



S20P IP HD Camera User Manual









Thank you for purchasing our product. If there is any question or request, please do not hesitate to contact XonTel.

This Manual explains how to use and manage XonTel S20P IP Camera on your network. Previous experience of networking will be of use when using the products. Please read this manual carefully before operation and retain it for future reference.

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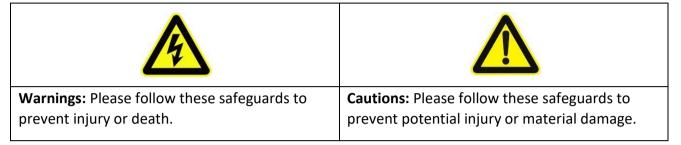






Safety Instruction

These instructions are intended to ensure that user can use the product correctly to avoid danger or property loss. The precaution measures are divided into "Warnings" and "Cautions" **Warnings:** Serious injury or death may be caused if any of these warnings is neglected. **Cautions:** Injury or equipment damage may be caused if any of these cautions are neglected.





- This installation must be conducted by a qualified service person and should strictly comply with the electrical safety regulations of the local region
- To avoid risk of fire and electric shock, do keep the product away from rain and moisture before installed.
- Do not touch components such as heat sinks, power regulators, and processors, which may be hot
- Source with DC 12V or POE
- Please make sure the plug is firmly inserted into the power socket
- When the product is installed on a wall or ceiling, the device should be firmly fixed
- If the product does not work properly, please contact your dealer. Never attempt to disassemble the camera by yourself



زونتسل

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- Make sure that the power supply voltage is correct before using the camera
- Do not store or install the device in extremely hot or cold temperatures, dusty or damp locations, and do not expose it to high electromagnetic radiation
- Only use components and parts recommended by manufacturer
- Do not drop the camera or subject it to physical shock
- To prevent heat accumulation, do not block air circulation around the camera
- Laser beams may damage image sensors. The surface of image sensors should not be exposed to where a laser beam equipment is used
- Use a blower to remove dust from the lens cover
- Use a soft, dry cloth to clean the surface of the camera. Stubborn stains can be removed using a soft cloth dampened with a small quantity of detergent solution, then wipe dry
- Do not use volatile solvents such as alcohol, benzene or thinners as they may damage the surface finishes
- Save the package to ensure availability of shipping containers for future transportation

EU Conformity Statement



2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info.



2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or

Mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: www.recyclethis.info.





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Chapter I Product Description

1.1 Product Overview

XonTel provides a consistent range of cost-effective and reliable network cameras to fully meet your requirements. Based on embedded Linux operating system, XonTel network cameras could be easily accessed and managed either locally or remotely with great reliability. With built-in high-performance DSP video processing modules, the cameras pride on low power consumption and high stability. They support H.264/MJPEG video compression algorithm and industry-leading HD dual-stream technology to achieve the highest level of video image quality under the limited network resources. It is fully functional, supporting for flexible and comprehensive alarm linkage mechanism, day and night auto switch, smart PTZ control and privacy masking, etc.

In practical applications, XonTel network cameras could either work independently in the LAN, or be networked to form a powerful safety monitoring system. It is widely used in fields such as finance, education, industrial production, civil defense, health care for security's sake.

1.2 Key Features

- ♦ Based on Linux OS with high reliability
- ♦ H.264/MJPEG video compression capability
- ♦ Support POE
- ♦ Support Video Content Analysis
- ♦ ICR filter with auto switch, true day/night
- ♦ Built-in WEB server, support IE/ Firefox/ Chrome/ Safari browser
- ♦ UPnP protocol for the easy management of IPC
- ♦ Support DDNS
- ♦ Motion Detection, Privacy Masking and Network Fault Detection
- ♦ FTP upload, SMTP upload, SD card record and SIP phone
- ♦ G.711/AAC audio compression capability
- ♦ Alarm I/O(built-in for pro bullet and box cameras, optional for dome cameras)
- ♦ Real-time video electronic amplification
- ♦ Three-privilege levels of users for flexible management
- ♦ Micro SD card local storage support, expand the edge storage







1.3 Hardware Overview

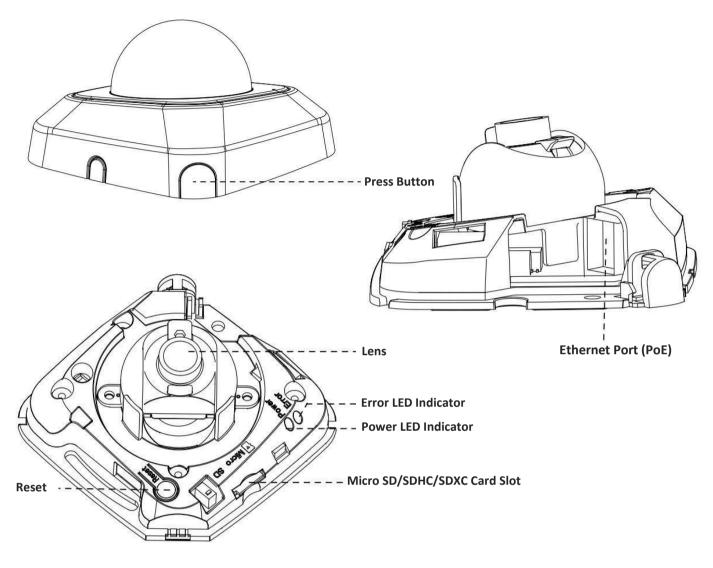


Figure 1-3-1 S20P Network Camera

Note:

- 1) Error LED Indicator: Error LED Indicator is on when the device starts up or runs error.
- 2) Reset Button: Press "Reset" button for 5 seconds, then the device will be restored to factory default.
- 3) Only PoE is available for power supply.







