

NETO



COLORFLEX SERIES

7-IPX / 18-IPX

HEX PAR USER MANUAL



Colorflex™ User Manual

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Check online at
WWW.NETOLIGHTING.COM
For supplementary information including
Downloadable DMX Profiles
Updated User Guides
Recent Revisions

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WARRANTY INFORMATION

To register your Neto™ product, please follow the instructions on the included warranty card by completing and mailing it in. Registration is not necessary for your warranty to be valid, however contributing your information to our product owner's database will help us communicate with you regarding important updates specific to your product, including firmware updates, new documentation and dmx profiles, and in rare cases, product recalls.

When returning a product to Neto Lighting inc or an authorized service center for repair, ALWAYS include a RA (Return Authorization) number supplied by Neto™ on both the shipping package and on a repair note detailing the service required inside the package. If a product is receiving service under warranty be sure to supply a copy of the purchase receipt detailing purchase date, vendor information, and serial numbers of the units in question.

For questions about warranty coverage, Neto™ support & service, or to obtain a RA number, please contact our customer service department by email at support@netolighting.com with your inquiry.

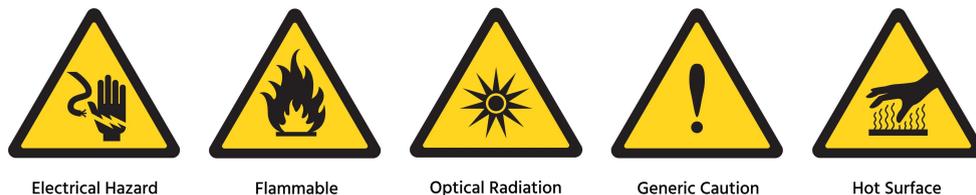
SAFETY INFORMATION

READ BEFORE USE

This manual contains important safety information. Before powering on your Neto™ product for the first time, familiarize yourself with all warnings and safety instructions. This manual may be updated from time to time - to obtain the most recent product information, user guides, and manuals, visit www.NetoLighting.com

SAFETY SYMBOL IDENTIFICATION

This manual and Neto™ products use the following symbols to highlight possible safety hazards and important warnings.



OPERATING ENVIRONMENT

Do not operate the product if ambient temperature is below -15°C (5°F) or above 45°C (113°F).

Do not operate the product in excessively wet or humid environments.

Do not operate the product in excessively dusty or dirty environments.

Product is not intended for household use. Consult a professional before use in residential applications.



INSPECT PRIOR TO USE

Before connecting to a power source, inspect the product for damage or abnormalities. Do not connect to a power source if any moisture or water appears to have entered the product casing. Ensure no screws are loose or missing. Product seals may be compromised if the casing is warped or bent. Risk of sharp edges if the front lens is cracked or broken. Do not install above ground level if the mounting bracket or any rigging safety feature is bent, broken, or missing parts.

ELECTRICAL HAZARD



Electrical Hazard

Power down or unplug product when not in use to minimize potential risks. Disconnect from power immediately if power plug or any cable, seal, plug, cover, or other component is damaged or is showing signs of overheating. Do not reconnect to a power source until the problem has been resolved by a properly qualified technician.

Use only a properly grounded and ground-fault protected power source that complies with local electrical laws and regulations. Before connecting the unit, ensure that all power cables and devices supplying power are in perfect condition and rated for total power requirements of all devices connected on the circuit. When linking power output from a unit, never exceed the maximum number of linked units indicated on the device. Do not connect product to a power circuit with a dimmer or rheostat.

PREVENTING BURNS AND FIRE



Hot Surface

Surface temperature of Colorflex™ casing may reach temperatures up to 85°C (185°F) during operation. Avoid direct skin contact with the luminaire during operation to protect from burns. Unplug or turn off the product and allow it to cool for 10 minutes before handling.



Flammable

Keep any flammable materials a minimum of 50cm (20in) from the fixture when plugged in. Keep all combustible materials (wood, fabric, paper products, etc.) a minimum 50cm (20in) from every side of the luminaire during operation. Do not illuminate surfaces less than 30cm (12in) from the light output. Use only in a ventilated space.

