



High Country Tek, Inc.

Single Channel PWM Controller - PTD-12-V

Electronic Controller Solutions for Mobile, Industrial & Marine Applications.

Application Information:

- 12V @ 3amp General purpose open loop single coil valve driver
- Uni-directional open loop pump stroker or valve controller
- DIN 43650 footprint for mobile or industrial products
- Accepts industry standard 0 - 10V command signal

Product Feature Overview:

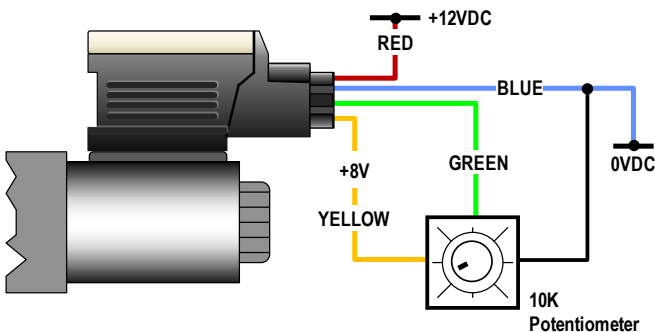
- Single PWM output for any make of proportional valve or pump control
- Linear Input to output curve to give best control resolution
- ALL settings by potentiometer under unit translucent lid
- Separate ramp UP and Down adjustments for smooth control
- Pre-connected 3m/10 foot color coded cable for easy connections
- +8VDC reference voltage for direct connection to joystick or potentiometer
- LED diagnostics show full controller operation at all times
- Meets latest CE latest test standards & Sealed to meet NEMA 6P or IP 67



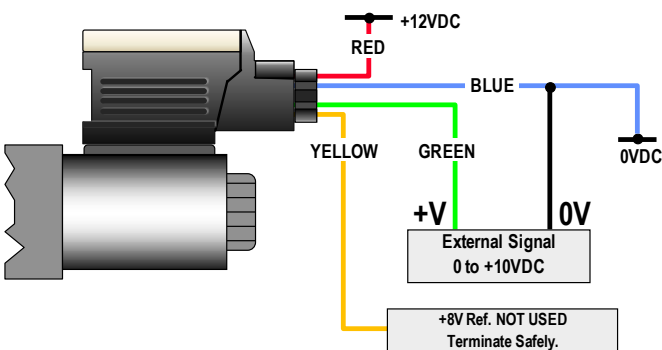
Order **PTD-12-V** for this unit

Electrical Connection Diagrams:

Internal +8VDC reference can be used to power local 10 K Ω potentiometer or joystick for easy installation.



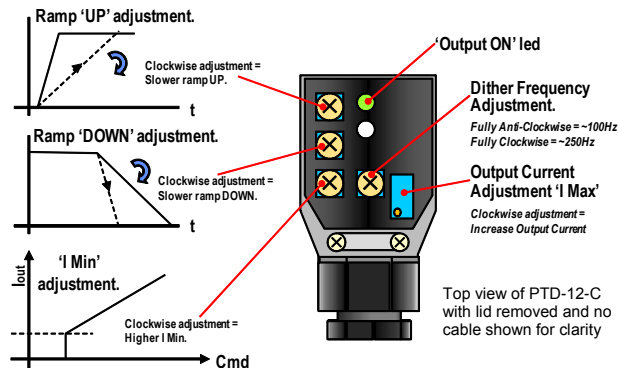
Ensure external signal source 0V is connected to same GND at this controller for correct operation



Controller Specification Overview:

Housing Type:-	HCT unique 'encapsulated' block.
Input Supply Voltage:	12VDC \pm 20% (Absolute Maximum)
Input Supply Current:	Valve Current Setting + 200mA Quiescent (Max)
Output Current:	3 amps typical (36W max)
Command Input Type:	Voltage only
Command Input Value:	0 to +Vref or external Industry standard 0 - 10VDC max
User reference:	Vref = +8VDC (\pm 5%) @ 5mA max
Ramp Times:	300mS to ~8 Secs (with I max at 100%) Separate UP and Down settings
Dither Frequency :	Adjustable, ~100 to ~250Hz (\pm 20%)
Housing Material:-	High Impact resistance ABS.
Wire Connections:-	3M/10' pre-connected color coded cable
Encapsulation:-	Flameproof epoxy resin filled
Mounting:-	DIN 43650 connector footprint
Temperature range:-	-20 to +70 $^{\circ}$ C (operational)
NEMA/IP Rating:	NEMA 6 / IP65 when assembled and mounted to coil correctly

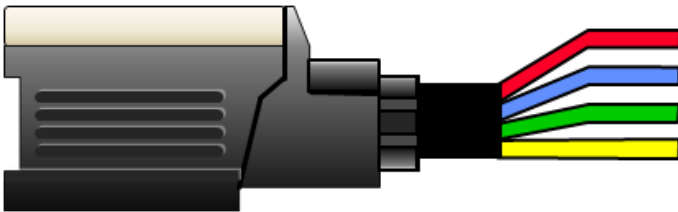
Adjustment Guide:



Connection Details:

Controller comes pre-wired with 3Meters / 10 feet of color coded cable that is selected for harsh environments and meets:

4 core, 16/02 with PVC outer protection to Def Standard 16-12 Part 5 (Screened) 2.5 Amps/core @ 70°C Max Operating Temp.



RED - +V Supply Input
BLUE - GND (0V) Supply Input
GREEN - Voltage Command Input
YELLOW - +8VDC Reference Output

IMPORTANT NOTE:

DO NOT SHORT +8V REF. TO +12V OR GND (0V) AS PERMANENT DAMAGE TO AN INTERNAL VOLTAGE REGULATOR WILL RESULT !!

Need More Information ?

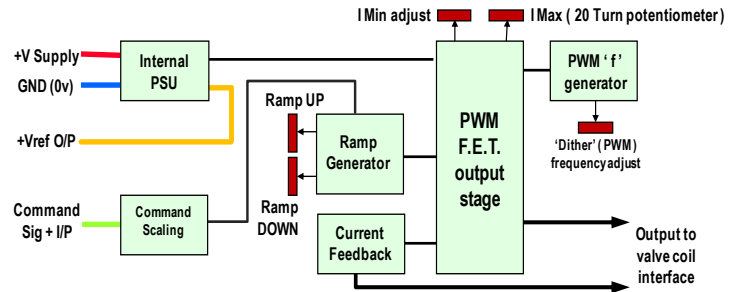
For customer service, pricing, order placement and application support, contact us through E-mail at:

www.hctcontrols.com



A SUN Hydraulics Company

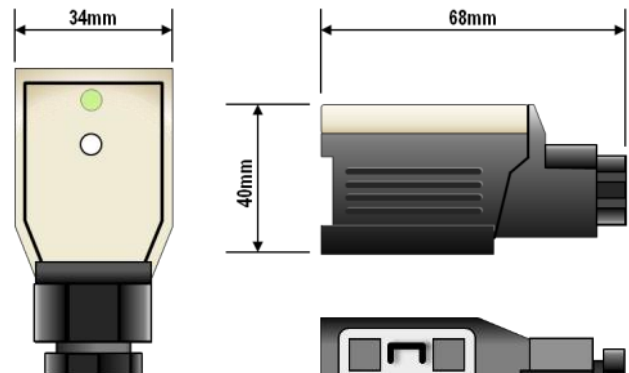
Block Diagram:



- IMax potentiometer is 20 turn with end travel clutch
- All other potentiometers are single turn variety - adjust with care
- ALL potentiometers are clockwise to increase respective value
- Unit is fully encapsulated in flame resistant black epoxy resin
- Controller M3 x 40 mounting screw and gasket supplied

Dimensional Data:

Pre-wired cable removed for clarity



Controller interfaces with industry standard DIN 43650 - 3 pin connector as shown



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