



Provisional

BR 1833

FEB 1982

Specification For

British Railways

Closed Circuit Television For Level Crossing Surveillance

Multiplex Transmission Equipment

British Railways Board



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Closed Circuit Television For Level Crossing Surveillance

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AMENDMENTS

Amd. No.	Date	Text Affected

British Railways Board



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BRITISH RAILWAYS BOARD

PROVISIONAL SPECIFICATION NO. 1833

CLOSED CIRCUIT TELEVISION FOR LEVEL CROSSING SURVEILLANCE:
MULTIPLEX TRANSMISSION EQUIPMENT (FEB 1962)

2110/08811/1

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2110/0881-1/2

ForClosed circuit television surveillance of level crossings; multiplex
Transmission equipment1. INTRODUCTION1.1. Foreword

- 1.1.1 This specification is issued by the Stores Controller (Railways) Board Headquarters, the Railway Technical Centre, Churnet House, Carrington Street, Derby, DE1 2RY. From whom further copies may be obtained. Technical queries shall be referred to:-

The Director of Signal & Telecommunications Engineering
Melbury House,
Melbury Terrace
London, NW1 6JU

Telephone: PO (STD) 01-262-3232 Ext. 5744
BR (ETD) 015-5744

1.2 References

- 1.2.1 Reference in this specification is made to:-

BRB 12 - British Railways Board General conditions of contract for purchase of supplies.

BR specification 967 - Railway Signalling apparatus:
Environmental conditions.

- 1.2.2 The latest issue of these documents shall apply unless specially stated.

1.3 Scope

- 1.3.1 This specification covers the supply of equipment to be used for the simultaneous transmission of several monochrome CCTV signals, from remote level crossings to a supervisory location, along the same co-axial cable.

1.4 General

- 1.4.1 The Director of S. & T. Engineering, British Railways Board is hereafter referred to as the Engineer.
- 1.4.2 This specification is to be read in conjunction with British Railways Board General Conditions of Contract for the Purchase of Supplies No. BRB 12.

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2. SYSTEM REQUIREMENTS

- 2.1 The equipment shall operate in the high frequency (H.F.) and/or very high frequency (V.H.F.) bands. It shall be suitable for the transmission of monochrome CCTV signals with a scanning system of 625 lines 50 fields/second.
- 2.2 The equipment shall operate with single sideband transmission.
- 2.3 The equipment shall be capable of multiplexing a minimum of four video signals along a single co-axial cable.
- 2.4 The equipment shall allow the addition of one or more video signals at remote points onto a co-axial cable that is already carrying other video signals.
- 2.5 The equipment shall have provision for obtaining, from the cable at remote points, any pilot signals required to achieve compliance with paragraph 2.4.
- 2.6 A system of fault indication shall be provided to enable a failure to be identified to a particular geographical site. The telemetry associated with these indications shall operate over the same co-axial cable used for picture transmission.
- 2.7 When specifically asked for with the invitation to tender ~~the tenderer~~ shall provide a means of using the co-axial cable between equipment locations for telephone communication.
- 2.8 The tenderer shall submit full details of the recommended repeater amplifier spacing when line co-axial cable having a nominal attenuation of 11dB/Km at 10MHz is used. These spacings shall be capable of being varied by up to +10%. Using line co-axial cable having an attenuation characteristic as above the repeater amplifier spacing required for a four signal system shall not be less than 1 Km.