T-CAM Camera Tracking Package



Description

The T-Cam Camera Tracking package is a complete and out-of-the-box solution for conference camera tracking.

It allows straight-forward installation, fast configuration and integration of a camera tracking system with any Televic Conference system. The T-Cam solution controls up to 4 IP-CAM50¹, using the 3G-SDI connectivity.

By combining hardware and software, the T-Cam solution makes it easy to use and control cameras. Installers can quickly set up cameras, create talking heads, automatically switch the camera between participants, and even add a participant's name as an overlay² on top of the image. The end result is a package that makes camera integration plug and play.

The T-Cam Camera Tracking Solution comes in 3 different packages.

Packages

Basic T-Cam Package [71.98.1303]

The basic package contains everything you need for a basic camera tracking set-up:

- » 2 IP-CAM50 cameras
- » Camera interconnection cables
- » Preview capture card: Blackmagic DeckLink Mini Recorder
- » Video switcher: Blackmagic ATEM 1M/E Constellation HD
- » T-Cam Software: PC software with a license for control of 2 cameras
- » BlackMagic Micro Converter SDI to HDMI

IP-CAM 50 Camera & License [71.98.1304]

Adds another camera and a camera license. Up to 2 packages may be ordered for a maximum of 4 cameras.

- » 1 IP-CAM 50 Camera
- » Camera interconnection cables
- » 1 license for one additional camera

T-Cam Name Overlay [71.98.1302]

This add-on allows an overlay to be added onto the video output by using an additional capture card.

- » 1 license for name overlay
- » Capture card: Blackmagic DeckLink Mini Recorder



^{1.} The basic package includes 2 cameras by default. One additional license required for each additional camera. (for a maximum of 4 cameras)

^{2.} Available as an add-on in the T-Cam Name Overlay package

Global Features

T-Cam is built for seamless integration with Televic Conference systems and allows a number of features out of the box.

- » Integrates perfectly with D-Cerno, Plixus engine, CoCon, Confidea G3 and Confidea G4.
- » Creation of a synoptic for easy configuration of camera positions
- » 2 shots per seat
- » 2 shots for the wide shot
- » Multiple seat configurations immediately available for flexible seating arrangements
- Configuration of camera positions can be done with the software or with a USB-joystick (not included in any of the packages)
- » Camera control over serial connection and IP connection
- » 20× Optical zoom on cameras
- » Software may be upgraded to webcasting software

Product Features

Full HD PTZ Camera

» Camera

The T-Cam solution is a dynamic PTZ camera tracking solution ideally suited for conference room settings. With Full HD 1080p output at 60 fps, the camera provides excellent images. Additionally, the 20× zoom, outstanding white balance, and exposure mode bring even the smallest details into focus, especially in darker conference rooms where lighting conditions may be poor.

With a wide viewing angle (horizontal -170° to $+170^{\circ}$, tilting up to 90° and down to -30°) and fast response and smooth operation, the camera captures every move securely.

Finally, the 3G-SDI interface allows for crystal-clear and uncompressed video without delays. Combined with Televic Conference's Plixus network, working with high-quality, lipsynced video becomes a joy.

Blackmagic DeckLink Mini

» Capture Card

Blackmagic ATEM 1/M Constellation HD

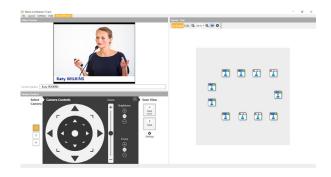
» Video Switcher

The Blackmagic ATEM video switcher puts a host of video switching options easily at your fingertips. It includes 10 3G-SDI video inputs to convert any 1080p input source, making it ideal to use with the T-Cam cameras. It includes a large LCD front panel to see program output and change the switcher settings via the on-screen menu.

T-Cam Camera Control

» Software

Configure camera positions, assign name overlays (separate license required), set up 2 shots per seat, wide shots, etc. Manual override is available.



