



# CS spot line

## CATALOGUE

moving light &  
moving multipar concept



CS1 spot line 575, 400, 150

*moving light*



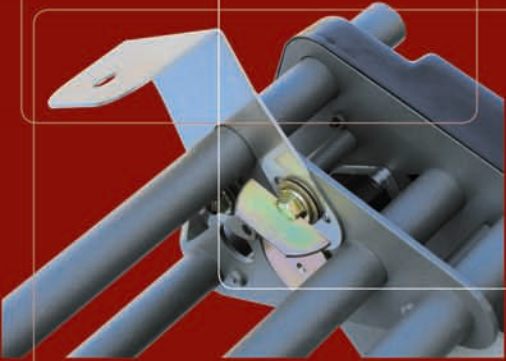
CS2 spot line 2x250



CS4 spot line 4x250

*moving multipar concept*

the optional kit with steel fast fixing bracket and fast lock



the CS2/CS4 250W 28V lamp

**CS4**  
**4x250W**

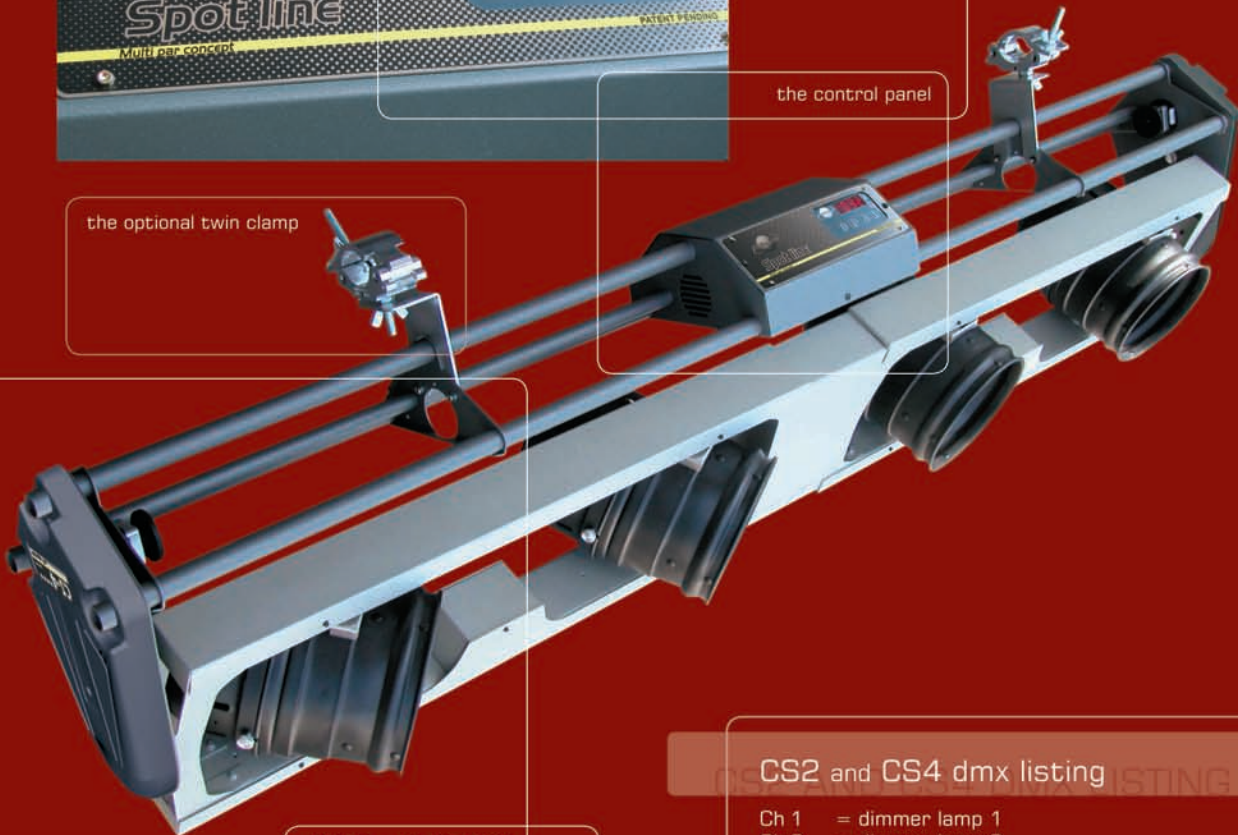
cs4  
4x250W

moving multipar  
concept



the control panel

the optional twin clamp



PATENT PENDING

CS4 • 4x250W

### CS2 and CS4 dmx listing

- Ch 1 = dimmer lamp 1
- Ch 2 = dimmer lamp 2
- Ch 3\* = dimmer lamp 3 (not used for CS2)
- Ch 4\* = dimmer lamp 4 (not used for CS2)
- Ch 5 = global pan coarse
- Ch 6 = global pan fine
- Ch 7 = tilt coarse
- Ch 8 = tilt fine
- Ch 9 = pan 1 coarse
- Ch 10 = pan 1 fine
- Ch 11 = pan 2 coarse
- Ch 12 = pan 2 fine
- Ch 13\* = pan 3 coarse (not used for CS2)
- Ch 14\* = pan 3 fine (not used for CS2)
- Ch 15\* = pan 4 coarse (not used for CS2)
- Ch 16\* = pan 4 fine (not used for CS2)
- Ch 17 = pan mode selector  
(0..63 Normal, 64..127 Twin UP, 128..255 Twin DOWN)
- Ch 18 = motor speed
- Ch 19 = reset
- Ch 20 = aux

#### available models

art. 0308: CS2 2x250W  
art. 0309: CS4 4x250W

#### available accessories

art. TWIN clamps: 2 clamps  
art. CS2/CS4 fast bracket: kit 2 bracket + 4 fast lock  
art. CS2/CS4 base: base for vertical installation

CS2 • CS4 (2 or 4x250W)

