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PRODUCT SPECIFICATION

Compact Generic Control system

ROCS SCS01

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PRODUCT DESCRIPTION

The ROCs SCS01 compact control system is an example of a typical control combination based on three products in the ROCS control system range. This design consists of the ROCS 1010 analogue mux board with 3 master controller options: -

- ?? A second ROCS 1010 board for hardwired control from potentiometers and switches. This item may be housed in a control box or desk and will require a mains Power Module.
- ?? A low cost 6" monochrome touch screen control module with 24V Dc power supply. This is a stand alone item with pre-programmed screens allowing full control over all the ROCS 1010 outputs and calibrated display of all inputs.
- ?? A High quality 6" TFT colour touch screen display module. With the same control capabilities as the previous option.

The individual components used will also work with other components from the ROCs range.

ROCS1010 ANALOGUE MUX DESCRIPTION (SLAVE)

The ROV Network Analogue Multiplexer Board is a Euro card sized PCB designed to control a servo valve pack or servo valve manifold. The design will work with all standard servo valves from Moog and Star. A simple calibration procedure prior to installation will set the board drive format.

The board communicates over an RS485 or RS232 communications link. If RS485 is used, the board may be multi-dropped with others using onboard links to determine the addressing of each card.

The communications protocol is compatible with all the products in our range and baud rate options will cater for longer cable lengths.

The board is designed to be fitted in any electronics pod or housing or alternatively to mount in oil inside the valve manifold itself. The unit is rated to 3000 metres of seawater. Any input at the master board will be mirrored as an output at the slave board and vice-versa.

A range of power supply modules are available depending on the local supply voltage and the valve load ratings.

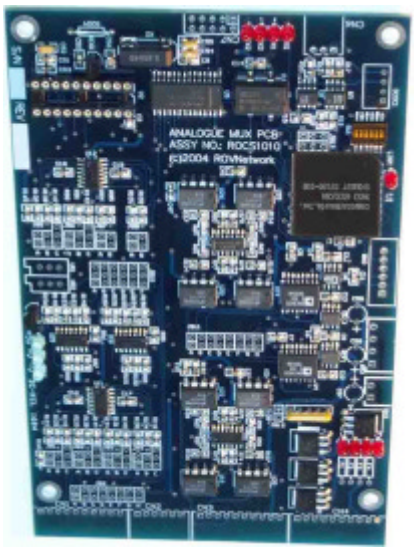

Figure 1 Analogue Mux Board ROCS1010

ROCS1010 ANALOGUE MUX SPECIFICATION

Analogue Inputs x 8	- 6 off +/-5V, +/-10V, 0-20mA or Resistor Pull up (Jumper Selectable) - 2 off As above + PT100 type input (Jumper Selectable)
Analogue Outputs x 8	- +/-5V, +/-10V up to 100mA
Digital Inputs x 4	- 5V logic inputs
Digital outputs x 4	- 24V up to 1A
Communications Ports	- 1 off RS-485 Selectable baud rate - 1 off RS-232 Selectable baud rate
Power Requirements	- +5V, +/-12-15V, +24V from the power module. -Loading is dependent on the valves used. -Off load power is <150mA for the 24Vdc voltage power module option -Other options include 110Vac, 18 to 40V dc (client must specify input power)

OPTION 1: - ROCS1010 ANALOGUE MUX DESCIPTION (MASTER)

Using a second identical ROCS1010 board with the slave/master link to Master, a simple 3 wire RS485 or 3 wire RS232 link will allow the two boards to communicate. Any input on the master board is output by the slave and vice versa. Surface controls may be connected to Potentiometers, joysticks, switches and sliders or digital outputs from other systems. Surface outputs may be connected to LED's, meters, Digital displays, sounders and relays. This is the simplest option in terms of speed of development with a true plug and play capability.

OPTION 2:- MONO TOUCH SCREEN CONTROLLER (MASTER)

This option uses a standard 6" Black and white touch screen. These displays are used throughout industry for simple MMI purposes and are ultra reliable. If mounted correctly, the front of the panel is rated to IP54 specification

With 5 off dedicated front panel switches and touch screen capability. The system can display bar graphs, digital readouts and "LED's". On screen switches can mimic joysticks, sliders or thumbwheels. With this system, The pages will be created for the application by our software engineers. Alternatively the user may purchase the development software and using our in depth manual, develop their own screens in-house.

