CASA

DATA SHEET

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Date - 13th February, 2002   e-mail = sales@casa.co.nz   http://www.casa.co.nz   Ref - SMCU-DAT.FRP

Stepper Motor Control Unit - SMCU

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CASA's stepper motor control unit provides a highly versatile stand alone microprocessor controller for a wide variety of standard 6 or 8 wire stepper motors.

This ingenious product offers an economic solution to a wide range of industrial automation functions including many controlled rotation and manipulative processes.

Special Features Include:

1) ASCII Command Programmable from any PC or Terminal via RS-232c port (9 pin D-Sub connector).
2) Flash-ROM Storage of up to 4 groups of 5,000 step commands and stand-alone operation once programmed.
3) Ramp-Up and Ramp-Down (acceleration) profiles adjustable to suit any practical combination of motor and load.
4) Signal & switchable I/O ports for remote command signals (up to 8 are available depending on model selected).
5) Interactive Switch / Dwell / Pause functions provide refined control sequences and system protection etc.
6) Optional remote operator panel for "Start, Stop, Pause, Re-Set" push buttons.
7) Optional inputs for Chopper Encoded signal. This version is recommended for some position critical applications.
8) Custom programming and packaging can be undertaken to suit special applications and environments etc.
9) New Zealand designed and manufactured. A servo motor option is also available for special applications.
10) Daisychaining options for complex applications requiring several interactive motors (using RS422 interface).

General Specification: *(for physical details, see typical drawings on reverse of this data sheet or enquire)*

Step-Rates: (subject to specific motor or motors)	**50~10,000 steps per sec.**
Programme Steps (for single sequence)	**1~5000 (expandable)**
Interactive Input + Output Signals	**4~8 I/O Signals**
Operator Local or Remote Control	**4~6 switches &/or lamps**
Ramp-Up / Ramp Down:	**fully variable**
Pause / Dwell:	**0~200 min.**
Command Language: simple English characters	**ASCII** (under Forth)
Microprocessor Type / family	**68HC11**
Fixing Holes:	**2 or 4 Holes tapped M4**
(DIN Rail option also available to order)	*(See drawing overleaf)*
Temperature Rating:	**10~50 deg C ambient**
(Relative Humidity)	**95% non-condensing**
Weight:	**3 kg (typical)**
Size: (Length x Width x Depth)	**250x193x55 mm (typical)**
Standard Packaging:- (CASA's CB19 Instrument Box)	**Dust Proof / Drip Proof**

Part Number: SMCU-xAX-yAzV-CE(special adder/suffix)

Please compose a Part Number according to this system and use on your official order.	**SMCU-**	Prefix to indicate "STEPPING MOTOR CONTROL UNIT"
	xAX-	x = Number of Motors to be driven from this controller.
	yAzV-	y = Max Amps z = DC supply Voltage of each Motor
	CE-	Optional Support for "Chopper Encoder" (for positional feedback)
	(------)	Special adder or suffix for custom Software or environmental design etc.

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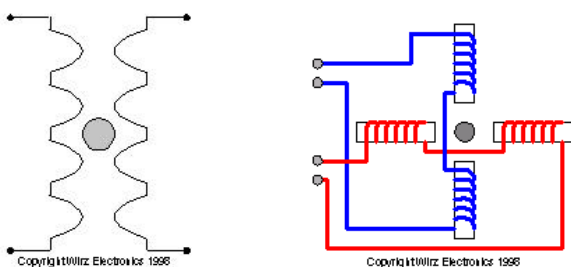
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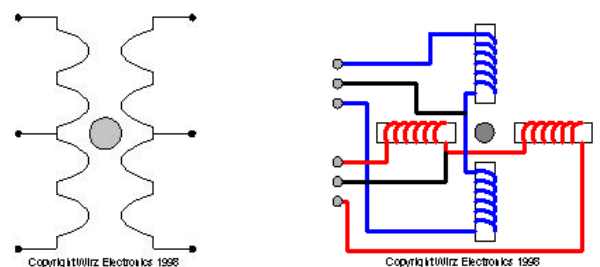Images\EQUIP\CONTROL\MOTOR\SMCU\SMCU-P2.WMF

Typical Stepping Motors

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Typical Bi-Polar (2 phase) Stepping Motors

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Typical Uni-Polar (4 phase) Stepping Motors

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