HL LIGHT FOR HBR-045063-RD/BL/GR/IR/SW KITS

Applicable Kit Models	HBR-045063-RD/BL/GR/IR/SW
Power Consumption	1.5 W
Mass	317 g

Third Angle Projection   All dimensions in mm

44.5

38.1
(EMITTING SURFACE)

48.9 ± 1

38.1 (EMITTING SURFACE)

14.3

31.8

63.5

50.8

46.8

5

14.8

500

2-M5 SLIDING NUTS
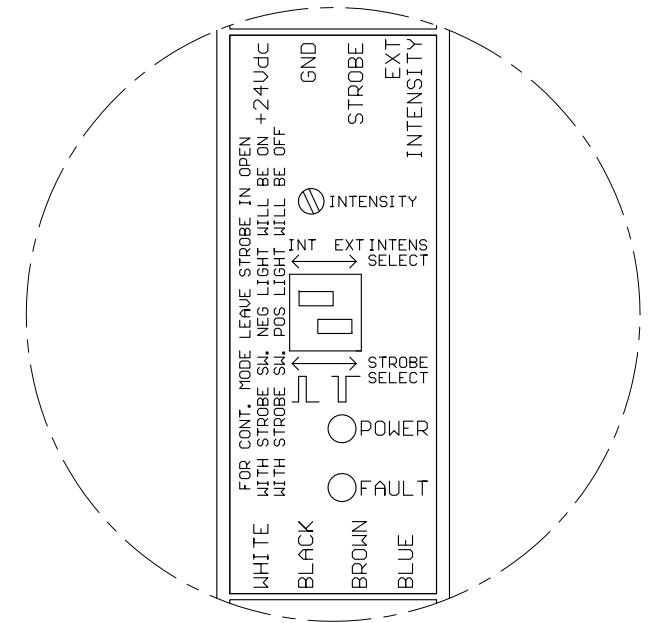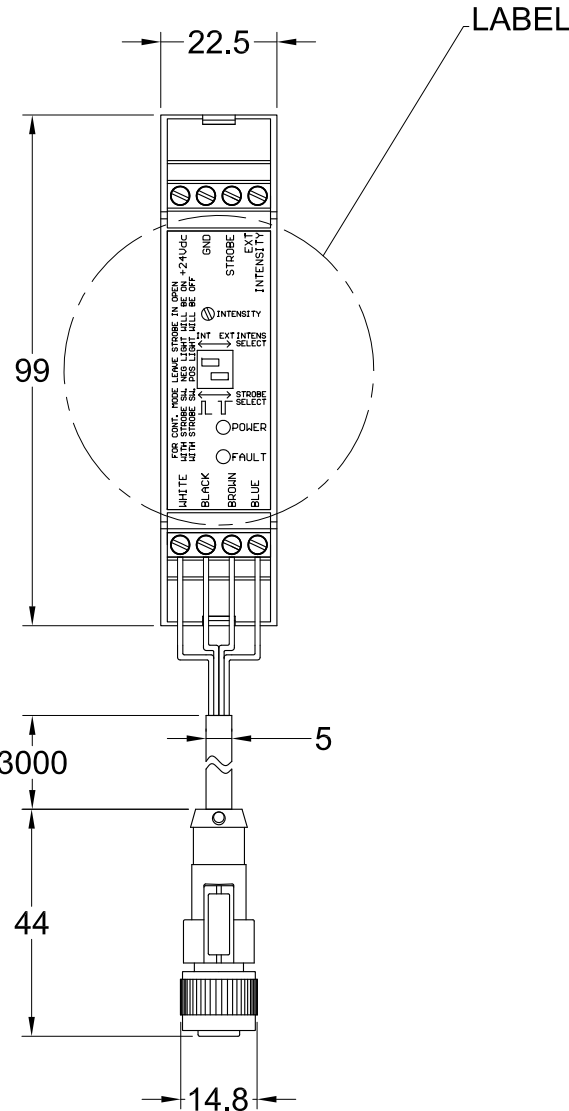