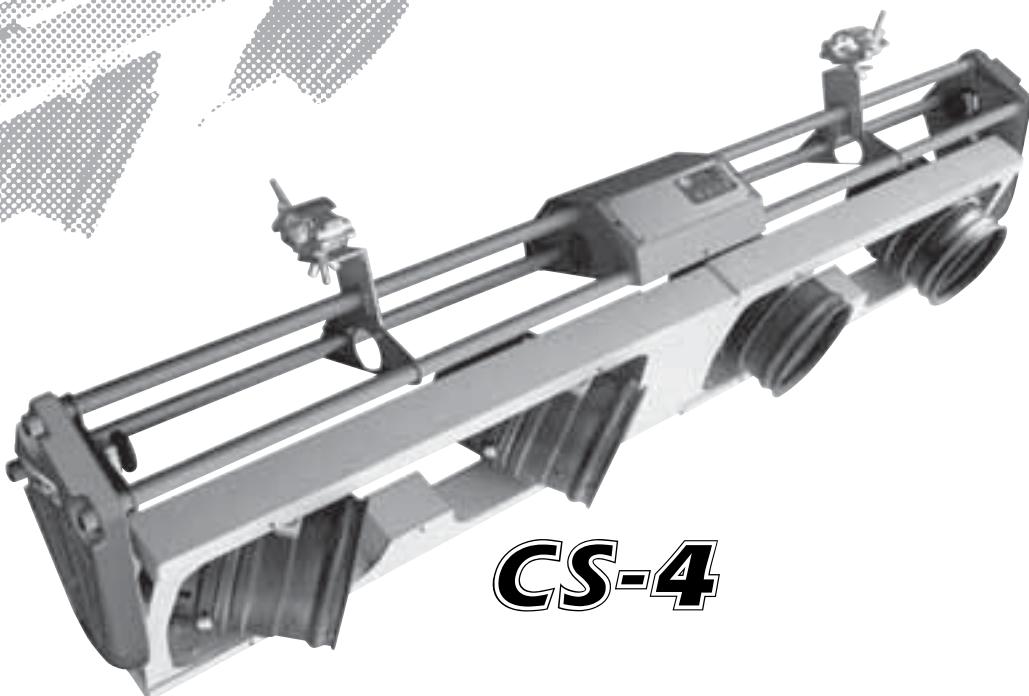


**CS-2**



**CS-4**

**User's and operator's manual for art. 0402/C and 0403/C**  
**Manuale d'uso e dell'operatore per art. 0402/C e 0403/C**

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**WARNING****SAFETY INFORMATION**

READ ALL CAUTIONS AND WARNINGS PRIOR TO OPERATE THIS EQUIPMENT.  
INSTRUCTION TO PREVENT INJURY OR DAMAGE DUE TO ELECTRIC SHOCK, FIRE, MECHANICAL HAZARDS AND  
UV RADIATION HAZARDS.

**•PROTECTION AGAINST FIRE**

- 1) This equipment is designed for use with the following lamps only:

ACL STI-250W-28V or ACL GE-250W-28V.

**DO NOT USE ANY OTHER TYPE OF LAMP!**

- 2) Maintain minimum distance of 0.3 meter from walls or any other type flammable surfaces.
- 3) Maintain minimum distance of 1.0 meter to lighted objects .
- 4) Replace fuses only with the specified type and rating.
- 5) Do not install the spot close to heat sources. Do not lay the connection cable on the spot when it is warm.

**•PROTECTION AGAINST ELECTRIC SHOCK**

- 1) **This equipment must be earthed.**

- 2) Class I equipment. The power supply cord includes a protective earthing conductor as part of the cord.
- 3) Disconnect power before installing the lamp or servicing (service personnel).

**•PROTECTION AGAINST MECHANICAL HAZARDS**

- 1) Use secondary safety chain when fixing this equipment.
- 2) Hot lamp explosion hazard. Do not open the equipment for 300 seconds after switching off.
- 3) Equipment surface may reach temperature up to 80°C. Allow about five minutes before handling.
- 4) Replace the lamp if it is damaged or thermally deformed and however after 200 life hrs (STI) or 25 life hrs (GE).

**•PROTECTION AGAINST UV RADIATION HAZARDS**

- 1) Do not start on this equipment without lamp enclosure or if the protection screens, or ultraviolet screens are damaged.
- 2) The protection screens, the lenses, or the ultraviolet filters must be replaced if they are visibly damaged and their effectiveness has been reduced, for example, by cracks or deep scratches.
- 3) Do not look directly at the lamp while lamp is on.

**IMPORTANTE****INFORMAZIONI DI SICUREZZA**

LEGGERE ATTENTAMENTE TUTTI GLI AVVERTIMENTI PRIMA DI COMPIERE QUALUNQUE OPERAZIONE SU QUESTO APPARECCHIO. ISTRUZIONI PER PREVENIRE LESIONI O DANNI DOVUTI AL FUOCO, ALLE SCOSSE ELETTRICHE, AI RAGGI ULTRAVIOLETTI ED AI RISCHI MECCANICI.

**•PROTEZIONE CONTRO IL FUOCO**

- 1) Questo apparecchio è progettato per funzionare esclusivamente con la lampada:  
ACL STI-250W-28V oppure ACL GE-250W-28V.

**NON USARE ASSOLUTAMENTE ALTRI TIPI DI LAMPADA!**

- 2) Mantenere la distanza minima di 0.3 metri da pareti ed altre superfici infiammabili.
- 3) Mantenere la distanza minima di 1.0 metri dagli oggetti illuminati.
- 4) Sostituire i fusibili solo con altri dello stesso tipo e valore.
- 5) Non installare il faro vicino fonti di calore. Non appoggiare il cavo di connessione sul faro quando questo è caldo.

**•PROTEZIONE CONTRO SCOSSE ELETTRICHE**

- 1) **Questo apparecchio necessita di messa a terra.**

- 2) Apparecchio di Classe I. Il conduttore di protezione deve far parte del cavo di alimentazione.
- 3) Disconnettere l'alimentazione prima di sostituire la lampada o aprire l'apparecchio (personale di servizio).

**•PROTEZIONE CONTRO RISCHI MECCANICI**

- 1) Usare la catena di sicurezza supplementare quando installate il faro.
- 2) Rischio di esplosione con lampada calda. Non aprire l'apparecchio per 300 secondi dopo lo spegnimento.
- 3) La temperatura dell'apparecchio può raggiungere 70°C. Attendere circa 5 minuti prima di operare sul faro.
- 4) Sostituire la lampada se è danneggiata o deformata a causa del calore e comunque dopo 200 ore di vita (STI) o 25 ore di vita (GE).

**•PROTEZIONE CONTRO RISCHI DA RADIAZIONE UV**

- 1) Non accendere l'apparecchio senza lo schermo protettivo o se le lenti o i filtri per l'ultravioletto sono danneggiate.
- 2) Gli schermi di protezione, le lenti, o i filtri ultravioletti, devono essere sostituiti se sono visibilmente danneggiati e se la loro efficacia è stata ridotta, per esempio, da fessure o incisioni profonde.
- 3) Non guardare direttamente la lampada quando questa è accesa.

**INTRODUCTION**

Thanks for choosing our CS-2/CS-4, the innovative mobile PAR-64.

CS-2 / CS-4 are projectors of the last generation, exclusively created to enrich traditional scenographies where the PAR-64 are used, allowing the use of a great number of scenes yet using only a few units: this also means a fast installation and the reduction of space for the transport. The CS-2 is the unit with 2 PAR-64 lights, using 2 Air Craft 250W 28V lamps: the lamps can be separately dimmed by 2 DMX channels, and also the PAN movement can be individually regulated at 8 or 16 bit by 2 DMX channels, while the TILT movement at 8 or 16 bit is the same for both the PAR-64. The CS-4 is equipped with the addition of 2 spots PAR 64 and has a length of 200 cm. Both the CS-2 and the CS-4 use all the 20 DMX channels used as shown on the schematics on next pages.

- Art. 0402/C CS-2 for two halogen lamps STI 250W 28V or GE 250W 28V.
- Art. 0403/C CS-4 for four halogen lamps STI 250W 28V or GE 250W 28V.

The input protocol used is the DMX 512. We suggest to use our controller Control Show 512, Fancy o Easy Control which can optimally drive the CS-2/CS-4.

To make the best of the performances, and to achieve the perfect functioning of this unit throughout the years, we do suggest you to carefully read this manual before connecting and switching on the unit. This will easily help you to become familiar with its commands and connections, and easily use it

**YOUR REFERENCE**

Please always mention the serial number and model every time you address the seller for any information or assistance

**BASIC KIT**

The basic kit of the CS-2/CS-4 projector contains:

- Projector
- Fixing plates
- User's Manual
- Studio Due warranty

On request:

- Lamps
- art. Twin clamp: n.2 aluminium clamps
- art. CS2/CS4 TR-ADP: couple of truss adaptor
- art. CS2/CS4 JOINT BRACKET: couple of joint bracket
- art. CS2/CS4 base: base for vertical installation
- art. CS4/Case: flight case for n.1 CS4
- art. CS2x2/Case: flight case for n.2 CS2

**WARNING**

**Check that the spot has not been damaged during transport. If it has been damaged or it does not work, address the seller. Whether the spot has been shipped to you directly, please contact the shipping company. Only the consignee (person or company) can claim for these damages.**

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**ita****INTRODUZIONE**

Vi ringraziamo per l'utilizzo del CS-2/CS-4, il nostro rivoluzionario faro PAR-64 mobile.

Il CS-2 / CS-4 sono proiettori di nuovissima concezione, pensati esclusivamente per arricchire le scenografie tradizionali dove si utilizzano i PAR-64 permettendo moltissime scene con poche unità, questo comporta anche velocità d'installazione e riduzione di spazi per il trasporto. Il CS-2 è l'unità con 2 fari PAR-64 che monta 2 lampade Air Craft 250W 28V le lampade possono essere dimmate separate da due canali DMX, anche il movimento PAN può essere regolato a 8 o 16 bit singolarmente da 2 canali DMX, mentre per il movimento TILT 8 o 16 bit è comune per entrambe i PAR-64. Il CS-4 in più ha altri 2 spot PAR 64 e raggiunge una lunghezza di 200 cm. Sia il CS-2 che il CS-4 utilizzano 20 canali DMX come da schemi illustrati nelle pagine successive.

