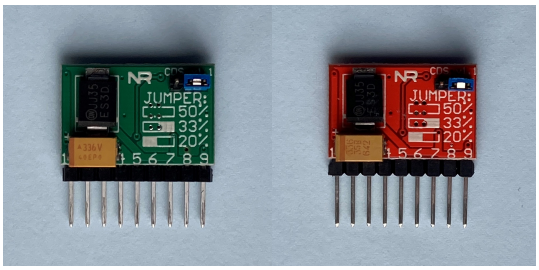
CoolDriveSolo Part # CDS-US-V02 (US Specification Rev3)



The principle of this design was to incorporate sufficient features to enable a single device solution to cover all possible line voltages, trigger voltages and duties for valves in our standard product range without the need to use an additional 5VDC supply. (Red Board Special Order.)

This product is a complementary device to our existing range of CoolDrive modules, a single valve driver with a retro compatible pin format with earlier models and can also be used in conjunction with our new 'CDSX8US-XX Multiboards' offering unparalleled flexibility of use.

Features

Line Voltages	:	8-24VDC. (No 5VDC supply line required.)
Trigger Voltages	:	4.5-24VDC. (Enables 4 and 5 wire operation and/or logic interfacing.)
Multiple Duty Cycles	:	20%, 33% and 50%. Jumper selectivity enables simple operation of high pressure valves, pinch valves and higher voltage strike and hold requirements.
PWM Frequency	:	25KHz. (Silent in operation.)
No Floating Inputs	:	No need to ground inputs as these are held low on the board.
LED Indicators	:	Red LED for short circuit indication, Green LED for trigger operation.
Flexibility	:	No need to specify a particular valve number, truly universal.

Pin Out Information.

Pin # 1	=	Positive Line Voltage (8-24VDC.)
Pin # 2	=	Ground (Zero Volts.)
Pin # 3	=	Not Connected
Pin # 4	=	Ground
Pin # 5	=	Trigger (Voltage +4.5-24VDC (Voltage +4.5-24VDC. Do Not Exceed Line Voltage)
Pin # 6	=	Not Connected
Pin # 7	=	Not Connected
Pin # 8	=	Ground Output To Valve
Pin # 9	=	Output to Valve (In case the valve has one RED and one different colour wire, pin# 9 is to be connected to the RED wire.)

Notes:

Pins 2, 4 and 8 are common grounds.

4-Wire Operation

For 4-wire operation the trigger and the line voltage pins should be coupled together so that it is possible to switch the driver with only a line voltage input. The limitation of use for this method is that it will not be possible for the driver to interface with voltages lower than 8 volts. Note also that if the driver is being controlled by this method the supply/trigger input will need to be capable of supplying the full current requirement of the valve or it will not operate. This option cannot be realised when using the Multiboards.