

GESCHÄFTSFÜHRER:
Uwe Hagenbach
Bernhard Grill

BANKVERBINDUNG:
Deutsche Bank
Kto-Nr. 7 258 601
BLZ 700 700 10

HRA-Nr. 88773
Ust.-IdNr.: DE 129402596
Amtsgericht München

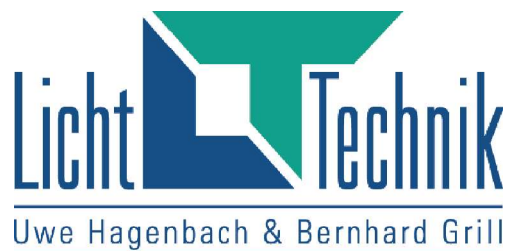
Licht-Technik Vertriebs GmbH
Osterwaldstraße 9-10

D-80805 München

Telefon: +49 (0) 89 / 36 05 28-0

Fax: Int. +49 (0) 89 / 36 05 28-30

E-mail: INFO@LICHT-TECHNIK.COM



Color changer type MagMax for automatic light coloring of headlights (Suggestion for tendering text)

Color changer for lamps with lenses from 150mm up to 500mm diameter.



The color changer must be designed to control color of a headlight. The color changer must realize the following functions and specifications:

Power	24V DC max. 1,2A
Fuse	3,15 A slow blow
Max Temperature	0..40 °
Protection	IP20
Colour	Black

GESCHÄFTSFÜHRER:
Uwe Hagenbach
Bernhard Grill

BANKVERBINDUNG:
Deutsche Bank
Kto-Nr. 7 258 601
BLZ 700 700 10

HRA-Nr. 88773
Ust.-IdNr.: DE 129402596
Amtsgericht München

Licht-Technik Vertriebs GmbH

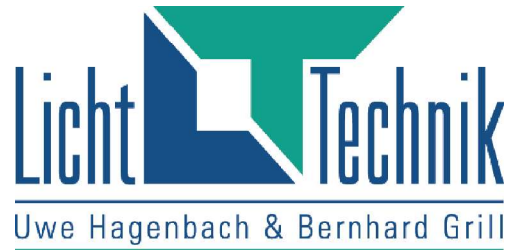
Osterwaldstraße 9-10

D-80805 München

Telefon: +49 (0) 89 / 36 05 28-0

Fax: Int. +49 (0) 89 / 36 05 28-30

E-mail: INFO@LICHT-TECHNIK.COM



Housings must be made of high density aluminium.

The surface of the color changer must be powder coated, heat resistant, scratch resistant, not light reflectable. Preferable color is black.

All mechanical and electrical parts must be durable heat resistant or protected by an isolation.

The power circuits of the lamp and the color changer must be separated. They must not influence each other.

The color changer must be CE-certified.

The motors and the gearboxes should be designed in low noise construction to move the lamp also during a production.

Fast dynamic movement as well as clean, smooth starts and stops without any jerking must be guaranteed.

The color changer must have a cartridge system to allow a quick and safe changing of the gel string.

There must be no initialisation run after power up.

An automatic recalibration system for the frame positions must be supported. Realized via aluminium markers and light sensor.

Gel locations must be read and activated automatically.

Speed control for the string and fan must be implemented.

The user interface must be lightened. In addition there should be the possibility to switch the light off.

The programming possibilities must be indicated in plain text.

Real time drive from 1 second to 2 hours must be possible.

The user language must be available either in german or in english language.

Special sizes and rectangular light-hole should be available.

manufacture: Licht-Technik or equal
type: MMxxxMkII
(xxx = size 200 to 500, depends on lamp)

GESCHÄFTSFÜHRER:
Uwe Hagenbach
Bernhard Grill

BANKVERBINDUNG:
Deutsche Bank
Kto-Nr. 7 258 601
BLZ 700 700 10

HRA-Nr. 88773
Ust.-IdNr.: DE 129402596
Amtsgericht München

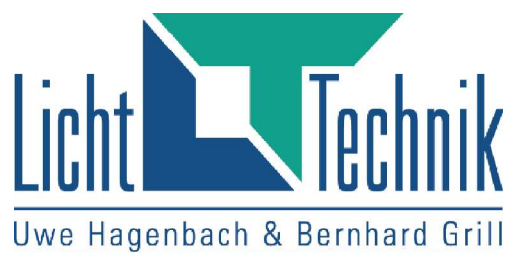
Licht-Technik Vertriebs GmbH
Osterwaldstraße 9-10