- Art. 0402/C CS-2 per 2 lampade alogene STI 250W 28V oppure GE 250W 28V.
- Art. 0403/C CS-4 per 4 lampade alogene STI 250W 28V oppure GE 250W 28V.

Il protocollo di ingresso è il DMX 512. Per il pilotaggio del CS-2/CS-4 raccomandiamo l'utilizzazione delle nostre centraline Control Show 512, Fancy o Easy Control che sono in grado di pilotare i CS-2/CS-4 in modo ottimale.

Per ottenere il meglio delle prestazioni ed un corretto funzionamento negli anni di questa unità, Vi consigliamo di leggere attentamente questo manuale prima di collegarla e metterla in uso. In questo modo acquisirete familiarità con i suoi comandi e collegamenti affinché possiate utilizzarla facilmente.

**VOSTRA REFERENZA**

Citate il numero del modello e di serie ogni volta che Vi rivolgete al vostro rivenditore per informazioni o assistenza.

**CONFEZIONE BASE**

La confezione base del proiettore CS-2/CS-4 contiene:

- Proiettore
- Staffe di fissaggio
- Manuale d'uso
- Garanzia Studio Due

A richiesta:

- Lampade
- art. Twin clamp: n.2 clamps in alluminio
- art. CS2/CS4 base: base per installazione verticale
- art. CS2/CS4 TR-ADP: coppia di adattatori per installazioni modulari
- art. CS2/CS4 JOINT BRACKET: coppia di joint bracket
- art. CS4/Case: flight case per n.1 CS4
- art. CS2x2/Case: flight case per n.2 CS2

**IMPORTANTE**

**Controllate che l'apparecchio non abbia subito alcun danno durante il trasporto.**

**Se avesse subito dei danni o se non dovesse funzionare, rivolgetevi al vostro rivenditore. Se l'apparecchio vi è stato spedito direttamente, rivolgetevi immediatamente alla ditta di trasporto. Solo il destinatario (la persona o ditta ricevente l'apparecchio) può reclamare per questo tipo di danni.**

## TECHNICAL FEATURES / CARATTERISTICHE TECNICHE

### • LAMPS / LAMPADE

**CS-2:** 2 lamps ACL STI-250W-28V (suggested) or ACL GE-28V-250W (4552)

**CS-4:** 4 lamps ACL STI-250W-28V (suggerita) o ACL GE-28V-250W (4552)

average lamp life / durata lampada: STI=300 hours / GE=25 hours

luminous flux / : 50.000 lm

colour temperature / temperatura colore: 3200°K

### • OPTIC SYSTEM

CS-2: two units - CS-4: four units

beam angle / apertura fascio luminoso: 3,5°

### • PAN-TILT

stepper motors 8 or 16 bit: **PAN** 315° (2,0sec.), global **TILT** 270° (3,0sec.)

encoder close loop with auto-repositioning / autoriposizionamento tramite encoder  
PAN and TILT lock mechanism / blocco meccanico PAN e TILT

### • DIMMER

electronic dimmer: 0÷100%

### • CONTROL INPUT / SEGNALE DI INGRESSO

standard interface RS485, opto-coupled input

protocol: USITT DMX512

### • SETUP

built-in microprocessor with LED display and keys

### • POWER SUPPLY / POTENZA INGRESSO

rated voltage / tensione nominale:

100V, 120V, 230V, 240V/50-60Hz with internal voltage selector

rated current / corrente nominale: **CS-2:** 230V= 2,4A - **CS-4:** 230V= 4,8A

rated power / potenza nominale: **CS-2:** 230V= 550W - **CS-4:** 230V= 1100W

### • DMX CHANNELS

**CS4** setting:

13ch: all pan/tilt 8 bit

**CS2** setting:

9ch: all pan/tilt 8 bit

15ch: global pan/tilt 16 bit

11ch: global pan/tilt 16 bit

single pan 8 bit

single pan 8 bit

20ch: all pan/tilt 16 bit

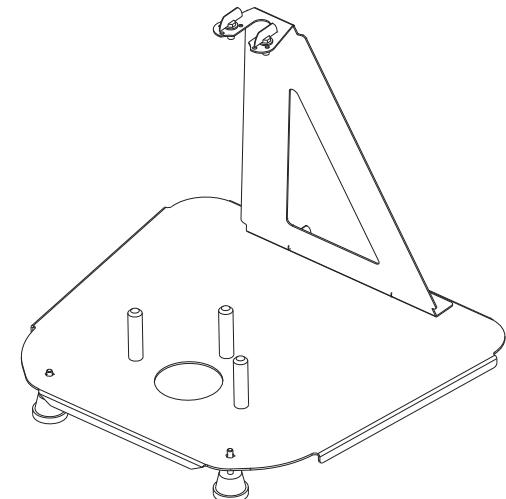
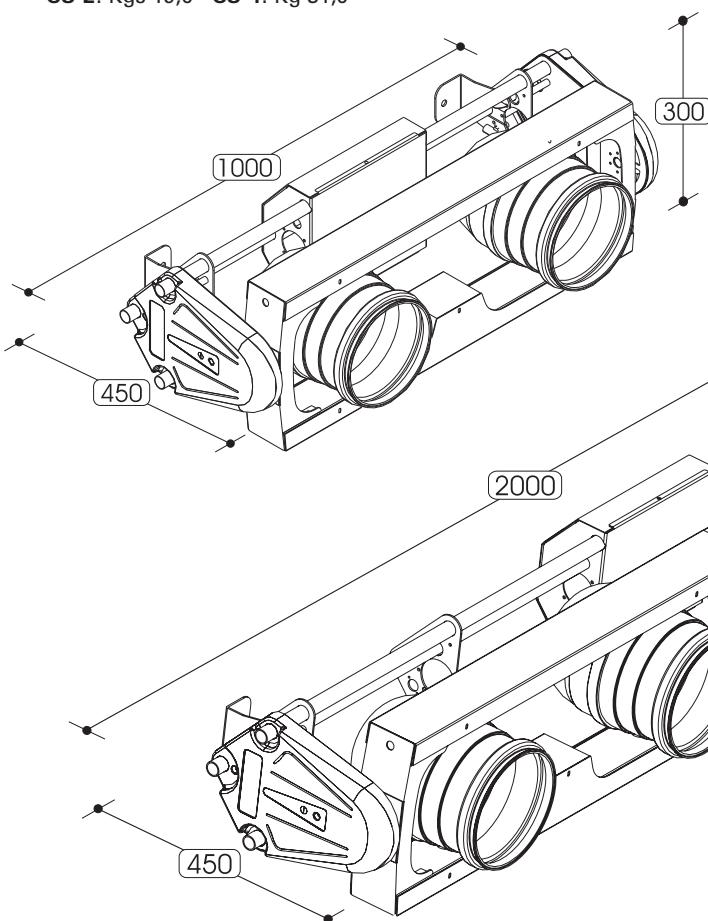
14ch: all pan/tilt 16 bit

### • DIMENSIONS / DIMENSIONI ( WxDxH ) / (LxPxH)

**CS-2:** mm 1000X300X450 - **CS-4:** mm 2000X300X450

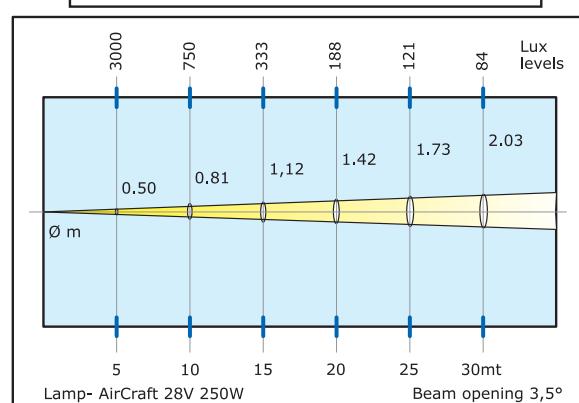
### • WEIGHT / PESO

**CS-2:** Kgs 19,0 - **CS-4:** Kg 31,0



Art. CS2/CS4 BASE (optional): for vertical installation

## PHOTOMETRIC PARAMETERS PARAMETRI FOTOMETRICI





**Spot line**  
Multi par concept

**CS 2 CS 4**

from 3.00 software version

<b>8888</b> -8888= Led test	<b>STUDIO dUE CS SPOT LINE</b>
<b>C001</b> -C001= CH-Default	
<b>8888</b> -Addr= Address/indirizzo DMX	<b>C001 ÷ C492</b>
<b>P088</b> -Pt= Menù PAN-TILT	<b>I888</b> -IPan= on/off inversion/inversione PAN <b>I888</b> -ItLt= on/off inversion/inversione TILT <b>F0bc</b> -Fdbc= on/off Feedback encoder <b>R0LP</b> -ALLP= on/off Ch5-Ch6 <b>O8Un</b> -OrUn= overrun function
<b>D600</b> -dEMO= Demo	<b>0088</b> -MOdE= DMX mode <b>0088</b> -nO= normal DMX <b>0088</b> -dM1= demo 1 <b>0088</b> -dM2= demo 2, demo 3 etc.
	<b>SP88</b> -SPd= demo speed <b>0000</b>
<b>FHrS</b> -FHrS= Fixture hours / ore di lavoro	<b>0000 ÷ 9999</b>
<b>D15P</b> -dISP= Menù display	<b>F08P</b> -FLIP= on/off 180° rotation display <b>L888</b> -LSHd= led shutdown
<b>SrvC</b> -SrvC= Service/servizio	<b>rSEt</b> -rSET= Reset <b>F088</b> -Frmt= Format <b>nCbo</b> <b>0088</b> -MOd1= DMX channels mode 1* <b>0088</b> -MOd2= DMX channels mode 2* <b>0088</b> -MOd3= DMX channels mode 3*
<b>On88</b> -On= ON / attivato	<b>OFF8</b> -OFF= OFF / disattivato
<b>FErr</b> -FErr= Format ERROR // // RESET OR CONTACT StudioDue DISTRIBUTOR // //	<b>8888</b> -PULSE = Holding to confirm ENTER

### eng

When the fixture is switched on will be present, for few seconds, the writing "STUDIO DUE CS SPOT LINE" (from 3.00 software-version only), than all the motors and the displays start a reset and then position themselves in the deafult settings: now you can start the set-up of the fixture through the electronic panel with 4 keys "MENU-DOWN-UP-ENTER", then choose the best setting following the schematics given above.

