



- Drives all CVI Melles Griot 12-V IES™ and UltraThin™ shutters
- Local or remote operation
- CE compliant
- 8 preset shutter speeds
- Actuate with manual pushbutton or standard TTL input signal
- Infinitely adjustable shutter speeds from 1/60 of a second to 30 seconds
- Easy control of long shutter speeds via B (bulb) and T (time) control functions
- OEM (unpackaged) control board also available

CVI Melles Griot electronic shutter controllers facilitate the operation of all standard CVI Melles Griot 12-volt IES™ and UltraThin™ shutters. For convenience, a number of shutter control functions are designed into the controller, including eight preset shutter speeds ranging from 1/60th of a second to two seconds. For local operation, these functions are actuated using the controller's manual pushbutton trigger switch. For remote operation, the functions are actuated using a TTL pulse or signal. A shutter control board, which can be panel mounted, is available separately for OEM applications.

LOCAL OPERATION

Pressing the manual pushbutton trigger switch on the packaged controller actuates and holds the shutter open either for one of eight preset, calibrated intervals, or for an uncalibrated interval that can be as long as 30 seconds. The interval selection is made via a rotary switch, and the uncalibrated duration is set by a potentiometer accessible from the side of the controller.

Setting the B/T toggle switch in the T (time) position holds the shutter open until the switch is returned to its neutral position. Setting and holding the toggle switch in the B (bulb) position holds the shutter open until the switch is released.

REMOTE OPERATION

Applying a brief (10 msec) TTL pulse to the controller duplicates the function of the pushbutton.

The shutter can also be energized and held open for as long as the TTL signal remains high.

SPECIFICATIONS: Electronic Shutter Controllers

Input Voltage¹	12 Vdc
Input Current¹	2.5 A Minimum
Output Voltage	
Initial Pulse	48 Vdc for 10–20 msec
Holding Voltage	6 Vdc
Preset Shutter Speeds²	2, 1, 1/2, 1/4, 1/8, 1/15, 1/30, 1/60 sec
TTL Input	3–7 Vdc, 15 mA (opto-isolated, floating ground)
Maximum Repetition Rate	2 Hz
Minimum Recharge Time	200 msec
Input Voltage³	90–264 Vac, 47–63 Hz
Dimensions (L × W × H)⁴	149.9 × 79.5 × 46.2 mm (5.90 × 3.13 × 1.82 in.)
Weight	0.32 kg (11.2 oz)
Connectors	
Packaged Controller	
dc Input	Coaxial barrel
Shutter Drive	50 Ω coaxial barrel
TTL Input	BNC
OEM Controller Board	
dc Input	Coaxial barrel
TTL and Shutter Drive	6-in. pigtailed leads

¹ Controller module

² Accessed via rotary knob on packaged units. Accessed via DIP switch on OEM control board.

