# IPC series IP camera

# user manual

# 1. Product introduction

IPC series IP camera applied embedded RTOS system design, Dual-core T architecture 32-bit TI Da Vinci chip (DSP), Super storage capability, which support high definition resolution (1080P $_{\gamma}$ 720p) and CIF real-time & dual-stream transfer, It can achieve high definition storage and fluent & stable transfer. Large capacity hard disk can be installed in front end, perfect client software in rear-end for NVR. The camera is suitable for all kinds of high definition remote surveillance and control

# 2. Specifications

Specification	IP2 series	IP3 series	IP5 series	IP8 series		
System	Embedd	led ROST design, Dual	-core 32-bit DSP(T arc	chitecture)		
Memory		32M FLASH	、128M DDR2			
Image compression	MPEG coding	、 AVI storage	H.264 coding	s、AVI storage		
Resolution	D1 (704*576)	720P (1280*720)	960P (1280*960)	1080P (1920*1080)		
Frame		1-30	Frame/s			
Audio	1-Cl	1-CH audio input(pickup),1-CH output (earphone) port				
Network port	1 10/100M Adaptive Ethernet					
Network function	FTP/PPPOE/DHCP/DDNS/NTP/UPnP.etc					
Front end storage	MicroSD、 USB					
Outer connector	RS422/485 port					
Alarm port	1-CH switching value input, 1-CH switching value output					
Power	DC12V / 1.5A					

# 3. System requirements

CPU: In	tel Pentium E 2.8G;
Memory:	1G;
Video Card:	Intel GMA X3100、Geforce 9600GT、ATI Radeon HD 4350;
Hard Disk:	80G $($ can add to suit channel number and video storage $)$ ;
Monitor:	17 inch;
Operation System	n: Windows XP; Windows 7;
System Setup:	DirectX 9.0; Resolution $1024 \times 768$ or above; True Color(32 bit);

# 4. Port illustration:



♦ Reset Button: Push the button when power off → turn on power → 15 seconds later → stop push the button ( the system reset, IP address and user name & password return to default value)

#### 5. Browser:

#### Default IP address: 192.168.0.123; Default user name: admin; Password: 123456

#### 5.1 IE Browser.

First make sure the computer and camera are connected to the same network segment, Then enable unsigned Active X in your browser as following steps:

(1) Open your internet browser

(2) Click on the "**tools**" menu at the top of screen and select "Internet options..."

(3) Select the security tab from the internet options menu

(4) Click the "**Custom level**" button and enable or prompt unsigned Active X features in the list using the radio buttons

Settings					-
	Display video and animatio Disable  Fnable	n on a webpa	age that doe	s not use	*
1 💽 ) ) )	Download signed ActiveX o Disable Enable (not secure) Prompt (recommended	ontrols (not s	secure)	[	1
	Download unsigned Active Disable (recommended Enable (not secure) Prompt Initialize and script ActiveX	X controls (no ) controls not	ot secure) marked as s	afe for s	
0	<ul> <li>Disable (recommended</li> <li>Enable (not secure)</li> <li>Prompt</li> </ul>	)			1.12
4	Only allow approved doma III	ine to use Ac	tiveV withou	t prompt	2
Takes ef	fect after you restart Inte	rnet Explorer			-
eset custo	om settings				
Reset to:	Medium-high (default)		•	Reset	
			or	Cane	al

Enter the IP address of camera in the browser address field, and the login screen will appear

		C. S. S.S.	
2	Username		1 44
	Password	Login	5
	Install	Language English 🔻	N. de
			1

English and Chinese are supported, Default language is Chinese, The language can switch to English when click "English" at the bottom of Login screen

Enter your user name and password, then click "Login" button, the Active will installed automatically; (Default user name: admin; Password: 123456)



Select different scream at bottom right of screen to adjust high or low resolution monitor;

#### Change IP address and WEB port:

When camera IP address segment is different from computer, Change camera IP usually, First connect the camera to an computer, of which IP address was set as same network segment as 192.168.0, Then enter into camera operation screen through IE browser, click "network setup"  $\rightarrow$  "Ethernet Setup" in the left menu bar. If there are many IP cameras in one net, Every camera IP address should be set to be different