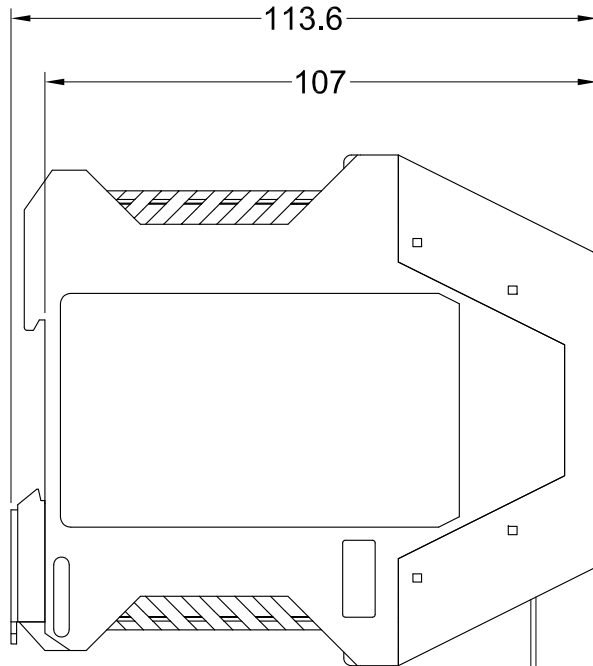FOR MOUNTING
MAX SCREW DEPTH 5 mm
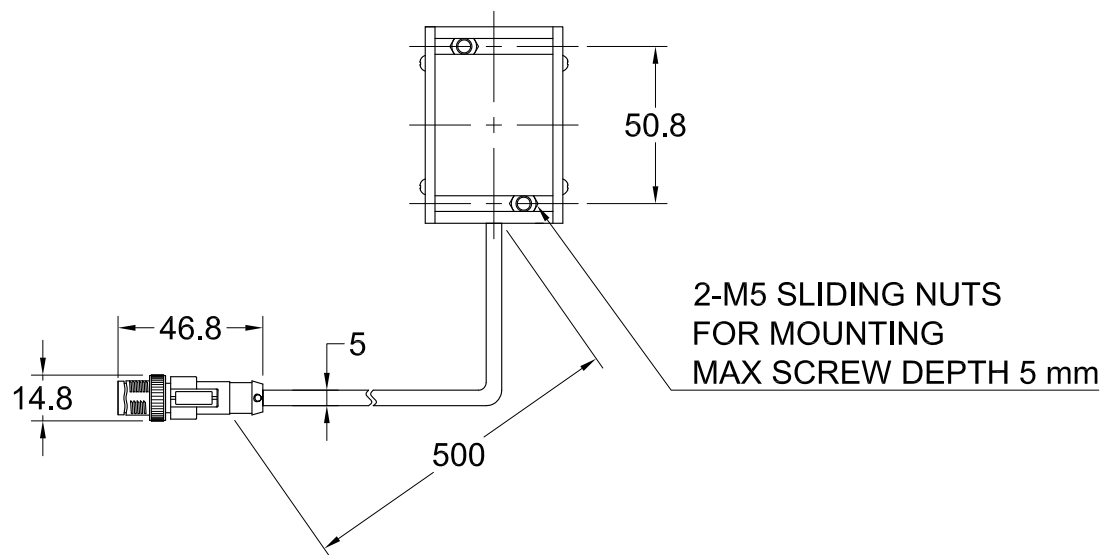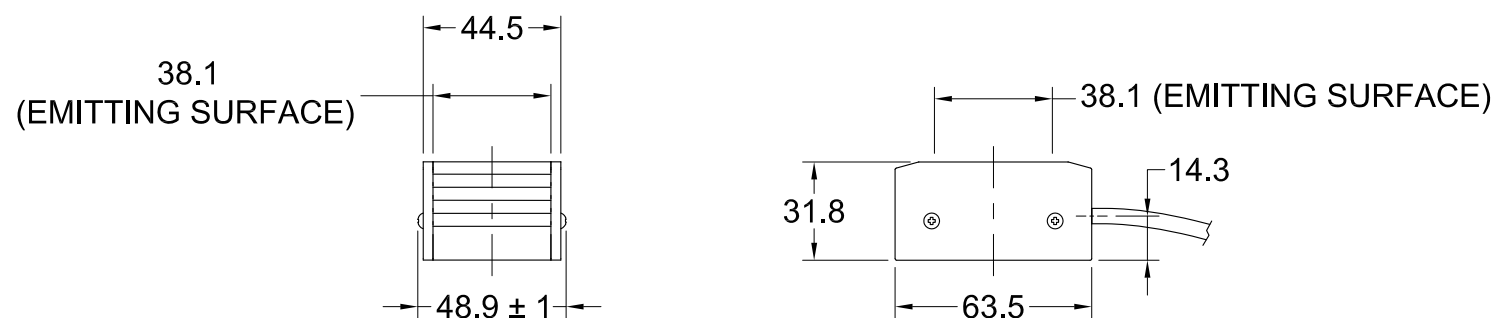
NOTES:
- HBR KIT INCLUDES HL LIGHT, HL CONTROLLER, AND 3m CABLE
- M12 X 1, MALE, 4-PIN, REVERSE KEYED CONNECTOR
- CONNECT HL LIGHT ONLY TO INCLUDED HL CONTROLLER
- IMPROPER CONNECTION WILL VOID WARRANTY

