

Dual Relay Input Module



Introduction

The E-Plex 356DRIM is a flexible input and output module consisting of 2 normally open relay outputs and 4 digital inputs. Each digital input is configurable as either active high or active low through the E-Logic software.

For output relays, status LEDs are red when the relay is closed. For digital inputs, status LEDs indicate green for active high input, red for active low input.

Key Features

- 2 relay outputs.
- 4 inputs, configurable as active high or low.
- Output relay contacts rated for 10 amps AC or 5 amps DC.
- Status LEDs for inputs and outputs.
- Ideal for controlling generators.
- LEN value 12.

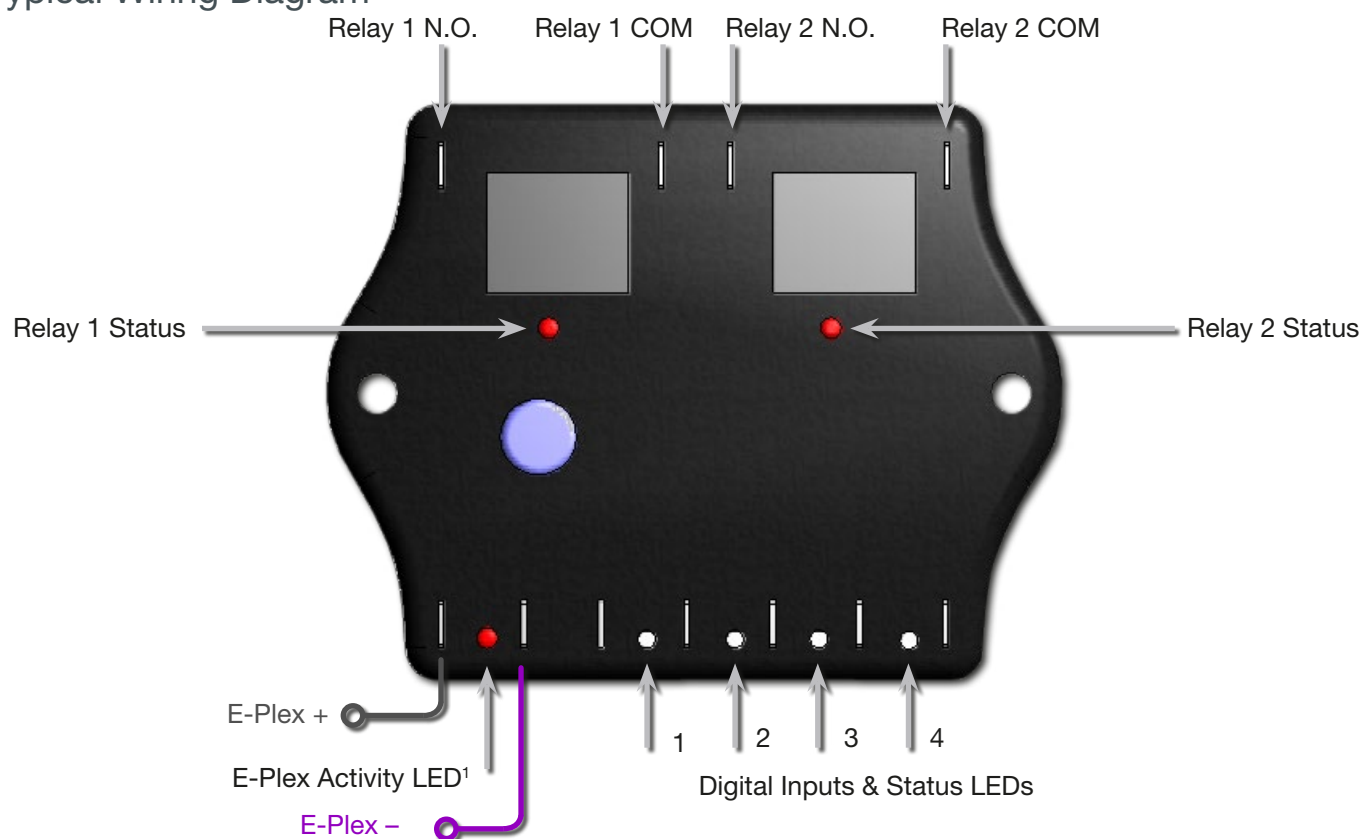
Design Specifications

- Shock: Mil Std 202 Method 213 test condition.
- Vibration: Tested to Lloyds Register Approval Vibration Test 2.
- Moisture resistance: IP54.
- PCB characteristics: UL94V-0.
- Ignition protection: UL 1500 compliant.
- Operating Temperature: -40°C to 60°C.
- Storage Temperature: -40°C to 85°C.
- Operating Humidity: 0% to 100% (condensing).
- Weight: 4.8oz (136g).