MAC Address	00:a5:4f:bc:42:66
DHCP Function	Disable 💌
IP Address	192.168.3.149
Net Mask	255.255.255.0
Gateway	192.168.3.1
DNS1	202.96.128.86
DNS2	202.96.134.133

In the network transmission, port 80 will often be reserved or shielded by network operators, you can change the port to 81 or 800 and others except 80 according to the following steps: click "network setup"  $\rightarrow$  "Stream Setup" $\rightarrow$  change Web Access Port, Once the port 80 is

changed, you have to enter IP address http:// manually and add :port number in the end of address when using IE browser, eg: <u>http://192.168.0.123:81</u>

Stream Media Setup	
Authentication	Enable 💌
Media Access Port(1-65535)	554
Media Access Protocol	
PTZ Control Port(1-65535)	8091
Web Access Port(1-65535)	80
	Default Save

#### Software.

Software installation: Insert supplied CD into your CD drive, execute UC file (file suffix: setup.exe) in the root file of CD, Follow the on-screen instructions (select langue when install) After installation, click UC icon to operate client program, enter your user name and password (Default user name: admin; Password: 123456)

Video Surveillance Client					
Username Password IP	admin 💌	<ul> <li>Automatic Login</li> <li>Save Password</li> <li>Sign Platform</li> </ul>			
		Login Cancel			

Enter software "Config management" to add equipment, manual or automatic operation for optional

Manual add (Device config box):

"Group Name": select "default group" or add group;

"Device Name": user define;

"Protocol Type": select "TCP";

"Device type": select IPC;

"Device IP": Device IP or domain name;

"Video Port": default 554, Input changed port if it is changed

"PTZ Port": Default 8091, Input changed port if it is changed

"Login name": Device user name;

"password": Device user password;

Click "add" button after setup, and device will show in the left menu bar

Automatic search add

Click "search device" button in "Device config box", Software will search the equipment in the network automatically. Include equipments with same IP or different segments. It is also can change IP address. Cameras IP must be different but in the same segment, so that all the cameras can be accessed in the same time. After equipment search, select required equipment and click "batch add" button, the device will show in the left menu bar

Video View F	ecord Query	Alara queries	Config Ha	nagement	TV Wall	Шар		网络高清飘	類监控
Device Config User Config Record Conf Config Device List Config List Config List	ig Remote Config Manke Device Management Group Config Group Name Config Information Device Source Group Name Device Type Device IP Login Name	Local Device     Def aut     JPC	Add Remo	ve Modfy b Sream	Protocol Type TC Wat Mod RT PT2 Port BOT PT2 Address	२ × २ × म			
	Device Management     IP Address     DNS1     Device number	siste: # is not allowed	Add Rem Subnet Mask	ove Modify	Gateway Address Auto gain Modify	, , , , , , , , , , , , , , , , , , ,		- <b>-</b> -	
	P Address	Subnet Mask	Gateway Address	C4631	DARS2	Device Type	5eral ND.	MAC Depring of the second seco	

Enter "Video View" interface after device is added, Left click corresponding IP camera in the left menu bar and hold down the left mouse button to drag it to the black screen box, If you want to view multi equipments, select "multi-split screen" first and drag every device to the black screen box.

Video View	Record Query Alarm queries	Config Management	TV Wall	Mac 网络高清职镇监控
	и II у Ф 🛪 B С A 💥 🛙			2013-10-09 11:49:36
Cento Lat D= to Default → to Default → to Default → to Default → to Default → to Default → to Default		2013-08-22	星期回 14:21:54 日本市会社の大学会	
Crignal Properties Map List O PT2 Control Alarm Message				

(Camera icon introduction: gray (off line) blue (on line) red (connect view)

# 6. video and replay

IP camera video recording includes front-end video and remote local video. Front-end video is recording in U disk or mobile hark disk connected to the equipment. Remote local video is recording in local hark disk

#### 6.1 Front-end video and replay:

Connect IP camera with U disk or mobile hard disk (mobile hard disk must have external power supply), Enter network video server through IE browser, click "Record and Replay" menu and select "storage manage", U disk or mobile hark disk should be formatted when it is used in IP camera for the first time.

