Polycom Terminal

Remote Control Unit

User Manual
KT-410C

© 2008 Sony Visca Protocol

Please read carefully before using
WARNING!

Do not use Gasoline, Thinner, etc. wipe the surface, soft cloth dipped in clean water or alcohol is acceptable

WARNING!

1. Do not touch the water or other liquid, keep the surface clean.
2. This product is for indoor use only, Do not rain or let it be wet
3. When the tem is below -10 centigrade, LCD may can’t show properly.
4. Please use our own power adaptor, If you wannar change it, please sure the voltage is 9-15V/1000ma
5. Avoiding collided with hard objects

IMPORTANT

This product is manufactured to comply with requirements of following directives:
89/336/EEC, 92/31/EEC, 93/68/EEC

Function Intro:

Sony VISCA RS-422/RS485 communication, Hi-speed, long distance control.

Two RS422/485 communicate interface, The Max. can reach 2000 meters.

6-16 cameras preset. Like PTZ Control, Lens position, white balance, Mirror, Freeze, ect.
Equipment that can be connected:

BRC-H700/Z700 3CCD Color Video Camera
BRC-300/300P 3CCD Color Video Camera
EVI-D100/D100P/S Color Video Camera
EVI-D70/D70P/W Color Video Camera
EVI-D30/D30P Color Video Camera
SNC-RZ30N/RZ30P Network Camera
SONY EVI-HD1
EVI-HD3V
SONY EVI-HD7V
BRC-Z330 CMOS
Sony DXC-390/390P—1/3 DSP 3-CCD camera
Sony DXC-990/990P—1/2 DSP 3CCD camera
Polycom series camera

Joystick: 6-axis, zoom function, shuttle, jog in the knob, auto returning
Buttons: 28, multifunction, silicon + keystone
Display: LCD, 2 lines of 20 characters, backlight

Performance Index:

Dimensions: 355(L) × 150(W) × 155(H)mm
Weight: 1.47kg (w/o Power supply)
        1.89 kg (with Power supply)
        2.4kg (prepared for shipping)
Operating Temperature: -10°C - 70°C
Humidity: 30% - 90% (w/o condensation)
Adapter: DC12V / 1000mA

ELECTRICAL SPECIFICATION

Power source: 12 VDC
Power consumption: 2.7 W (not loaded line)
Recommended adapter: AC100-240V-12VDC/1000mA
Connectors:

1 x RJ-45 (RS-485) (for digital video recorders)
RS485(COM1)RS485 transmit   Power output 2000M(for camera)
RS485(COM2)RS485 two way, standard 485 bus. 1200M(for camera)
USB-D:USB2.0(for computer)

Accessories:
1. Power adaptor x 1
2. RJ45 signal cable x 1
3. Junction box x1
4. 120 Ohm 1/4W resistance x3
SONY VISCA Usage (EV1-D70TECH)

Home
Set preset position
Delete preset position
Call preset position
Backlight compensation
Picture Freeze
Image Mirror
Screen information display
Screen information off: 99+ON

WB Mode
Press [TOUR] to change mode
6 WB Modes
Press TOUR, 6WB Modes as follow
Auto
Indoor
Outdoor
One Push WB
ATW
Manual

Manual WB Mode
There are three parameters adjustable by Press “SEQ”
R Gain、B Gain、RB Stop

(1)Manual WB R Gain
(1) Under Manual WB, Press SEQ, LCD display “R Gain”
(2) Joystick “shuttle” clockwise +, anticlockwise -
(2) Manual WB B Gain
(1) Under Manual WB, Press SEQ, LCD display “B Gain”
(2) Joystick “shuttle” clockwise -, anticlockwise +
(3) Manual WB R/B Gain stop
(1) Under Manual WB, Press SEQ, LCD display “Gain Stop”

ONE PUSH
Under ONE PUSH WB mode, Press “SEQ”

Right&Left exchange

1) Right&Left exchange: 200+ON
2) Normal: 200+OFF

Attention: This function is not storage, need to be set every time
6 Axis non-contact, High resolution, Long life