CCS America, Inc.

HL CONTROLLER FOR
HBR-045063-RD/BL/GR/IR/SW KITS

Applicable Kit Models	HBR-045063-RD/BL/GR/IR/SW
Input Voltage	24VDC 0.5A

Third Angle Projection   All dimensions in mm

113.6

107

22.5

LABEL

99

LABEL DETAIL

3000

5

44

14.8

Label text (controller):

+24Vdc
GND
STROBE
EXT INTENSITY

FOR CONT. MODE LEAVE STROBE IN OPEN
WITH STROBE SW. NEG LIGHT WILL BE ON
WITH STROBE SW. POS LIGHT WILL BE OFF

INTENSITY

INT EXT INTENS SELECT

STROBE SELECT

POWER

FAULT

WHITE
BLACK
BROWN
BLUE

NOTES:
- HBR KIT INCLUDES HL LIGHT, HL CONTROLLER, AND 3m CABLE
- M12 X 1, FEMALE, 4-PIN, REVERSE KEYED CONNECTOR
- DIN RAIL (35mm) MOUNT
- CONNECT HL LIGHT ONLY TO INCLUDED HL CONTROLLER
- IMPROPER CONNECTION WILL VOID WARRANTY

CCS America, Inc.

HL Series
General Machine Vision Illumination

High Output Spot Lights and Bar Lights
Front, Spot, Dark Field, Low Angle Lighting

Applications
- Robot Guidance
- Web Inspections
- Package Sorting
- General Packaging
- Palletizing
- Food-Grade Washdown*

Performance
- High Intensity
- Large Area Illumination
- Long Stand-off Distances
- Long Life - 50,000 hours (typical)
- Optional Lenses*

Design Features
- Controller and 3m cable included
- 24V input power to controller
- Controller drives continuous and non-overdriven strobe illumination
- Robust aluminum housing with superior heat transfer properties
- Efficient thermal management through heat fin design
- Adjustable mounting M5 nuts via (2) nut channels on back face
- RoHS compliant
- CE certified

Available LED Color & Peak Wavelength		
●	Blue	470nm
●	Green	530nm
●	Red	635nm
●	Infrared	840nm
○	White	~ 5500K