Do not use any filters, masks, lenses, or other covers on the optical component of the luminaire unless they are specifically intended for such an application and rated for high

temperature applications. Never install directly on the surface of the luminaire - ensure there is an adequate air gap for ventilation.

PREVENTING DAMAGE TO EYES AND SEIZURES



Optical Radiation

This product produces powerful, concentrated light output. Direct exposure to the light output from close proximity may cause retinal damage. Do not look directly into the optical component when close to the fixture. Connection to power or DMX signal may cause the fixture to light up unexpectedly. When installing and testing the fixture, ensure adequate ambient light in the work environment to maintain dilated pupils. Never use optical magnification devices such as magnifying glasses, lenses, telescopes, binoculars which may concentrate the light output when the fixture is in operation.

When using the Purple (UV 395-405nm) color LED this unit produces light in the UV-A or Near-Ultraviolet range of the electromagnetic spectrum, in the same range as UV-A radiation produced by the sun. Extended or high-intensity exposure to UV radiation is known to cause premature skin aging and can contribute to the development of skin cancer among other health consequences. Certain chemicals and medications can cause increased sensitivity to UV radiation.

A small percentage of individuals may experience a seizure when exposed to certain visual stimuli including flashing lights. Even people with no history of seizures may experience a "photosensitive epileptic seizure." This fixture includes a "Strobe" feature and may also flash rapidly as part of a dmX control program. If you or someone around you is experiencing a seizure, discontinue use of the fixture immediately and seek medical attention.

REPAIRS AND SERVICING

Neto Lighting™ products are not intended for any service or repair except by properly qualified and insured technicians. Attempting to service or repair a Neto Lighting™ product may create a safety hazard, cause damage, and/or void product warranties. Service only as directed by product manuals or by the manufacturer.

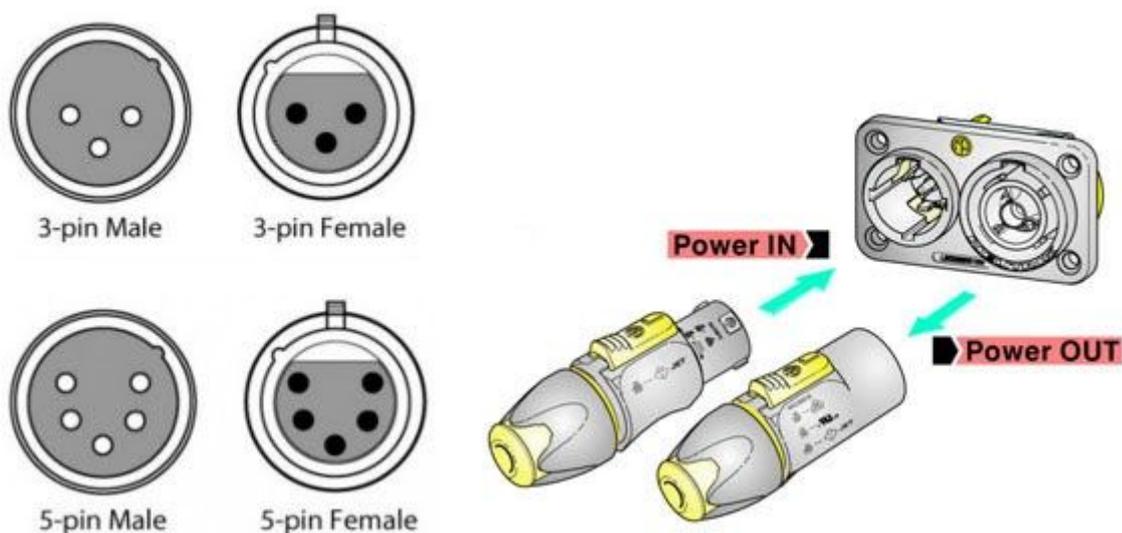
PRODUCT OVERVIEW

INTRODUCTION

The Neto™ Colorflex™ Series LED Pars are designed to offer a rugged and versatile lighting solution for a wide variety of standalone or DMX controlled applications. With a six color (RGBWA+UV) light chip and high quality lenses at the heart of the optical engine, Colorflex™ lights can produce a smooth color output across a range of trillions of colors. Adjustable dimming frequency, dimmer curve and white balance calibration allow flexible use in professional camera applications. An adjustable two arm mounting bracket can be used as a rigging point or a floor stand. To ensure a durable and reliable product, each unit features a fully sealed enclosure with ip65 rated connections, controls, and display.

