

European and American Television Cameras



Make	Philips
Model	LDK 5 (B)
Country	Holland
Camera Type :	
Colour, Studio or Outside broadcasts. Full facilities	
Camera Description :	
Low profile camera with prominent viewfinder on top. Quality diecast panels and modular construction inside.	

Data	Data
Tube details	3 x Plumbicons 25mm. ACT, XQ1080
Lens details	Zoom
Sig. to Noise	45dB.
Sensitivity	1000Lux @ f2.8
Resolution	40% at 5Mhz. Without correction
Viewfinder	17cm. Detachable, tilts and rotates.
Camera cable	Triax to 2800m. 14mm size
Power supply	110-117 or 220-234V 50-60Hz 500W.
Line standards	625/50 525/60
Colour standards	PAL/NTSC/SECAM
Drives or locking	Genlock
Weight *	33.5Kg. V/f = 8Kg.
Colours	Grey
Dimensions	410H x 430W x 560L mm.
Date designed	1971 (B version 1981)
Dates used	

Associated equipment

Reception unit LDK 4300, Surveillance unit LDK 4310, PSU LDK 4315, Sync Lock module LDK 4322, OCP and colour paint panels, Monitoring 2 and CSO unit LDK 4317.

Features

The self-contained nature of the camera together with the data control system enabled many different operation configurations; Triax, cable, radio working, co-ax cable, local or remote PSU, control over modem link, battery operation (100volt). Note the mechanical zoom control in the illustration, that linked to the lens within the camera body.

General description

The 3 Plumbicon tubes are in the middle of the camera in a horizontal fan. As the lens and tubes are in line it results in a longer overall camera length. Using smaller 1" tubes and a smaller prism offsets this disadvantage. ACT tubes were used giving improved highlight overload handling. The viewfinder tilts for high angle shots and rotates to both sides. It could be removed and operated a short distance away from the camera head.

References

There is a good technical description in the Royal Television Society Journal March/April 1975 page 275.

Innovations

In many ways this camera was revolutionary, The CCU was dispensed with and replaced with a base station comprising a power supply, reception unit and a surveillance unit. All the vision processing was done in the camera head with digital control signals on the Triax. The use of Triax made OB's much easier. A modular plug in board system made first line maintenance quick and easy. A sister camera, the LDK25, used camera cable (TV36) for studios. The analogue function values are stored digitally in a MOS memory, this is supported by a backup (two) batteries so that values are not lost on power off. The memory is claimed to use only 1 microwatt of power! Developed to B version introduced 1980/1.

History

Introduced at Montreux in 1971. The LDK5 camera was developed from the Norelco PC100 and owes it's digital control systems to this and earlier work done on the PCP90 portable camera.

Notes

This camera was marketed in the UK by Pye & Peto Scott, Norelco in the USA and Philips elsewhere.