D-80805 München

Telefon: +49 (0) 89 / 36 05 28-0

Fax: Int. +49 (0) 89 / 36 05 28-30

E-mail: INFO@LICHT-TECHNIK.COM



Technical data

Dimensions and Weight (without lampholders):

Type MM-MkII-	Weight	Height	Length	Depth	Lighthole	
					front	rear
200	4,8 kg	430	337	74	220	200
250	5,0 kg	470	430	75	260	250
300	7,5 kg	515	526	88	300	300
350	8,9 kg	570	775	88	350	340
430	10,2 kg	633	634	88	430	430
500	10,0 kg	710	680	100	500	500
500-XL	13,5 kg	915	690	100	525 x 680	500 x 680
8-Lite	11,2 kg	910	610	100	430 x 680	430 x 680

Connected loads: 24V DC, max. 1,2 A

Pin assignment:

Data-Power-cable:

4pin XLR

Housing: shield

PIN 1: 0 V

min. cross section 0,75mm²

PIN 2: Data –

min. cross section 0,25mm²

PIN 3: Data +

min. cross section 0,25mm²

PIN 4: +24 V DC

min. cross section 0,75mm²

DMX-data cable:

5pin XLR

PIN 1: 0V

min. cross section 0,25mm²

PIN 2: Data –

min. cross section 0,25mm²

PIN 3: Data +

min. cross section 0,25mm²

PIN 4: not connected

min. cross section 0,25mm²

PIN 5: not connected

min. cross section 0,25mm²

Caution: To comply EMV rules our equipment has to be connected with shielded cables. This also for reliability of our equipment.

The DMX wires must be twisted pair and shielded separately.

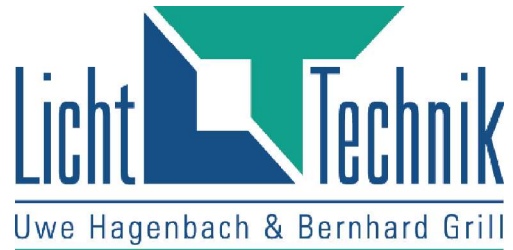
GESCHÄFTSFÜHRER:
Uwe Hagenbach
Bernhard Grill

BANKVERBINDUNG:
Deutsche Bank
Kto-Nr. 7 258 601
BLZ 700 700 10

HRA-Nr. 88773
Ust.-IdNr.: DE 129402596
Amtsgericht München

Licht-Technik Vertriebs GmbH
Osterwaldstraße 9-10
D-80805 München

Telefon: +49 (0) 89 / 36 05 28-0
Fax: Int. +49 (0) 89 / 36 05 28-30
E-mail: INFO@LICHT-TECHNIK.COM



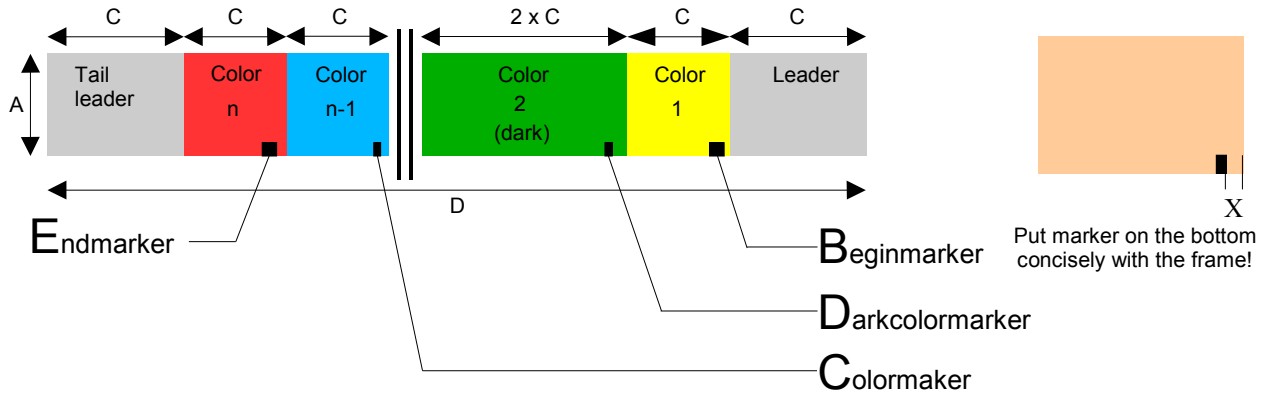
Dimensions of strings of Licht-Technik color changers

(All dimensions in mm!)

