

Uniblitz® V880

Open-Frame Multifunction Shutter Driver

Overview

The Uniblitz V880 is a versatile shutter driver/controller that operates using a constant voltage drive. Two additional modes (10.7V and 18V) are similar to the settings of the VED24 driver and contain some expanded drive pulse durations. Additionally, its unique design provides on-board selection to operate all shutter devices within our extensive line of Uniblitz performance shutter systems.

Key Features

- Open-frame printed circuit card suitable for OEM applications
- **RoHS Compliant**
- Compatible with all Uniblitz shutter devices
- **510P** shutter interconnect cable included
- Two sync outputs for shutters equipped with a dual synchronization systems
- Replaces **D880C Driver**

Specifications

System Characteristics

Repeat Exposure	Minimum time between exposures is determined by shutter used and drive pulses selected.
Shutter Drive	<ul style="list-style-type: none">• Continuously variable exposure frequency from DC to the shutter's maximum rate• Drive pulses for all shutters derived from on-board PIC processor• Bi-stable driver – H-Bridge Control• Uni-stable driver – ½ H-Bridge• D880C Emulation Mode – Constant voltage drive system. High current – 1.2A, Hold current – 300mA.
Power Supply	<ul style="list-style-type: none">• +24 VDC regulated ±2%• 1.5A minimum• User supplied or optional PS24 available

General Characteristics

Weight	74.0 g
Size (HWD) w/ TS1 installed	1.91 x 8.26 x 11.56 cm
Operating Temp.	5 - 40 °C
Storage Temp.	-20 - 55 °C



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Shutter Compatibility

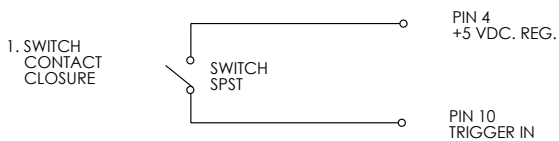
Please see the [V880 User Manual](#) for specific compatibility settings for each Uniblitz shutter device.

CS	DSS	ES	FS	LS	MS	NS	VS	XRS
CS25 ¹	DSS10B	ES6B		LS2 ¹		NS15B	VS14 ¹	XRS6 ¹
CS35 ¹	DSS20B			LS3 ¹		NS25B	VS25 ¹	XRS14 ¹
CS45 ¹	DSS25B			LS6 ¹		NS35B	VS35 ¹	XRS25 ^{1,2}
CS65 ¹	DSS35B					NS45B		
CS90 ¹						NS65B		
						NS25S		

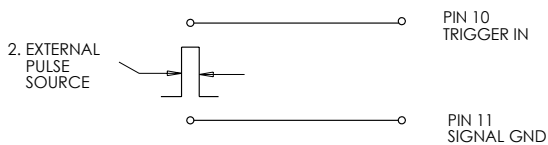
¹ Will require "E" option ("For use with VED24, V880, or D880C") for V880 compatibility.

² Will require two V880 drivers for operation.

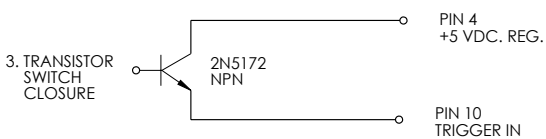
Control Input Diagram



UPON SWITCH CLOSURE THE V880 WILL OPEN SHUTTER. SWITCH CONTACT MUST REMAIN CLOSED TO MAINTAIN THE SHUTTER IN THE OPEN STATE.



PULSE DURATION WILL DETERMINE SHUTTER EXPOSURE. PULSE MUST REMAIN IN THE ACTIVE HIGH STATE TO MAINTAIN SHUTTER IN THE OPEN POSITION.

