# 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



## **Description**

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>Yeartbeat format: \$PKENH,OK\*hh</r></r>

#### **Data Structure**

S - Start of message
P - Proprietary code

KEN - Manufacturers code (Kentec)
 H - Sentence type H = Heartbeat
 M = Message Data separator

- Data seperator

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



Specification	
Product code	S <sub>737</sub>
Supply voltage	21 - 30V DC
Quiescent current consumption	62mA at 24V
Weight	ıkg
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)

