is fitted with a white balancing system that can be customized and stored for each fixture for an unlimited number of times. Moreover, in the context of any balance which is set, it's possible also possible to adjust colour temperature in a completely dynamic manner according to needs, by means of the CTC channel, with a certain range round the balanced white or Full Colour value.

All these operations can be carried out via DMX, or directly on the fixture itself. Should it be necessary to balance the white via DMX, proceed as follows:

1. Set the Color_Mode channel at 220 (85%)
2. Use the RED, GREEN and BLUE channels to obtain the required white balance
3. Set the Macro channel at 71 (28%)
4. Increase Color_Mode to the maximum - 255 (100 %). After 4 seconds, the new white balance is stored by the Genio Mobile

The Color Mode channel can also be used as an instant selector between: previously stored balance (at the value of 127) or Full-color Power (at the value of 0) when total colour emission is required, without any limits being set by the balance.

5.2 Colour Temperature Control (CTC Channel)

The CTC channel allows to adjust the fixture's color temperature by means of channel 6 of Genio Mobile. It acts in a range around the white balance or Full-Color, according to requirements. It's therefore possible to cool down or warm up in a linear manner absolutely any type of previously chosen white, by more or less 2000 K°.

To enable the Colour Temperature Control related to a custom white balance, bring the channel 8, Colour Mode, to the DMX value 127 (50%). On the other hand, the CTC channel will adjust the colour temperature based on the natural white NOT BALANCED of Genio Mobile, should the channel 8 be set at DMX=000.

5.3 Infrared (IR) use

Genio Mobile can also be used through its remote IR control when the DMX line is not connected to the fixture. The IR signal will be automatically detected, without performing any particular setting, when the remote IR control will be aimed to the fixture, allowing the control the following features:

- Colour adjustment (Red, Green, Blue)
- Pan and Tilt positioning
- Running Macros
- Enabling Programs
- Enabling Scenes
- Storing Scenes
- Enabling the Master mode
- Enabling the internal Scheduler

5.4 Stand Alone programming

In permanent installations for architectural use, it may be necessary to use Genio Mobile fixtures in Stand-Alone mode (with independent operation). This is very useful when the fixture has to run relatively simple scenes over a period of time, without the aid of an external DMX controller, which could be difficult for inexperienced staff to operate. The simplification of Genio Mobile's operation ensures greater flexibility of use, even with important installations of a decorative-architectural nature. Each Genio Mobile can therefore be programmed by means of 2 Programs, each with 10 scenes which are completely adjustable as far as times and modes are concerned.

The "Scheduler" section also allows to organize the playback of programs already prepared on a weekly basis (day by day from Monday to Sunday), deciding the start and finish time of playback of the Program. Each day can obviously contain several events, for a maximum of 48 per week.

Should the installation involve a large number of fixtures, it's possible to create a completely independent programmable MASTER-SLAVE type system, which can involve a maximum of 30 fixtures. In this case, it will only be necessary to program the MASTER (main) fixture, and all the fixtures connected to it will run the same program if configured as SLAVES. During Master programming, it's also possible to store various luminous statuses for several fixtures within each scene of the program. Each on-board Master program is therefore also able to individually control all the SLAVE fixtures scene by scene.

Everything is obviously controllable by means of the Scheduler, which enables the system controller to automate all the events as required over a period of time without having to resort to external controllers every time.

5.5 Programming Genio Mobile

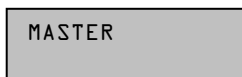


ATTENTION:

Genio Mobile programming is possible if the fixture isn't receiving a DMX 512 or RS 232 signal.

Make certain that the fixture is not receiving DMX 512 or RS 232 signals and configure Genio Mobile as a "MASTER" (see. "Master Configuration" in the previous chapter).

Follow the steps described now for the programming:

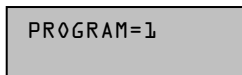


Once Master status is enabled, "MASTER" appears on the display.