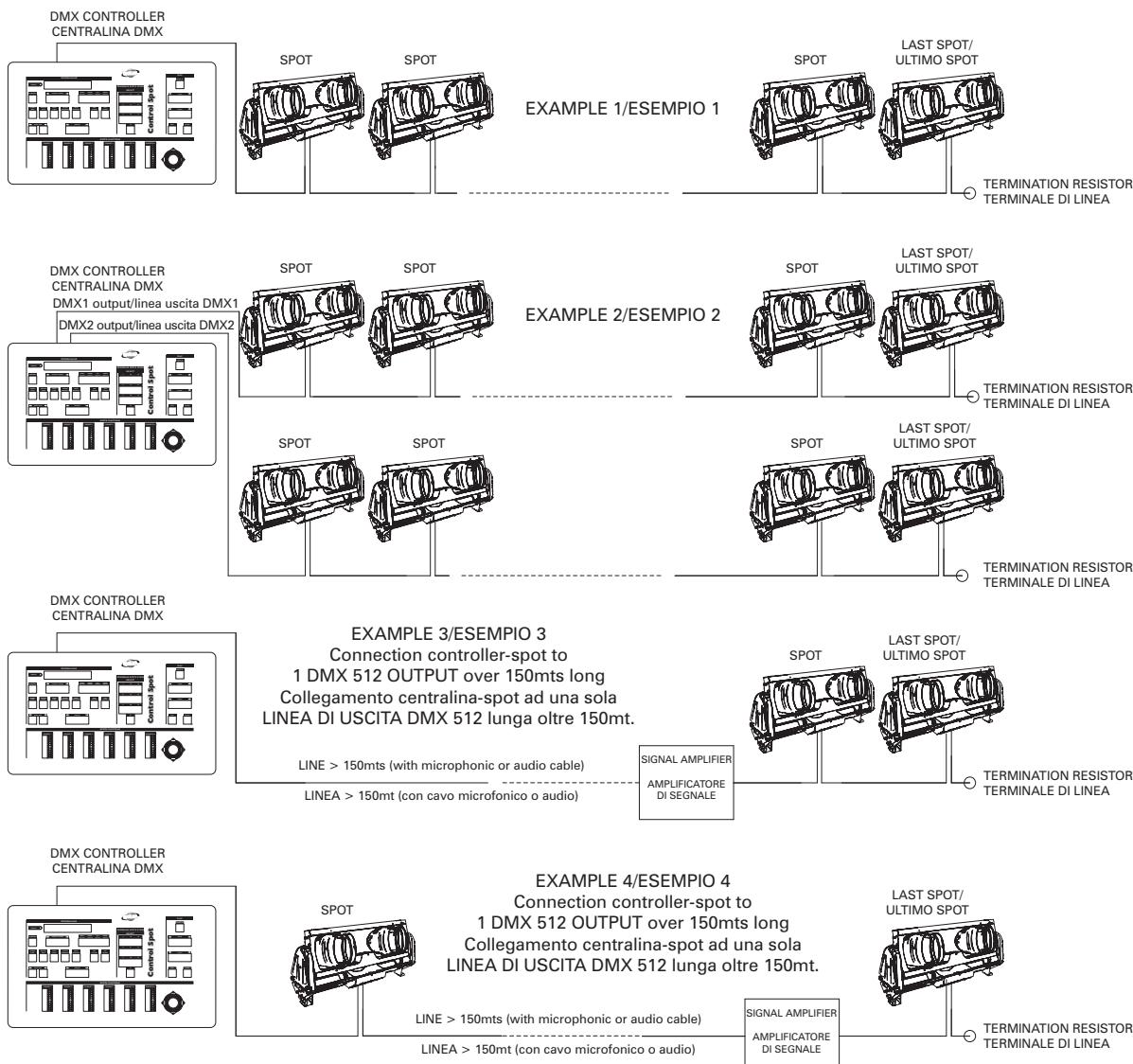
**IMPORTANT.** The display will flash after each modification: press and holding ENTER to confirm the change you have chosen

### ita

All'accensione dell'apparecchio sarà presente per pochi secondi la scritta "STUDIO DUE CS SPOT LINE" (solo dalla versione del software 3.00), poi tutti i motori ed i display faranno un ciclo di reset per poi posizionarsi nella configurazione di default, a questo punto si potrà effettuare il set-up dell'apparecchio a mezzo del pannello elettronico provvisto di 4 tasti "MENU-DOWN-UP-ENTER", quindi scegliere la migliore configurazione seguendo lo schema sopra riportato.

**IMPORTANTE.** Dopo ogni modifica il display lampeggerà, per confermare il cambiamento richiesto sarà necessario premere e tenere premuto ENTER.

## EXAMPLE OF CONNECTION DMX CONTROLLER-SPOT / ESEMPIO DI COLLEGAMENTO CENTRALINA - FARI



### DMX TERMINAL LINE

The wrong connection of the terminal line or its non-connection are probably the most frequent reasons for the defective functioning of the DMX line. The terminator is a terminal resistor fitted at the end of the cable furthest from the transmitter.

The terminal resistor should have the same value as the impedance of the connection cable.

We suggest to use a terminal with a 100 ohm resistor.

It is recommended that all DMX 512 systems have the terminal resistor fitted in the DMX output of the last fixture.

### TERMINALE LINEA DMX

L'incorretto o il mancato collegamento del terminale di linea è probabilmente la più comune causa del difettoso funzionamento della linea DMX. Il terminale di linea DMX consiste in una resistenza posta alla fine della linea.

La resistenza terminale dovrebbe avere idealmente lo stesso valore dell'impedenza del cavo di collegamento.

Noi forniamo un terminale con una resistenza da 100 ohm.

E' raccomandato per tutti i sistemi DMX 512 inserire il terminale di linea nel connettore uscita DMX dell'ultimo apparecchio collegato.

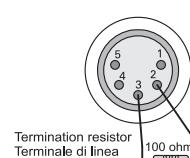
### DMX CONNECTION / COLLEGAMENTO DMX

The table maps DMX connector pins to wires and signals:

PIN	WIRE	SIGNAL
1	SHIELD	GROUND/RETURN/OV
2	INNER CONDUCTOR	DATA COMPLEMENT (-, INVERTED)
3	INNER CONDUCTOR	DATA TRUE (+, NON INVERTED)

DMX output connectors (top row): Pin 1 is shield, Pin 2 is inner conductor, Pin 3 is inner conductor.

DMX input connectors (bottom row): Pin 1 is inner conductor, Pin 2 is inner conductor, Pin 3 is shield.



## CS2 DMX SETTING: 14 CHANNELS 16 BIT; 11 CHANNELS 8 BIT; 9 CHANNELS 8 BIT

DMX CHANNEL	FUNCTION	DESCRIPTION	DECIMAL
Ch 1	dimmer lamp 1	linear dimmer 0 - 100% lamp 1	000...255
Ch 2	dimmer lamp 2	linear dimmer 0 - 100% lamp 2	000...255
Ch 3	motor speed	8 level of motor speed - max speed	000...031
		- min speed	224...255
Ch 4	reset	reset of all the motors	128...191
Ch 5	global pan coarse	global pan coarse (000 = excluded)	001...255
Ch 6	global pan fine	global pan fine for 16 bit	000...255
Ch 7	tilt coarse	global tilt coarse	000...255
Ch 8	tilt fine	global tilt fine for 16 bit	000...255
Ch 9	pan 1 coarse	pan spot 1 coarse	000...255
Ch 10	pan 1 fine	pan spot 1 fine for 16 bit	000...255
Ch 11	pan 2 coarse	pan spot 2 coarse	000...255
Ch 12	pan 2 fine	pan spot 2 fine for 16 bit	000...255
Ch 13	pan mode selector	pan mode normal	000...063
		pan mode 1	064...127
		pan mode 2	128...255
Ch 14	aux	aux	000...255

DMX CHANNEL	FUNCTION	DESCRIPTION	DECIMAL
Ch 1	dimmer lamp 1	linear dimmer 0 - 100% lamp 1	000...255
Ch 2	dimmer lamp 2	linear dimmer 0 - 100% lamp 2	000...255
Ch 3	pan 1	pan spot 1 for 8 bit	000...255
Ch 4	pan 2	pan spot 2 for 8 bit	000...255
Ch 5	global pan coarse	global pan coarse (000 = excluded)	001...255
Ch 6	global pan fine	global pan fine for 16 bit	000...255
Ch 7	tilt coarse	global tilt coarse	000...255
Ch 8	tilt fine	global tilt fine for 16 bit	000...255
Ch 9	pan mode selector	pan mode normal	000...063
		pan mode 1	064...127
		pan mode 2	128...255
Ch 10	motor speed	8 level of motor speed - max speed	000...031
		- min speed	224...255
Ch 11	reset	reset of all the motors	128...191

DMX CHANNEL	FUNCTION	DESCRIPTION	DECIMAL
Ch 1	dimmer lamp 1	linear dimmer 0 - 100% lamp 1	000...255
Ch 2	dimmer lamp 2	linear dimmer 0 - 100% lamp 2	000...255
Ch 3	pan 1	pan spot 1 for 8 bit	000...255
Ch 4	pan 2	pan spot 2 for 8 bit	000...255
Ch 5	global pan	global pan coarse (000 = excluded)	001...255
Ch 6	tilt	tilt 8 bit	000...255
Ch 7	pan mode selector	pan mode normal	000...063
		pan mode 1	064...127
		pan mode 2	128...255
Ch 8	motor speed	8 level of motor speed - max speed	000...031
		- min speed	224...255
Ch 9	reset	reset of all the motors	128...191

### eng

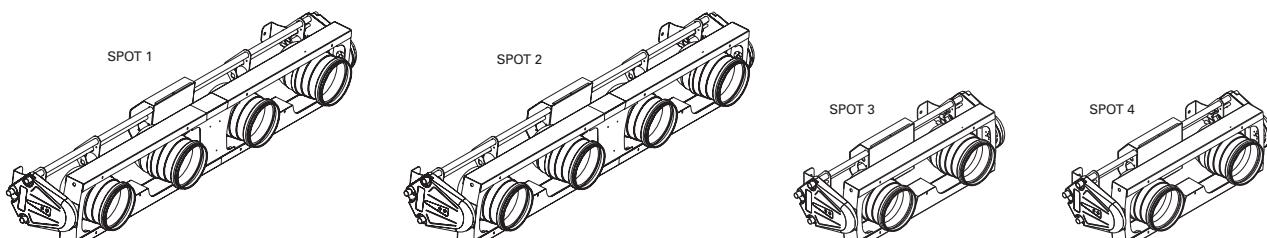
The CS2 can work both at 16 and 8 bit.