**KX, KY Axis:**
Mainly for Cursor Control or User defined; 16 Angle each way

**Z Axis:**
ZOOM control, ±36 Degree, 64 at Max. different protocols with different parameters

**B Axis:**
shuttle jog: General for frame control of VCR, or User defined

**Main Axis X, Y:**
PTZ Control, ±36 degree, 0-100 adjustable, different protocols with different parameters

**Front Panel:**

**Button Backlight**
Two lights under each button, Blue, Red; Blue for backlight, Red for function remind. Press it the blue backlight will blink about 1S, Red for 2S
Press DVR and CAM, The blue will blink twice, Red(always), stats indicate
Glossary:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAM</td>
<td>CAMERA</td>
</tr>
<tr>
<td>DVR</td>
<td>Digital Video Recorder</td>
</tr>
<tr>
<td>PRESET</td>
<td>Call Preset</td>
</tr>
<tr>
<td>SET</td>
<td>Set Preset</td>
</tr>
<tr>
<td>DEL</td>
<td>Delete Preset</td>
</tr>
<tr>
<td>HOME</td>
<td>home</td>
</tr>
<tr>
<td>TOUR</td>
<td>Cruise switch to WB</td>
</tr>
<tr>
<td>SCAN</td>
<td>Scan</td>
</tr>
<tr>
<td>MENU</td>
<td>menu</td>
</tr>
<tr>
<td>SAVE</td>
<td>Store(video),Backlight</td>
</tr>
<tr>
<td>PAUSE</td>
<td>Suspend, Frame, Freeze</td>
</tr>
<tr>
<td>RUN</td>
<td>Run, picture mirror</td>
</tr>
<tr>
<td>ON</td>
<td>Auxiliary open, open, 99+ON</td>
</tr>
<tr>
<td>OFF</td>
<td>Auxiliary close, close, 99+OFF, Screen information</td>
</tr>
<tr>
<td>FAR</td>
<td>Focus Far</td>
</tr>
<tr>
<td>NEAR</td>
<td>Focus Near</td>
</tr>
<tr>
<td>OPEN</td>
<td>Aperture on</td>
</tr>
<tr>
<td>CLOSE</td>
<td>Aperture off</td>
</tr>
<tr>
<td>PATTERN</td>
<td>Pattern Learn</td>
</tr>
</tbody>
</table>

Easy Operation

Delete Display: Press “0” for 2S
Switch to Cam: No.+ CAM
Switch to DVR: No.+DVR
From DVR to CAM: CAM or “No.+CAM”
From CAM to DVR: DVR or “No.+DVR”
Call preset position: No.+PRESET
Set preset position: No.+SET
Delete preset position: No.+DEL
LCD info display: 99+ON
LCD info off: 99+OFF
Backlight Compensation On/Off Press [ ● ]
Mirror Press [ ▶ ]
Picture Freeze press [ ◄◄]
WB Mode Press [ TOUR] 6 Mode

Symbols Explanation:

POWER , Stop ,  ● Backlight Compensation/Recording ,
            Freeze/Suspend/Frames

Mirror/Play ▶ ; Multi Picture Switch ◄ ◄ ; Former ◄ ; Later ▶ ; Fast Reverse ◄ ◄ ;
Fast Forward ▶ ▶
LCD Display

Camera Operating Mode

| CAM: 001
| >> 0000 |

Camera Operating Mode  Function(Call Preset Position)

| CAM: 001   | [MOVE] |
| >> 0000   | PRESET |

DVR Operating Mode

| CAM: 001
| >> 0000   | DVR:001 |

DVR Operating Mode

MENU

| CAM:001
| [MENU→] | DVR:001 |

CAM: 001  Means controlling “Address Number is 001 Camera”
DVR: 001  Means controlling “Address Number is 001 DVR”
>> 0000  Number Display Zone, 4 digits at most
[MENU→]  Menu operation of DVR
[MOVE] PRESET  Function display: show the pressing button’s function, it’ll auto disappear after 3S

Direction Control: SONY VISCA Command

8 above direction control, 24 level speed

ZOOM Control: SONY VISCA Command

ZOOM: 8 level, Multi zoom speed control

Real-time Control:

Joystick can control direction and zoom at the same time
Keyboard Control:

Joystick in Menu:

- B Axis – shuttle: Switch to Menu N01-10
- Z Axis – Lens Control: Change parameter

Enter into the submenu: Turn “shuttle” clockwise
Back to the former menu: Turn shuttle anticlockwise

Parameter+ : turn Z axis clockwise
Parameter - : turn Z axis anticlockwise

Keyboard set in OSD Menu

Menu structure

- LCD OSD
- Main Menu (1-10)

1. Key Backlight = On (On/Off/Active)
2. LCD Backlight = On/Off
3. Camera Protocol = PelcoP/PelcoD/AD/Samsung/Panasonic/DaHuaDome/Sony Visca
4. Camera Baud rate = 9600/4800/2400
5. DVR Protocol = Dahua/Hikvision/Dali/Hanbang/Appro
6. Alarm In = RS485/USB
7. Alarm output = All Red/Led Blink
8. Keyboard ID = 001
9. Password1 = ****
   Password2 = ****
10. Exit

Enter in Keyboard menu set:

1) Press CAM, if under CAM status, can be omitted
2) Press MUNU
3) Input Password: 9999

Enter in menu set, LCD display as following

- No1: Backlight
  - No1: key Backlight
    - on
    - off

Back to Keyboard menu set:

1) Press MENU
2) Under No10: Exit, Turn Z axis
No1: Key Backlight

No1: Key Backlight
[on] off

Enter into the submenu: Turn “shuttle” clockwise
Back to the former menu: Turn shuttle anticlockwise
Change present status: Turn Z Axis, clockwise +, anticlockwise -
With bracket is optional. Like [ O N ] upper

No2: LCD Backlight

No2: LCD Backlight
[on] off

No3: Camera Protocol

No3: Camera Protocol
[Sony Visca]

Camera protocol as follows:
Pelco-P, Pelco-D, AD, Samsung, Panasonic, DaHuA
DH-PELCO-P, Sony Visca(default)
Turn Z Axis Zoom (clockwise+, anticlockwise-) select camera protocol
Turn shuttle clockwise to the submenu
(back to former menu: Turn shuttle anticlockwise)

No4: Camera Baud rate

No4: Camera Baudrate
[9600]

Camera Baud rate: 2400, 4800, 9600 (default)
Turn Z Axis Zoom (clockwise+, anticlockwise-) select camera Baud rate
Turn shuttle clockwise to the submenu
(back to former menu: Turn shuttle anticlockwise)

No5: DVR Protocol

No5: DVR Protocol
[Hikvision]

DVR Protocol: Baud rate: 9600

Dahua, Hikvision, Dali, Hanbang, Appro, HighEasy
Turn Z Axis Zoom (clockwise+, anticlockwise-) select DVR protocol
Turn shuttle clockwise to the submenu
(back to former menu: Turn shuttle anticlockwise)
No6: Alarm In

**No6: Alarm In [Usb] RS485**

USB: USB Port
RS485: DVR RS485control; Baud rate: 9600
Turn Z Axis Zoom (clockwise+, anticlockwise-) select
Turn shuttle clockwise to the submenu
(back to former menu: Turn shuttle anticlockwise)

No7: Alarm Do: select alarm signal output

**No7: Alarm Do [LED Blink]**

Led Blink, RS485 (DVR port RS485 signal output)
Turn Z Axis Zoom (clockwise+, anticlockwise-) select
Turn shuttle clockwise to the submenu
(back to former menu: Turn shuttle anticlockwise)

No8: Keyboard ID

**No8: Keyboard ID=[01]**

Keyboard Address: 00-99
Turn Z Axis Zoom (clockwise+, anticlockwise-) select
Turn shuttle clockwise to the submenu
(back to former menu: Turn shuttle anticlockwise)

No9: Password 1, 2

**No9: Password1 [****]
Password2**

Turn shuttle clockwise to Password2

**No9: Password1 [****]
Password2 [****]**

1) Input keyboard password
2) Turn Z Axis Zoom (clockwise+, anticlockwise-) confirm