1.4 System Requirements

Operating System: Windows XP/Vista/7/8/10/Server 2000/Server 2008 CPU: 1.66GHz or higher RAM: 1G or higher Graphic memory: 128MB or more Internet protocol: TCP/IP (IPv4/IPv6) Web Browsers: Internet Explorer 8.0 and above version, Mozilla Firefox, Google Chrome and Safari.





Chapter II Network Connection

2.1 Setting the Camera over the LAN

Connecting the camera to a switch or a router is the most common connection method. The camera must be assigned an IP address that is compatible with its LAN.

2.1.1 Connect the Camera to the PC Directly

In this method, only the computer connected to the camera will be able to view the camera. The camera must be assigned a compatible IP address to the computer.

2.1.2 Connect via a Switch or a Router

In this method, the IP network camera will connect the network over the LAN via the switch or router.

2.2 Dynamic IP Connection

• Connecting the network camera via a router

Step1: Connect the network camera to a router;

- Step2: On the camera, assign a LAN IP address, the Subnet mask and the Gateway;
- Step3: On the router, set port forwarding. E.g. 80, 8000 and 554 ports. The steps for port forwarding vary depending on different routers. Please look up the router's user manual for assistance with port forwarding;
- Step4: Apply a domain name from a domain name provider;
- Step5: Configure the DDNS settings in the setting interface of the router;
- Step6: Visit the camera via the domain name.







Chapter III Accessing the Network Camera

The camera must be assigned an IP address to be accessible.

3.1 Assigning an IP Address

The Network Camera must be assigned an IP address to be accessible. The default IP address of S20P Network Camera is **192.168.5.190**. The default user name is "admin", and password is "xontel".

You can change the IP address of the camera via browser. Please connect the camera in the same LAN of your computer.





3.1.1 Assign an IP Address via Browser

If the network segment of the computer and that of the camera are different, please follow the steps to change the IP address:

Step1: Change the IP address of computer to 192.168.5.0 segment, here are two ways as below:

a. Start → Control Panel → Network and Internet Connection → Network Connection → Local Area Connection, and double click it. (Refer to Figure 3-1-8);

	d automatically if your network supports need to ask your network administrator
 Obtain an IP address auto Obtain the following IP address 	
P address:	192 . 168 . 1 . 10
Subnet mask:	255 . 255 . 255 . 0
Default gateway:	192.168.1.1
 Obtain DNS server address Use the following DNS server Preferred DNS server: Alternate DNS server: 	CONSIGNATION CONTRACTOR
Validate settings upon exi	t Advanced

Figure 3-1-1 Setting Network Segment IP Address of Computer

b. Click "Advanced", and then click "IP settings" → "IP address" → "Add" (See Figure 3-1-9). In the pop-up window, enter an IP address that in the same segment with XonTel network camera (e.g. 192.168.5.61, but please note that this IP address shall not conflict with the IP address on the existing network);

P Settings DNS	5 WINS		
IP addresses			
IP address		Subnet mask	
192.168.1.	10	255.255.255.0	
2	Add	Edit	Remove
Default gatev	lays:		
Gateway		Metric	
192.168.1.	1	Automatic	
	Add	Edit	Remove
Automatic	1999		
Interface me	tric:		







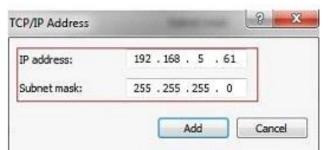


Figure 3-1-2 Setting IP Address of Computer

- Step2: Start the browser. In the address bar, enter the default IP address of the camera: http://192.168.5.190;
- Step3: Enter the user name and password when the login page appears; Default user name: admin

Default password: xontel

Network	Camera	
Network	Camera	
KonTel	Remember me? •	ş
	id ActiveX el All rights reserved.	
Copyright © Xon te	er An rights reserved.	

Figure 3-1-3 Login

Step4: After login, please select "Configuration" → "Basic Settings" → "Network" → "TCP/IP". The Network Settings page appears (Shown as below Figure);

KonTel	TCP/IP	НТТР	RTSP				
Live Video				O Get IPv4 address automatical	у		
Playback				Use fixed IPv4 address			
Basic Settings				IPv4 Address:	192.168.11.203		
Video				IPv4 Subnet Mask:	255.255.252.0		
Image				IPv4 Default Gateway:	192.168.11.1		
Audio				Primary DNS:	192.168.11.1		
Network Date & Time				IPv6 Mode:	Manual		
Advanced Settings				IPv6 Address:			
				IPV6 Prefix:		G	
0 System				IPv6 Default Gateway:		Ť	

Figure 3-1-4 IP Address of Camera

Step5: Change the IP address or other network values. Then click "Save" button; Step6: The change of default IP address is completed.







3.2 Accessing from the Web Browser

The camera can be used with the most standard operating systems and browsers. The recommended browsers are Internet Explorer, Firefox, Chrome, Safari.

Access over IE Browser

Before using the browser to get access to your camera, you need to install the MsActiveX firstly. You can refer the steps as follows:

- Step1: Launch the IE browser and enter the IP address of the camera;
- Step2: Enter the User Name and Password and click "Login";
 - (The default user name is "admin", password is "xontel")
- Step3: At the first time to log in the device, the browser will prompt to install Controls, please click "Click here to download and install controls manually" as Figure 3-2-1;

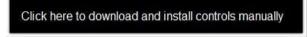


Figure 3-2-1 to download and install controls

Note:

1) During installing the controls, please keep the browsers close.