It utilize: 14 DMX channels, 16 bit (mod 3), 11 DMX channels, 8 bit (mod 2) e 9 DMX channels, 8 bit (mod 1).

### ita

Il CS-2 può funzionare sia a 16 che a 8 bit utilizzando:

14 canali DMX a 16 bit (mod 3), 11 canali DMX a 8 bit (mod 2) e 9 canali DMX a 8 bit (mod 1).



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**CS4 DMX SETTING: 20 CHANNELS 16 BIT; 15 CHANNELS 8 BIT; 13 CHANNELS 8 BIT****eng**

The CS4 can work at 16 or 8 bit. It utilize: 20 DMX channels, 16 bit (mod 3), 15 DMX channels, 8 bit (mod 2), 13 DMX channels, 8 bit (mod 1).

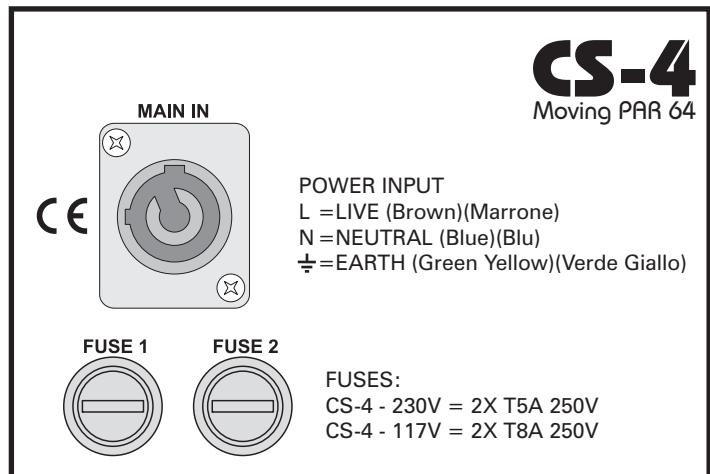
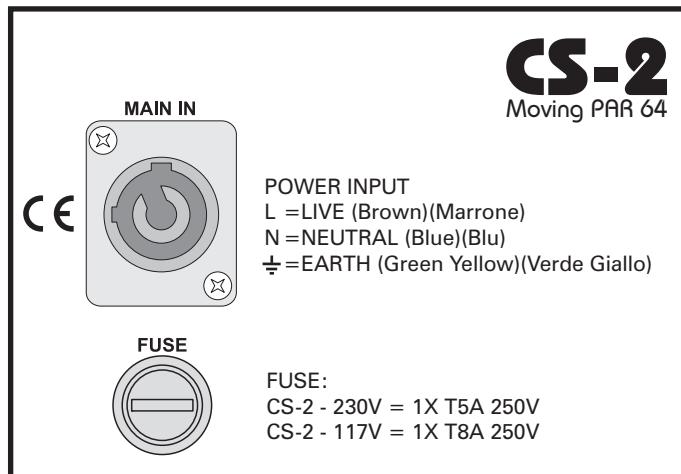
**ita**

Il CS4 può funzionare a 16 o a 8 bit utilizzando: 20 canali DMX a 16 bit (mod 3), 15 canali DMX a 8 bit (mod 2) e 13 canali DMX a 8 bit (mod 1).

DMX CHANNEL	FUNCTION	DESCRIPTION	DECIMAL
Ch 1	dimmer lamp 1	linear dimmer 0 - 100% lamp 1	000...255
Ch 2	dimmer lamp 2	linear dimmer 0 - 100% lamp 2	000...255
Ch 3	dimmer lamp 3	linear dimmer 0 - 100% lamp 3	000...255
Ch 4	dimmer lamp 4	linear dimmer 0 - 100% lamp 4	000...255
Ch 5	global pan coarse	global pan coarse (000 = excluded)	001...255
Ch 6	global pan fine	global pan fine for 16 bit	000...255
Ch 7	tilt coarse	global tilt coarse	000...255
Ch 8	tilt fine	global tilt fine for 16 bit	000...255
Ch 9	pan 1 coarse	pan spot 1 coarse	000...255
Ch 10	pan 1 fine	pan spot 1 fine for 16 bit	000...255
Ch 11	pan 2 coarse	pan spot 2 coarse	000...255
Ch 12	pan 2 fine	pan spot 2 fine for 16 bit	000...255
Ch 13	pan 3 coarse	pan spot 3 coarse	000...255
Ch 14	pan 3 fine	pan spot 3 fine for 16 bit	000...255
Ch 15	pan 4 coarse	pan spot 4 coarse	000...255
Ch 16	pan 4 fine	pan spot 4 fine for 16 bit	000...255
Ch 17	pan mode selector	pan mode normal	000...063
		pan mode 1	064...127
		pan mode 2	128...255
Ch 18	motor speed	8 level of motor speed - max speed	000...031
		- min speed	224...255
Ch 19	reset	reset of all the motors	128...191
Ch 20	aux	aux	000...255

DMX CHANNEL	FUNCTION	DESCRIPTION	DECIMAL
Ch 1	dimmer lamp 1	linear dimmer 0 - 100% lamp 1	000...255
Ch 2	dimmer lamp 2	linear dimmer 0 - 100% lamp 2	000...255
Ch 3	dimmer lamp 3	linear dimmer 0 - 100% lamp 3	000...255
Ch 4	dimmer lamp 4	linear dimmer 0 - 100% lamp 4	000...255
Ch 5	global pan coarse	global pan coarse (000 = excluded)	001...255
Ch 6	global pan fine	global pan fine for 16 bit	000...255
Ch 7	tilt coarse	global tilt coarse	000...255
Ch 8	tilt fine	global tilt fine for 16 bit	000...255
Ch 9	pan 1	pan spot 1 for 8 bit	000...255
Ch 10	pan 2	pan spot 2 for 8 bit	000...255
Ch 11	pan 3	pan spot 3 for 8 bit	000...255
Ch 12	pan 4	pan spot 4 for 8 bit	000...255
Ch 13	pan mode selector	pan mode normal	000...063
		pan mode 1	064...127
		pan mode 2	128...255
Ch 14	motor speed	8 level of motor speed - max speed	000...031
		- min speed	224...255
Ch 15	reset	reset of all the motors	128...191

DMX CHANNEL	FUNCTION	DESCRIPTION	DECIMAL
Ch 1	dimmer lamp 1	linear dimmer 0 - 100% lamp 1	000...255
Ch 2	dimmer lamp 2	linear dimmer 0 - 100% lamp 2	000...255
Ch 3	dimmer lamp 3	linear dimmer 0 - 100% lamp 3	000...255
Ch 4	dimmer lamp 4	linear dimmer 0 - 100% lamp 4	000...255
Ch 5	global pan	global pan coarse (000 = excluded)	001...255
Ch 6	tilt	global tilt coarse	000...255
Ch 7	pan 1	pan spot 1 for 8 bit	000...255
Ch 8	pan 2	pan spot 2 for 8 bit	000...255
Ch 9	pan 3	pan spot 3 for 8 bit	000...255
Ch 10	pan 4	pan spot 4 for 8 bit	000...255
Ch 11	pan mode selector	pan mode normal	000...063
		pan mode 1	064...127
		pan mode 2	128...255
Ch 12	motor speed	8 level of motor speed - max speed	000...031
		- min speed	224...255
Ch 13	reset	reset of all the motors	128...191



## ⚠️ WARNING

Before connecting the equipment to the mains power:  
Make sure that the mains voltage and frequency are in the right range on the voltage selector.

Prima di collegare l'apparecchio alla rete elettrica:  
Assicurarsi che la tensione e la frequenza di utilizzo corrispondano ai valori indicati in etichetta  
(see side picture/vedere figura a lato)

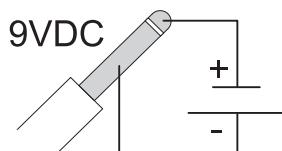
## ⚠️ IMPORTANTE



## FIXTURE SETUP (9V DC) / CONFIGURAZIONE APPARECCHIO (9V DC)

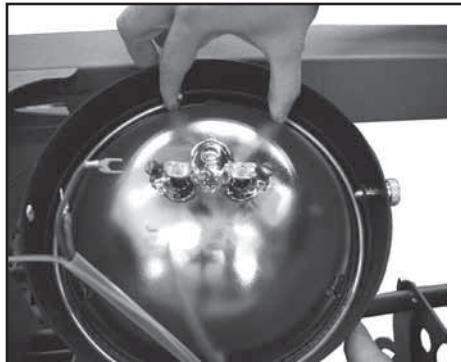
With 9V DC it's possible to configure the fixture by its control panel (DMX channels setup, games choose, etc.) without mains power connection. Here below is shown the correct cable connection.

Con alimentazione 9V DC è possibile configurare l'apparecchio tramite il suo pannello di controllo (settare i canali DMX, scegliere i giochi, etc.) senza collegarlo alla rete. Di seguito è illustrato lo schema di collegamento del cavo.

