Syncro ASM | Voyage Data Recorder Interface

Features

- ☐ NMEA 0183 message format
- ☐ RS485 data connection to VDR
- ☐ Heartbeat sent every 30 seconds
- ☐ Small board profile
- ☐ Panel powered
- ☐ Low current consumption

Product Overview

- ☐ The S737 Voyage Data Recorder (VDR) interface circuit board is installed in close proximity to the Syncro AS Marine fire control panel. It is powered from the panel's Auxiliary 24volt supply output

- ☐ When any fire, faults, disablement or panel control operations take place, their details are passed to the VDR equipment over a RS485 2 core shielded cable connection.

- ☐ The VDR interface uses NMEA 0183 standard message format.

- ☐ The messages will include detection device address, zone and event type, up to 82 characters total

- ☐ The Syncro AS Marine panel does not monitor the link to the VDR, but sends a "heartbeat" message at 30 second intervals. This heartbeat message allows the VDR system to monitor and report any failures in the data connection

- ☐ Consideration must be taken as to the loading on the main panel.

Message Format

Sample message from Syncro AS Marine panel
Fire 18/02/09 08:57
SMOKE DETECTOR ADR=120.00 ZONE 15

Sentence format: $PKENM, datafield1*hh<cr><lf>

Heartbeat format: $PKENH,OK*hh<cr><lf>

Data Structure

$	-	Start of message
P	-	Proprietary code
KEN	-	Manufacturers code (Kentec)
H	-	Sentence type H = Heartbeat
		M = Message
,	-	Data separator
OK	-	Text string for heartbeat
*****	-	Checksum indicator
hh	-	8-bit XOR – checksum in ASCII
<cr><if>	-	End of message

Note: Overall message truncated to 82 characters

Technical

Product code	-	S737
Supply voltage	-	21 - 30V DC
Quiescent current consumption	-	62mA at 24V
Weight	-	1kg
Communications (panel to S737)	-	RS232 via ribbon cable
Communications (to VDR)	-	RS485 two wire
Maximum distance from panel	-	1.2km (using correct type of cable)
PCB size	-	190mm x 61mm
Cable capacity	-	2.5mm per terminal
Operating temperature	-	-10°C to +50°C
Operating humidity	-	To 95% (non condensing)

Part No. S737