PHYSICAL CONNECTIONS

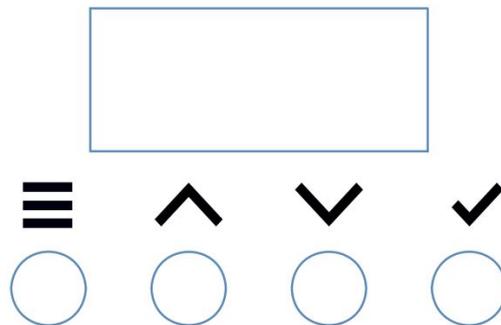
Each Colorflex™ series fixture provides four physical connections for managing power and data. Seetronic™ brand shockproof and water resistant panel mount connectors with rubber sealing sleeves help to protect the unit from environmental hazards. POWER IN and POWER OUT are connected in Parallel using the Seetronic™ SAC3MPX and SAC3FPX connector standard. DMX DATA IN and DATA OUT are available in either 3pin or 5pin XLR connector format.



DISPLAY AND CONTROLS

The Colorflex™ features a two line, 8 character backlit matrix LCD display and four control buttons to navigate and configure the menu options. The display and control module is laid out as follows:

COLORFLEX X-IPX



The functions of the four buttons are as follows:

☰ - MENU / BACK

Moves back one menu tree level, or exits a control value setting window

^ - UP / INCREMENT

Moves up one item in a menu, or increments a control value setting,

∨ - DOWN / DECREMENT

Moves down one item in a menu, or decrements a control value setting

✓ - SELECT / ENTER

Selects a menu option or confirms entry of a control value setting (save value)

INSTALLATION GUIDE

RIGGING SAFETY



Generic Caution

Neto products are intended for professional applications and should only be installed by qualified technicians with proper insurance coverage. When installing a Neto Lighting™ product overhead, use only the prescribed rigging points on the mounting brackets. Make sure that all rigging hardware is installed properly and is rated for the particular use case. Always be sure to use a properly rated steel safety cable in addition to the principal attachment.

When installing the fixture to any kind of support such as truss or an architectural feature, always ensure that the attachment point can safely support at least 10 times the weight of the fixture.

POWERING THE UNIT

Colorflex™ series fixtures use the Seetronic™ TR1 twist lock power connectors for both POWER IN and POWER OUT on the chassis. Use either the supplied power cable or a properly rated cable assembly with minimum 18AWG conductors. Always ensure that the power source is compatible with the operating voltage range and AC frequency indicated on the fixture.

When using the POWER OUT of the unit, never link more units than the maximum total quantity indicated on the label. When not in use ensure that the rubber connector cover is properly closed. Always ensure that the total power consumption of all devices connected to a power source does not exceed the 80% of the maximum power rating of the circuit.

CONNECTING DMX

The Colorflex™ IPX series is controllable remotely via DMX 512 (USITT DMX512/1990). Each unit features Seetronic™ waterproof DATA IN and DATA OUT connectors in either XLR3 or XLR5 format. Both XLR connectors and IP XLR connectors will fit without the need for adapters. DMX cables should be minimum 24AWG shielded 2 conductor cables with an impedance of 120ohms. It is recommended to have a DMX Opto-Splitter in the signal path between the controller and fixture, it will reduce potential data issues and protect both the fixture and console from damaging each other in the event of serious malfunction.

