

# JVC

PROFESSIONAL

1/2" CCD COLOUR VIDEO CAMERAS

# TK-C1480BE

(24V AC/12V DC)

# TK-C1481BEG

(220-240V AC)

Advanced High-Sensitivity Super LoLux Colour  
CCTV Cameras with Multi-Function

**0.3 Super LoLux**  
**lux**



Shown with optional lens

- 1/2" Super LoLux type CCD
- High resolution equivalent to 480 TV lines
- Powerful DSP
- Minimum Required Illumination  
0.3 lux (F1.2, video 25%, AGC 20dB, Normal shutter 1/50 sec.)  
Slow shutter to 32/50 sec. for minimum illumination to 0.01 lux
- Sophisticated Backlight compensation
  - BLC
  - Extended Dynamic Range
  - High Light Inverter
- ATW/AWC white balance /Manual paint
- Multi-Purpose /Easy set up menu operation
- Scene file memory by command (4 files)
- Dump command function
- Digital zoom (Max X10)
- RS-422A/485 control
- Automatic motion detection with alarm signal

# 0.3 Lux Highly Sensitive Super LoLux Colour CCTV Cameras for Excellent Performance Under Various Bright and Dark Conditions



**JVC's TK-C1480BE and TK-C1481BEG colour CCTV cameras perform excellently even in near-dark or bright ambient light conditions, both indoors and out. Unlike other CCTV cameras, the TK-C1480BE and TK-C1481BEG feature a new high-sensitivity CCD, digital signal processor with multi-functions, motion detector, and Super LoLux to ensure quality image capture even under the most demanding conditions and in the most difficult locations.**

- **Totally New Interline Transfer (IT) CCD**  
JVC's TK-C1480BE and TK-C1481BEG cameras come loaded with a totally new 1/2-inch IT CCD, which delivers clear pictures without image lag or geometric distortion. And, with a signal-to-noise ratio of more than 50dB, the TK-C1480BE and TK-C1481BEG produce crisp images with a low level of smear and accurate colour reproduction. High-sensitivity is also excellent so that no detail is missed even under low light conditions (0.3 lux at F1.2.)
- **New Digital Signal Processor (DSP)**  
A powerful Digital Signal Processor (DSP) with Extended Dynamic Range (400x Max. at Auto, 400x Max. at Manual) lets users shoot in dark and bright locations.
- **Super LoLux**  
JVC's exclusive Super LoLux enables the camera to shoot high-quality images in light as low as 0.3 lux with minimal noise. This is the lowest level ever of darkness where the TK-C1480BE and TK-C1481BEG can see far better than the naked eye.

At 32x slow shutter minimum illumination is even as low as 0.005 lux.

- **Extended Dynamic Range**  
A bright portion in the shooting area is shot with the high-speed shutter exposure, while a dark portion shot with the normal exposure. Both of the images read in are then synthesised to output a single image that includes distinguishable bright and dark portions. Therefore, the cameras are compatible with a wide range of scenes such as the entrance of a building where a difference in illumination tends to be encountered due to the varying effects of the external light on the entrance, and a place where a subject can be backlit due to the direction of lighting, etc. (See the example on the next page.)

- **RS-422A/RS-485 Terminals**  
RS-422A/RS-485 terminals offer multi-system remote control compatibility. Ideal for remote control is also the JVC RM-P2580E remote control unit.

- **Motion Detector Function**  
A motion detector function detects the

These images are sample images output in an extended dynamic range. So, actual images may vary according to various shooting conditions.



At high speed shutter



At normal speed shutter



```

--- MENU ---
> SYNC ADJUST..
  ALC SETTINGS..
  VIDEO ADJUST..
  MODE SELECT..
  MOTION DETECT..
  COMMUNICATION..
  MAINTENANCE..
  FACTORY SETTINGS..
  
```

```

--- VIDEO ADJUST ---
> WHITE BALANCE ATW
  COLOUR LEVEL NORMAL
  ENHANCE LEVEL NORMAL
  PEDESTAL LEVEL NORMAL
  AUTO BLACK CTL OFF
  
```

```

--- MOTION DETECT ---
> MODE OFF
  LEVEL NORMAL
  AREA EDIT..
  ALARM TIME 10s
  DEMONSTRATION..
  