moving multipar concept



## CS2 and CS4 technical features

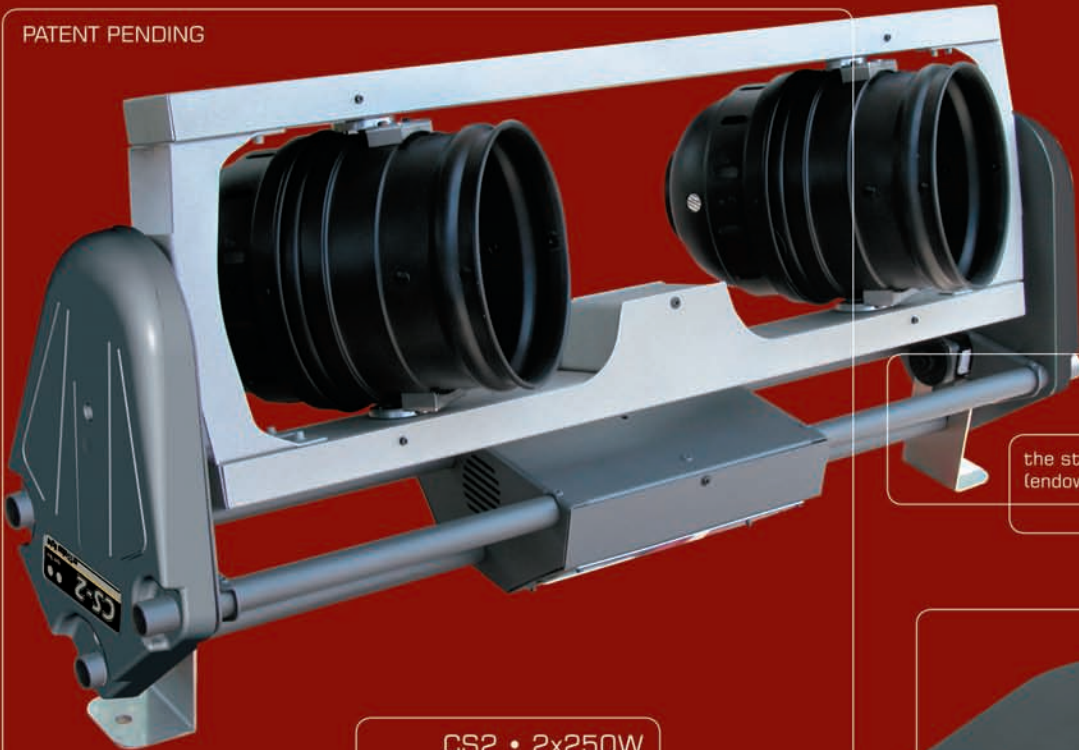
CS2  
2x250W

cs2  
2x250W

moving multipar  
concept

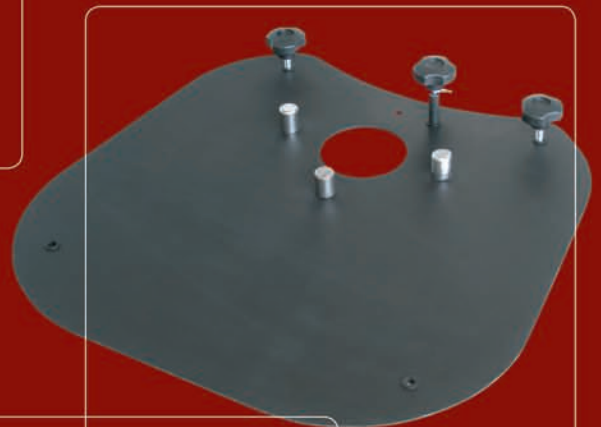
- LAMPS
  - CS2: 2 x 250W
  - CS4: 4 x 250W
- LAMP TYPE
  - ST 250W 28V (suggested), 300 hrs lamp life
  - GE4552 250W 28V, 50 hrs lamp life
- OPTIC SYSTEM
  - Motorised PAR 64 system:
    - CS2: two units
    - CS4: four units
- PAN TILT
  - Movement: stepper motor 8 or 16 bit resolution
  - single tilt: 200°
  - double or quadruple pan: 270°
- CONTROL INPUT
  - Standard interface: RS-485, opto-coupled input
  - Protocol: USITT DMX 512
- SETTING
  - Built-in microprocessor with display
- POWER SUPPLY
  - Rated voltage: 100V, 120V, 230V, 240V 50-60Hz with internal voltage selector
  - Rated power:
    - CS2: 550W
    - CS4: 1100W
  - Rated current:
    - CS2: 2,4A (230V)
    - CS4: 4,8A (230V)
- DIMMER
  - Electronic progressive dimmer
- DIMENSIONS (wxdxh)
  - CS2: mm 1000x300x450
  - CS4: mm 2000x300x450
- WEIGHT
  - CS2: Kgs.19
  - CS4: Kgs.31

PATENT PENDING



CS2 • 2x250W

the standard bracket  
(endowed with the fixture) fixed with bolt



the CS2 and CS4 base for vertical installation