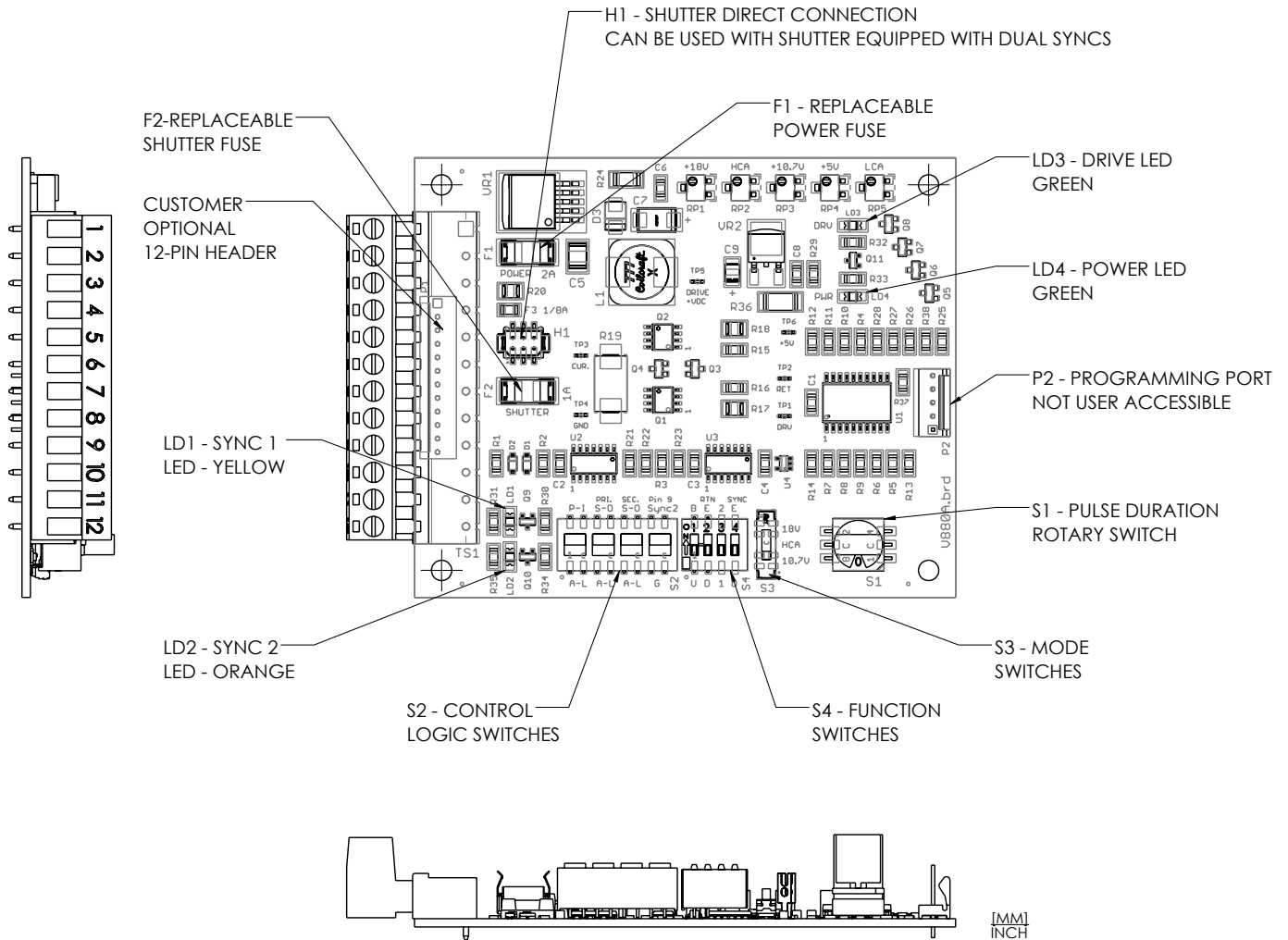


UPON TRANSISTOR ENERGIZATION THE V880 WILL OPEN THE SHUTTER. TRANSISTOR MUST REMAIN ENERGIZED TO MAINTAIN THE SHUTTER IN THE OPEN STATE.

There are three methods for triggering a shutter using V880 control: Switch Contact Closure, External Pulse Source, and Transistor Switch Closure. All of the triggering methods assume an Active High input on TS1 Pin #10. This is set by switch position of S2-1. S2-1 select switch must be set to the P-I setting. See the [V880 User Manual](#) for more information.

Uniblitz® V880 Technical Drawings

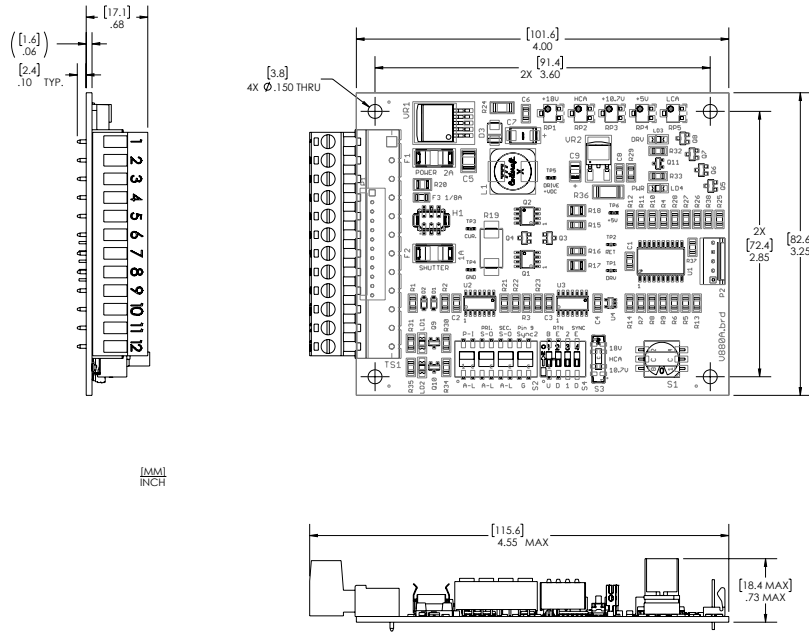
Jumper/Connection Location and Layout



1. SEE V880 OPERATOR CONTROL SWITCHES. TABLE #1, #2, #3
2. SEE H1 PIN OUT

Uniblitz® V880 Technical Drawings

Printed Circuit Board Outline and Connections



NOTES:

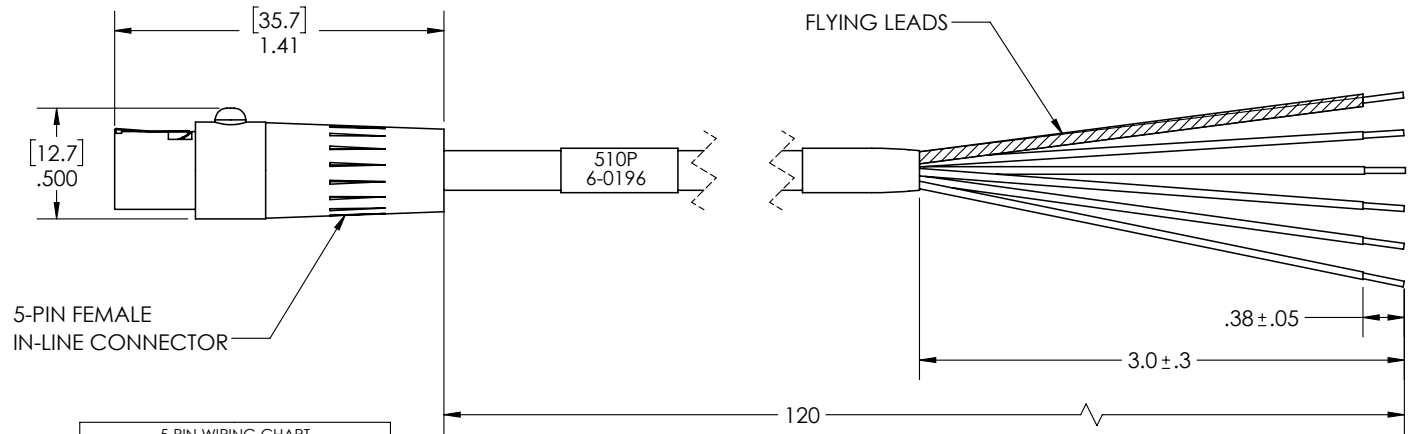
1. TS1 CONNECTIONS:

- A. INPUT PIN 1 +24 VDC REG/1.5A
- B. PASSIVE PIN 2 POWER GND
- C. PASSIVE PIN 3 SYNC RESISTOR (75Ω)
- D. OUTPUT PIN 4 +5 VDC REG (510P - BLU)
- E. INPUT PIN 5 SYNC 1 (510P - YEL)
- F. PASSIVE PIN 6 GND - RETURN (510P - GRN)
- G. OUTPUT PIN 7 SHUTTER A (510P - RED)
- H. OUTPUT PIN 8 SHUTTER B (510P - BLK)
- I. OUTPUT PIN 9 S2-4 SWITCH - SYNC 2 (SYNC #2 OUT)
- J. PASSIVE PIN 9 S2-4 SWITCH - G (GROUND)
- K. INPUT PIN 10 TRIGGER (EXPOSURE) INPUT
- L. PASSIVE PIN 11 SIGNAL RETURN (GND)
- L. OUTPUT PIN 12 SYNC 1 OUTPUT

- (1) PINS 3, 4, 5, 6:
USED ONLY WHEN SHUTTER IS EQUIPPED WITH ELECTRONIC SYNC.
- (2) PIN 9:
USED FOR GROUND CONNECTION OR SYNC #2 OUTPUT.
- (3) PIN 12:
DEFAULT ACTIVE HIGH OUTPUT (HIGH WHEN ELECTRONIC SYNC IS ACTIVATED.)

- 2. DO NOT CHANGE SWITCHES WITHOUT FIRST REMOVING POWER.
- 3. DO NOT ADJUST TRIM POTENTIOMETERS LOCATED ON PC BOARD. IMPROPER ADJUSTMENT MAY CAUSE IRREPARABLE DAMAGE TO V880 AND/OR SHUTTER.
- 4. TS1 IS REMOVABLE.
- 5. FOR FUSE AND SWITCH LOCATIONS SEE DRAWING #16-0732.

510P Shutter Interconnect Cable (Included)



5-PIN FEMALE IN-LINE CONNECTOR

5-PIN WIRING CHART	
5-PIN (FEMALE)	WIRE COLOR
1	RED
2	BLACK
3	BLUE
4	GREEN
5	YELLOW
INTERNAL GROUND (SHELL)	BROWN