```

```

---WHITE BALANCE CONTROL---
> AWC SET..
  R :.....: B
  M:.....: G
  
```

```

--- ALC SETTINGS ---
> IRIS LEVEL NORMAL
  AVERAGE: PEAK 8:2
  SHUTTER/ExDR NORMAL
  AGC MODE 20dB
  LOLUX MODE OFF
  SENSE UP OFF
  PRIORITY MOTION
  BLC EDIT1
  B&W/COLOUR MODE
  
```

```

--- SHUTTER/ExDR ---
> SHUTTER SPEED 1/120
  FAST LIMIT ---
  ExDR LEVEL ---
  M.ExDR SPEED ---
  
```

```

--- MODE SELECT ---
> CAMERA TITLE EDIT..
  REVERSE MODE OFF
  H.L.I. MODE OFF
  ALM.TITLE SIZE DOUBLE
  ALARM COLOUR WHITE
  D. ZOOM MAX x2
  
```

motion inside an image and emits alarm signals.

■ **Full Genlock**

INT/EXT (Full genlock)/LINE LOCK opens up a wide array of shooting options with connectors for BB or VBS (BNC) sync input.

■ **White Balance**

To ensure optimum white balance under a wide range of colour temperatures, the TK-C1480BE and TK-C1481BEG come with two white balance modes — ATW (Auto Traced White Balance) and AWC (Manual Paint Possible with AWC). So the operator can select the ideal white balance for the shooting conditions.

■ **Camera ID**

The TK-C1480BE and TK-C1481BEG have a built-in camera ID system for configuring a multi-camera surveillance system.

■ **Wide-Range Automatic Electronic Shutter**

A wide-range Automatic Electronic Shutter (AES) continuously adjusts speed to ensure correct exposure under any

lighting conditions (1/50 — 1/100,000 second).

■ **Y/C Output Connectors**

The TK-C1480BE and TK-C1481BEG are equipped with connectors for BB or VBS (BNC) sync input, VBS (BNC) output and Y/C (S-terminal, 4-pin) output.

■ **Easy Menu-Driven Parameter Setting**

A simple menu-driven operation sets a range of parameters including IRIS level, ENHANCE level, PED level, ATW/AWC, H. PHASE/SC. PHASE, AGC ON/OFF, AGC level, colour level, H.L.C. and L.L. PHASE.

■ **Backlight Compensation**

With a strong light in the back, this function improves the image. 4 types of fixed and 2 types of editable, metered areas are available.

■ **H.L.I. (High light Inverter)**

The new high light inverter function ensures superb overall image quality when part of a subject is under especially strong illumination. H.L.I. MODE is the function which the highlighted part of the

image is made black mask to make the surroundings of the highlighted part better visible. Set to HIGH when there are many highlighted parts.

■ **C/CS Mount with DC/Video Iris Lens**

The TK-C1480BE and TK-C1481BEG are C/CS-mount lens compatible, so the ideal lens for an application can be selected from the widest possible range.

■ **AC/DC Power Supply**

The TK-C1480BE and TK-C1481BEG may be powered by AC 24V/DC 12V sources.

■ **Scene file memory by command (4 files)**

Up to 4 file of camera setting depended on circumstance.

■ **Dump 64 by command**

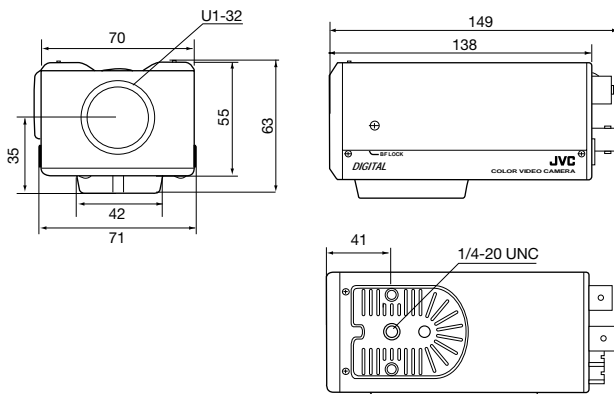
Upload and download of Setting data possible.

