

*ESD1591*

- *Compatible with our product range of Flight Data Recorders*

- *Enables documentary data to be inserted manually into a Flight Data Recorder*

- *Provides failure indication for the Flight Data Recorder*

- *Small size and low weight with high reliability*

- *Alternative colours available to match cockpit colour scheme*

**ESD1591 Flight Data Entry Panel (FDEP) provides a display of the flight data recorder system status and a means of manually inserting documentary data into the recording.**

Flight data entry panels are available for the whole range of Electronic Systems Divisions Flight Data Acquisition Units (FDAU) and Data Acquisition and Recorder Units (DARU) together with associated Digital Flight Data Recorders (DFDR).

#### **Operation**

Aircraft 'trip and date' data is inserted into the system by use of the eight thumbwheel switches on the front panel of the unit. The FDEP signal output represents the number indicated on one of these switches. Each of the eight switches is sampled in turn, for one data frame of the associated FDAU/DARU (typically 4 seconds). At the end of this cycle an invalid frame (15) is output for eight data frames to provide a synchronisation signal.

This 16 frame long sequence repeats continuously. The signal output is an analogue voltage, chosen so that when the recorded data is decoded, the four most significant Bits represent the value of the switch in binary coded decimal format.

Two push buttons, one marked EVENT and the other marked DDI (Documentary Data Insert), are provided to insert markers into the recording to assist post flight analysis of the data.

Two alternative Status Lights are available. One is a single indicator for use with a single box DARU. The other is a split indicator, one half marked FDAU the other half marked DFDR, for use with a two box system. Several alternative logic combinations are available dependent on the type of FDR and the aircraft installation.

Panel lighting is provided with several choices of lamp voltage and lighting colour. A plastic 'Liteflo' panel bears the legends and is available in alternative colour to match the aircraft cockpit scheme.

### Documentary Data

Eight decimal thumbwheel switches  
(each with 0 - 9 settings)  
Two push buttons

### Status indicator

The standard arrangement is:

Single indicator:	28V	=	lamp on
	0V	=	lamp off
Split indicator:			
FDAU:	open	=	lamp on
	0V	=	lamp off
DFDR:	0V	=	lamp on
	28V	=	lamp off

Alternative configurations are available.

### Panel lighting

Voltage:	5V or 28V
Colour:	White, Red, or Blue/white

### Front panel

Black or grey

### Environmental

Temperature range:	-20 to +55°C operating -50 to +85°C storage
Vibration:	to DO-160B Cat K/S

### Dimensions

Height:	85.5mm (3.37ins)
Width:	146.0 (5.75ins)
Depth:	117.0mm (4.61ins)

### Weight

The weight of the FDEP is 0.9kg (2.0lb)

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## ESD1591 Flight Data Entry Panel

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