Step4: Follow the prompts to install the Controls, when it's finished, it will pop out a window as Figure 3-2-2. Please click "Finish" and refresh the browser, then you will see the video.

🛃 Installing Ms	ActiveX
- A	MsActiveX has been successfully installed!
200 C	Click Finish to complete the installation.
	Einish

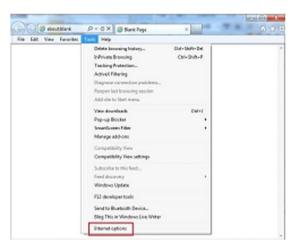
Figure 3-2-2 Finish installation

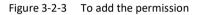
If IE9 or higher version browser is used, it is suggested that the XonTel camera web link should be added as a trusted site. See the instructions as follows:

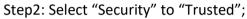
Step1: Start the IE9 or higher version browser, and select "Tools" \rightarrow "Internet Options";











	Privacy Content Connections	
Internet L	ocal intranet	estricted sites
trust not your files	e contains websites that you to damage your computer or	Sites
Security level for	r this zone	
Allowed levels	for this zone: All	
	finimal safeguards and warning pr fost content is downloaded and ru VI active content can run Appropriate for sites that you abs otected Mode (requires restarting	in without prompts olutely trust
	Custom level	Default level
	Reset all zor	es to default level
	OK	Cancel Apply

Step3: Enter the IP address of the camera in the blank and click "Add";

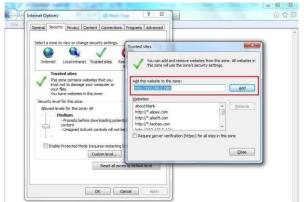


Figure 3-2-5 Add the website to the zone

Step4: Enter the IP address. After logging on network camera's web GUI successfully, user is allowed to view live video as follows.

















Chapter IV System Operation Guide

4.1 Live Video

After logging in the network camera web GUI successfully, user is allowed to view live video as follows.



Figure 4-1-1 Live view interface

Table 4-1-1	Description of t	he buttons
-------------	------------------	------------

No.	Parameter	Description
		Brightness: Adjust the Brightness of the scene
		Contrast: Adjust the color and light contrast
	50	Saturation: Adjust the Saturation of the image. Higher
	© 50 0 50 50 50 50 50 50	Saturation makes colors appear more "pure" while
1		lower one appears more "wash-out"
1		Sharpness: Adjust the Sharpness of image. Higher
	C	Sharpness sharps the pixel boundary and makes the
	Image Adjustment	image looks "more clear"
		Noise Reduction Level: Adjust the noise reduction level
		Default: Restore brightness, contrast and saturation to
		default settings







	6 ⁹ Configuration	Click to access the configuration page
2	Primary Stream	Choose the Stream (Primary/Secondary/Tertiary to show on the current video window
3	Web Components	 Only available for camera whose software version is 43 or above Web Components: Support Firefox, Safari, Chrome (Chrome version 44 or below); need to install the component to display the view; MJPEG: Support to display the view on Firefox, Safari, Chrome (Chrome version 45 or above); (NOTE: IE choose Web Components mode for default, in this case, it will not show the options)
4	UDP 🔻	 TCP: More reliable connection; UDP: More instantaneous connection, but if you cannot get the live view successfully, please turn into TCP connection;
5	Balanced	Least Delay: The most instantaneous mode; Balanced: A balanced mode between Least Delay and Best Fluency, maintains the fluency while keeps an acceptable delay; Best Fluency: The most fluent mode;
6	Kindow size	Click to display images at a window size
7	ریا 100% Real size	Click to display images at a real size
8	Full Screen	Click to display images at full-screen
9	Recording	When recording, the icon will turn red
10	(2) Alarm	When an alarm of Smart Event was triggered, the icon appears
11	<u>-</u> ॠ Alarm	When an alarm of Motion Detection was triggered, the icon appears
12	济 Alarm	Except for the two kinds of alarms above, when other alarms were triggered, the icon appears
0 0 0	<u>ل</u> م 1	Adjust the Zoom length of the lens (Only work when your camera is equipped with motorized lens)





		Adjust focus of the lens (Only work when your camera is equipped with motorized lens)
		Adjust the size of Iris (Only work when your camera is equipped with P-Iris)
	۵ (D	Auxiliary Focus and Lens Initialization (Only work when your camera is equipped with motorized lens)
T	0	Adjust iris automatically if check this box (Only work when your camera is equipped with P-Iris)
14	> , =	Start/Stop live view
15	Capture	Click to capture the current image and save to the configured path. The default path is C:VMS\+-1\ IMAGE-MANUAL
16	Start Recording	Click to start recording video and save to the configured path. The default path is C:VMS\+-1\MS_Record. Click again to stop recording
17	Play Audio	Enable Audio Input/Output. It can also be set in Audio configuration page
18	Saving Path Settings	Set the saving path for captured images and video recordings of operating on the live view
19	Q Enable Digital Zoom	When enabled, you can zoom in in a specific area of video image with your mouse wheel
20	Start Talking	When it is enabled, you can start real-time talking.