🗣 Remote Con	fig
NetWork Media Storag	ge Alarm System
Storage Setting Storage	device information
Storage device info	prmation
- SD 1	
Device Status	Not Mount
-SD 2	
Device Status	Not Mount
USB Storage Device	
Device Status	Not Mount

Enter "Record Setup" menu for video plan setup

"local storage": must be enabled;

- "Storage Media": Auto select;
- "storage strategy": "stop when full" or "Overwrite when full"
- "Max Time Each File": continuous video recording time in one video file
- "Schedule Record": must be enabled;
- "Video Stream": select video stream 1;
- "video Format": AVI;
- "Media type": "only Video" or "video & audio"

"save to local": must be enabled;

"Record Schedule": user define video time, Time cycle is one week, 24-hour time system, can set video time of every day, Check "every day 00:00 to 24:00" and the equipment will video all the time

-			
🗣 Remote Config			
NetWork Media Storage Alarm Sus	tem		
Storage Setting Storage device informatic			
Storage Setting			
Storage Setting			
Local Storage	Enable	<ul> <li>Storage Strategy</li> </ul>	Overwrite When Full
Storage Media	Auto select	Max Time Each File	30 Minutes
			,
Schedule Record 😞			
Enable	Disable	-	
Video Stream	Main Stream		
Video Format	AVI		
Record Type	Only Video	-	
Capture Interval(1-3600)	1 5	econd(s)	
Upload to FTP	Disable		
Send To Email	Disable		
Period Sunday From 0:00:00	To 23:59:59	Add	
Period Date Start	Time End Time		
0 Monday 0:0:	0 24: 0: 0		
			Save

play or download video (search video in "Record file play back" menu)

select start time, end time and video type in "Query Conditions" box (suggest select "unlimited" in "Min Len" & "Max Len"), Click "search" button and all the matching video files information (file name, size, start time) will show in medium file list, you can play, delete, download, backup any video file in right menu bar (short-time video file can play directly, longer than 10 minutes file can play after download, You can play file using tools such as media player or storm player)



#### 6.2 Remote Video and Replay.

Enter "Config Management"  $\rightarrow$  "Record Config"  $\rightarrow$  "Detail", Trigger timer record function through adding strategy

"Strategy Name": user define

"Save Day": the number of days that the video need to be saved, old file will be deleted if the number of day is full though the hard disk is under full

"Storage Strategy": "Overwrite when full" or "stop when full"

"Trigger Method": "Schedule Record" or "Motion Detect Record"

"Storage Path": three paths for optional

"Strategy Device": Add original device to strategy device, Device can operate only when in strategy device, the strategy device can be added or removed anytime

"Original Device": the camera connected to the network

"Config enable": select "Yes"

"Record time per file": continuous video recording time in one video file

"Prerecord time": prerecord time when triggered by motion detection

"Record video": select "high resolution" or "low resolution"

"Detect Record Time": Delay record time when triggered by motion detection, Recording stop when alarm not be triggered again during the record time

"Record Audio": record audio or not

Schedule set is as same as IE set, time cycle is one week, select everyday 00: 00 - 23: 59 for continues recording

After set up, click "add strategy" function, the strategy will show in the left strategy bar and start work at once