## CS1 technical features

### • ELECTRONIC PROGRESSIVE DIMMER

Electronic dimmer 100%-0% for CS1 575W halogen lamp, 100%-60% for the others one.

### • BEAM ANGLE

Equipped with 4 version of lenses for 4 beam angles (50%)

15° with VN5P lens (very narrow beam)

19° with NSP lens (narrow beam)

21° with MFL lens (medium beam)

30° with WFL lens (wide beam)

### • PAN TILT

Movement: stepper motor 8 or 16 bit resolution:

540° Pan, 270° Tilt

Encoder close loop with autorepositioning

### • CONTROL INPUT

Standard interface: RS-485, opto-coupled input

Protocol: USITT DMX512

### • SETTING

Built-in microprocessor with display

### • DMX CHANNELS

1= motor speed

5= pan coarse

2= aux

6= pan fine

3= reset/lamp off

7= tilt coarse

4= dimmer

8= tilt fine

### • POWER SUPPLY

Rated voltage: 95-265Vac 50-60Hz, electronic ballast (for CS1-575 halogen lamp, it is necessary to utilize the lamp code OSRAM: 93725 for 117V, 93728 for 230V)

### • DIMENSIONS mm (wxdxh) and WEIGHT

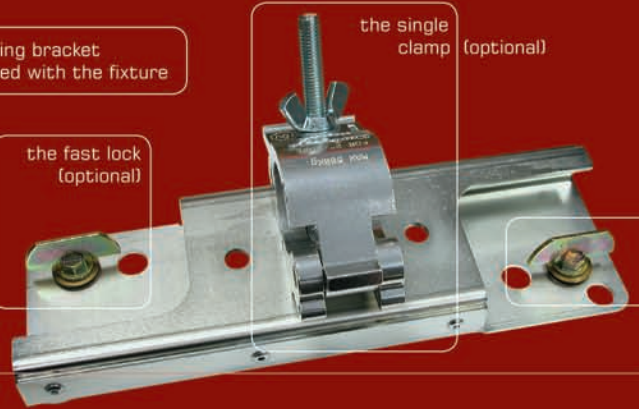
Art. 0307,03072: 400x340x500 - Kgs. 10

Art. 03071,03073: 430x340x500 - Kgs. 12

the fixing bracket endowed with the fixture

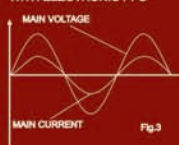
the single clamp (optional)

the fast lock (optional)

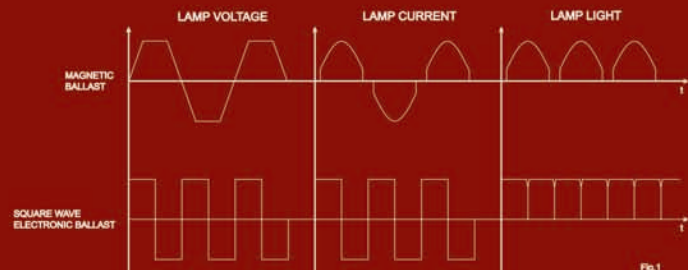
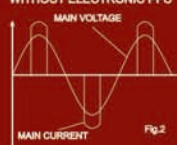


