



**DSE125 MSC Converter Installation Instructions**



**Introduction**

The DSE125 MSC Converter module is used to interface an MSC link containing 55XX/75XX with an MSC link containing 8XXX series modules. It does this by providing two MSC inputs, one for 55XX/75XX and another for the 8XXX series up to a maximum distance 250 m. This reduces the MSC link functionality of a system to that containing only 55XX and 75XX modules. The following chart indicates the combinations possible.



55/75 MSC		DSE125 Converter	8XXX MSC		
55/7510	55/7560		8X10	8X60	8X80
YES	YES	←	YES	NO	NO
YES	NO	←	YES	YES	NO
YES	YES	←	YES		NO

**LED INDICATION**

Name	Colour	Off	On Steady	Flashing
Power	RED	No Power to module	Power to module	
MSC 55/75	RED	No Data received	Receiving Data	Receiving Faulty Data
MSC 8XXX	RED	No Data received	Receiving Data	Receiving Faulty Data

**DIMENSIONS AND MOUNTING**

Overall size	133.9 mm x 76.4 mm x 48.9 mm (5.3" x 3.0" x 1.9")
Mounting Type	Din Rail or chassis mounting
Din rail type	EN50022 35 mm type only

Mounting holes	M4 clearance
Mounting hole centres	122.5 mm x 64.5 mm (1/8" clearance, centres at 4.8" x 2.5")
Weight	0.2 kg (200 g)

**APPLICABLE STANDARDS AND ENVIRONMENTAL SPECIFICATION**

BS EN 60068-2-1	-30 °C (-22 °F)
BS EN 60068-2-2	+85 °C (158 °F)
BS EN 60950	Safety of information technology equipment, including electrical business equipment
BS EN 61000-6-2	EMC Generic Immunity Standard (Industrial)
BS EN 61000-6-4	EMC Generic Emission Standard (Industrial)

Storage temperature	-40°C to +85°.
Humidity	93%relative, non-condensing.
Chemical resistance	Resistant to automotive and industrial chemicals / fluids.
Ingress protection	IP21

- ▲ NOTE: Only one DSE125 can be used in a system**
- ▲ NOTE: Copper connection to MSC must be made using Belden 9841 cable or equivalent.**

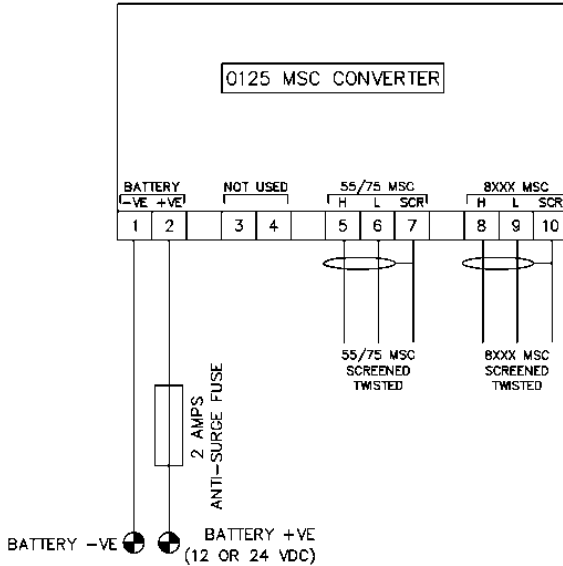
**Deep Sea Electronics Plc.**

Tel: +44 (0)1723 890099  
 Fax: +44 (0)1723 893303  
 Email: sales@deepseapl.com  
 Web: www.deepseapl.com

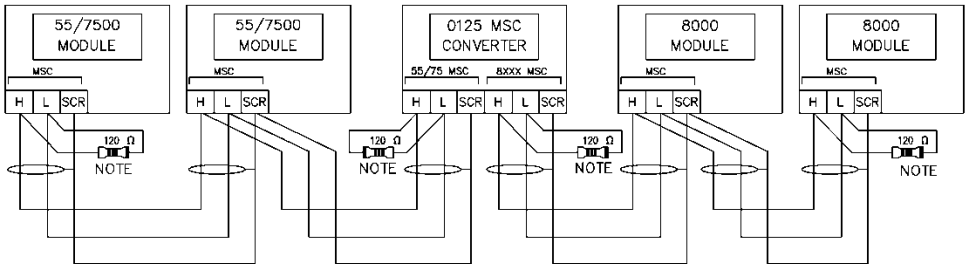
**Deep Sea Electronics Inc.**

Phone: +1 (815) 316-8706  
 Fax: +1 (815) 316-8708  
 TOLL FREE (USA only) : Tel: 1 866 636 9703  
 Email: sales@deepseausa.com  
 Web: www.deepseausa.com

# Typical Wiring Diagram.



TERMINALS SUITABLE FOR 22-16 AWG (0.6mm - 1.3mm) FIELD WIRING  
TIGHTENING TORQUE = 0.8Nm (7lb-in)



NOTE

A 120 OHM TERMINATION RESISTOR MUST BE FITTED TO THE FIRST AND LAST UNIT ON THE MSC LINK

## SPECIFICATION

### POWER SUPPLY REQUIREMENTS

Minimum supply voltage	8 V continuous 5 V for up to 1 minute
Cranking dropouts	Able to survive 0 V for 50 ms providing the supply was at least 10 V before the dropout and recovers to 5 V afterwards.
Maximum supply voltage	35 V continuous (60 V protection for surges)
Maximum operating current	99 mA at 24 V 191 mA at 12 V
Maximum standby current	76 mA at 24 V 147 mA at 12 V (No activity on MSC ports)

### DISPOSAL WEEE (WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT)

Directive 2002/96/EC. If you use electrical and electronic equipment you must store, collect, treat, recycle and dispose of WEEE separately from your other waste.