Step 1 – CHOOSING THE PROGRAM NUMBER

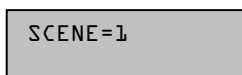


1. Use the UP/DOWN keys to find the "PROGRAMMER" menu
2. Press "Enter" for a few seconds, until the following appears: "PROGRAM=1"
3. If it is necessary to create a program other than number 1, press "Enter" again and "PROGRAM=" will begin to flash



4. Use the UP/DOWN keys to choose the required program number from 1 to 2, then Press "Enter" to exit the PROGRAM menu and confirm.

Step 2 – CHOOSING THE SCENE NUMBER



1. Use the UP key to pass to the "SCENE=1" menu
2. If it is necessary to create a program other than number 1, press "Enter" again and "SCENE=" will begin to flash
3. Use the UP/DOWN keys to choose the required scene number from 1 to 10, then Press "Enter" to exit the SCENE menu and confirm.

Step 3 – CHOOSING THE FIXTURE NUMBER

FIXT=ALL

FIXT=0DD

FIXT=EVEN

FIXT=MASTR

FIXT=SLV12

1. Use the UP key to pass to the "FIXT=ALL" menu
2. Press "Enter" and "FIXT=" will begin to flash

Use the UP/DOWN keys to choose:

- "ALL" if the scene to be created involves all fixtures (MASTER + SLAVES).
- "MSTR" if the scene to be created involves just the Master fixture.
- "ODD" if the scene to be created involves the odd-numbered fixtures.
- "EVEN" if the scene to be created involves the even-numbered fixtures.
- "SLV1" - "SLV29" if the scene to be created must have each slave fixture with its own channel status, chosen individually

3. Press "Enter" to exit the FIXTURE menu and confirm

Step 4 - PAN

PAN=0-100%

1. Use the UP key to pass to the "PAN=0-100%" menu.
2. Press "Enter" and "PAN=" will begin to flash.
3. Use the UP/DOWN keys to choose the value of PAN for the current scene.
4. Press "Enter" to exit the PAN menu and confirm.

Step 5 - TILT

TILT=0-100%

1. Use the UP key to pass to the "TILT=0-100%" menu.
2. Press "Enter" and "TILT=" will begin to flash.
3. Use the UP/DOWN keys to choose the value of TILT for the current scene.
4. Press "Enter" to exit the TILT menu and confirm.

Step 6 - SHUTTER

SHUTT=100%

1. Use the UP key to pass to the "SHUTT=100%" menu
2. Press "Enter" and "SHUTT=" will begin to flash
3. Use the UP/DOWN keys to choose the required value of the shutter channel for the current scene.
4. Press "Enter" to exit the SHUTTER menu and confirm

Step 7 - DIMMER

DIMMR=100%

1. Use the UP key to pass to the "DIMMR=100%" menu
2. Press "Enter" and "DIMMR=" will begin to flash
3. Use the UP/DOWN keys to choose the required value of the dimmer channel for the current scene.
4. Press "Enter" to exit the DIMMER menu and confirm

Step 8 - RED

RED=50 %

1. Use the UP key to pass to the "RED=0 %" menu
2. Press "Enter" and "RED=" will begin to flash
3. Use the UP/DOWN keys to choose the required value of the COLOUR-Red channel for the current scene.
4. Press "Enter" to exit the RED menu and confirm

Step 9 - GREEN

GREEN=70 %

1. Use the UP key to pass to the "GREEN=0 %" menu
2. Press "Enter" and "GREEN=" will begin to flash
3. Use the UP/DOWN keys to choose the required value of the COLOUR-Green channel for the current scene.
4. Press "Enter" to exit the GREEN menu and confirm

Step 10 - BLUE

BLUE=100%

1. Use the UP key to pass to the "BLUE=0 %" menu
2. Press "Enter" and "BLUE=" will begin to flash
3. Use the UP/DOWN keys to choose the required value of the COLOUR-Blue channel for the current scene.
4. Press "Enter" to exit the BLUE menu and confirm