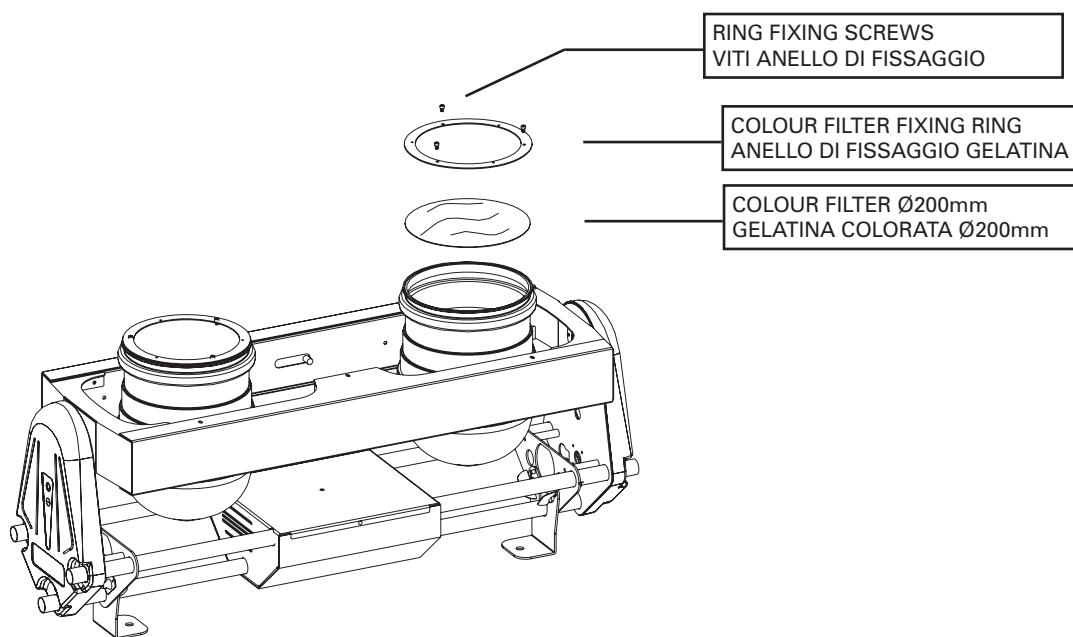


## LAMP'S INSTALLATION AND REPLACEMENT / INSTALLAZIONE E SOSTITUZIONE LAMPADA

AIRCRAFT STI-250W-28V OR GE-250W-28V LAMP  
LAMPADA AIRCRAFT STI-250W-28V OPPURE GE-250W-28V

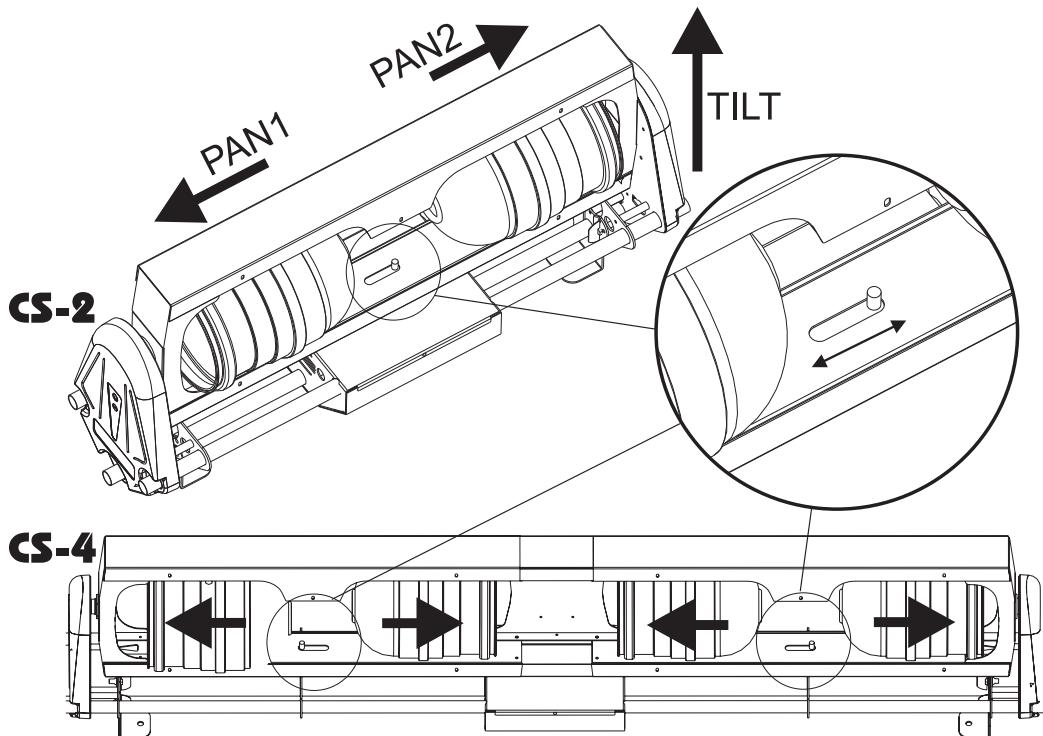


## COLOR FILTER INSTALLATION / MONTAGGIO GELATINA COLORATA



## MECHANICAL LOCK / BLOCCO MECCANICO

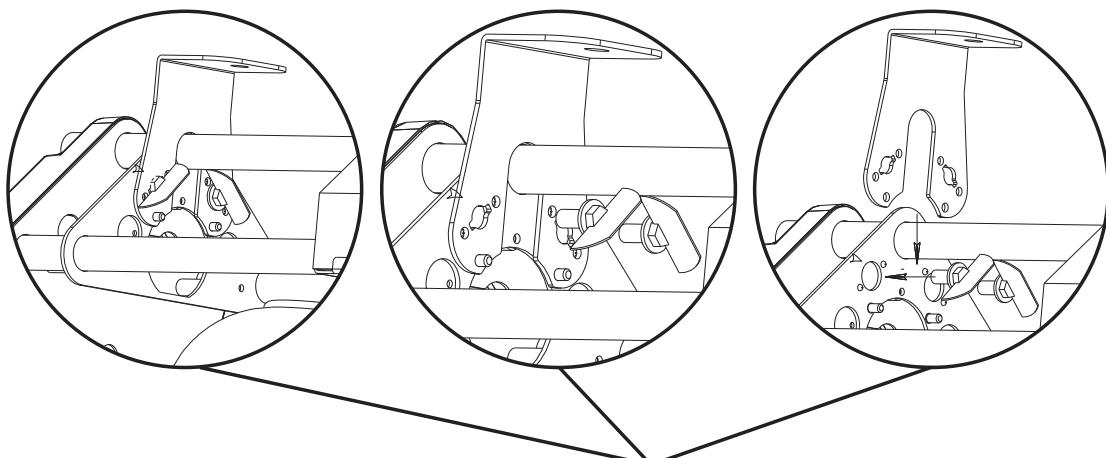
Mechanical LOCK  
Blocco meccanico



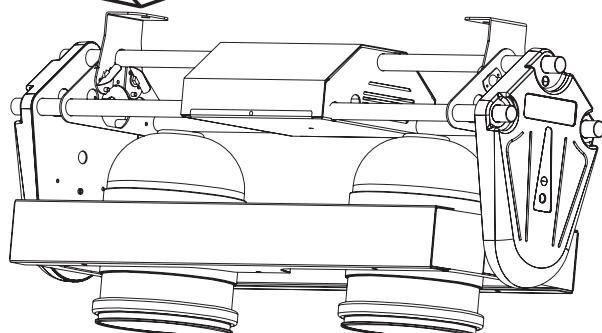
**IMPORTANT!** BEFORE TO MOVE THE LOCK KEY, BE SURE TO HAVE POSITIONED THE FIXTURE IN THE RIGHT WAY, AS SHOWN IN THE DRAWING.

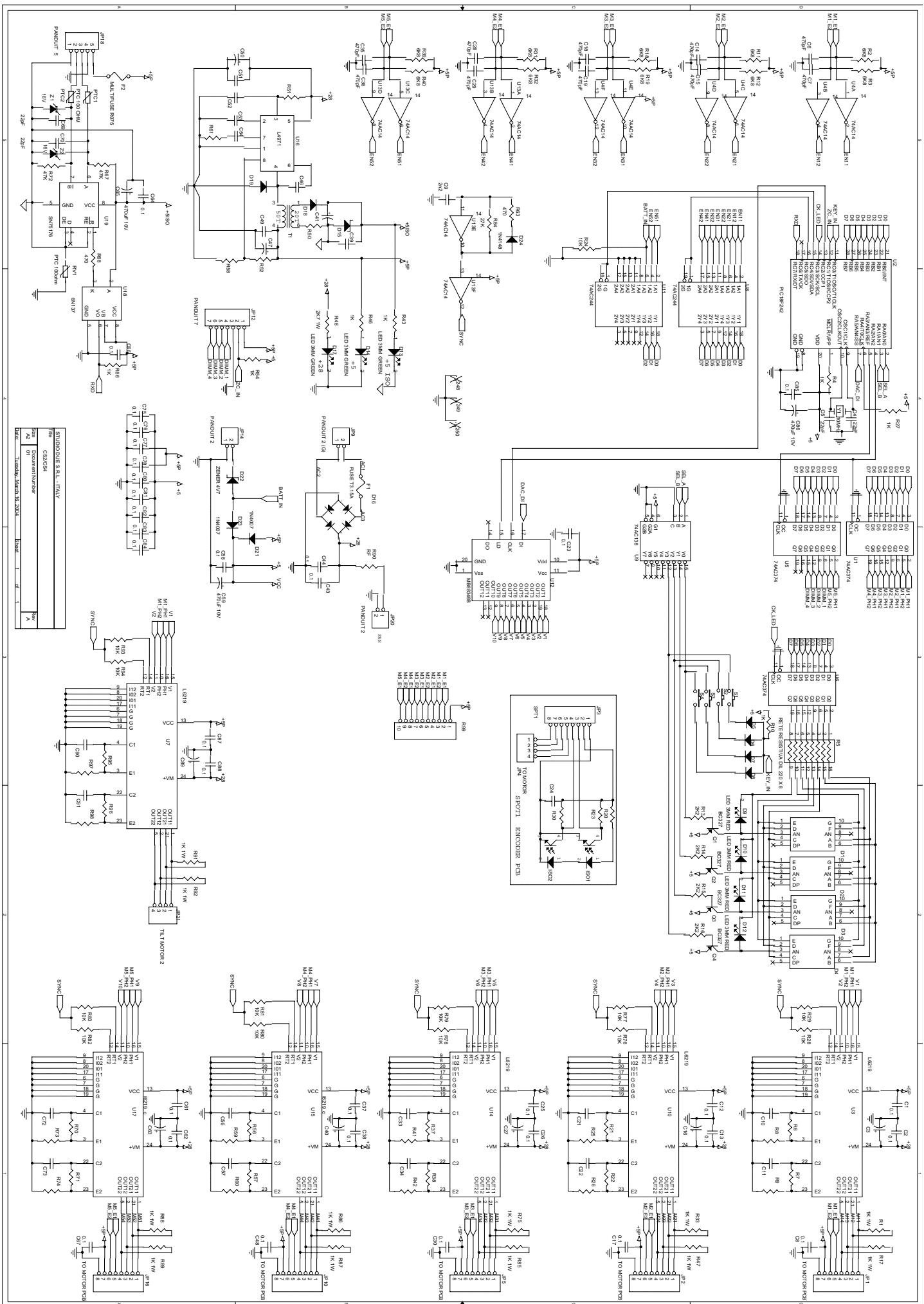
**IMPORTANTE!** POSIZIONARE LE PARTI MOBILI COME DA DISEGNO PRIMA DI INSERIRE IL BLOCCO MECCANICO.