Electrical Specifications

Description	Minimum	Nominal	Maximum	Absolute Max (Surge)
Voltage	7 Volts DC	12 / 24 Volts DC	32 Volts DC	45 Volts DC
Current	20 milliAmps (idle)	—	120 milliAmps (full load)	—
Input Low Threshold	0 Volts	—	0.6 Volts	—
Input High Threshold	7 Volts	—	30 Volts	—
Output Relay Contact Rating (120 / 240VAC)	—	—	10 Amps	—
Output Relay Contact Rating VDC	—	—	5 Amps	—

Typical Wiring Diagram



Status LEDs:

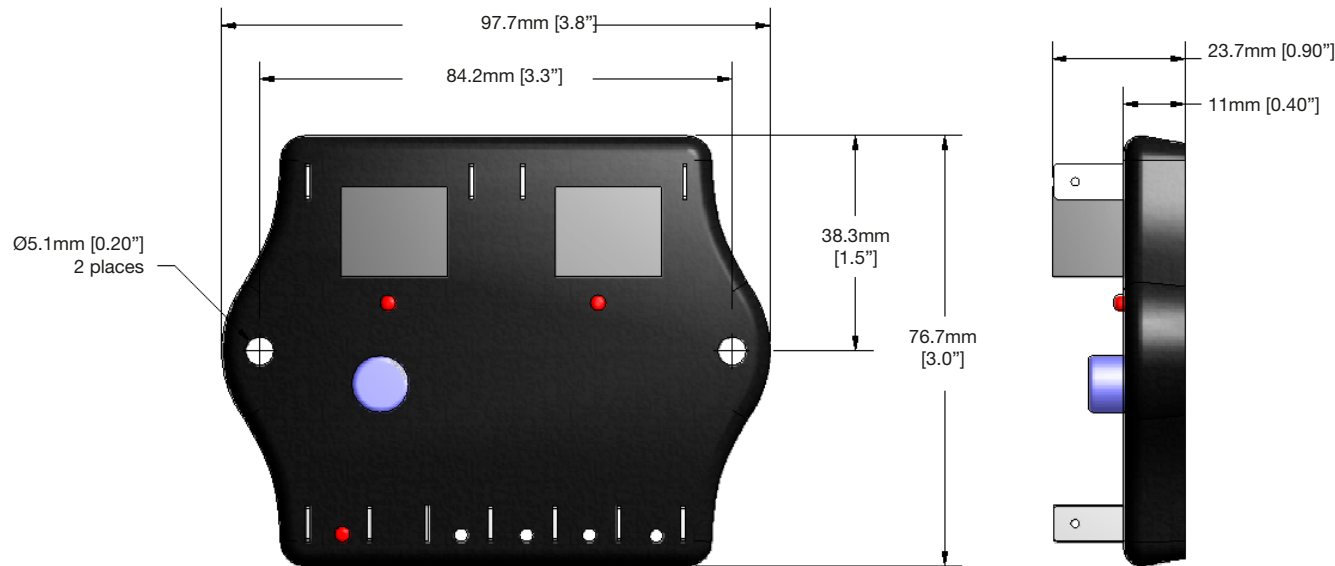
Relay 1 & 2: ON - relay is closed, OFF - relay is open.

E-Plex Activity: ON, Blinking - module is responding, OFF - module is not responding.

Digital Inputs 1-4: GREEN - input is high, RED - input is low.

NOTE: Do not use the V+ connection on this unit.

Dimensional Specifications



Mounting Specifications

Screw assembly to a flat mounting surface in 2 places, as shown in the illustration.

Mounting Instructions

- Metric fasteners: Use M5 size screw, M5 split lock washer and M5 washer. Torque to 250~280 N-cm. Do not exceed this torque as it could cause damage to the electronics.
- Imperial (English) fasteners: Use #10 size screw, #10 split lock washer, #10 washer. Torque to 20~22 in-lb. Do not exceed this torque as it could cause damage to the electronics.

Ordering Information

Description	E-Plex Part Number
356DRIM Series - Dual Relay Input Module	EP-SW-IO-4/2CH-356DRIM



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For output relays, status LEDs are red when the relay is closed. For digital inputs, status LEDs indicate green for active high input, red for active low input.

Key Features

- 2 relay outputs.
- 4 inputs, configurable as active high or low.
- Inputs isolated from E-Plex ground.
- Output relay contacts rated for 10 amps AC or 5 amps DC.
- Status LEDs for inputs and outputs.
- Ideal for controlling generators.
- LEN value 23 @12V.