Step 11 - MACRO

MACRO=4

1. Use the UP key to pass to the "MACRO=0" menu
2. Press "Enter" and "MACRO=" will begin to flash
3. Use the UP/DOWN keys to choose the required Macro value for the current scene.
4. Press "Enter" to exit the MACRO menu and confirm

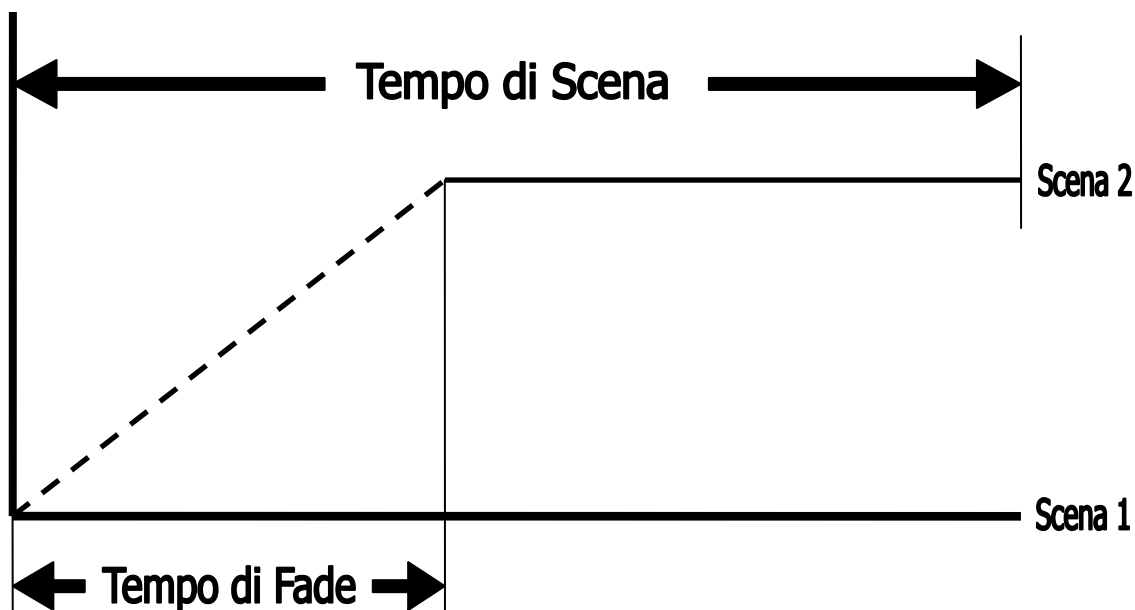
Step 12 - SCENE TIME

Each scene in a program can be run with the required times. There are two types of scene times:

Total scene time (STIME), expressed in hours, minutes and seconds

Scene fade time (FTIME), expressed in hours, minutes and seconds

The scene time is the total time occupied by the scene in the program, whereas fade time is the time taken by the scene's channel status to reach the appropriate level.



The STIME menu gives access to the adjustment of the total scene time. The time can be configured in hours, minutes and seconds

STIME_h=2

1. Use the UP key to pass to the "STIME_h=0" menu
2. Press "Enter" and "STIME_h=" will begin to flash
3. Use the UP/DOWN keys to choose the number of hours the current scene has to last.
4. Press "Enter" to exit the "STIME_h" menu and confirm.