BlackMagic Micro Converter SDI to HDMI

» HDMI converter

System Requirements

Recommended PC requirements:

- » Desktop PC with at least 1 PCI slot. 2 PCI slots, if both preview and overlay are required.
- » Windows 7, 8 and 10 supported
- » Serial COM port (USB to Serial converter can be used as well) when not used with IP connection
- » PoE switch when used with IP connection

Standard USB joystick can be connected for camera control. Recommended joystick: Axis T8310.

Specifications

T-CAM Camera Tracking Package

Mechanical	
Size (mm)	570 x 300 x 420
Weight	11400g

IP-CAM50

1/2.8" 2 MP CMOS 1080p 60 / 59.94 / 50 fps, 1080i 60 / 59.94 / 50 fps, 1080p 30 / 29.97 / 25 fps,
1080i 60 / 59.94 / 50 fps, 1080p 30 / 29.97 / 25 fps,
720p 60 / 59.94 / 50 fps
20×
-170° ~ +170°
-30° ~ +90°
128
3G-SDI
PoE+ (IEEE802.3at)
RS-232 / RS-422 / Ethernet
VISCA / PELCO D
> 50dB
1/1 ~ 1/10,000 sec
f = 4.7 ~ 94 mm

3D NR	Yes
Horizontal Viewing Angle	63°
Aperture	F1.6 ~ 3.5
Minimum Illumination	1.0 lux (F1.6, 50 IRE, 30fps)
Minimum Object Distance	1.2m
Gain Control	Auto, manual
White Balance	Auto, indoor, outdoor, one- push, manual
Exposure Control	Auto, manual
Focus System	Auto, manual
Image Flip	Yes
Audio Input	Line In / MIC In
Audio Output	Ethernet, SDI and HDMI

Blackmagic ATEM 1/M Constellation HD

Technical & Electrical		
Power Supply	1 x Internal 100 - 240 AC	
Power Usage	36 W	
Dimensions	28 x 4.4 x 17.6 cm	
Connections		
Total Video Inputs	10	
Total Video Outputs	6	
SDI Rates	1.5G, 3G	
Total Audio Inputs	2 x balanced 1/4 inch Jack 1 x 5 pin XLR Talkback	
Total Audio Outputs	1 x 5 pin XLR Talkback	
SDI Audio Inputs	4 x 10-bit SD/HD switchable. 2 channel embedded audio.	
SDI Audio Inputs	2 Ch embedded audio on all SDI inputs	
SDI Audio Outputs	2 Ch embedded audio on all SDI outputs	
Reference Input	Tri-Sync or Black Burst	
Video Input Re-Sync	On all 10 inputs	
Frame Rate and Format Converters	On all 10 inputs	
SDI Aux Outputs	Any of the 6 SDI outputs	
SDI Preview Outputs	Any of the 6 SDI outputs.	
SDI Program Output	Any of the 6 SDI outputs	
Webcam Output	1 x USB-C supporting 720p or 1080p at PGM frame rate	

Total Multi Views	1 x 3G-SDI
Control Panel Connection	Ethernet. Direct connection between panel and chassis, or via network.
Internal Timecode Generator	Yes
Talkback	RJ45 for 3rd party talkback systems
Ethernet	10/100/1000 BASE-T
Computer Interface	1 x USB-C supports USB 3.1 Gen 1 (5Gb/s)
Standards	
SD Video Standards	None
HD Video Standards	720p50, 720p59.94, 720p60, 1080i50, 1080i59.94, 1080i60 1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p60
SDI Compliance	SMPTE 292M, SMPTE 296M, SMPTE 424M, SMPTE 425M level A and B
Video Sampling	4:2:2
Color Precision	10-bit
Color Space	REC 709
SDI Auto Switching	Automatically detects between 1.5G-SDI and level A or level B 3G-SDI
Display	
Front panel	Built in 2.2"LCD monitor for video, 10 LED buttons for setup and emergency switching, 4 source but- tons, 6 talkback selection and mix buttons, menu control knob and set button, front panel lock button.
Environmental	
Operating Temperature	0° to 40°C (32° to 104°F)
Storage Temperature	-20° to 60°C (-4° to 140° F)
Relative Humidity	0% to 90% non-condensing