## Specifications

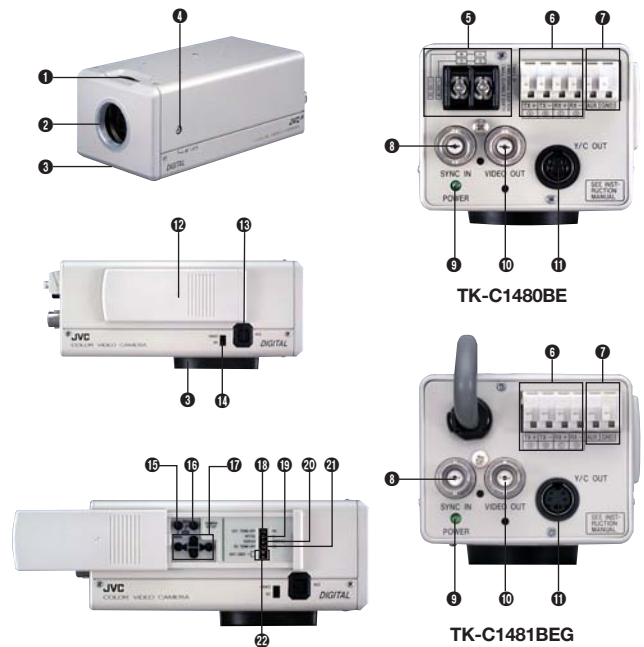
Signal system	PAL
Image device	1/2" Ultra Super LoLux IT CCD, 752 (H) x 582 (V)
Sync system	Internal, Line Lock, Full Genlock
Scanning frequency	15.625 kHz (H), 50 Hz (V)
Horizontal resolution	480 TV lines
Video output	Composite video signal
Y/C output	Y/C video signal (4-pin)
Video S/N ratio	50 dB (AGC OFF)
Minimum required illumination	0.6 lux (F 1.2, 50%, AGC 20dB, Normal shutter 1/50 sec.) 0.3 lux (F 1.2, 25%, AGC 20dB, Normal shutter 1/50 sec.) 0.15 lux (F 1.2, 25%, AGC 26dB, Normal shutter 1/50 sec.) 0.02 lux (F 1.2, 50%, AGC 20dB, Slow shutter 32/50 sec.) 0.01 lux (F 1.2, 25%, AGC 20dB, Slow shutter 32/50 sec.) 0.005 lux (F 1.2, 25%, AGC 26dB, Slow shutter 32/50 sec.)
Communication	RS-422A or RS-485 (switchable)
Lens mount	C/CS mount
Power requirement	TK-C1480BE: AC 24 V (50 /60 Hz), DC 12 V TK-C1481BEG: AC 220 - 240 V (50 /60 Hz)
Power consumption	TK-C1480BE: 450 mA TK-C1481BEG: 75 mA
Operating temperature range	-10°C to 50°C 0°C to 40°C (recommended)
Weight	TK-C1480BE: 600g TK-C1481BEG: 835g
Accessories	4P plug x1 Ferrite core x1 Instructions x2

## Dimensions

Unit: mm



## Controls, Connectors and Indicators



- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>1 BACK FOCUS adjustment</li> <li>2 Lens mount (C or CS)</li> <li>3 Camera mounting bracket</li> <li>4 BACK FOCUS locking screw</li> <li>5 [DC 12V, AC 24V] Power input terminals</li> <li>6 [TX+(A), TX-(B), RX+(C), RX-(D)] Control signal connection terminals</li> <li>7 [AUX, GND] Auxiliary output terminal</li> <li>8 [SYNC IN] Sync signal input connector</li> <li>9 [POWER] Power indicator lamp</li> <li>10 [VIDEO OUT] Video signal output connector</li> <li>11 [Y/C OUT] Y/C output connector</li> </ul> | <ul style="list-style-type: none"> <li>12 Cover</li> <li>13 [IRIS] Iris terminal</li> <li>14 [VIDEO/DC] Iris selector switch</li> <li>15 [MENU] Menu button</li> <li>16 [SET/AWC] Set. auto white control button</li> <li>17 Up-and-down, left-and-right button</li> <li>18 [EXT.TERM-ON/OFF] Terminal ON/OFF switch of external synchronisation signal</li> <li>19 [INT/GL, LL] Selector switch for synchronising system</li> <li>20 [DUPLX, SIMPLX] Selector switch for transmission system</li> <li>21 [RX, TERM-ON/OFF] RX signal terminal ON/OFF switch</li> <li>22 NOT USED</li> </ul> |
|--|--|

## Other Equipment

### RM-P2580E Remote Control Unit

Use the remote control unit to open the CCD camera menu and set camera parameters. Another function of the unit is to control 360-degree dome cameras such as TK-C676E and TK-C655E.



- Built-in 8ch sequential switcher function
- Multi-alarm input/outputs
- 8 video input/outputs (Loop through)
- Operation lock function
- Interface: RS-485 for camera and RS-232C for external unit

# JVC

VICTOR COMPANY OF JAPAN, LIMITED

DISTRIBUTED BY

Design and specifications subject to change without notice.



■ The Hachioji Plant of Victor Company of Japan, Ltd., has received ISO14001 and ISO9001 Certifications under the global standard for environmental management.