4.2 Playback

This section explains how to view the recorded video files stored in SD cards. Step1: Click [Playback] on the menu bar to enter playback interface;

	Playback
KonTel	
Live Video	
Playback	
Basic Settings	
Video	
Image	
Audio	
Network	
Date & Time	
Oc Advanced Settings	2017-11-01 00:00:00 2017-11-01 00:00:00 ⊭00 19:00 20:00 21:00 22:00 23:00 00:00 01:00 02:00 03:00 04:00 00:00 06:1
System	100 19100 20100 21100 22100 23100 0000 01100 02100 03100 04100 025100 061
Maintenance	



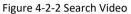






Step2: Click the date button, choose the date when date window pops up;





Note:

1) The date with bright red means current date; one with a dark red number and white background means weekend day; one with a dark red number and blue background means that the date is selected now.

Step3: Click **I** to play the video files found on this date.

The toolbar on the button of playback interface can be used to control playing progress.



0.	-	-	• •		-		

Button	Operation
	Play
	Pause
	Stop
	Speed Down
•	Speed Up
	Audio On/Off
Q	Search
	Go To
€,	Time Narrow/Expand

Table 4-2-1 Description of the buttons







	Start/Stop Recording
Ď	Snapshot
Q, Q	Zoom On/Off
\times	Full Screen

Note:

1) Drag the progress bar with the mouse to locate the exact playback point. You can also input the





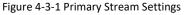
4.3 Basic Settings

4.3.1 Video

Stream parameters can be set in this module, adapting to different network environments and demands.

Primary Stream Settings

Live Video	Video Codec:	H.264	~	
Playback	Frame Size:	1080P(1920*1080)	~	
Basic Settings	Maximum Frame Rate:	25	✓ fps	
Video	Bit Rate:	4096	 ✓ kbps 	
Image	Bit Rate Control:	VBR	~	
Audio	Profile:	High	~	
Date & Time	I-frame Interval:	20	frame(1-60)	
Advanced Settings				
System		Save		\$









Secondary Stream Settings

Live Video			
Disubask	Enable:		
Playback	Video Codec:	H.264 ~	
Dasic Settings	Frame Size:	640*360 ~	
Video	Maximum Frame Rate:	25 v fps	
Image	Bit Rate:	1024 vkbps	
Audio	Bit Rate Control:	VBR	
Network Date & Time	Profile:	Base	
Advanced Settings	I-frame Interval:	20 frame(1-60)	
9 System		Save	

Figure 4-3-2 Secondary Stream

4.3.2 Image

Display information and Day/Night setting can be set in this module. OSD (On Screen Display) content and video time can be displayed to rich the image information.

On Screen l	Display (OSD)			
	Basic Settings >> Image			
KonTel	OSD Display Day/Night Mode			
Live Video		Didse ge	NUMBER OF STREET	
O Playback		Contraction of the		
O Basic Settings		and the second		
Video		and a manufacture of the second		
Image		Contraction of the second seco	BUCCUT THERE IN DURING	
Audio			Prane Rate Steeps Reservetion 21020-1080	
Network		The second second second	Ulden Codec. H. 264 Burrent Connection -2.	
Date & Time		and a second		
Oo Advanced Settings		Show Video Title:		
System		Video Title:	text1	
Maintenance		Text Position:	Top-Left 🗸	\searrow
		Show Timestamp:		
		Date Position:	Top-Right 🗸	
		Date Format:	DD/MM/YYYY U	
		Date i villäl.	Save Cancel	

Figure 4-3-3 OSD







Table 4-3-1 Description of the buttons

Parameters	Function Introduction
Show Video Title	Check the checkbox to show video title
Video Title	Customize the OSD content
Text Position	OSD display position on the image
Show Timestamp	Check the checkbox to display date on the image
Date Position	Date display position on the image
Date Format	The format of date Rotating 90°: The images is presented rotating 90°
	Rotating 180°: The images is presented upside down
	Rotating 270°: The images is presented rotating 270°





Display

OSD Display Day/Night Mode			
cor copies contraction			
Live Video	ML ACCURA	CONTRACTOR OF STATES	
Playback			
Basic Settings	and the second sec	A CONTRACTOR OF THE OWNER	
/deo	and the second se	and the second sec	
mage		and the second	
udio		the second second second second	
letwork		all and an all and a stag as a finger	
ate & Time		Biller Dudry B.,268 Disyrant Dissociation at	
Advanced Settings			
System	WDR	Off	↓ ↓
System	Exposure Region:	Full View	
Maintenance	Outdoor/Indoor Mode:	Outdoor	
	Smart IR:	On 🗸	
	IR Light sensor sensitivity:	MEDIUM	
	Exposure Mode:	Auto Mode	
	Power Line Frequency:	50HZ	
	Day/Night Mode:	[Auto Mode	
	Video Orientation:	Normal	

Figure 4-3-4 Display

Table 4-3-2Description of the buttons

Parameters	Function Introduction
Power Line Frequency	60HZ flicker for NTSC mode and 50HZ flicker for PAL mode
	There are several parameters such as Exposure Level, Maximum Exposure Time and
	IR-CUT Interval, etc, associated with this mode
	Night Mode: Shown in live view based on Night Mode settings
- /	Day Mode: Shown in live view based on Day Mode settings
Day/Night Mode	Auto Mode: Shown in live view based on environment, set the sensitivity for switching
	Day Mode to Night Mode, or Night Mode to Day Mode
	Customize: Shown in live view based on your own settings' time to start/end
	Night Mode
	Camera will adjust the intensity of the camera's infrared LEDs to compensate for the
Smart IR	distance of an object so that the infrared does not overexpose the object.
	wide dynamic range camera adjust automatically to bright and dark areas to adjust
WDR	for and eliminate overexposure and under exposure conditions. Enable or
	disable this option
IR Light Sensor Sensitivity	The current value of the IR light sensor
Outdoor/Indoor Mode	Select indoor or outdoor mode to meet your needs
	There are six options available, you can select one to meet your need
Video Orientation	Normal: Remain the image in normaldirection Flip
	Horizontal: Flip the image horizontally Flip
	vertical: Flip the image vertically







