

Australian Standard™

Closed circuit television (CCTV)

Part 3: PAL signal timings and levels



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Australian Communications and Media Authority
Australian Federal Police
Australasian Railway Association
Engineers Australia
Australian Security Industry Association
National Security Association of Australia
Society of Motion Picture and Television Engineers

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PREFACE

This Standard was prepared by the Standards Australia Committee EL-031, Intruder Alarm Equipment and Installations. This is a new Joint Australian/New Zealand Standard.

The objective of this Standard is to provide requirements for phase alternating line (PAL) closed circuit television (CCTV) signal timings and levels.

The CCTV PAL signal timings and levels given in this Standard are based on the Australian Communications and Media Authority Technical Planning Guidelines.

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STANDARDS AUSTRALIA

Australian Standard Closed circuit television (CCTV)

Part 3: PAL signal timings and levels

1 SCOPE

This Standard provides requirements for PAL signals used in closed circuit television (CCTV) equipment and systems with an analogue input or an analogue output or both.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

ACMA Australian Communication and Media Authority
Technical Planning Guidelines for the Planning of Individual Services that use the
Broadcasting Services Bands

ITU-R International Telecommunications Union—Radiocommunication
BT.470 Conventional analogue television systems

3 PAL VIDEO CHARACTERISTICS

3.1 General

Equipment used in closed circuit television (CCTV) systems with an analogue input and/or an analogue output should comply with the CCTV PAL signal timings and levels specified in this Standard.

3.2 Scanning

3.2.1 General

Clause 3.2 specifies the timing intervals of the video signal and Figure 1 illustrates this relationship.

3.2.2 Aspect ratio

The aspect ratio of the television picture shall be four units horizontally to three units vertically (4:3).

3.2.3 Scanning sequence

During active scanning intervals, the scene shall be scanned from left to right horizontally, and from top to bottom vertically, at uniform velocities (as seen when sitting in front of a CCTV monitor).

3.2.4 Number of lines and interlacing

The number of scanning lines per picture shall be 625, interlaced two to one (2:1).

3.2.5 TV frame and TV field frequencies

The nominal television frame (TV frame) and television field (TV field) frequencies shall be 25 Hz and 50 Hz respectively, and equal to the appropriate submultiples (625 and 312.5 respectively) of the line frequency. Two subsequent TV fields make up one TV frame.