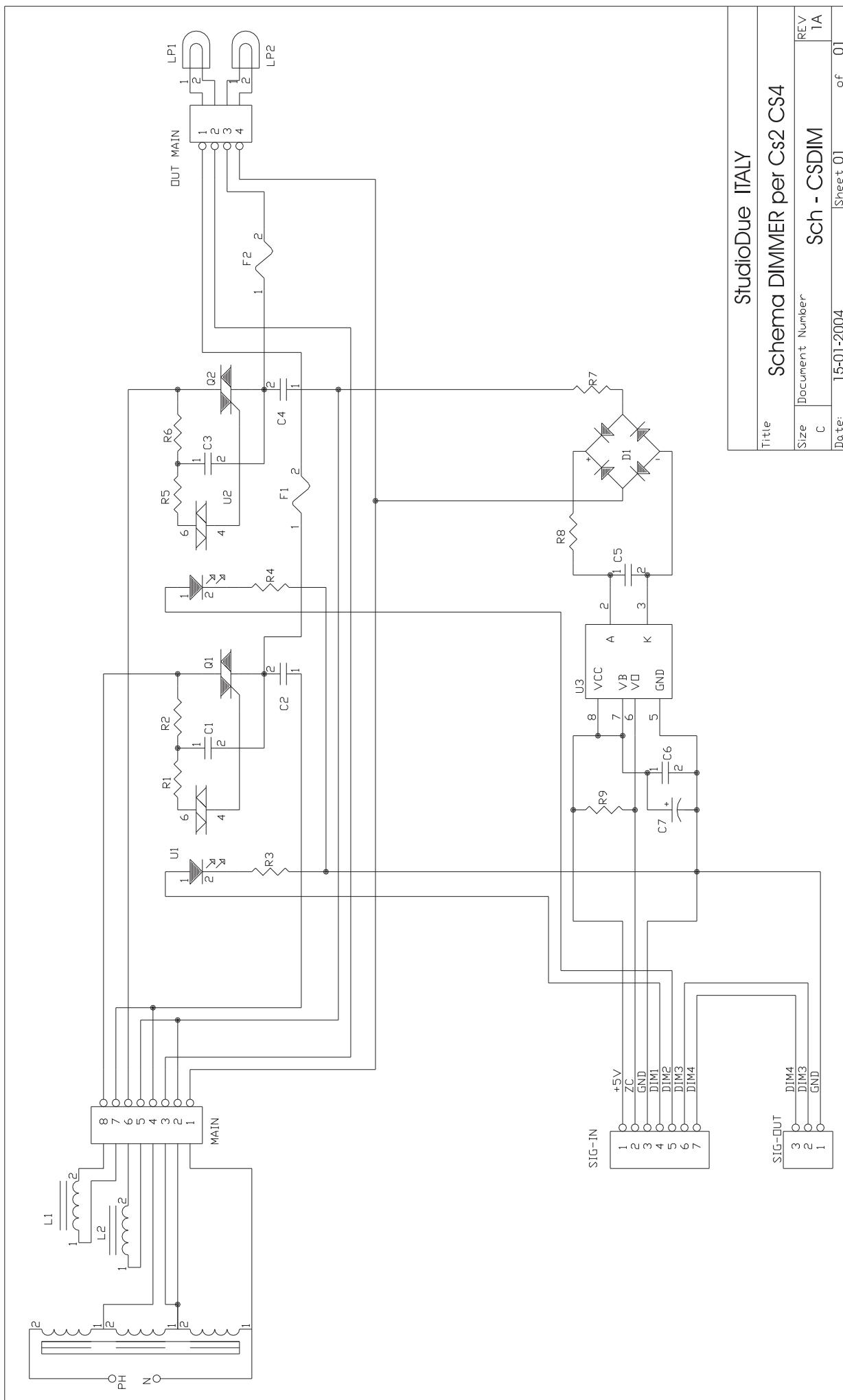
## THE FIXING BRACKET / STAFFE DI FISSAGGIO

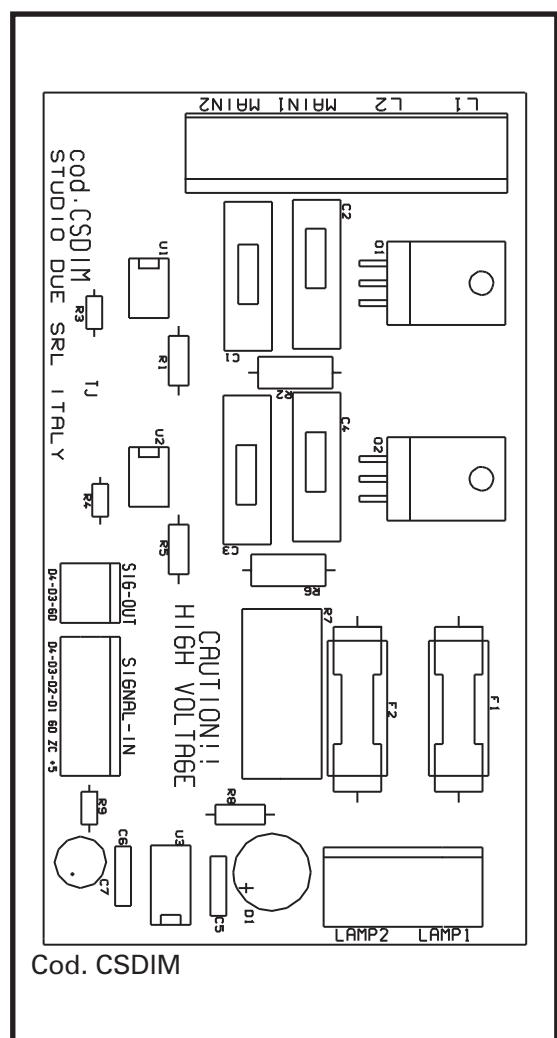
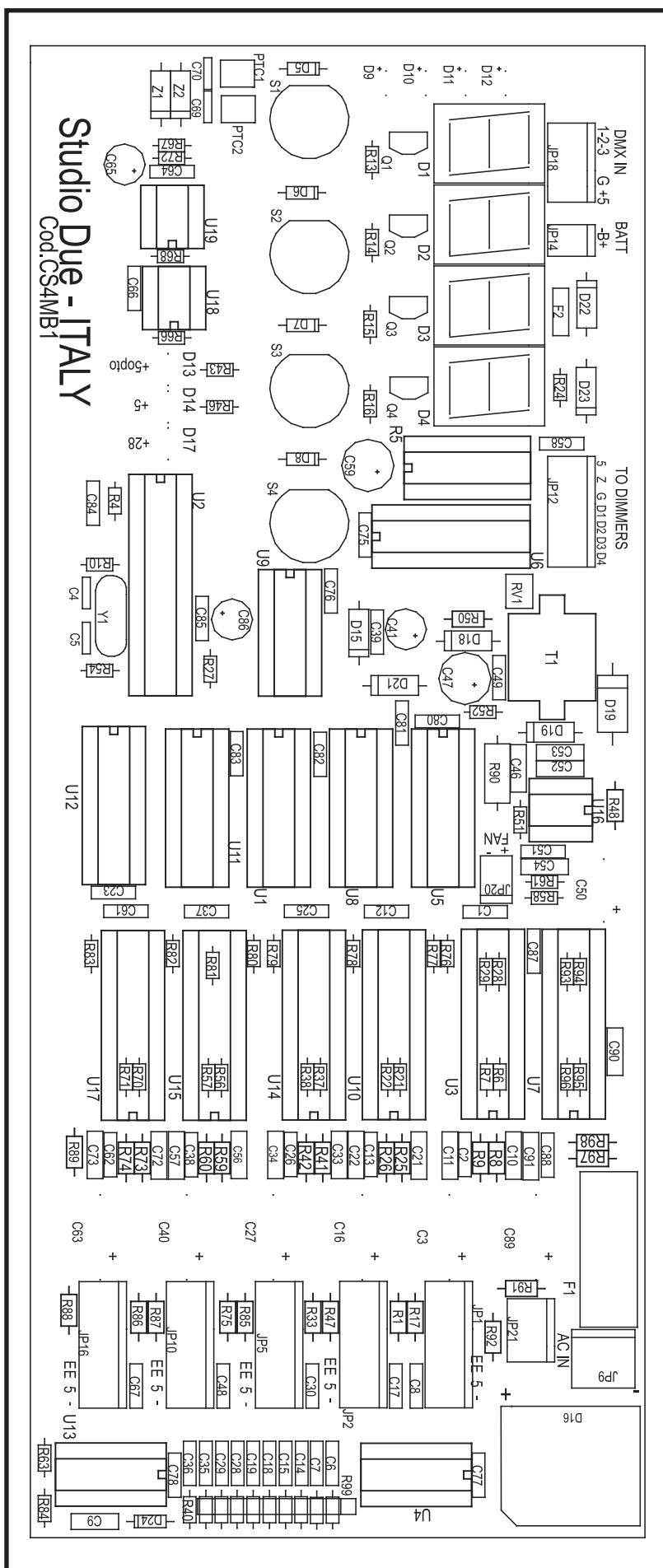