Day/Night Mode

onTel	OSD Display	Day/Night Mode						
Live Video Playback Basic Settings								
deo 1age					um Rate Jennys			
Jage					WINCION :1920v1000 Hen Codes (N.264 Year Connective II)			
etwork					Tent Conner Light 2			
ate & Time								
Advanced Settings		Day/Night Mode	Exposure Level	Day/Night Mode Maximum Exposure Time	IR-CUT Interval	IR-CUT	IR LED	Color Mode
System		Night Mode:	Exposure Level	1/25	10.	Off		B/W X
		Day Mode:	5	1/25	10 2	On 🗸	Off	Color V
Maintenance				Schedule Mode				
		Timer	Exposure Level	Maximum Exposure Time	IR-CUT Interval	IR-CUT	IR LED	Color Mode
		00 ; : 00 ; = 00 ; :	5 📈	1/25	10 👃	Off	Off 🗸	B/W 💭 🍃
				1/25	10 👾	Off	Off 👡	B/W
			3	1/25	10	Off	Off	B/W
				1/25	10 📈	Off	Off	B/W
			5	1/25	10	Off	Off	B/W

Figure 4-3-5 Day/Night Mode

Table 4-3-3	Description	of the buttons
-------------	-------------	----------------

Parameters	Function Introduction
Exposure Level	Level 0~10 are available to meet your need
Maximum Exposure Time	Set the maximum exposure time to 1/5~1/100000
IR-CUT Interval	The interval time of switching one mode to another
IR-CUT	Turn on or turn off IR-CUT
IR LED	Turn on or turn off IR-LED
Color Mode	Select B/W or Color mode under Day/Night mode
Schedule Mode	Here you can customize your special demands for different time, then the Day mode and Night mode will switch automatically according to your settings





4.3.3 Audio

This audio function allows you to hear the sound from the camera or transmit your sound to the camera side. A two-way communication is also possible to be achieved with this feature. Alarm can be triggered when the audio input is above a certain alarm level you set, and configured audio can be played when an alarm occurs.

Live Video	Enable Audio:	
Playback	Audio Input:	
Basic Settings	Denoise:	
Video	Encoding:	G711-ULaw ~
Image	Input Gain:	
Audio	Alarm Level:	
Network Date & Time		
Advanced Settings		
🗘 Advanced Settings		_

Figure 4-3-6 Audio

Table 4-3-4	Description of the buttons	
-------------	----------------------------	--

Parameters	Function Introduction
Enable Audio Check on the checkbox to enable audio feature	
	Denoise: Set it as On/Off. When you set the function on, the noise detected can be filtered
	Encoding: G711-ULaw, G711-ALaw and AAC LC are available
Audio Input	Sample Rate: There are 8KHz/16KHz two options
	Input Gain: Input audio gain level, 0-100
	Alarm Level: Alarm will be triggered if voice alarm is enabled and input gained
	volume is higher than the alarm level, 1-100





4.3.4 Network

TCP/IP

O Get IPv4 address automatically	
• Use fixed IPv4 address	
IP Address:	192.168.8.150 Test
IPv4 Subnet Mask:	255.255.255.0
IPv4 Default Gateway:	192.168.8.2
Preferred DNS Server:	8.8.8.8
IPv6 Mode:	Manual
IPv6 Address:	
IPv6 Prefix:	
IPv6 Default Gateway:	

Figure 4-3-7 TCP/IP

Table 4-3-10 Description of the buttons







is located IPv4 Default Router: The default router address Preferred DNS Server: The DNS Server translates the domain name to IP address	Parameters	Function Introduction	
Use fixed IP address network IPv4 Subnet Mask: It is used to identify the subnet where the network call is located IPv4 Default Router: The default router address Preferred DNS Server: The DNS Server translates the domain name to IP address	Get an IP address from the DHCP server automatically		
DHCPv6 IPv6 Address: IPv6 Address used to identify a network camera on the net IPv6 Prefix: Define the prefix length of IPv6 address IPv6 Default Router: The default router IPv6 address	Use fixed IP address	network IPv4 Subnet Mask: It is used to identify the subnet where the network camera is located IPv4 Default Router: The default router address Preferred DNS Server: The DNS Server translates the domain name to IP address IPv6 Mode: Choose different mode for IPv6: Manual/Route Advertisement/ DHCPv6 IPv6 Address: IPv6 Address used to identify a network camera on the network IPv6 Prefix: Define the prefix length of IPv6 address	

Table 4-3-5Description of the buttons

HTTP

Basic Settings >> Network			
TCP/IP HTTP RTSP			
	HTTP Enable:		
	HTTP Port:	80	
	HTTPS Enable:		
	HTTPS Port:	443	
	ONVIF RTSP Custom:		
	Sa	ive	

Figure 4-3-8 HTTP Settings







Table 4-3-6	Description of the buttons

Parameters	Function Introduction	
HTTP Enable	Start or stop using HTTP	
HTTP Port	Web GUI login port, the default is 80, the same with ONVIF port	
HTTPS Enable	Start or stop using HTTPS	
HTTPS Port	Web GUI login port via HTTPS, the default is 443	

HTTP URL are as below:

Stream	URL
Main Stream	http://username:password@IP:port/ipcam/mjpeg.cgi
Secondary Stream	http://username:password@IP:port/ipcam/mjpegcif.cgi
Tertiary Stream	http://username:password@IP:port/mjpegthird.cgi

Note:

1) You need to change the codec type of streams to MJPEG except the main stream of H.264 cameras whose models with "-A".