Turn shuttle clockwise to the submenu
(back to former menu: Turn shuttle anticlockwise)

No10: Exit

**No10: Exit**

Turn Z Axis Zoom (clockwise+, anticlockwise-) quit
Turn shuttle clockwise to the next menu
(back to former menu: Turn shuttle anticlockwise)
Keyboard Controller with EVI-D70/D70P

<table>
<thead>
<tr>
<th>Terminal</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(Data transmit input+) TXD IN+</td>
</tr>
<tr>
<td>2</td>
<td>(Data transmit input -) TXD IN-</td>
</tr>
<tr>
<td>3</td>
<td>(Data receive input +) RXD IN+</td>
</tr>
<tr>
<td>4</td>
<td>(Data receive input -) RXD IN-</td>
</tr>
<tr>
<td>5</td>
<td>(Common terminal) GND</td>
</tr>
<tr>
<td>6</td>
<td>(Data transmit output+) TXD OUT+</td>
</tr>
<tr>
<td>7</td>
<td>(Data transmit output -) TXD OUT-</td>
</tr>
<tr>
<td>8</td>
<td>(Data receive output +) RXD OUT+</td>
</tr>
<tr>
<td>9</td>
<td>(Data receive output -) RXD OUT-</td>
</tr>
</tbody>
</table>
Keyboard Controller with EVI-D70/D70P RS232 connect

<table>
<thead>
<tr>
<th>No</th>
<th>Pins</th>
<th>Signals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DTR</td>
<td>Data Transmission Ready (OUTPUT)</td>
</tr>
<tr>
<td>2</td>
<td>DSR</td>
<td>Data Set Ready (INPUT)</td>
</tr>
<tr>
<td>3</td>
<td>TXD</td>
<td>Transmit Data (OUTPUT)</td>
</tr>
<tr>
<td>4</td>
<td>GND</td>
<td>Ground</td>
</tr>
<tr>
<td>5</td>
<td>RXD</td>
<td>Receive Data (INPUT)</td>
</tr>
<tr>
<td>6</td>
<td>GND</td>
<td>Ground</td>
</tr>
<tr>
<td>7</td>
<td>IR OUT</td>
<td>IR Commander Signal (OUTPUT)</td>
</tr>
<tr>
<td>8</td>
<td>N.C.</td>
<td>No Connection</td>
</tr>
</tbody>
</table>
Keyboard Controller with BRC-700

VISCA RS-422 cable

First BRC-Z700

VISCA RS-422 cable

Second BRC-Z700

VISCA RS-422 to AC outlet

Third to Seventh BRC-Z700

VISCA RS-422 to AC outlet
Keyboard Controller with EVI-HD1

1. DTR  1. CD
2. DSR  2. RXD
3. TXD  3. TXD
4. GND  4. DTR
5. RXD  5. GND
6. GND  6. DSR
Two EVI-HD1/HD3/HD7 connection

EVI-HD1/3/7 (VISCA IN)  EVI-HD1/3/7 (VISCA OUT)

1. DTR  
2. DSR  
3. TXD  
4. GND  
5. RXD  
6. GND  
7. IR OUT  
8. N.C.  
9. RI

Keyboard Via RS232-485 commutator connect with Polycom Camera
RS-232 Serial port: For RS232 equipment

LAN Port: For IP call or SIP call. Peeple + Connect IP and Polycom HDX interface

Analog phone port: For Analog phone

ISDN Port: For QEB, PRI or V.35 Module

Power connector: For power

HDX 8000 meeting terminal

DB9 Cable
**Polycom EagleEye series camera**

**Camera operation:**

CAM mode: press CAM or “No.” +CAM

**PTZ Control:**

Control camera direction, up, down, left, right 360degree rotation, speed 0-24 level (SONY VISCA protocol), speed vary with protocols 0-100.