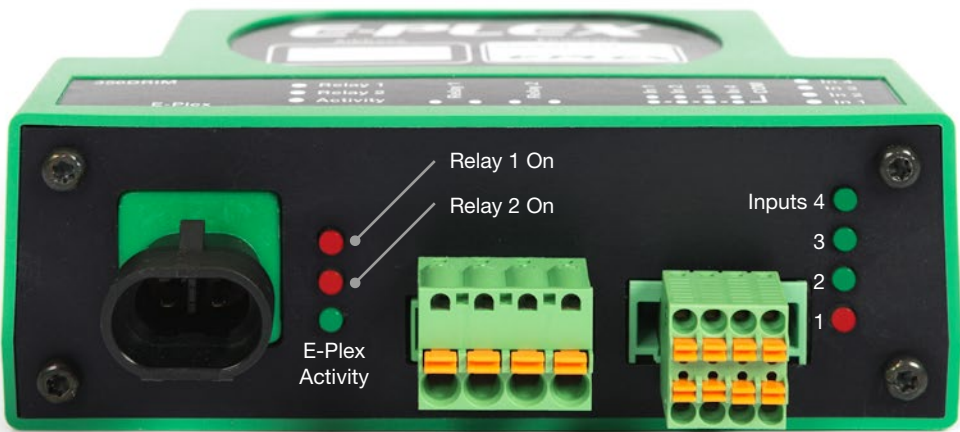
Design Specifications

- PCB characteristics: UL94V-0.
- Operating Temperature: -20°C to 60°C.
- Storage Temperature: -40°C to 85°C.
- Operating Humidity: 0% to 95% (non-condensing).
- Weight: 188g.

Electrical Specifications

Description	Minimum	Nominal	Maximum	Absolute Max (Surge)
Voltage	11 VDC	12 / 24 VDC	32 VDC	45 VDC
Current 12V	25mA (idle)	—	230mA (full load)	—
Current 24V	25mA (idle)	—	110mA (full load)	—
Input Low Threshold	—	—	2V	—
Input High Threshold	7V	—	—	—
Input Electrical isolation from E-Plex ground	—	—	30VAC 35VDC	—
Input Voltage range (relative to input common)	0V	—	32V	—
Output Relay Contact Rating (120 / 240VAC)	—	—	10A	—
Output Relay Contact Rating VDC	—	—	5A	—

Typical Wiring Diagram



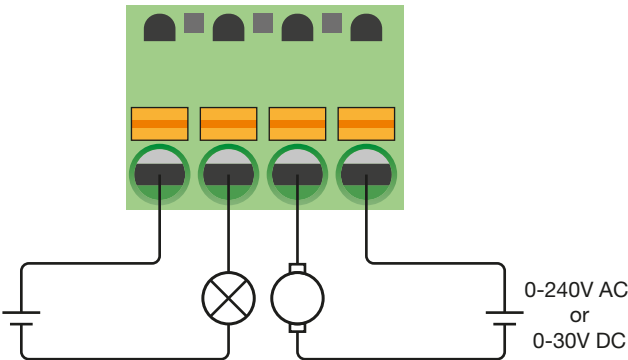
Status LEDs:

Relay 1 & 2:
ON - relay is closed
OFF - relay is open

E-Plex Activity:
Blinking - module is responding
OFF - module is not responding

Digital Inputs 1-4:
All inputs are bi-colour
Off - Input inactive
GREEN - input is high
RED - input is low

Relay 1 & 2 Configuration
(Dinkle 2ESDSR-04P)

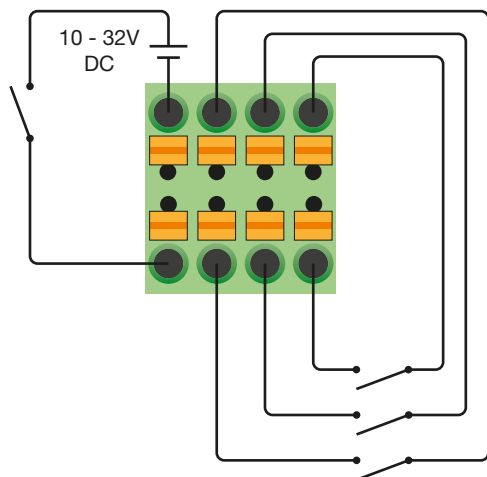


Recommended wire:
0.2 to 2.5mm² solid or stranded wire. Insulation should be stripped back 8 to 9mm.