STIME_m=10

5. Use the UP key to pass to the "STIME_m=0" menu
6. Press "Enter" and "STIME_m=" will begin to flash
7. Use the UP/DOWN keys to choose the number of minutes the current scene has to last.
8. Press "Enter" to exit the "STIME_m" menu and confirm

STIME_s=30

9. Use the UP key to pass to the "STIME_s=0" menu
10. Press "Enter" and "STIME_s=" will begin to flash
11. Use the UP/DOWN keys to choose the number of seconds the current scene has to last.
12. Press "Enter" to exit the "STIME_s" menu and confirm

Step 13 – FADE TIME

The FTIME menu gives access to the adjustment of the scene fade time. The time can be configured in hours, minutes and seconds

FTIME_h=0

1. Use the UP key to pass to the "FTIME_h=0" menu
2. Press "Enter" and "FTIME_h=" will begin to flash
3. Use the UP/DOWN keys to choose the number of hours of the current scene's fade time.
4. Press "Enter" to exit the "FTIME_h" menu and confirm

FTIME_m=3

5. Use the UP key to pass to the "FTIME_m=0" menu
6. Press "Enter" and "FTIME_m=" will begin to flash
7. Use the UP/DOWN keys to choose the number of minutes of the current scene's fade time.
8. Press "Enter" to exit the "FTIME_m" menu and confirm

FTIME_s=0

9. Use the UP key to pass to the "FTIME_s=0" menu
10. Press "Enter" and "FTIME_s=" will begin to flash
11. Use the UP/DOWN keys to choose the number of seconds of the current scene's fade time.
12. Press "Enter" to exit the "FTIME_s" menu and confirm



ATTENTION:

The program does not display the scene if its scene time is ZERO. If the scene time is less than the fade time, the scene will not reach its value, but will be cut along the fade time when the scene time finishes.

Step 14 – ENABLING SCENES

Enabling a scene decides if the scene will be run or not when the program is run. The SCNRUN menu is also useful when it is necessary to temporarily eliminate the playback of some scenes in a program without cancelling them.

SCNRUN=0N

1. Use the UP key to pass to the "SCNRUN=OFF" menu
2. Press "Enter" and "SCNRUN=" will begin to flash
3. Use the UP/DOWN keys to choose ON to enable the scene, or OFF if it has not to be run.
4. Press "Enter" to exit the SCNRN menu and confirm

Repeat the above steps to program other scenes on the Genio Mobile.

Once programming is finished, keep "Enter" pressed down for approximately 6 sec. In order to exit the PROGRAMMER menu.

Step 15 - PROGRAM PLAYBACK

To start the playback of a program, access the PRGRUN menu

PRGRUN=1

1. Use the UP/DOWN keys to find the "PRGRUN" menu
2. Press "Enter" and the displayed text will immediately begin to flash
3. Use the UP/DOWN keys to choose the required programs from 1 to 2, or OFF to stop the playback of the current program.
4. Press "Enter" to exit the PRGRN menu and confirm

THE EVENT SCHEDULER

Scheduler is a Genio Mobile menu that allows to organize a series of 48 events over a period of a week and which are repeated week after week. Each event can control the day and time of the start and finish of one of the ten programs already prepared on board the Genio Mobile, in order to automate playback, without the need for any external operators.



ATTENTION:

Before proceeding with the programming of the Scheduler, it's important to set the current date and time (See Chap. Menu - paragraph: Days of the week and time)

Step 1 – CHOOSING THE EVENT NUMBER

SCHEDULER

EVENT=1

1. Use the UP/DOWN keys to find the "SCHEDULER" menu
2. Press "Enter" for a few seconds, until the following appears: "EVENT=1"
3. If it is necessary to create a event other than number 1, press "Enter" again and "EVENT=" will begin to flash
4. Use the UP/DOWN keys to choose the required event, from 1 to 48, then Press "Enter" to exit the EVENT menu and confirm.

