

INTERNAL USE ONLY

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EEL1 CTS Optical Fan-out Sub-module User Guide

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TABLE OF CONTENTS

1. Introduction
2. Module Functions
3. Construction
4. Specification
5. Drawings

1. Introduction

There are 3 types of CODAS sub-module, ELE1, ELE2 for inclusion into user equipment. It is envisaged that they be used for triggering and driving local equipment from CTS signals.

2. Module Functions

The EEL1 is a quad electrical-optical converter. It has 4 independent electrical inputs which are converted to 4 optical outputs.

The optical output light emitting diodes are housed in SMA type bulkhead sockets which have to be provided with a bulkhead or front panel.

The board may be fitted with an F-connector, if desired, for all electrical connections.

3. Construction

The sub-module takes the form of a PCB 100 x 160mm. The module width is 10mm. Power and electrical input are through solder spill connections or through a F-connector, using rows b and Z, which may be mounted on the rear of the board. The optical output diodes mounted in SMA type bulkhead fittings are at the end of 200mm flying leads. These SMA type connectors must be mounted on a convenient bulkhead or front panel. The PCB is laid out in such a way that it may be cut into 4 individual channels, each one working independently.

4. Specification

Signal standards:

Optical output: CODAS type 43. Light = Logic 1

Electrical input: TTL, CODAS type 24. Logic 1 is a low voltage level

CODAS type signals are specified in the CODAS handbook. section JCH 7.6

Power supply:

+5V \pm 5%

5. Drawings

[1729](#) Component overlay

[1705](#) Circuit diagram

JOINT EUROPEAN TORUS CODAS					
TITLE <i>QUAD ELECTRICAL - OPTO CONVERTOR EEL1</i>					
DATE	<i>4.2.85</i>	CODAS	Y 2	A C A 4	1 7 0 5
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