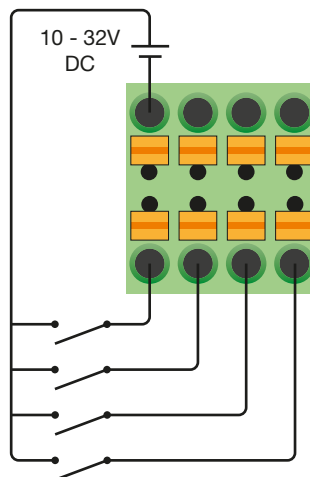
Digital Inputs 1-4 Configuration

(Dinkle 0156-2b08) All Input commons connected internally

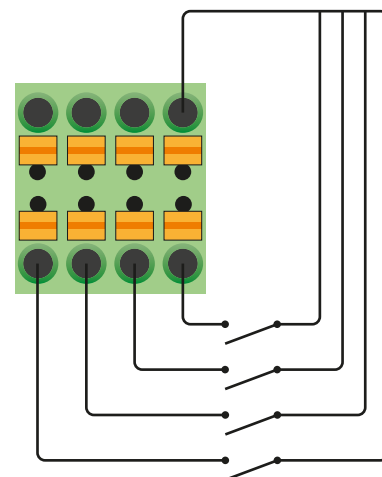
**Configured with Input 1 active high,
Input 2,3,4 active low**



**Configured with all Inputs
active high**



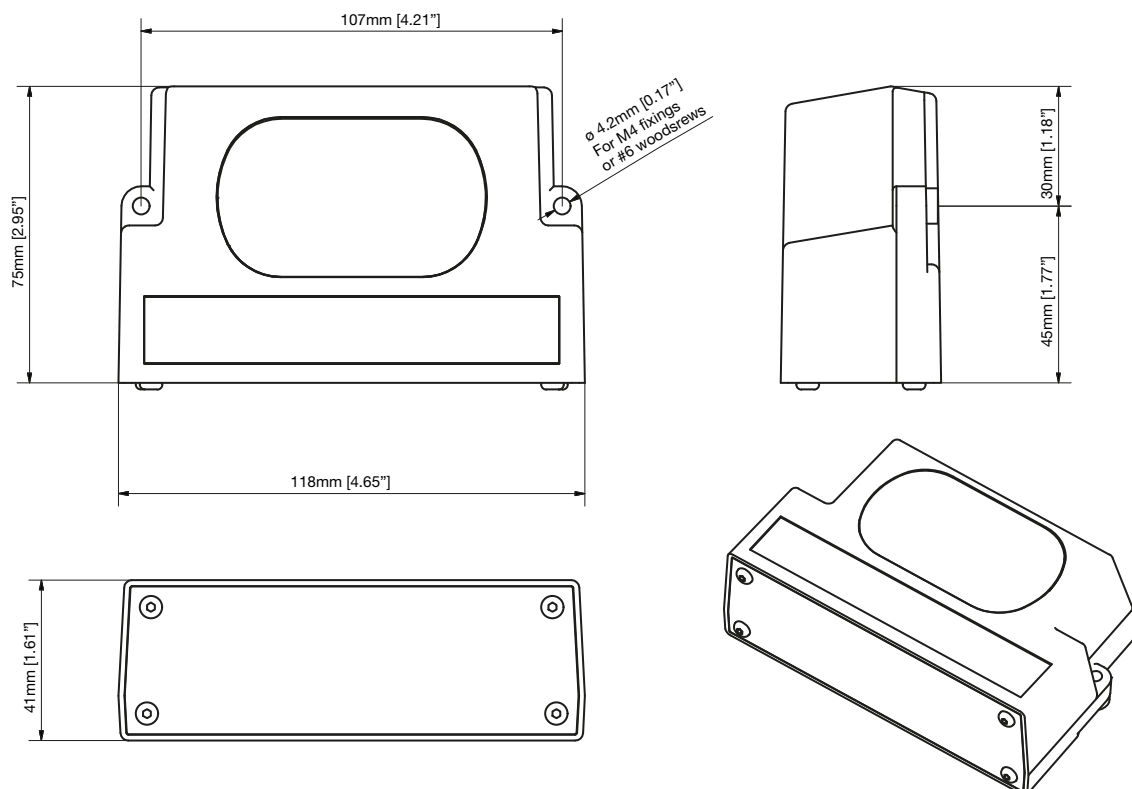
**Configured with all Inputs
active low**



Recommended Wire:

0.2 to 1mm² Solid wire, 0.2 to 1.5mm² Stranded wire, 0.25 to 0.5mm² If Ferrule used. Insulation should be stripped back 7 to 8mm.

Dimensional Specifications



Ordering Information

Description	E-Plex Part Number
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