HL Light Specifications

KIT PART NUMBER (Light, Controller, and 3m Cable)	LED COLOR	POWER CONSUMPTION	WEIGHT (g)	LENGTH (mm)		ADJUSTABLE MOUNTING NUTS (M5)	RECOMMENDED POWER SUPPLY FOR CONTROLLER	MAXIMUM EXTENSION CABLE LENGTH (m)
				A (Overall)	B (Emitting Surface)			
HBR-045063-RD	●	1.5 W	317	44.5	38.1	1 x 2 rows	24VDC 0.5A	12
HBR-045063-BL/GR/IR/SW	● ● ● ○	1.5 W	317	44.5	38.1	1 x 2 rows	24VDC 0.5A	12
HBR-165063-RD	●	7.5 W	590	165.1	158.8	2 x 2 rows	24VDC 1A	12
HBR-165063-BL/GR/IR/SW	● ● ● ○	8.5 W	590	165.1	158.8	2 x 2 rows	24VDC 1A	12
HBR-317063-RD	●	15 W	1179	317.5	311.2	3 x 2 rows	24VDC 2A	9
HBR-317063-BL/GR/IR/SW	● ● ● ○	17 W	1179	317.5	311.2	3 x 2 rows	24VDC 2A	9
HBR-470063-RD	●	22.5 W	1406	469.9	463.6	4 x 2 rows	24VDC 2A	6
HBR-470063-BL/GR/IR/SW	● ● ● ○	25.5 W	1406	469.9	463.6	4 x 2 rows	24VDC 2A	6
HBR-622063-RD	●	30 W	2495	622.3	616.0	4 x 2 rows	24VDC 2A	6
HBR-622063-BL/GR/IR/SW	● ● ● ○	34 W	2495	622.3	616.0	4 x 2 rows	24VDC 2A	6
HBR-991063-RD	●	48 W	3856	990.6	984.3	5 x 2 rows	24VDC 5A	6
HBR-991063-BL/GR/IR/SW	● ● ● ○	53 W	3856	990.6	984.3	5 x 2 rows	24VDC 5A	3 / (6 for IR)

Operating Temperature	0°C to 45°C Humidity 0 to 90% (non-condensing)
Storage Temperature	-40°C to 100°C Humidity 0 to 90% (non-condensing)

Each kit includes a light, controller, and 3 meter cable

* Available upon request

HL Controller

The HL Controller drives both continuous and non-overdriven strobe illumination. In strobe mode, the output pulse width follows the input pulse width. The light output intensity can be adjusted from 10% to 100% with the potentiometer or via external 0-10V analog signal. The potentiometer is recessed, multi-turn, screw-adjustable, and features a slipping clutch to prevent damage.

Features

- 24V DC input
- Intensity control from 10% to 100% continuous or (non-overdriving) strobe mode operation
- DIN rail mountable
- Protective circuitry to prevent damage to light if is connected to wrong controller
- Recessed switches
- Compact

HL Controller Specifications

Input Voltage	24V DC ± 0.5V
Intensity	Adjustable from 10% to 100% output on-board or via external 0-10V analog signal (11V max)
Connections	2 x 4 position screw-type terminal blocks
Top (Input)	**+24Vdc:** + 24V DC input (± 0.5V) **GND:** Ground (-) **STROBE:** Strobe signal input (CMOS / TTL compatible, 24V max) **EXT INTENSITY:** External intensity control signal input (0-10V analog, 11V max)
Bottom	**WHITE:** Not for user access **BLACK:** Not for user access **BROWN:** Not for user access **BLUE:** Not for user access
Front Panel Indicators	**POWER**: indicates DC power presence **FAULT:** LED turns on when mismatched with light, no connection, or fault in light
Operating Temperature	0°C to 45°C Humidity 0 to 90% (non-condensing)
Storage Temperature	-40°C to 100°C Humidity 0 to 90% (non-condensing)
Included Cable	3 meter, M12 X 1, 4-pin, reverse-keyed, female connector
Dimensions	113.6mm (L) x 22.5mm (W) x 99mm (H)
Mounting	DIN rail (35mm)
Strobe Mode	Trigger response selectable between rising or falling edge of the trigger Output pulse width follows input pulse width
Trigger Inputs	CMOS / TTL compatible (24V max)
Minimum Pulse Width	10µs
Trigger to Pulse Delay	200ns maximum
Rise and Fall times	1µs
Continuous Mode	Leave the trigger input open, place trigger switch in falling edge position

⚠️ Do not connect HL light directly to a 24V DC power supply. Connect HL light only to supplied HL controller. Improper connection will void the warranty.
The BLUE wire is NOT common to ground. Connecting the BLUE wire to common ground will result in failure of the HL light, HL controller, or both, and will void the warranty.