



DCR[®] IV Light Source



DCR[®] IV Light Source with DDL lamp, A20890

DC regulated light source with integrated Equalizer light feedback to provide stabilized light output for the most demanding machine vision inspection applications (See DCR[®] III Plus datasheet for base description.)

DCR[®] IV Light Source

DCR[®]

- Stable lamp output over the life of the lamp and minimized lamp to lamp variation
- Remote controllable using integrated RS232 interface
- **Flexible** - Two configurations available:
 - A. DCR[®] IV used with a reference Modulamp unit and off-the-shelf fiber optic, maintains DDL lamp output at $\pm 2\%$ over the life of the lamp and $\pm 8\%$ lamp to lamp
 - B. For even greater control, use the DCR[®] IV with fiber optic products that have an integrated reference bundle; **special order only**. This will maintain DDL lamp output and lamp to lamp variation within $\pm 1\%$.
- All of the features of the DCR[®] III Plus Light Source including control of up to three additional DCR[®] III light sources via an expansion cable
- LED's located on the front panel indicate that the lamp intensity is stabilized.
- Easy to use front panel controls for calibration and intensity control
- CSA certified to UL, CE compliant to low voltage and EMC directives
- Universal input voltage – accepts 90 to 265 VAC, 50/60 Hz

DCR[®] IV Light Source Models

Part No.	Description
Standard Light Sources US Power Cord Included	
★ A20890	Integrated Equalizer (complete with Reference Modulamp assembly and DDL Lamp). (Standard fiber)
★ A20891	Integrated Equalizer (complete with Modulamp assembly and DDL Lamp. Does not include reference bundle). (Custom Fiber)
Standard Light Sources EU Version - No Power Cord Included	
★ A20895	Integrated Equalizer (complete with Reference Modulamp assembly and DDL Lamp).

★ Made-to-order products.

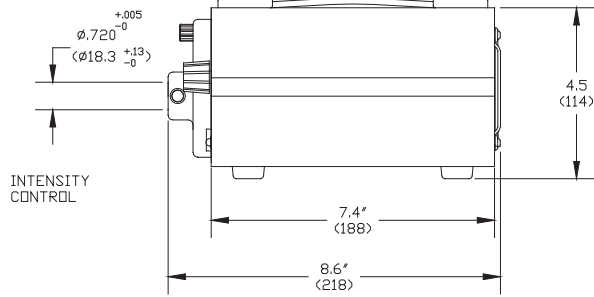
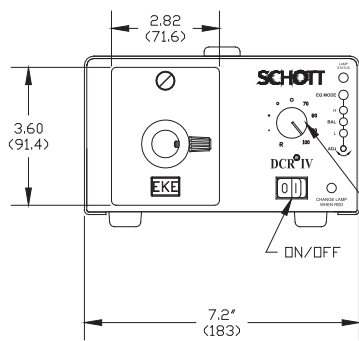
DDL lamp and Modulamp units can be purchased separately.

Options

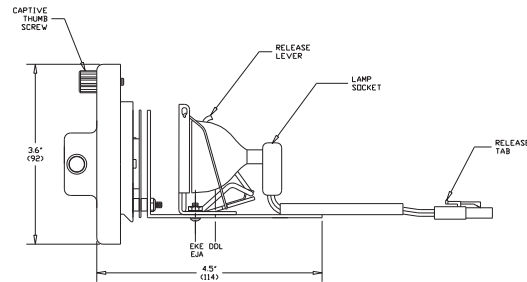
- Mechanical shutter.
- Infinite setting, twelve blade iris diaphragm unit available to reduce intensity while maintaining color temperature. Cannot be used with reference Modulamp.
- Expansion cable.

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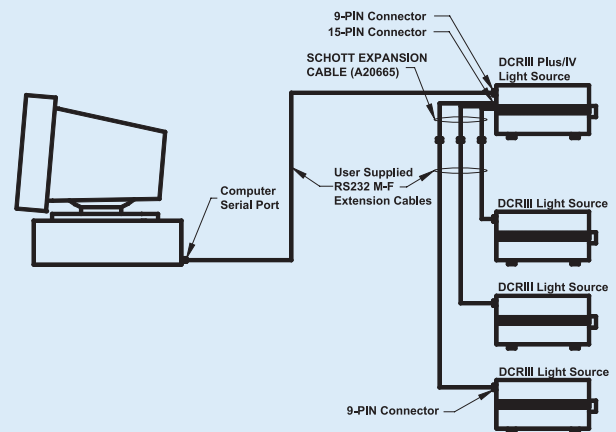
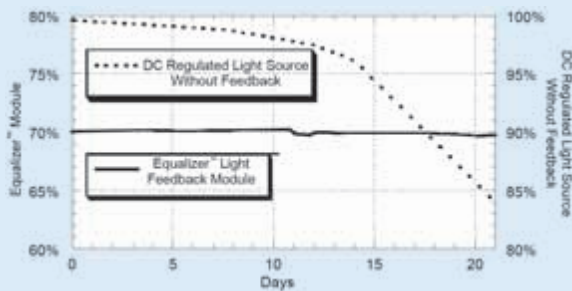
Dimensions in () are in mm



DDL lamp is offered as the standard lamp for this unit.



Lamp Intensity vs. Time



Note: If the intensity control knob is turned to the R (Remote) position, lamp intensity control is switched to the RS232 interface. Front panel intensity control will always override the remote intensity control. Remote control of attached DCR® IIIs is dependent on each individual unit's setting, which should be in R (Remote) position for remote control.

Performance Specifications	
Light Output with Reference Modulamp Unit	±2%
Light Output with Independent Reference Bundle	±1%
Lamp to Lamp Variation with Reference Modulamp Unit	±8%
Lamp to Lamp Variation with Independent Reference Bundle	±1%
Power Supply Specifications	
Rated Power Output	150 Watts
Output Voltage	0.0, 0.5 to 20.5 VDC
Input Voltage Rating, 50/60 Hz.	90 to 265 VAC
Power Factor Correction @ 230 VAC, 50 Hz.	> 0.99, < 4°
Hold-up Time, Nominal AC Input, Full Load	8.3 milliseconds
Line Regulation, Over Entire Input Range	±0.5%
Lamp Type	DDL, Ushio or GE, 150 W Halogen Bulb
Current Limit Set Point	8.5 Amps
Temperature Range: Operating	0° to 45°C
Storage	-25° to 85°C
Relative Humidity, Non-condensing	5% to 95%