

# JVC

PROFESSIONAL

1/2" CCD COLOUR VIDEO CAMERA

# TK-C1480E

(24V AC/12V DC)

High-sensitivity Super LoLux Colour CCTV  
Camera with Extended Dynamic Range

**0.4** Super LoLux  
*lux*



- High resolution equivalent to 480 TV lines
- Super LoLux 0.4 lux
- Minimum illumination of 0.0125 Lux (Slow shutter)
- Extended dynamic range
- Automatic motion detection with alarm signal
- RS-422A/485 control
- ATW/AWC white balance
- Automatic image correction with backlight compensation

# Highly Sensitive Super LoLux Colour CCTV Camera for Excellent Performance Under Bright and Dark Conditions



**JVC's TK-C1480E colour CCTV camera performs excellently even in near-dark or bright ambient light conditions, both indoors and out. Unlike other CCTV cameras, the TK-C1480E features a new high-sensitivity CCD, digital signal processor with extended dynamic range, 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-C1480E camera comes 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-C1480E produces 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 (0.4 lux at F1.2.)

#### ■ **New Digital Signal Processor (DSP)**

A powerful Digital Signal Processor (DSP) with Extended Dynamic Range (200X 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 0.4 lux with minimal noise. This is the lowest level ever of darkness where the TK-C1480E can see far better than the naked eye. At 32X slow shutter minimum illumination is even as low as 0.0125 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 camera is 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 example on the next page.)

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..
  FACTORY SETTINGS..
  
```

```

--- VIDEO ADJUST ---
> WHITE BALANCE   ATW   NORMAL
  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
  SENSE UP        OFF
  PRIORITY        ---
  BLC             OFF
  
```

```

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



#### ■ 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 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-C1480E comes with four 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-C1480E has 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-C1480E is 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 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.

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

The TK-C1480E is C/CS-mount lens compatible, so the ideal lens for an application can be selected from the widest possible range.

#### ■ AC 24V/DC 12V Power Supply

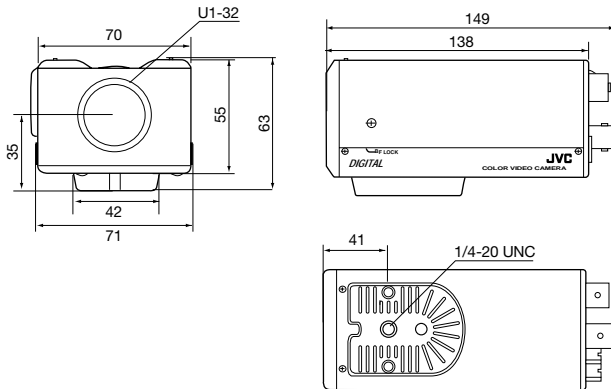
The TK-C1480E may be powered by AC 24V/DC 12V sources.

## Specifications

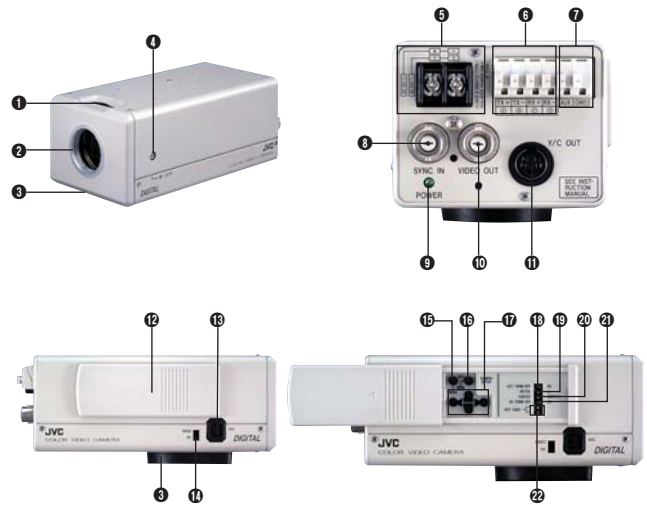
Image device	1/2" IT CCD, 752 (H) x 582 (V)
Sync system	Internal, Line Lock Full Genlock
Scanning frequency	15.625 kHz (H), 50 Hz (V)
Horizontal resolution	480 TV lines
Video output	Composite video signal
Y/C output	Y/C video signal (4-pin)
Video S/N ratio	50 dB (AGC OFF)
Minimum required illumination	0.4 lux (F1.2, 25% AGC 20dB) 0.25 lux (F1.2, 25%, Super AGC) 0.0125 lux (F1.2, 25%, AGC 20dB, 32X Slow Shutter)
Communication	RS-422A or RS-485 (switchable) 9600 bit/s
Lens mount	C/CS mount
Power requirement	AC 24 V (50 Hz/60 Hz), DC 12 V
Power consumption	450 mA
Operating temperature range	-10°C to 50°C 0°C to 40°C (recommended)
Weight	580g
Accessories	4P plug x1 Ferrite core x1 Instructions x2

## Dimensions

Unit: mm



## Controls, Connectors and Indicators



- 1 BACK FOCUS adjustment
- 2 Lens mount (C or CS)
- 3 Camera mounting bracket
- 4 BACK FOCUS locking screw
- 5 [DC 12V, AC 24V] Power input terminals
- 6 [TX+(A), TX-(B), RX+(C), RX-(D)] Control signal connection terminals
- 7 [AUX, GND] Auxiliary output terminal
- 8 [SYNC IN] Sync signal input connector
- 9 [POWER] Power indicator lamp
- 10 [VIDEO OUT] Video signal output connector
- 11 [Y/C OUT] Y/C output connector
- 12 Cover
- 13 [IRIS] Iris terminal
- 14 [VIDEO/DC] Iris selector switch
- 15 [MENU] Menu button
- 16 [SET/AWC] Set. auto white control button
- 17 Up-and-down, left-and-right button
- 18 [EXT.TERM-ON/OFF] Terminal ON/OFF switch of external synchronisation signal
- 19 [INT/GL, LL] Selector switch for synchronising system
- 20 [DUPLX, SIMPLX] Selector switch for transmission system
- 21 [RX, TERM-ON/OFF] RX signal terminal ON/OFF switch
- 22 NOT USED

## Other Equipment

### RM-P2580E Remote Control Unit

Build a cost-effective CCTV surveillance system using the RM-P2580E to control colour cameras such as the TK-C1480E, as well as 360° dome colour cameras such as the TK-C675BE.



- Built-in PAN, TILT, and ZOOM controls
- Auto panning
- Built-in 8ch sequential switcher function
- Auto Patrol Mode
- Auto alarm operation
- Multi-alarm input/outputs
- 8 video input/outputs (Loop through)
- Operation lock function
- Interface: RS-485 for camera and RS-232C for external unit

Design and specifications subject to change without notice.

# JVC

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