Record Strategy		
Basic Config		
	Strategy Devices	Original Devices
Strategy Name Default Strategy	Device List	A Device List
	- □ 🛱 192.168.88.100	■ 192.168.88.100
Storage Strategy Overwrite latest file:	🗖 🛱 192.168.88.151	
Tigger Method  Schedule Record		
	₩ 192.168.88.156	Add 192.168.88.156
Storage Path1 D:1	Browse	192.168.88.165
Charles Bullos Ed	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	Remove 192.168.88.166
Storage Path2	Browse	□ ···· □ ··
Storage Path3 F:\	Browse	
,		
Config enable: NO	rd time per file: 30 🔽 Minutes Prei	record time: 5 Sec.
Record video: Main Stream 💌 Detec	t record time: 60 (10-600Sec.)	Record audio
Time span1 Everyday 🔽 Fro	<sup>m</sup> 0:00:00 ÷ <sup>To</sup> 23:59:59 -	•
Time coap2 Supday	Μ 0,00,00 • Το 23,50,50	-
	• 23.39.39	•
🗌 🔽 Time span3 Sunday 💽 Fro	<sup>m</sup> 0:00:00 ÷ <sup>To</sup> 23:59:59 -	<u>.</u>
E Time and Finder		•
Time span4  Sunday		•
Time span5 Sunday 🔽 Fro	<sup>m</sup> 0:00:00 <u>+</u> To 23:59:59 -	-
Time span6  Sunday	0:00:00	•
Time span7 Sunday	m 0:00:00 To 23:59:59	
		•
Add Strategy Del Strategy Modify Stra	ategy	

• (Insure the video stream of all strategy device is already connected. Judge the connection status through the icon in front of video stream)

Enter video search & replay interface after click "video Query"

First select camera you want to search, then select video configuration, such as time range, record type, media type, resolution (file source include local record and front-end record), click "search" button and properly record will show.

Local record will play when double click current window, front-end record need be downloaded to the local disk (select file  $\rightarrow$  click "start download") before play. Pay attention to the download path that show when click "start download", you can find the file through this path and make file-backup or replay

									网络高清觐颖监控
Video View	Record Query	Alara queries	Config Manage	enent	TV Wall	1	Дар	1	2012 10 00 15:02:20
R CQ I	<u> </u>								2013-10-09 15:03:29
E Device List									
B-10 Default									
* 1410010									
	Ela elu hack Tima elu h	ark							
	Record Query								
	Device Name Please s	elect device from device list	in the left						
	File Source Local Reco	rd 💽 Record Type	Al 💌 Ti	me range 201	3-08-22 00:00:00	10	2013-08-22 23:59:59		
	Media Type Wdeo	Resolution	Al 🔽 Pi	e Size	To	-1	Bytes(-1 means limitation)	no	
	Query Pre Page Ne	ot Page			the case		Revelued Data of	NewDates	Start Download
	Pile Path				File Size(	yres)	Download Scatus	Piley scatus	
Original Properties Map List	1				(				1

# 7. Wan connection

Please use fixed public network IP or other DDNS

Enter the router to do port mapping, check port 554, 8091, 80 in "stream setup" ("network setup" — "stream setup"), port 80 is changed to 8200 as it is occupied by other system sometimes, media access protocol is TCP

- Stream Setup	
Authentication	Enable -
Media Access Port(1-65535)	554
Media Access Protocol	TCP -
PTZ Control Port(1-65535)	8091
Web Access Port(1-65535)	8200
	Default Save

Take router TL-R410 for example:

# Virtual Server

Virtual server define the mapping relation between WAN port and LAN port,All services of the WAN port access will be re-assigned to LAN server that defined through IP address

ID	Service Port	IP address	Protocol	Status	Configuration	
1	8080	192.168.1.2	ALL	Enable	<u>edit</u>	<u>delete</u>
2	8200	192.168.1.200	ALL	Enable	<u>edit</u>	<u>delete</u>
3	554	192.168.1.200	ALL	Enable	<u>edit</u>	<u>delete</u>
4	8090	192.168.1.202	ALL	Enable	<u>edit</u>	<u>delete</u>
5	8091	192.168.1.202	ALL	Enable	<u>edit</u>	<u>delete</u>
6	8000	192.168.1.202	ALL	Enable	<u>edit</u>	<u>delete</u>

Login router, then map WEB port 8200 and video port 554 to a IP camera address in virtual server or forwarding rules, such as: 192.168.0.123

After mapping, a computer outside the network can monitor through enter fixed public network IP or DDNS in IE field