³ Power-supply module

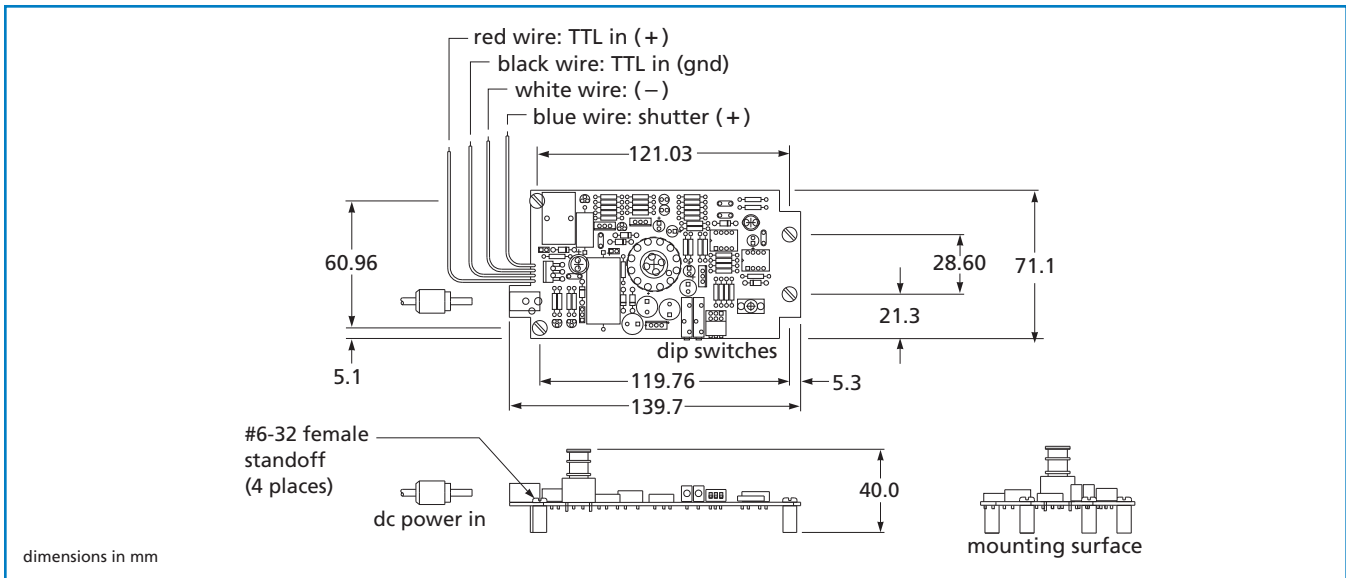
⁴ Packaged unit. For control board see drawing.

continued

APPLICATION NOTE

TTL Operation

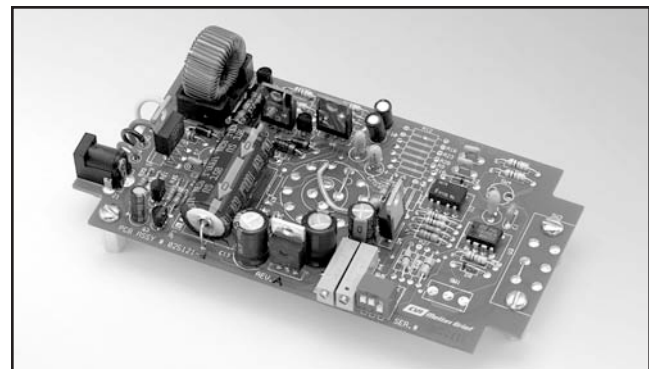
In the TTL setting, the shutter will actuate for an uncalibrated time when the manual trigger is pressed. To prevent the shutter from actuating as a result of electronic noise and spurious pulses, disconnect the TTL input plug when not in use.



59 OSC 205 Electronic Shutter Controller Board Drawing

Electronic Shutter Controller

Description	Plug Style	PART NUMBER
Electronic Shutter Controller		
Controller		04 ISC 850
OEM Controller Board		59 OSC 205
Shutter Controller Power Supplies		
12-Vdc Power Supply	3 prong North American	04 IPS 833
12-Vdc Power Supply	2 prong European	04 IPS 835
12-Vdc Power Supply	Japanese	04 IPS 837



59 OSC 205 Electronic Shutter Controller Board

Electrical Specifications

CVI Melles Griot electronic shutters are operated by external power sources, such as the 04 ISC 850 electronic shutter controller. To operate the shutter, it is important to understand the electrical requirements. To open the shutter, a dc signal that is four times the rated solenoid voltage should be applied to the bipost connector. The recommended pulse width is 20 msec. To keep the shutter open, a holding voltage of one-half the solenoid rating must be maintained after opening the shutter. Removal of this signal will quickly close the shutter. Standard solenoids are rated at 12 Vdc. Thus, the nominal opening voltage should be 48 Vdc for 20 msec, with a holding voltage of 6 Vdc.