RTSP

TCP/IP	НТТР	RTSP			
			RTSP Port:	554	
			Playback Port:	555	
			Working Mode:	Normal ~	
			Multicast Group Address:	239.6.6.6	
			Qos Dscp:	0	
l					
				Save	







Parameters	Function Introduction
RTSP Port	The port of RTSP, the default is 554
Playback Port	The port of playback, the default is 555
Working Mode	There are Normal and compatible two options, if your camera's image mess up, please switch this option
Multicast Group Address	Support multicast function
QoS DSCP	The valid value range of the DSCP is 0-63.

Table 4-3-7Description of the buttons

RTSP URL are as below:

Stream	URL
Main Stream	rtsp://username:password@IP:port/main
Secondary Stream	rtsp://username:password@IP:port/sub

Note:

- 1) Get the format of RTSP URL by ⁽¹⁾ "on the right side of RTSPPort.
- 2) DSCP refers to the Differentiated Service Code Point; and the DSCP value is used in the IP header to indicate the priority of the data.
- 3) A reboot is required for the settings to take effect.
- 4) The tertiary stream is only equipped on camera whose model with "-A" or "-B".





4.3.5 Date&Time

Current System Time	
Date:	27/7/2015
Time:	23:32:16
Set the System Time	
Time Zone:	-8 United States - Pacific Time 🗸
Daylight Saving Time:	Disabled V
NTP Sync:	Interval: 1 day
O Synchronize with computer ti	me
Date:	28/7/2015
Time:	15:31:34
O NTP server	
O Manual	

Figure 4-3-10 Date&Time Settings

Current System Time

Current date&time of the system

Set the System Time

Table 4-3-8	Description	of the	buttons
-------------	-------------	--------	---------

Parameters	Function Introduction		
Time Zone	Choose a time zone for your location		
Daylight Saving time	Enable the daylight saving time		
NTP Sync	Regularly update your time according to the interval time		
Synchronize with computer time	Synchronize the time with your computer		
NTP server	Input the address of NTP server		
Manual	Set the system time manually		







4.4 Advanced Settings

4.4.1 Alarm

Motion Detection

Step1: Check the checkbox to enable the motion detection; Step2: Set motion region;

Motion Settings
RittAcc R 2000 Resolution :1920×1080 Video Codec :H.264 Current Connection :13
Select All Clear All (Please click the screen for setting!)
Sensitivity

Figure 4-4-1 Motion Region Settings

Table 4-4-1	Description of the buttons
-------------	----------------------------

Parameters	Function Introduction
Motion Detection	Check the checkbox to enable Motion Detection function
Select All	Click the button, the motion in the area will be detected
Clear All	Click the button, the area drawn before will be removed
Sensitivity	Sensitivity level, 1~10





Step3: Set motion detection schedule; Step4: Set alarm action;

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		Motion Detection Time Sc	hedule	
	Period1	Period2	Period3	
Sunday	00 \sim : 00 \sim 24 \sim : 00 \sim	$00 \lor$: $00 \lor$ $00 \lor$: $00 \lor$	$00 \sim$: $00 \sim$ $00 \sim$: $00 \sim$	Copy to Other Days
Monday	00 ~ : 00 ~ - 24 ~ : 00 ~	00 ~ : 00 ~ 00 ~ : 00 ~	$00 \checkmark : 00 \backsim \cdots 00 \lor : 00 \backsim $	Copy to Other Days
Tuesday	$00 \lor$: $00 \lor$ 24 \lor : $00 \lor$	00 \sim : 00 \sim 00 \sim : 00 \sim	$00 \lor$: $00 \lor$ $00 \lor$: $00 \lor$	Copy to Other Days
Wednesday	00 ~ : 00 ~ - 24 ~ : 00 ~	00 ~ : 00 ~ 00 ~ : 00 ~	$00 \checkmark : 00 \backsim \cdots 00 \lor : 00 \backsim$	Copy to Other Days
Thursday	00 ${\scriptstyle\checkmark}$: 00 ${\scriptstyle\checkmark}$ 24 ${\scriptstyle\checkmark}$: 00 ${\scriptstyle\lor}$	$00 {\scriptstyle \checkmark}$: $00 {\scriptstyle \backsim}$ $00 {\scriptstyle \backsim}$: $00 {\scriptstyle \lor}$	$00 \sim$: $00 \sim$ $00 \sim$: $00 \sim$	Copy to Other Days
Friday	$00 \lor : 00 \lor - 24 \lor : 00 \lor$	00 ~ : 00 ~ 00 ~ : 00 ~	$00 \checkmark : 00 \backsim - 00 \backsim : 00 \backsim$	Copy to Other Days
Saturday	00 \sim : 00 \sim 24 \sim : 00 \sim	00 \sim : 00 \sim 00 \sim : 00 \sim	$00 \lor : 00 \lor - 00 \lor : 00 \lor$	Copy to Other Days

Figure 4-4-2 Schedule Settings

Alarm Action	
Upload Via FTP:	File Format: AVI
Upload Via SMTP:	File Format: AVI
Save Into Storage:	File Format: AVI
Play Buzzer:	
Voice Alarm to SIP Phone:	
HTTP Notification:	

Figure 4-4-3 Alarm Action

Table 4-4-2	Description	of the buttons
-------------	-------------	----------------

Parameters	Function Introduction		
Upload Via FTP	Upload the recording files via FTP		
Upload Via SMTP	Upload the files via SMTP		
Save Into Storage	Save the alarm into storage after mounting a storage (SD card)		
Play Buzzer	If the camera equips with Buzzer, you can check the checkbox to enable the function.		
Voice Alarm to SIP Phone	Support to call the SIP phone after enable the SIP function.		
HTTP Notification	Support to pop up the alarm news to specified HTTP URL.		