Electronic Ballast technical features	CS1 575W	CS1 400W	CS1 150W
MAINS POWER SUPPLY	95-260Vac, 47-63Hz		
LAMP POWER	580W	400W	150W
DEVIATION OF THE OUTPUT POWER	+/-3%	+/-3%	+/-3%
MAX LAMP CURRENT	10A	9A	3A
MAX LAMP VOLTAGE	280V	280V	280V
PFC SWITCHING FREQUENCY	50KHz	50KHz	50KHz
EB SWITCHING FREQUENCY	35KHz	35KHz	35KHz
LAMP SQUARE WAVE FREQUENCY	100Hz +/-5%	100Hz +/-5%	100Hz +/-5%
MAX LAMP DIMMER	-40% (350W)	-40% (240W)	-40% (90W)
REMOTE OPTO LAMP ON/OFF	yes	yes	yes
THERMAL SHUTDOWN PROTECTION	90°C of the case	90°C of the case	90°C of the case

WITH ELECTRONIC PFC



WITHOUT ELECTRONIC PFC



## ELECTRONIC BALLAST

The CS1 Studio Due electronic ballast has an electronic power factor corrector. The ballast conforms to the European Norm EN60555 and the international standard IEC555 which imposes a limit on the harmonic content of the input current of mains supplied equipment. The CS1 Studio Due electronic ballast draws a sinusoidal input current from the mains supply, in phase with the mains voltage (Fig.3), and meets the EN60555 norm. Another big advantage is that the ballast can correctly work with tension from 95V up to 260V and frequencies from 47Hz up to 63Hz. The above mentioned benefits added to the power of the stabilized lamp, the lack of light flickering and the chance to dim the lamp is a huge saving in weight that makes the CS1 Studio Due essential for professional use where a stable, reliable and flickering free light are required.

## ADVANTAGES OF THE ELECTRONIC BALLAST

The square wave output power of the Studio Due electronic ballast, eliminates the flicker problem. A square wave ballast maintains a virtually constant output of light over the whole AC cycle by squaring off the curves of the AC sine wave (Fig.1). The change over this period is so brief that the light is virtually continuous. Note that photosensitive "Cinecheck" meters do not give accurate readings when square wave ballasts are used. The Studio Due electronic PFC completely processes and regulates the input power, and as a result, they can tolerate fairly wide voltage and Hertz rate discrepancies. It can take an input from 95V to 260V, 50 or 60Hz without affecting the output power. Therefore, we have an increase of light output by 10% to 20% and an increase of lamp life up to +50%. To adapt the main input voltage, the electronic PFC eliminates the problem of capacitive front end components typical of most old electronic ballasts which had a power factor of 0.6 or less (Fig.2). This means that the ballast without PFC has to draw 40% more power than it used. Associated with poor power factor are harmonic current which builds up on the neutral wire, 65 to 80% of the current does not cancel out between phases when all hot legs are evenly loaded. This means that when operating a large number of electronic ballasts without PFC, the neutral wire will need to be doubled or even tripled to carry the additive current. Studio Due's PFCEBs have a power factor >of 0.98, and a line current distortion < 6%.



UNIVERSAL MAIN VOLTAGE  
95-260V, 47-63Hz



ELECTRONIC  
POWER FACTOR CORRECTOR



FLICKERING FREE

### available models

art. 03071: CS1 575 discharge lamp  
art. 03073: CS1 400 discharge lamp (hot restrike)  
art. 0307: CS1 150 discharge lamp  
art. 03072: CS1 575 halogen lamp

### available accessories

art. SINGLE clamp: 1 clamp  
art. FL/2: kit 2 fast lock

CS1 • 575, 400, 150

moving light



**CS1**  
**575**  
**400, 150**

cs1  
575  
400, 150

**moving light**

### CS1 lamp's technical features

for art. 03071: CS1 575W discharge lamp  
MSD 575W or MSR 575W (Philips)  
Color temperature: 6.000° K (MSD575) or 7.200° K (MSR575)  
Average lamp life: 3.000 hrs (MSD575) or 1.000 hrs (MSR575)  
Luminous flux: 43.000 lm (MSD575) or 49.000 lm (MSR575)  
Color rendering index (Ra): 75 (MSD575) or 80 (MSR575)

for art. 03073: CS1 400W hot restrike  
MSR 400W HR (Philips)  
Color temperature: 5.600° K  
Average lamp life: 750 hrs  
Luminous flux: 32.000 lm  
Color rendering index (Ra): 92

for art. 0307: CS1 150W discharge lamp  
Mastercolour CDM-T 150/830 or CDM-T 150/942 (Philips)  
Color temperature: 3.000° K (150/830) or 4.200° K (150/942)  
Average lamp life: 6.000 hrs  
Luminous flux: 14.000 lm

for art. 03072: CS1 575W halogen lamp  
HPL 575 (Osram)  
Color temperature: 3.150° K  
Average lamp life: 300 hrs  
Luminous flux: 15.000 lm



MSR 575/2



MSR 400 HR



CDM SA T150



HPL 575 (halogen)



CS1 • 575, 400, 150

**moving light**