NAVIGATING MENU OPTIONS

TOP MENU	SUB MENU	PARAMETER	VALUE
Static Color	STATIC [Solid]	SOLID [Cor 1 - 63]	
	STATIC [Manual]	MANUAL [Red]	MANUAL < R = 000 - 255 >
		[Green]	< G = 000 - 255 >
		[Blue]	< B = 000 - 255 >
		[White]	< W = 000 - 255 >
		[Amber]	< A = 000 - 255 >
		[Purple]	< P = 000 - 255 >
		[Strobe]	< S = 000 - 255 >
Auto Program	Program [Pro 01 - Pro 10]	Speed [001 - 100]	
DMX Address	DMX ADDR [ADDR = 001 - 512]		
DMX Mode	DMX Mode [6 CH] [8 CH] [12 CH] [HSV] [HSI]		
Slave Mode	SLAVE [Slave] [Master]		
White Balance	Blance [Red] [Green] [Blue]	Red / Green / Blue [255 - 000]	
Dimmer Mode	Speed [OFF] [Curve1] [Curve2] [Curve3]		
Refresh Rate	Refresh [800HZ] [2KHZ] [4KHZ] [10KHZ] [20KHZ] [25KHZ]		

Keys Lock	Lock [No] [Yes]		
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MENU OPTIONS EXPLAINED

STATIC COLOR mode sets the light to output a specific color determined by the user. Using this mode will set the device SLAVE mode to MASTER automatically.

- STATIC SOLID mode allows the user to select between 63 pre-mixed colors (chart on next page)
- STATIC MANUAL mode allows the user to mix a precise color output by setting the intensity of each LED color in the chip

AUTO PROGRAM mode allows the user to select between 10 color chase programs, and to set the playback speed of the programs from slow to fast. Using this mode will set the device SLAVE mode to MASTER automatically.

DMX ADDRESS allows the user to select the dmx address for the fixture from a value range of 1 - 512. The first DMX channel of this fixture will now receive data at that DMX address, with subsequent channels following incrementally.

DMX MODE allows the user to choose between 5 different DMX profiles built into the fixture. The channel control values are laid out later in this manual in the DMX PROFILE CHART.

SLAVE MODE allows a unit to be set as a MASTER or SLAVE unit for stand-alone daisy-chain applications.

WHITE BALANCE allows the user to adjust the relative color balance of Red, Green, and Blue by reducing the maximum intensity for any or all of these colors.

DIMMER MODE allows the user to choose between four options for the fixture dimmer response curve - OFF (instantaneous), Curve 1 (Square Law Dimming), Curve 2 (Inverse Square Law Dimming), and Curve 3 (S-Curve Dimming)

REFRESH RATE allows the user to select between a variety of LED PWM refresh rates for different professional filming requirements.

KEYS LOCK locks the fixture automatically after 30 seconds of inactivity. The button passcode sequence to unlock the menu is UP - DOWN - UP - DOWN - ENTER

MODE	VALUE	COLOR MIX
STATIC [Solid]	Color 1	Red
	Color 2	Green
	Color 3	Blue
	Color 4	White
	Color 5	Amber
	Color 6	Purple
	Color 7	Red + Green
	Color 8	Red + Blue
	Color 9	Red + White
	Color 10	Red + Amber
	Color 11	Red + Purple
	Color 12	Green + Blue
	Color 13	Green + White
	Color 14	Green + Amber
	Color 15	Green + Purple
	Color 16	Blue + White
	Color 17	Blue + Amber
	Color 18	Blue + Purple
	Color 19	White + Amber
	Color 20	White + Purple
	Color 21	Amber + Purple
	Color 22	Red + Green + Blue
	Color 23	Red + Green + White
	Color 24	Red + Green + Amber
	Color 25	Red + Green + Purple
	Color 26	Red + Blue + White
	Color 27	Red + Blue + Amber
	Color 28	Red + Blue + Purple
	Color 29	Red + White + Amber
	Color 30	Red + White + Purple
	Color 31	Red + Amber + Purple
	Color 32	Green + Blue + White

