

LTC 2009, LTC 2012, LTC 2017 and LTC 2020 Series Monochrome Video Monitor

- Choice of 9-, 12-, 17-, and 20-inch monitors
- High quality pictures
- Auto-termination
- Supply 100-230 VAC with selectable selection between EIA and CCIR formats
- LTC 2020/90 has auto detection for EIA/CCIR and audio capabilities
- Robust metal case to minimize interference
- Optional rack mounting (except LTC 2020/90)



Philips offer a range of high performance monitors which reflects the high standards of other associated units in the Philips' CCTV systems, such as cameras, transmission and control equipment.

Included in this range of Philips' are the LTC 2009, LTC 2012, LTC 2017 and LTC 2020 Series of monochrome monitors. They offer high performance pictures with a resolution of 900 TVL, or in the case of the LTC 2017 monitor 700 TVL, making them ideal for remote observation and video applications.

The monitor housing consists of a robust rectangular metal case which minimizes interference from external signals and allows "stacking" of monitors when used in large numbers.

Designed for ease of installation and operation, the monitors will accept a voltage supply of 100-230 VAC, without the need for any switching or adjustments. The monitors are setup for standard composite video signals, the LTC -/5x versions CCIR format, the LTC -/6x versions EIA format and the LTC 2020/90 with automatic detection of CCIR/EIA format.

All controls are located on the front panel for easy adjustment of the picture image.

Monitor features include loop through connection; electrical circuits provide safeguards against interference, noise and changing signal strengths to maintain a clear and stable picture.

Additional features of the LTC 2017 and LTC 2020 monitors include switchable scanning size (over scan & under scan) and switchable DC restoration.

Also the LTC 2020/90 monitor includes two video input options and audio input/output with volume control.

An optional rack mounting is available for these monitors (except the LTC 2020/90).

SPECIFICATIONS

Electrical

Model No.	Rated Voltage	Voltage Range	Power at Rated Voltage	Sync Format
LTC 2009/51	230 VAC, 50 Hz	198 to 264	18 W	CCIR
LTC 2009/61	120 VAC, 60 Hz	108 to 132	18 W	EIA
LTC 2012/51	230 VAC, 50 Hz	198 to 264	18 W	CCIR
LTC 2012/61	120 VAC, 60 Hz	108 to 132	18 W	EIA
LTC 2017/50	230 VAC, 50 Hz	198 to 264	27 W	CCIR
LTC 2017/60	120 VAC, 60 Hz	108 to 132	27 W	EIA
LTC 2020/90	230 VAC, 50 Hz 120 VAC, 60 Hz	90 to 264	45 W	CCIR/EIA

Monochrome system:

CCIR/EIA, selectable on LTC 2009, LTC 2012, LTC 2017.
Auto selectable on LTC 2020.

Display Tube:

Measured diagonally, 90° deflection angle

LTC 2009: 23 cm (9 in).
LTC 2012: 30 cm (12 in).
LTC 2017: 43 cm (17 in).
LTC 2020: 51 cm (20 in).

Viewable picture area:

LTC 2009: 22 cm (9 in).
LTC 2012: 29 cm (11 in).
LTC 2017: 41 cm (16 in).
LTC 2020: 49 cm (19 in).

Linearity:

Horizontal: 10% max.
Vertical: 10% max.

Horizontal resolution:

LTC 2009, LTC 2012: 900 TVL.
LTC 2017: 700 TVL.
LTC 2020: 900 TVL.

Video input:

Composite video: 0.5 to 2.0 Vpp, sync negative. Auto switching from 75 Ω unbalanced termination to Hi-Z with looped through operation.
Two video inputs (LTC 2020/90 only).

Controls:

LTC 2009 & LTC 2012: Power, Contrast, Brightness, V-Hold, H-Hold, EIA/CCIR switch, V-Height, V-Lin.
LTC 2017: Power, Contrast, Brightness, V-Hold, H-Hold, Under/Over Scan, DC-Restoration, V-Height, V-Lin.
LTC 2020: Power, Video A/B, Volume, Sharpness, Contrast, Brightness, V-Hold, H-Hold, Under/Over Scan, DC-Restoration, V-Size, H-Size, V-Lin.

Connectors:

LTC 2009 & LTC 2012: Power input socket, 2 BNC Video input.
LTC 2017: Power input lead, 2 BNC Video input.
LTC 2020: Power input socket, 4 BNC Video input.

Audio input (LTC 2020/90 only):

RCA pin, bridge-out possible. 2 RCA phone jacks.

Audio output (LTC 2020/90 only):

Speaker: 1 W loop through line level.

Power cord:

Approx. 1.8 m (6 ft) with European Continental type.
2.4 m (8 ft) with plug US type.

Mechanical

Cabinet:

Material: Steel with plastic front.
Finish: Charcoal.

Dimensions (H x W x D):

LTC 2009: 234 x 220 x 248 mm (9.2 x 8.7 x 9.6 in).
LTC 2012: 287 x 305 x 306 mm (11.3 x 12 x 12 in).
LTC 2017: 386 x 419 x 381 mm (15.2 x 16.5 x 15 in).
LTC 2020: 441 x 445 x 380 mm (17.4 x 17.5 x 14.96 in).

Weight:

LTC 2009: 4.3 kg (9.5 lb).
LTC 2012: 8.9 kg (19.6 lb).
LTC 2017: 15 kg (33 lb).
LTC 2020: 17.7 kg (39 lb).

Environmental

Temperature:

Operation: -10 to +50 °C (+14 to +122 °F).
Storage: -10 to +50 °C (+14 to +122 °F).

Humidity:

Operating: 30 to 90% (non-condensing).

Electromagnetic Compatibility

EMC Requirements:

Immunity EN50082-1 1992,
EN500 82-1 1997 for LTC 2020/90 only.
Emission EN50081-1 1992.
FCC Part 15, Class B.

Safety

LTC 2009, LTC 2012, LTC 2017:
CE: EN60065.
UL: UL 1410.
cUL: CSA 22.2#01.

LTC 2020:

CE: EN60950.
UL: UL 1950.
cUL: CSA 22.2#950.

Product complies with DHHS Rules 21 CFR applicable at the date of manufacture.

Accessories

LTC 9009/00 Rack Kit: For mounting two LTC 2009 Series Monitors in an EIA 19-inch rack. One rack unit wide by 6 rack units high.

LTC 9009/01 Blank Panel: For use with LTC 9009/00 Rack Kit when mounting only one LTC 2009 Series Monitor in an EIA 19-inch rack.

LTC 9012/00 Rack Kit: For mounting one LTC 2012 Series Monitor in an EIA 19-inch rack. One rack unit wide by 7 rack units high.

LTC 9017/00 Rack Kit: For mounting one LTC 2017 Series Monitor in an EIA 19-inch rack. One rack unit wide by 10 rack units high.

