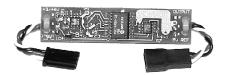
RC to DC Converter 12 Bit Output



Applications

R.O.V.s, U.A.Vs., R.P.Vs. Aerospace **Special Effects Motion Control** Robotics / A.I. **Animatronics**

Features

Plugs Directly into Futaba™ Type Radio Receivers. Stable 12 bit Output Wide power supply range Stores last valid pulse **Designed for Aerospace Apps.**

This precision device converts standard R/C servo style PPC, PCM signals to an analog DC output with12 bit resolution. It incorporates a charge pump so the output is stable with input changes such as: low battery supply voltage, pulse amplitude, frequency and temperature. Programable options include: output scaling within 0 to 5 volts, positive or negative going, valid pulse width cut off points, and a second order filter for different time constants (T/C) output filter rates. All programs are factory set.

Specifications

INPUTS:

Supply Voltage: 3.25 to 6.25 Volts

Current: 10ma. tvp.

R/C Input: Standard servo type PCM. Positive going.

Input Pulse Width Range: 1.00 to 2.00ms

*PCM, Pulse width range: 0.5 to 2.5 ms (Standard RC Radio) Pulse frequency range valid from 25-125 Hz. (50 Hz. Normal)

Input Logic Gate: 74HCT Series

Input Resolution: 0.4us *Connector: Futaba Male, 12"

OUTPUTS:

*Voltage Range: Programmable within 0.0V min. to 5.0v ± .5%

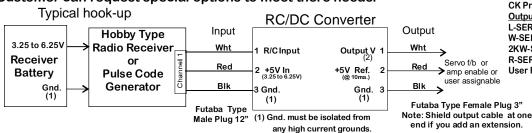
Output Device: Op Amp (Op295 @ 15ma.)

Power-Up Output, with no input pulses defaults to its lowest DC value.

Resolution: 12 bits ±1 LSB

Output Drift: ±.5% full scale and per 10°C +5.00 Volt Ref. @ 10ma. User assignable. * Time Constance (T/C) output filter. *Connector: Futaba Female, 3"

* Customer can request special options to meet there needs.



Size/Weight: 2.5" X .5" X .35" / .7oz. Temp. Range: -15° to +70°C

Standard Options are:

X=Output Ranges:

A) 0.05 to 4.95 Volts

B) 1.25 to 3.75 Volts

C) 0.75 to 4.25 Volts

T=T/C Filter Rate Codes 1-9

3= 1msec. (Std.) 6= (Smooth) 9= 1 sec.

Order Info: P/N RC/DC- X Y

X= Output Voltage Range A or B Y= T/C (Time Constance) 2 - 9

| CK Products | Retract | Extend | |
|------------------------------|-----------|----------|------|
| Output Voltages | Min. | Max. | Code |
| L-SERIES Servos | 0.05V | 4.95V | Α |
| W-SERIES Servos | 1.25V | 3.75V | В |
| 2KW-Series | 0.75V | 4.25V | С |
| R-SERIES Servos | 0.05V(ccw | 4.95V(cw |) A |
| User Requested Output | | | |
| • | | | |

Note: For Single source common ground systems. Disconnect the RC/DC Input ground, using only its output ground.

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(2) Keep wire short. May need shield.