**Lens Control:**

ZOOM: near ZOOM IN (TELE)  
Lens ZOOM OUT (WIDE)  
FOCUS: NEAR  
FAR  
Aperture IRIS: OPEN  
CLOSE

**Auxiliary equipment control On/Off:**

Control on, off, light, wiper, dable, heater, fan, etc. surveillance equipment

SONY camera on: ON  
SONY camera off: OFF

SONY camera LCD info on: 99+ON  
SONY camera LCD info off: 99+OFF

Auxiliary equipment on: No.+ON  
Auxiliary equipment off: No.+OFF

**Call preset position:**

1. input number “1-6” (EVI-D70)  
2. press “PRESET”

**Set preset position:**

1. input number “1-6” (EVI-D70)  
2. press “SET”

**Delete preset position:**
① Input number “1-6” (EVI-D70)
② Press “DEL”

**Backlight Compensation:**
- Press “黑洞”, once on, twice off, by cycle

**Picture Freeze:**
- Press “ ”, once freeze, twice unbind, by cycle
- When freezing, the picture is static

**Picture Mirror:**
- Press “ ”, once on, twice off, by cycle

**White Balance:**
6 WB:
- Press TOUR, 6 modes as follows
  - Auto
  - Indoor
  - Outdoor
  - One Push WB
  - ATW-auto track WB
  - Manual

WB switch: press [TOUR], can switch to 6WB by order

**TV screen display as follows**

<table>
<thead>
<tr>
<th>AUTO WB</th>
<th>INDOOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDOOR</td>
<td>One Push WB</td>
</tr>
<tr>
<td>ATW WB</td>
<td>MANUAL</td>
</tr>
</tbody>
</table>
**One Push WB**

1. Press “TOUR” to “One Push WB”
2. Press “SCAN”

LCD display

![ONE TRIGGER](image)

**Manual WB Mode Set:**

1. Press “TOUR” to (Manual)
2. Press SEQ. There are 3 modes:
   - R Gain (Red), B Gain (Blue), RB Stop (Red & Blue)

③ Manual WB R(red) gain adjust

![WB R GAIN](image)

Operate method: “shuttle” on Joystick
   - Clockwise (+), red change to deeper
   - Anti-clockwise (−), red shallow

③ Manual WB B(blue) gain adjust

![WB B GAIN](image)
Operate method: "shuttle" on Joystick
clockwise (+), blue deeper
anticlockwise (−), blue shallow
③ Manual WB R/B end red blue gain adjust
Press SEQ, LCD display as follows

<table>
<thead>
<tr>
<th>GAIN STOP</th>
</tr>
</thead>
</table>

**WB info Display**
When set WB parameters, LCD would remind, like AUTO WB

<table>
<thead>
<tr>
<th>AUTO WB</th>
</tr>
</thead>
</table>

Disappear after 1S

**Home:**
SONY EVI-D70 front, press (HOME), camera auto turn to this position

**Sony BRC-300/300P operate method**
Enter in menu: MENU+8888
To the submenu: shuttle clockwise
Back to the former or quit: MENU+8888
Cursor upside down: Joystick KY up&down;
Revise parameter: Joystick KX left&right

**Polycom camera**
1. Polycom camera, a conferencing system with a keyboard, select Polycom in menu, baud rate 9600
2. Via RS485-232 with HXD8000 meeting endpoint
3. Can control up, down, left, right, zoom, set preset positions, call preset positions
Back port:

<table>
<thead>
<tr>
<th>Port</th>
<th>Description</th>
<th>atten</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC12V</td>
<td>Power adapter</td>
<td>DC12V /1000 Ma core+</td>
</tr>
<tr>
<td>USB</td>
<td>USB interface</td>
<td>To PC</td>
</tr>
<tr>
<td>RS485-DVR</td>
<td>Control DVR’s RS485 port</td>
<td>3. RS485+/A/TX+</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. RS485-/A/TX-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7. GND</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8. DC12V+</td>
</tr>
<tr>
<td>RS485-CAM</td>
<td>Control camera two RS485 port</td>
<td>COM1: RS485 undirection port The Max.2000M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>COM2: RS485 two way port The Max.1200M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Can work with other equipment</td>
</tr>
</tbody>
</table>
RJ45 connect box (only DVR)