



High Country Tek, Inc.

Single Channel PWM Controller - PTD-24-V

Electronic Control Solutions for the Global Fluid Power Industry



Application Information:

- 24V General purpose open loop single coil valve driver
- Can be used with all types of fluid control products
- 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:

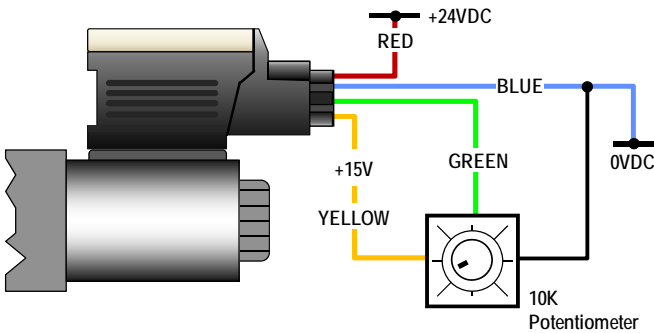
- Single PWM output for any make of proportional valve or pump control
- Linear Input to output curve to give best control resolution
- ALL settings by potentiometer under unit translucent lid
- Separate ramp UP and Down adjustments for smooth control
- Pre-connected 3m/10 foot color coded cable for easy connections
- +15VDC reference voltage for direct connection to joystick or potentiometer
- LED diagnostics show full controller operation at all times
- Mounting hardware and gaskets supplied with each controller
- Meets latest CE latest test standards & Sealed to meet NEMA 6P or IP 67



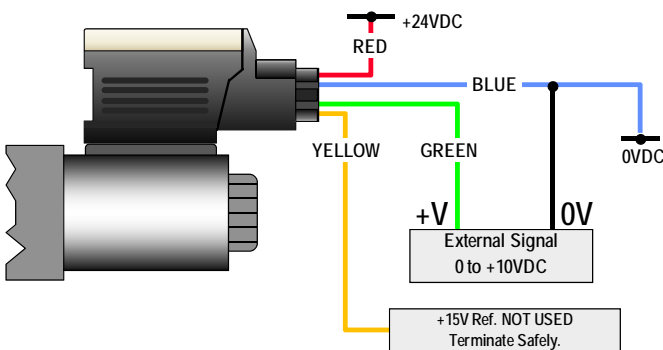
Order **PTD-24-V** for this unit

Electrical Connection Diagrams:

Internal +15VDC reference can be used to power local 10 KΩ potentiometer or joystick for easy installation.



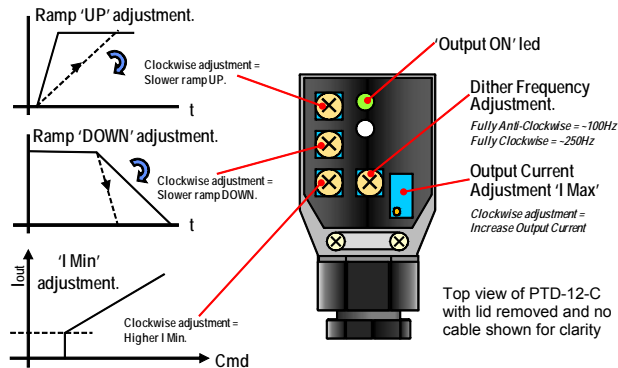
Ensure external signal source 0V is connected to same GND at this



Controller Specification Overview:

Housing Type:-	HCT unique 'encapsulated' block.
Input Supply Voltage:	24VDC $\pm 20\%$ (Absolute Maximum)
Input Supply Current:	Valve Current Setting + 200mA Quiescent (Max)
Command Input Type:	Voltage only
Command Input Value:	0 to +Vref or external Industry standard 0 - 10VDC max
User reference:	Vref = +15VDC ($\pm 5\%$) @ 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 °C (operational)
NEMA/IP Rating:	NEMA 6P/67 when assembled and mounted to coil correctly

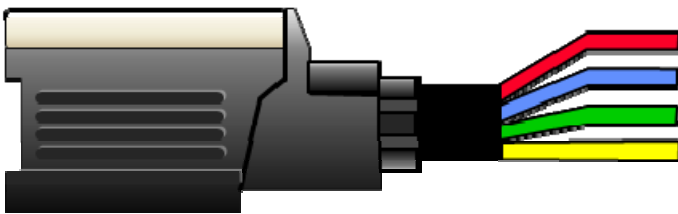
Adjustment Guide:



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 - +15VDC Reference Out-

IMPORTANT NOTE:

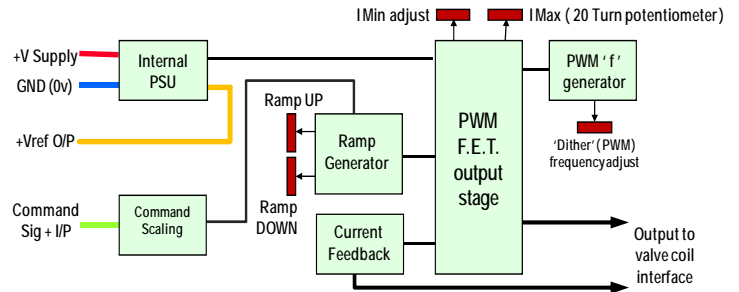
DO NOT SHORT +15V REF. TO +24V OR GND (0V) AS PERMANENT DAMAGE TO AN INTERNAL VOLTAGE REGULATOR WILL RESULT !!

Need More Information ?

For customer service, pricing, order placement and application support, contact us through E-mail at:
info@hctcontrols.com

www.hctcontrols.com

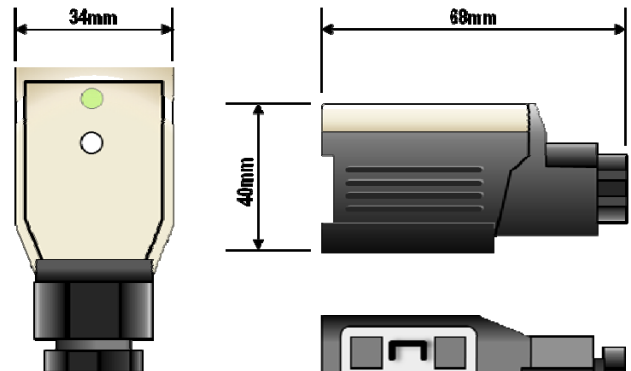
Block Diagram:



- 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



High Country Tek, Inc.

208 Gold Flat Court
Nevada City, CA, 95959
Tel: (1) 530 265 3236
Fax: (1) 530 265 3275