NOTE:

1) The HTTP notification function is just one way for camera to send messages.

The following are the detail steps of setting for HTTP Notification in our cameras.

Step1: Enable Alarm, set Motion Region and detection Schedule;

Step2: Check the HTTP Notification as Alarm Action, and fill the fields. Then save the alarm setting;

Advanced Settings >> Alarm				
Alarm HTTP Event				
	HTTP Notification Setting			
	HTTP Notification Event	Motion Detection		
	User Name:	admin		
	User Password:	•••••		
	HTTP Notification Message:			
		Save		

HTTP User Name: admin (the user name of your camera) HTTP Password: xontel (the password of your camera)

Step5: Set alarm settings.

Alarm Setting	2	
Record Video Sections:	5 seconds v	
Figure 4-4-4 Ali	arm Settings	

Table 4-4-3 Description of the buttons

Parameters	Function Introduction
Record Video Sections	Two different periods are available(5, 10 sec)







Audio Alarm

Enable the Audio before using Audio Alarm function.

Audio Alarm (Please open the audio mic.)

Alarm Action	
Upload Via FTP:	□ File Format: AVI
Upload Via SMTP:	File Format: AVI
Save Into Storage:	File Format: AVI (Please insert or mount a storage.)
Play Buzzer:	
Voice Alarm to SIP Phone:	
HTTP Notification:	

Alarm Setting	
Record Video Sections:	5 seconds v

Figure 4-4-5 Alarm Settings







Other Alarm

Alarm Event	
Enable Alarm:	
Trigger Type:	Motion Detection Set Motion Region Schedule Settings
	Network Lost
	Audio Alarm (Please open the audio mic.)
	Tampering Alarm
	SIP Call Alarm
Trigger Duration:	30 seconds
Alarm Action	
Upload Via FTP:	File Format: AVI
Upload Via SMTP:	File Format: AVI
Save Into Storage:	(Please insert or mount a storage.)
Play Buzzer:	
Voice Alarm to SIP Phone:	
HTTP Notification:	
Alarm Setting	
Record Video Sections:	5 seconds

Figure 4-4-6 Other Alarm

Table 4-4-4 Description of the buttons

Parameters	Function Introduction
Alarm Event	Network Lost, Tampering and SIP call are available
	Check the checkbox to enable the alarm type you selected
	Upload via FTP: Upload the recording files via FTP
	Upload via SMTP: Upload the files via SMTP
	Save Into Storage: Save alarm recording files into SD Card
Alarm Action	Play Buzzer: If the camera equips with Buzzer, you can check the checkbox to enable the function
	Voice Alarm to SIP Phone: If the camera register to a PBX , you can enable the
	action after configuring the SIP extension for the camera
	Record Video Sections: Two different periods are available (5, 10 sec)
Alarm setting	
U	







4.4.2 Storage

Before you start:

To configure record settings, please make sure that you have the network storage device within the network or the SD card inserted in your camera.

You can check "Enable cyclic storage", then it will delete the files when the free disk space reach a certain value. Choose the storage mode according to your needs.

SD Card

Total Size:14.82G Free Size:501	1.56M Used Size:14.33G
	Format UnMount
Enable Recycle Storage:	
Delete 20 % When the free	e disk space at 10 M
	Save
Figure	e 4-4-7 SD Card

Table 4-4-5 Description of the buttons

Parameters	Function Introduction
Format	Format SD card, the files in SD card will be removed
Mount/UnMount	Mount/Dismount SD card
Enable Recycle storage	Enable/Disable Recycle storage
Delete	Enable Recycle storage, when the free disk space reach at a certain value, it will automatically delete the files at certain percentage according to your settings







Record Schedule

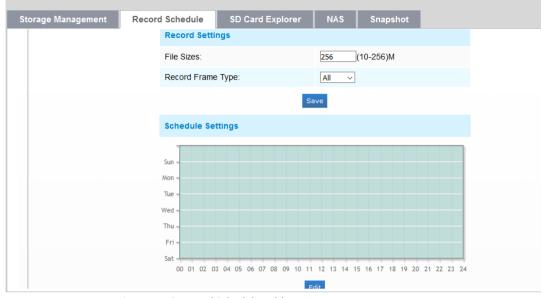


Figure 4-4-8 Record Schedule Table

4-4-6 Description of the buttons

Parameters	Function Introduction
	File Sizes: Set record file size, (10-256)M
Decord Cattings	Record Frame Type: All/Key
Record Settings	(All: Record all the frame
	Key: Only record I-frame)
Schedule Settings	Click the Edit button to edit record schedule

NAS

The network disk should be available within the network and properly configured to store the recorded files, etc.

NAS (Network-Attached Storage), connecting the storage devices to the existing network, provides data and files services.