Figure 2 Mono Touch Screen

MONO TOUCH SCREEN SPECIFICATION

Rated Voltage	24V DC
Permissible Range of Voltage	24V 10% DC
Demand (maximum rating)	10W or less
Cooling System	passive
Weight Approx.	0.8kg
Dimensions W x H x D (mm)	181.6 x 138.8 x 44
Panel Cut-out (mm)	174 X 131 +- 0.5mm
Case Color	Black
Material	Polycarbonate
Effective Display Area	5.7-inch
Resolution W x H (dots)	320 x 240
Angle of Vertical Visibility ( )	-40 to +20
Angle of Horizontal Visibility ()	-45 to +45
Backlight	Cold cathode rectifier
Backlight Average Life	Approx. 54,000 h

OPTION 2:- COLOUR TOUCH SCREEN

This option uses a TFT based 6" Colour touch screen. The Specification is the same as the Mono version shown above.

Larger screens can be supplied from 7.7 inch through to our large 12.1 inch 800 * 600 dot TFT screen. (*Prices on application)*

Again the software screens for your application will be developed by ROV Network based on your requirements or we can supply a software package allowing you to develop more complex systems in house.

Figure 3 Colour Touch Screen

One screen can control up to 8 slave stations through dozens of graphical pages designed to make operation of your tools clear and unambiguous.

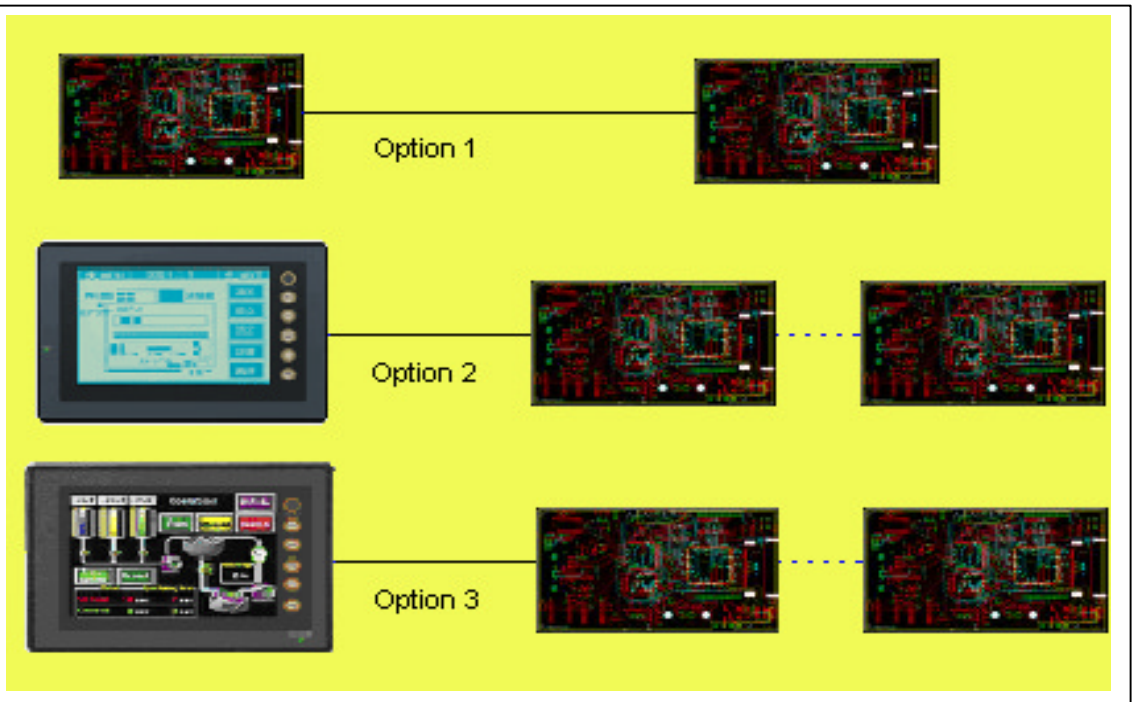

Figure 4 Options

PRICE LIST

Please contact Chris or Andy at ROV Network LTD +44 1224 311113 for up to date prices

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