Sizes of markers:

Begin- and Endmarker:
Colormarker:
Darkcolormarker:

25 x 25mm
6,5 x 25mm vertical
13 x 25mm vertical



MagMax™							Position x			Revolutions for foil tensioning
Type		Color-code Cartridge	Height A	Color Length C	String Length D	Max. Colors	Color marker	Begin marker	End marker	
MM200			216	280	6160	20	50	80	15	
MM250			275	380	7980	19	70	75	45	
MM300			318	450	9000	18	70	75	45	
MM350			358	480	8640	16	65	75	45	
MM430			450	530	8480	14	60	75	20	
MM500			520	640	8960	12	65	80	30	
MM500XL			700	640	8960	12	65	80	30	
MM8-Lite			700	530	8480	14	60	75	20	

MagMax™ Mk2		MagVader								
Type		Color-code Cartridge	Height A	Color Length C	String Length D	Max. Colors	Position x			
							Color marker	Begin marker	End marker	
MM200 Mk2		Green	225	305	6710	20	65	80	35	5-6
MM200 Mk2-25		Green	225	305	8235	25	65	80	35	6-7
MM250 Mk2	MV200	Red	276	370	8140	20	65	80	35	5-6
MM300 Mk2	MV250	Black	320	440	9680	20	65	80	35	10-11
MM300 Mk2-25		Black	320	440	11880	25	65	80	35	12-14
MM350 Mk2	MV300	Yellow	370	490	9800	18	80	95	40	10-11
MM430 Mk2	MV350	Blue	450	550	9900	16	80	95	40	12-14
MM500 Mk2	MV430	Grey	530	630	10080	14	80	95	40	20-22

CC-Serie										
Type			Height A	Color Length C	String Length D	Max. Colors	Position x			
							Color marker	Begin marker	End marker	
CC200			225	305	9760	30	50	50	50	
CC250			276	370	9990	25	55	50	50	
CC350			370	490	9800	18	75	60	50	

MagMax™ Cyclo Serie										
Typ			Height A	Color Length C	String Length D	Max. Colors	Position x			
							Color marker	Begin marker	End marker	
MM350 Cyclorama			212	480	6720	12	55	50	50	
MM500 Cyclorama			247	635	6720	12	55	50	50	

The revolutions for tensioning should be a reference point valid for new gels and the maximum of color frames!

GESCHÄFTSFÜHRER:
Uwe Hagenbach
Bernhard Grill

BANKVERBINDUNG:
Deutsche Bank
Kto-Nr. 7 258 601
BLZ 700 700 10

HRA-Nr. 88773
Ust.-IdNr.: DE 129402596
Amtsgericht München

Licht-Technik Vertriebs GmbH

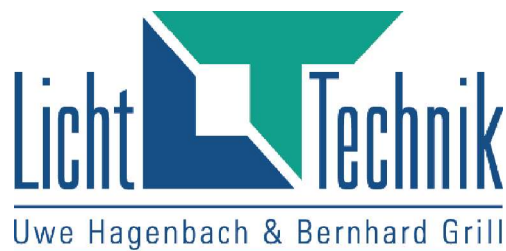
Osterwaldstraße 9-10

D-80805 München

Telefon: +49 (0) 89 / 36 05 28-0

Fax: Int. +49 (0) 89 / 36 05 28-30

E-mail: INFO@LICHT-TECHNIK.COM



Declaration of conformity

Manufacturer: Licht-Technik Vertriebs GmbH
Address: Osterwaldstraße 9-10
80805 München

declares that the product:

Name of product: MagMax (Cartridge Color Changer)
Type of product: MM200/MM250/MM300/MM350/MM430/MM500
MM Mk II 200/MM MkII 250/MM MkII 300/MM MkII 350/MM MkII 430

corresponds to the following specifications under strict observance of the installation instructions and technical specifications:

**Standard 2004/108/EG of the European Parliament and the council from
15. December 2004
for law provision adaptation of the member states concerning the electrical
compatibility and for
abrogation of standard 89/336/EEG.**

The device passed the test. A testreport is available at company Licht-Technik Vertriebs GmbH.

Munich 19.9.2005



Uwe Hagenbach / Bernhard Grill
Managing directors