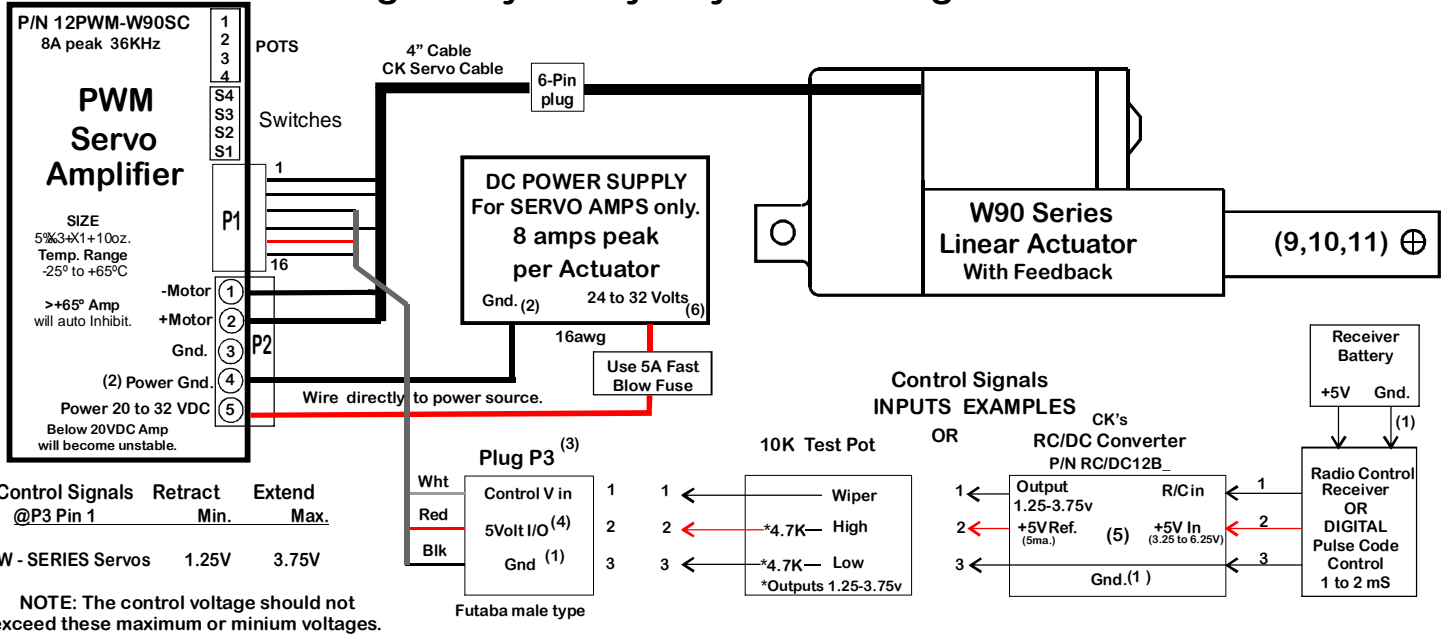




**“Servo Amps are factory set. Just connect power and signal as shown.”**  
**Plug & Play Ready only to CK Design Tech Actuators**



**P-1 SIP Connector Molex P/N 22-01-3167**

- +5V 5mA OUT = High Side Actuator F/B pot. [red/wht]
- SIGNAL GND = Low Side Actuator F/B pot. [blk/wht]
- 5V 5mA OUT = NC
- +REF IN = Control input or test pot wiper (P3-1 Wht.)
- REF IN = Wiper Actuator F/B pot. [Wht]
- TACH IN = NC
- +TACH/GND = Actuator Cable Shield Ground
- Curr Mntr Out = NC
- Curr Ref. Out = NC
- Cnt Curr Limit = NC
- INHIBIT IN = Gnd to inhibit H-Bridge output. (Recommended)
- + INHIBIT IN = NC Gnd. to disable servo extend direction.
- INHIBIT IN = NC Gnd. to disable servo retract direction.
- FAULT OUT = NC Fault Out, TTL high logic, LED=RED
- +5V Ref. = High side test pot (P3-2 Red)
- SIGNAL GND = Low side test pot, Sig Gnd. (P3-3 Blk)

**P-2 SCREW TERMINAL S/T**

- MOTOR = + Motor wht/blk
- + MOTOR = - Motor wht/red
- POWER GND. = Shield Gnd (User)
- POWER GND. = GND. 16awg Black
- HIGH VOLTAGE = 24-28VDC 16awg Red use 5 amp fuse!

**SWITCH SETTINGS {Factory Preset}**

- VOLTAGE FEEDBACK = ON
- CURR INTEGRATOR = OFF
- VEL INTEGRATOR = OFF
- TEST/OFFSET = ON

**POTENTIOMETER SETTINGS {Factory Preset}**

- LOOP GAIN = 1turn ccw from motor buzz
- CURR LIMIT: = W9015 = 2-3Tccw
- REF IN GAIN = Sensitivity: 100%= full cw; 85%=2-3 Tcc. see note 7, 11
- TEST/OFFSET = Stroke & Auto Ctr Adjustment: see note 7

**IMPORTANT**

[Follow Power up/dwn procedures or SERVO DAMAGE may occur]

You can ground, P1 pin 11, to inhibit servo amp as a fail safe mode.

**Power Up Procedure:** 1st Control signal inputs. 2nd Servo Amps.

**Power Down Procedure:** 1st Servo Amps. 2nd Control signal inputs.

(NOTES):

- Signal Ground Only. Gnd. (1) must be isolated from Gnd. (2)
- This ground is for servo amp to DC Power Supply only.
- P-3 open, actuator will auto center, slow speed to mid-stroke. If your cable is longer than 6" to P3, use a Shielded Cable. Connect only one end of shield to ground at P2 "3" terminal.
- P3 pin 2, is +5V ref. for high side of a test pot.
- RC/DC must have power before Servo Amp power is on.
- The power supply needs to supply at least 8 amps peak for 5 msec. and 4 amps continuous for each servo amp. Do Not daisy chain power lines or tie wrap with signal lines.
- Pot 3, "REF IN GAIN" Sensitivity Over/Undershoot Adjustment. To Increase turn(cw) to decrease turn(ccw). This will change the servo position. Use Offset adj., Pot 4, to correct this change.
- At +65°C servo amp will "over-temp" and the motor outputs to hi-Z. "Auto Inhibit Mode"
- The linear actuator should never be fully retracted or extended to a stall condition. Damage is most likely.
- In a stall or overload condition, the over current limit will only allow the actuator to travel in the reverse direction.
- Use Gain set @ 85% for: W9015-60-2 (60lb 2" stroke) Use Gain set @ 100% for all other W9015's.