MODE	VALUE	COLOR MIX
STATIC [Solid]	Color 33	Green + Blue + Amber
	Color 34	Green + Blue + Purple
	Color 35	Blue + White + Amber
	Color 36	Blue + White + Purple
	Color 37	White + Amber + Purple
	Color 38	Blue + Amber + Purple
	Color 39	Green + White + Amber
	Color 40	Green + White + Purple
	Color 41	Green + Amber + Purple
	Color 42	Red + Green + Blue + White
	Color 43	Red + Green + Blue + Amber
	Color 44	Red + Green + Blue + Purple
	Color 45	Red + Green + White + Amber
	Color 46	Red + Green + White + Purple
	Color 47	Red + Green + Amber + Purple
	Color 48	Red + Green + White + Amber
	Color 49	Red + Blue + White + Purple
	Color 50	Red + Blue + Amber + Purple
	Color 51	Red + White + Amber + Purple
	Color 52	Green + Blue + White + Amber
	Color 53	Green + Blue + White + Purple
	Color 54	Green + Blue + Amber + Purple
	Color 55	Green + White + Amber + Purple
	Color 56	Blue + White + Amber + Purple
	Color 57	Red + Green + Blue + White + Amber
	Color 58	Red + Green + Blue + White + Purple
	Color 59	Red + Green + Blue + Amber + Purple
	Color 60	Red + Green + White + Amber + Purple
	Color 61	Red + Blue + White + Amber + Purple
	Color 62	Green + Blue + White + Amber + Purple
	Color 63	Red + Green + Blue + White + Amber + Purple

DMX PROFILE CHART

DMX HSV MODE

CHANNEL	DMX VALUE	FUNCTION
1	[000 - 255]	Hue 0 - 100% (H)
2	[000 - 255]	Saturation 0 - 100% (S)
3	[000 - 255]	Brightness 0 - 100% (V)

DMX HSI MODE

CHANNEL	DMX VALUE	FUNCTION
1	[000 - 255]	Hue 0 - 100% (H)
2	[000 - 255]	Saturation 0 - 100% (S)
3	[000 - 255]	Intensity 0 - 100% (I)

DMX 6 CH MODE

CHANNEL	DMX VALUE	FUNCTION
1	[000 - 255]	RED Intensity 0 - 100%
2	[000 - 255]	GREEN Intensity 0 - 100%
3	[000 - 255]	BLUE Intensity 0 - 100%
4	[000 - 255]	WHITE Intensity 0 - 100%
5	[000 - 255]	AMBER Intensity 0 - 100%
6	[000 - 255]	PURPLE (UV) Intensity 0 - 100%

DMX 8 CH & 12 CH MODE

CHANNEL	DMX VALUE	FUNCTION
1	[000 - 255]	MASTER DIMMER Intensity 0 - 100%
2	[000 - 255]	RED Intensity 0 - 100%
3	[000 - 255]	GREEN Intensity 0 - 100%
4	[000 - 255]	BLUE Intensity 0 - 100%
5	[000 - 255]	WHITE Intensity 0 - 100%
6	[000 - 255]	AMBER Intensity 0 - 100%
7	[000 - 255]	PURPLE (UV) Intensity 0 - 100%
8	[000 - 009]	STROBE - OFF
	[010 - 255]	STROBE rate 1Hz - 20Hz
CHANNELS 9-12 OPERATIONAL IN 12CH MODE ONLY		
9 (12ch mode)	[000 - 010]	No Function
	[011 - 030]	Red 100%, Green 0% - 100%, Blue 0%
	[031 - 050]	Red 100% - 0%, Green 100%, Blue 0%
	[051 - 070]	Red 0%, Green 100%, Blue 0% - 100%
	[071 - 090]	Red 0%, Green 100% - 0%, Blue 100%
	[091 - 110]	Red 0% - 100%, Green 0%, Blue 100%
	[111 - 130]	Red 100%, Green 0%, Blue 100% - 0%
	[131 - 150]	Red 100%, Green 0% - 100%, Blue 0% - 100%
	[151 - 170]	Red 100% - 0%, Green 100% - 0%, Blue 100%
	[171 - 200]	Red 100%, Green 100%, Blue 100%, White 100%
	[201 - 205]	White 01
	[206 - 210]	White 02
	[211 - 215]	White 03
	[216 - 220]	White 04
	[221 - 225]	White 05
	[226 - 230]	White 06
	[231 - 235]	White 07
[236 - 240]	White 08	
[241 - 245]	White 09	
[246 - 250]	White 10	
[251 - 255]	White 11	
10 (12ch mode)	[000 - 015]	No Function
	[016 - 039]	Auto Program 01