Step 2 - CHOOSING the PROGRAM number

PROGRAM=1

1. Use the UP key to pass to the "PROGRAM=1" menu
2. Press "Enter" and "PROGRAM=" will begin to flash
3. Use the UP/DOWN keys to choose the required program number (from 1 to 2) to be controlled by Scheduler.
4. Press "Enter" to exit the PROGRAM menu and confirm

Step 3 – CHOOSING THE DAY

DAY=FRI

1. Use the UP key to pass to the "DAY=MON" menu
2. Press "Enter" and "DAY=" will begin to flash
3. Use the UP/DOWN keys to choose the day of the week on which the event must begin. The days of the week are expressed as follows:
 - ALL Every day
 - MON Monday
 - TUE Tuesday
 - WED Wednesday
 - THU Thursday
 - FRI Friday
 - SAT Saturday
 - SUN Sunday
4. Press "Enter" to exit the DAY menu and confirm

Step 4 - START TIME

START TIME is used to configure: the hour, minutes and seconds in which an event containing a previously prepared program will start.

START_h=21

1. Use the UP key to pass to the "START_h=0" menu
2. Press "Enter" and "START_h=" will begin to flash
3. Use the UP/DOWN keys to choose the hour at which the program has to start (from 0 to 23)
4. Press "Enter" to exit the "START_h" menu and confirm

START_m=15

5. Use the UP key to pass to the "START_m=0" menu
6. Press "Enter" and "START_m=" will begin to flash
7. Use the UP/DOWN keys to choose the minutes at which the program has to start (from 0 to 59)
8. Press "Enter" to exit the "START_m" menu and confirm

START_s=30

9. Use the UP key to pass to the "START_s=0" menu
10. Press "Enter" and "START_s=" will begin to flash
11. Use the UP/DOWN keys to choose the seconds at which the program has to start (from 0 to 59)
12. Press "Enter" to exit the "START_s" menu and confirm

Step 5 - END TIME

END TIME is used to configure: the hour, minutes and seconds in which an event containing a previously prepared program will end.

END_h=23

1. Use the UP key to pass to the "END_h=0" menu
2. Press "Enter" and "END_h=" will begin to flash
3. Use the UP/DOWN keys to choose the hour at which the program has to end (from 0 to 23)
4. Press "Enter" to exit the "END_h" menu and confirm

END_m=30

5. Use the UP key to pass to the "END_m=0" menu
6. Press "Enter" and "END_m=" will begin to flash
7. Use the UP/DOWN keys to choose the minutes at which the program has to end (from 0 to 59)
8. Press "Enter" to exit the "END_m" menu and confirm

END_s=30

9. Use the UP key to pass to the "END_s=0" menu
10. Press "Enter" and "END_s=" will begin to flash
11. Use the UP/DOWN keys to choose the seconds at which the program has to end (from 0 to 59)
12. Press "Enter" to exit the "END_s" menu and confirm

Step 6 – ENABLING THE EVENT

ENABLE=0N

1. Use the UP key to pass to the "ENABLE=OFF" menu
2. Press "Enter" and "ENABLE=" will begin to flash
3. Use the UP/DOWN keys to choose ON to enable the event, or OFF if it is to be disabled.
4. Press "Enter" to exit the "ENABLE" menu and confirm

Repeat the above steps to program other events on the Genio Mobile.

Once programming is finished, keep "Enter" pressed down for approximately 6 sec. In order to exit the "SCHEDULER" menu.

Step 7 – ENABLING THE SCHEDULER

To start the scheduler and all its "Actions", it's necessary to enter the SCHEDL=ON menu

SCHEDL=0N

1. Use the UP/DOWN keys to find the "SCHEDL=ON" menu
2. Press "Enter" and SCHEDL= will immediately begin to flash
3. Use the UP/DOWN keys to choose ON or OFF, according to requirements
4. Press "Enter" to exit the "SCHEDL=ON" menu and confirm



USER'S MANUAL REL. 1.00

SGM TECHNOLOGY FOR LIGHTING SPA
VIA PIO LA TORRE, 1_61010 TAVULLIA (PU), ITALY
TEL. +39 0721 476477 - FAX +39 0721 476170
www.sgm.it - info@sgm.it