**FIXING BRACKET**  
STANDARD FIXED WITH BOLTS  
OPTIONAL FIXED WITH FAST LOCK



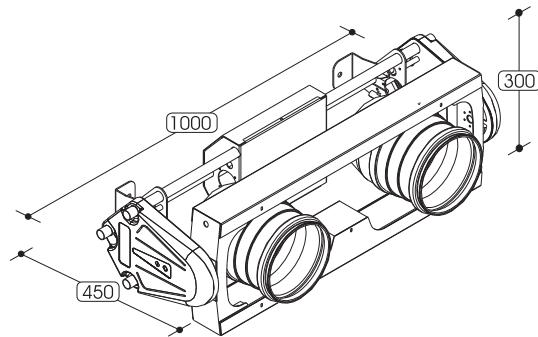






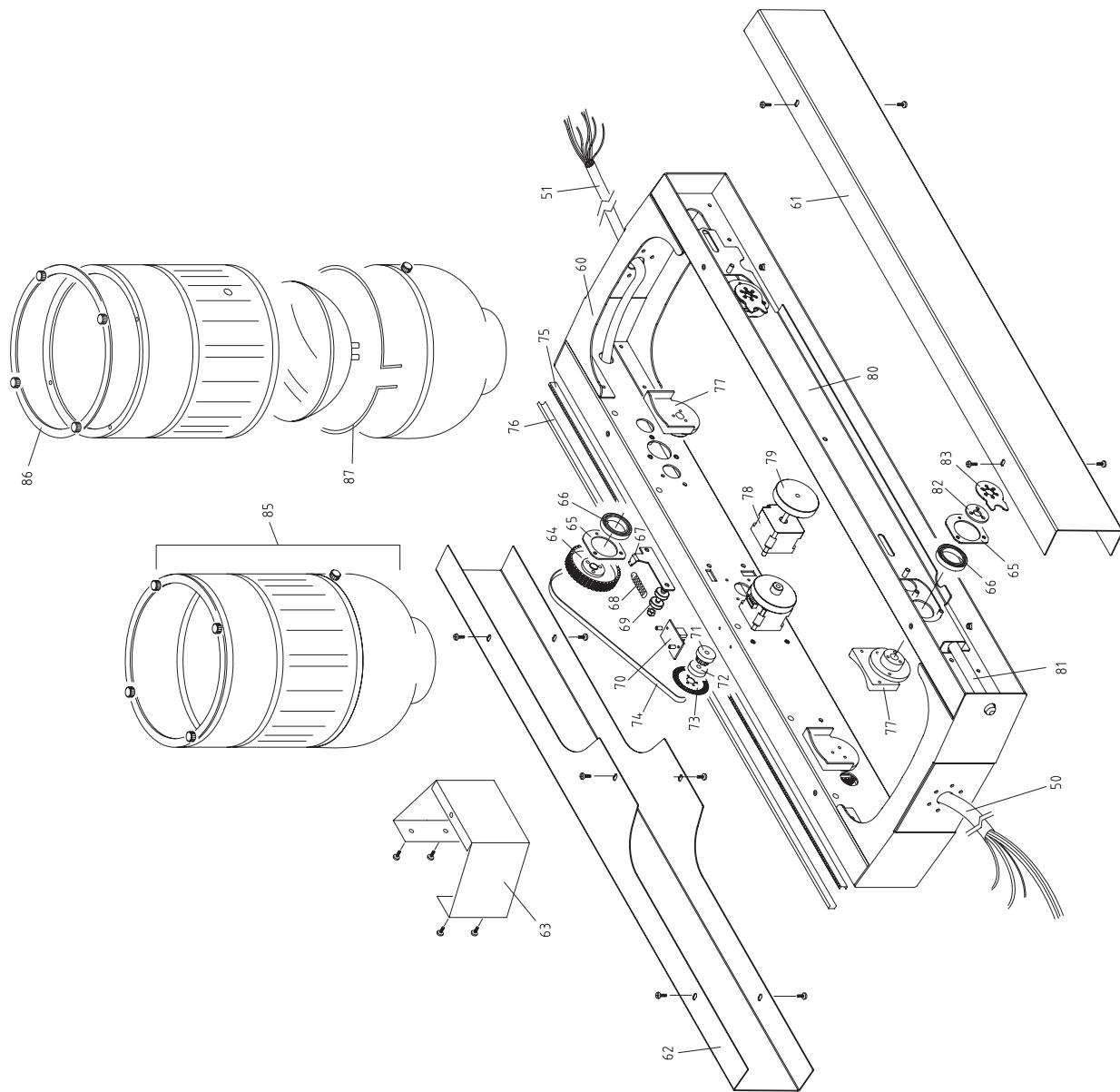
**Studio Due - ITALY**  
Cod.CS4MB1

**CS2: SPARE PARTS, TECHNICAL DRAWINGS**  
**CS2: PARTI DI RICAMBIO E DISEGNI TECNICI**

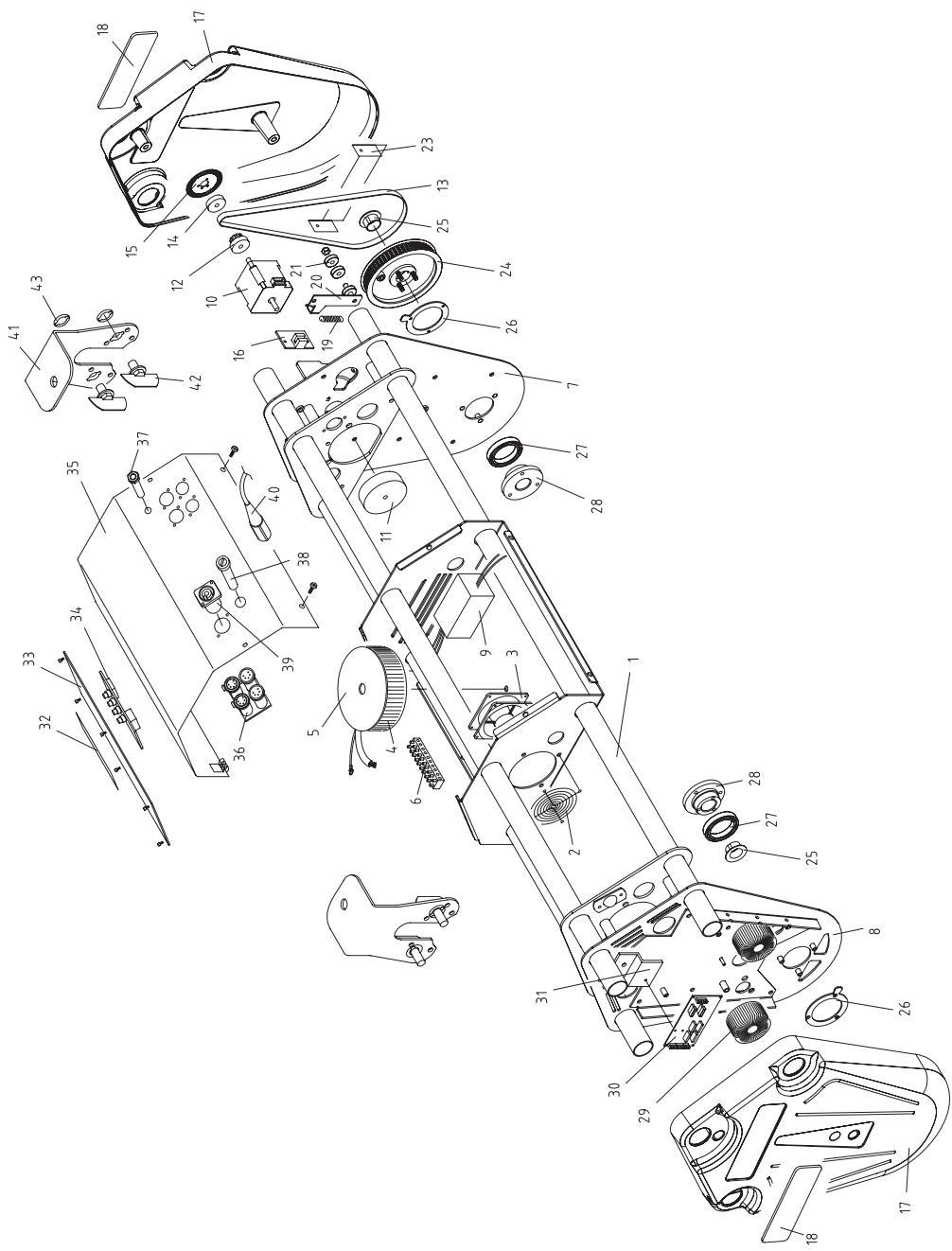


--- CS/2 ---	
N.	Description
1	base structure
2	fan grille
3	fan
4	voltage transformer
5	fixing plate
6	connecting terminal
7	lateral motor plate
8	lateral block plate
9	EMC filter
10	tilt motor
11	tilt flywheel
12	pulley
13	belt 230XL
14	spacer
15	encoder
16	PCB encoder
17	lateral cover
18	label
19	spiral spring
20	belt stretcher
21	ball bearing
-	
23	wire protection plate
24	tilt gear
25	protection cable
26	tilt stop plate
27	bearing
28	tilt hub
29	dimmer transformer coil
30	dimmer PCB
31	heat dissipator
32	display panel
33	electronic cover plate
34	DMX panel
35	electronic cover
36	DMX connector plate
37	jack input connector (female)
38	fuse holder
39	speakon power connector
40	input power connector
41	fixing bracket
42	fast lock
43	fast lock sliding ring

--- CS/2 ---	
N.	Description
50	lamps cable
51	motors cables
-	
60	head structure
61	lateral cover
62	lateral cover (shaped)
63	motor cover
64	pan gear
65	pan fixing flange
66	pan ball bearing
67	pan idler
68	spiral spring
69	ball bearing
70	encoder board
71	pulley
72	spacer
73	encoder
74	belt 230XL
75	surface raceway
76	surface raceway cover
77	pan hub
78	pan motor
79	pan flywheel
80	lock structure
81	stop pin
82	pan spacer
83	pan stop flange
-	
85	spot complete
86	colour filter fixing ring
87	lamp stop spring