	[040 - 063]	Auto Program 02
	[064 - 087]	Auto Program 03
	[088 - 111]	Auto Program 04
	[112 - 135]	Auto Program 05
	[136 - 159]	Auto Program 06
	[160 - 183]	Auto Program 07
	[184 - 207]	Auto Program 08
	[208 - 231]	Auto Program 09
	[232 - 255]	Auto Program 10
11 (12ch mode)	[000 - 255]	AUTO PROGRAM Speed 0 - 100%
12 (12ch mode)	[000 - 051]	Default Dimmer (use value set by control panel)
	[052 - 101]	Dimmer Curves OFF (instant dimmer)
	[102 - 152]	Dimmer Curve 1 (Square Law Dimming)
	[153 - 203]	Dimmer Curve 2 (Inverse-Square Law Dimming)
	[204 - 255]	Dimmer Curve 3 (S-Curve Dimming)

MAINTENANCE GUIDE

With proper care and maintenance Neto Lighting™ fixtures are designed to be long lasting and reliable. While there are no user serviceable parts on the fixture, following a few basic guidelines will help to get the most out of each Colorflex™ unit.

INSPECT THE UNIT REGULARLY

Make sure screws on the unit casing are all tight. If any are loose, use the appropriate tool to tighten. Inspect the screen and front glass plate for any signs of humidity inside the enclosure. If water or moisture are present, unplug and contact Neto Lighting™ service.

If the casing is bent or damaged the seal may be compromised and components may require repair or replacement.

KEEP THE UNIT CLEAN

Excessive dirt or moisture may compromise the functionality of the unit over time. Clean the glass cover with a soft cloth dampened with water. Use a light soap or glass cleaner if necessary. Remove any dirt buildup on the exterior surface of the casing with a damp cloth.

Keep the rubber connector covers closed when not in use to minimize accumulation of dirt and debris. Ensure that the power and data cables used to not show any excessive wear or exposed wiring. Any cabling that is damaged, dried or cracked should be replaced.

REPAIRS AND SERVICING

Neto Lighting™ products are not intended for any service or repair except by properly qualified and insured technicians. Attempting to service or repair a Neto Lighting™ product may create a safety hazard, cause damage, and/or void product warranties. If your unit requires repair or service, contact support@netolighting.com with a description of the problem.

TECHNICAL SPECIFICATIONS

NETO COLORFLEX 18-IPX™	NETO COLORFLEX 7-IPX™
Power supply: 100~240 V AC, 50/60 Hz ~	Power supply: 100~240 V AC, 50/60 Hz ~
Power consumption: 180 W	Power consumption: 60 W
DMX control channels: 12, 8, 6, HSV, HSI	DMX control channels: 12, 8, 6, HSV, HSI
DMX512 connection: 3-pin or 5-pin XLR	DMX512 connection: 3-pin or 5-pin XLR
LED type: 12W 6-in-1 RGBWA+UV	LED type: 12W 6-in-1 RGBWA+UV
Number of LEDs: 18	Number of LEDs: 6
Beam angle: 25°	Beam angle: 15°
Dimensions (LxWxH): 310 x 310 x 110 mm	Dimensions (LxWxH): 235 x 215 x 110 mm
Weight: 5.5 kg	Weight: 2.6 kg
Max ambient temperature range: -15°C - 40°C	Max ambient temperature range: -15°C - 40°C
Maximum housing temperature TC (steady state): 75° C	Maximum housing temperature TC (steady state): 65° C
Min. distance from flammable surfaces: 0.5 m	Min. distance from flammable surfaces: 0.5 m
Min. distance to lighted object: 30cm (12in)	Min. distance to lighted object: 30cm (12in)

