

# TECHNICAL INSTRUCTION

TI 031  
Issue 1  
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Page 1 of 2



NETWORK RAIL - SIGNAL ENGINEERING

## Coe 300 CCTV Transmission Equipment

**Relevant Standard:** NR/SP/SIG/10660 & NR/SP/SIG/11231

The COE 300 CCTV transmission equipment has now been given product acceptance. As part of the approval process, SMS & SMTH instructions have been produced.

This Technical Instruction covers SMS & SMTH instructions for this equipment, and will remain in force until such time these can be incorporated into the parent documents.

### NR/SMS/TEST 047- Coe 300 CCTV TX System

**Includes :** Earlier Coe 120 System.

**Safety:** This product contains a class 1 laser. There is no risk to eyesight in normal use. However use of a magnifying glass or a microscope to deliberately examine the laser output could be a hazard and should not be attempted.

#### SERVICE A

##### 1. Transmitter End

- 1.1 *Dust* the transmission equipment.
- 1.2 *Check* that the Green Power LED Indication is lit and the Red Laser Alarm LED is out.

##### 2. Receiver End

- 2.1 *Dust* the transmission equipment.
- 2.2 *Check* that the Green Video Detect LED Indication is lit and the Red Optical Alarm LED is out.
- 2.3 *Check* the received picture quality on the Signallers Monitor.

##### 3. Testing Following Alterations

*Whenever alterations have been carried out to the system which may affect the settings, such as a module replaced after failure or a repair to the fibre cable, then the following additional tasks shall be carried out.*

- 3.1 *Measure* Voltage on the 12V Power supplies. These should be 12V  $\pm$  0.5V.
- 3.2 Using an oscilloscope to *monitor* the video output at the Signal box, terminated in 75 Ohms, adjust the "Video level Set" on the Receiver to give a Video output of 1V Pk to Pk while there is a signal of 1V Pk to Pk being input at the transmitter. Check the resulting picture on the Signallers Monitor.

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Page 2 of 2

## NR/SMTH - Replace a Coe 300 CCTV Module

**Includes:** Any Coe module or 12V power supply feeding a Coe module. Also any repair to the fibre cable in the system.

### BEFORE INSTALLATION WORK

- 1 Check replacement module is not damaged and is correct type.

### AFTER INSTALLATION WORK

- 2 Check replacement item is correctly installed
- 3 Carry out the tasks in NR/SMS/TEST 047 following an alteration to the system.
- 4 Where there are two or more level crossings supervised by CCTV: Check that the picture of the correct level crossing appears on the correct monitor in the Signal box

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