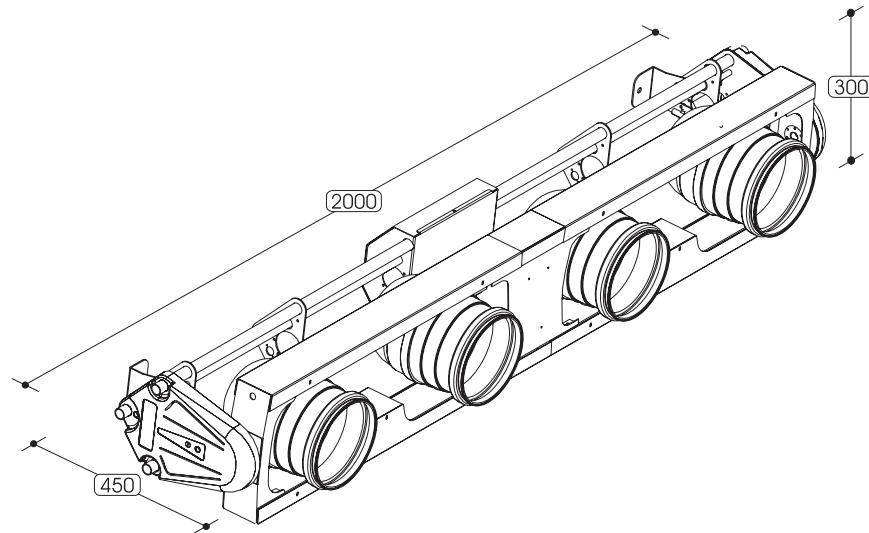
**CS2: HEAD**



**CS2: BASE**

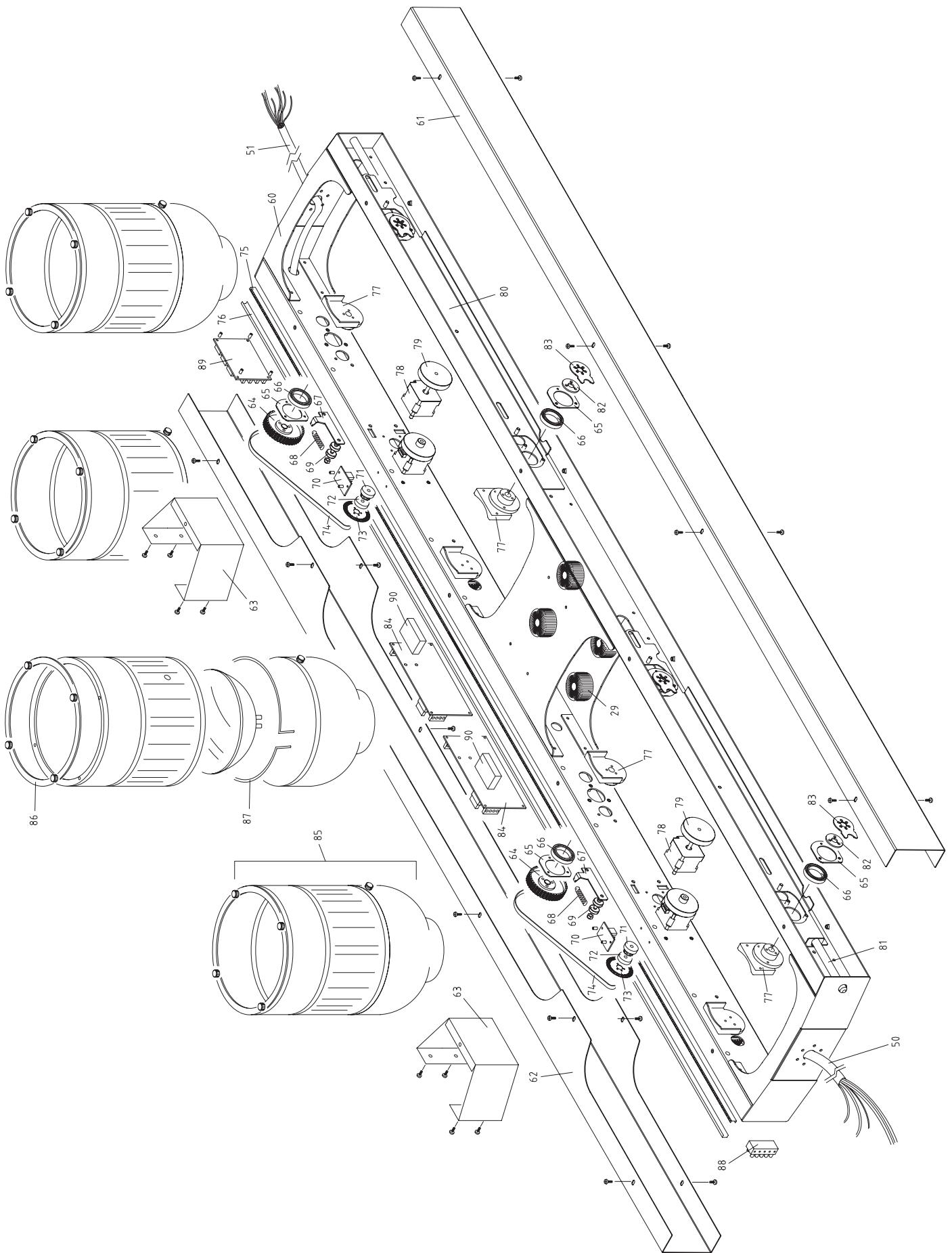
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**CS4: SPARE PARTS, TECHNICAL DRAWINGS**  
**CS4: PARTI DI RICAMBIO E DISEGNI TECNICI**

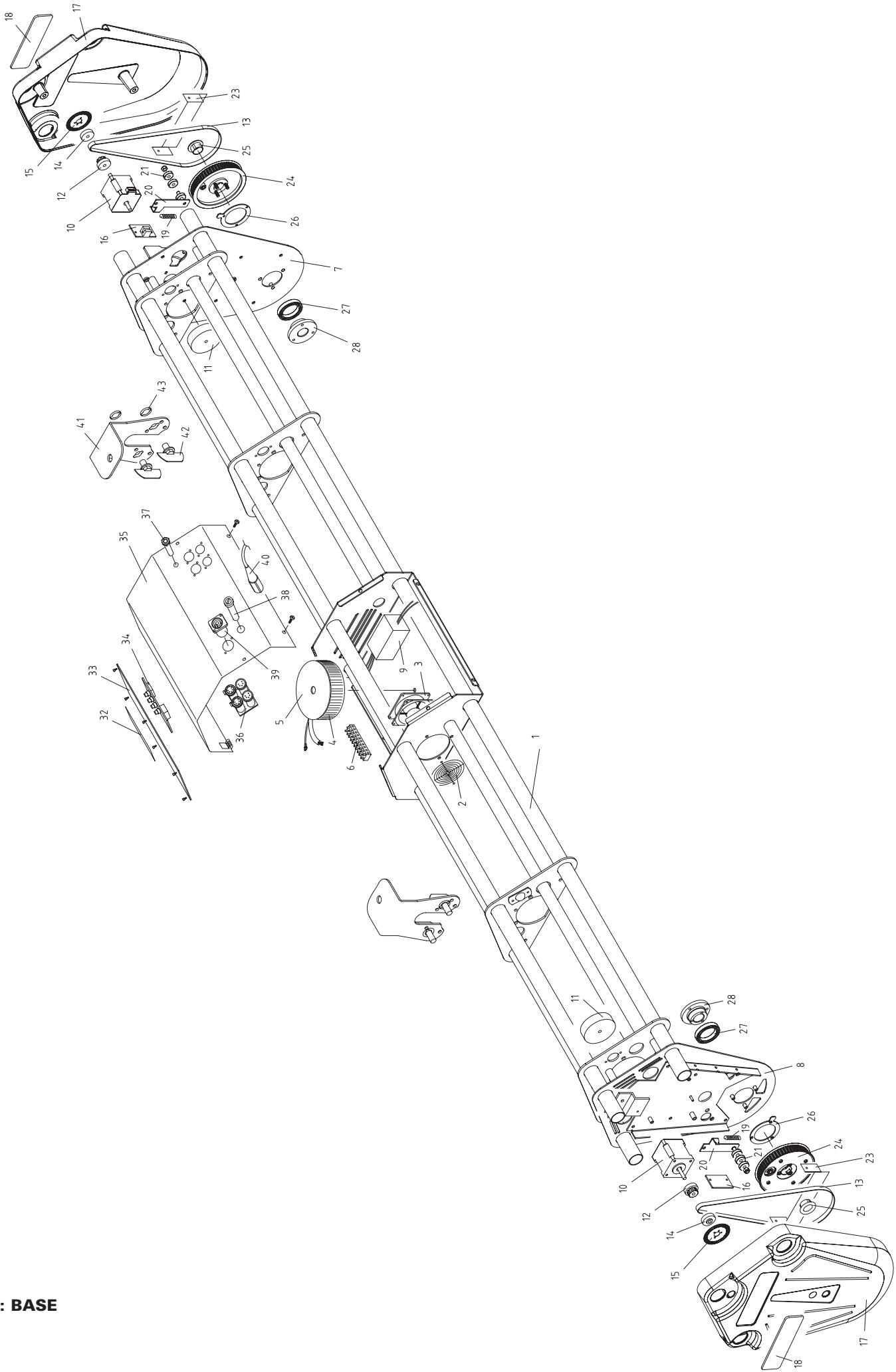


--- CS/4 ---	
N.	Description
1	base structure
2	fan grille
3	fan
4	voltage transformer
5	fixing plate
6	connecting terminal
7	lateral motor plate
8	lateral block plate
9	EMC filter
10	tilt motor
11	tilt flywheel
12	pulley
13	belt 230XL
14	spacer
15	encoder
16	PCB encoder
17	lateral cover
18	label
19	spiral spring
20	belt stretcher
21	ball bearing
-	
23	wire protection plate
24	tilt gear
25	protection cable
26	tilt stop plate
27	bearing
28	tilt hub
29	dimmer transformer coil
-	
-	
32	display panel
33	electronic cover plate
34	DMX panel
35	electronic cover
36	DMX connector plate
37	jack input connector (female)
38	fuse holder
39	speakon power connector
40	input power connector

--- CS/4 ---	
N.	Description
41	fixing bracket
42	fast lock
43	fast lock sliding ring
-	
50	lamps cable
51	motors cables
-	
60	head structure
61	lateral cover
62	lateral cover (shaped)
63	motor cover
64	pan gear
65	pan fixing flange
66	pan ball bearing
67	pan idler
68	spiral spring
69	ball bearing
70	encoder board
71	pulley
72	spacer
73	encoder
74	belt 230XL
75	surface raceway
76	surface raceway cover
77	pan hub
78	pan motor
79	pan flywheel
80	lock structure
81	stop pin
82	pan spacer
83	pan stop flange
84	dimmer PCB
85	spot complete
86	colour filter fixing ring
87	lamp stop spring
88	connecting terminal
89	motor PCB
90	heat dissipator



CS4: HEAD



**CS4: BASE**

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