Server Address:	192.168.8.76
File Path:	hare-arrow 2016-03-14
Mounting Type:	SMB/CIFS -
User Name:	admin
Password	
Enable Recycle Storage:	
Delete 20 % When the	free disk space at 500 M

Figure 4-4-9 NAS Settings







Table 4-4-7 Description of the buttons

Parameters	Function Introduction
Server Address	IP address of NAS server
File Path	Input the NAS file path, e.g. "\path".
Mounting Type	NFS and SMB/CIFS are available. And you can set the user name and password to guarantee the security if SMB/CIFS is selected

SD Card Explorer

Files will be seen on this page when they are configured to save into SD card.

You can set time schedule every day for recording videos and save video files to your desired location.

(Note: Files are visible once SD card is inserted. Don't insert or plug out SD card when power on.)

SD card video files are arranged by date. Each day files will be displayed under the corresponding date, from here you can copy and delete files etc. You can visit the files in SD card by ftp, for example, <u>ftp://username:password@192.168.5.190</u> (user name and password are the same as the camera account and the IP followed is the IP of your device).

orage Manageme	nt Record Schedule	SD Card Explo	orer NAS	Snapsh	ot	
Current Dir: /			Total Size:0M	Free Size:0M	Used Size:0M	Format Mount
Show 10 ~ entrie	2S	Go To Parent			Download Delete	File Search
	File Name	Time	Туре	Size	Action	Туре:
		Please insert SD	ard.			All Start Time: 2017-11-19 00:00:00 End Time: 2017-11-19 00:27:54 Search

Figure 4-4-10 SD Card Explorer







Snapshot

Storage Management	Record Schedule	SD Card Explorer	NAS	Snapshot	
	Timing S	napshot			
	Enable Ti	ming Snapshot	\square		
	Snapshot	Stream:	Priman	y Stream 🔍	
	Interval:		24	hour	~
	Save Into	Storage:			
	Upload Vi	a FTP:			
	Upload Vi	a SMTP:			
	Alarm Sr	apshot			
	Snapshot	Stream:	Priman	y Stream 🔍	
	Interval:		1	second	~
	Snapshot	:	1	~	
	ure 1-1-11 Spanshot Settin				

Figure 4-4-11 Snapshot Settings

Table 4-4-8 Description of the buttons

Parameters	Function Introduction
	Enable Timing Snapshot: Check the checkbox to enable the Timing Snapshot
	function Interval: Set the snapshots interval, input the number and choose the
	unit(millisecond, second, minute, hour, day)
	Save Into Storage: Save the snapshots into storage, and choose the file name to
	add time suffix or overwrite the base file name.
	Upload Via FTP: Upload the snapshots via FTP, and choose the file name to add
Snapshot Settings	time suffix or overwrite the base file name
Shapshot Settings	Upload Via SMTP: Upload the snapshots via SMTP
	Please note:
	If you choose to add time suffix, every snapshot picture will be saved, but if you
	choose to overwrite the base file name, only one latest picture will be saved.
	When you choose add overwrite the base file name to SD, it will create a file
	named "Snapshot" to place the snapshot while the NAS and FTP won't.







4.4.3 Security

User

Manage Privilege			
Allow Anonymous Viewin	g:		
Account Management			
User Name:			
Password:			
Confirm Password:			
Privilege:	Operator		~
	(You can only add 10 user	s)	
	Save		
User Name	Privilege	Edit	Delete
admin	Administrator	×	

Figure 4-4-12 User Settings

Table 4-4-9 Description of the buttons

Parameters	Function Introduction
Manage Privilege	Allow anonymous viewing: Check the checkbox to enable visit from whom doesn't have account of the device
Account Management	User Name: Input user name for creating an account User Password: Input password for the account Confirm User Password: Confirm the password Privilege: Set the privilege for the account
Administrator	An administrator can manage all configuration pages of the device, including change user password, add or delete users (the default user "admin" cannot be deleted)
Operator	An operator can manage all configuration pages except the User page
Viewer	A viewer can't change any settings







Access List

User	Access List			
		General settings		
		Maximum number of concurrent	streaming: 5 v	
		IP access list		
		Rule:	Single ~	
		IP address:		
			Add	Ş
		Enable access list filtering:		
		Filter type:	Allow Deny	

Figure 4-4-13 Access List

Table 4-4-10 Description of the buttons

Parameters	Function Introduction
General Settings	Maximum number of concurrent streaming: Select the maximum number of concurrent streaming. Options include No Limit, 1~5
IP access list	Rule: Single, Network and Range are available IP address: Input the address to get the access to the device
Enable access list filtering	Able to access or restrict access for some IP address
Filter type	Access or restrict access







Table 4-4-11 Description of the buttons

4.4.4 SIP

The Session Initiation Protocol (SIP) is a signaling communications protocol, widely used for controlling multimedia communication sessions such as voice and video calls over Internet Protocol(IP) networks. This page allows user to configure SIP related parameters. XonTel cameras can be configured as SIP endpoint to call out when alarm triggered; or allow permitted number to call in to check the video if the video IP phone is used. To use this function, the settings in SIP page must be configured properly. There are two ways to get video through SIP, one is to dial the IP address directly, the other is account registration mode, and the details are as follows:

Method 1: IP Direct mode

Dial on the camera's IP address directly through SIP phone, so you can see the video. (Note: SIP phone and the camera should in the same network segment).

Method2: Account registration mode

- 1) Before using the SIP, you need to register an account for the camera from the SIP server;
- 2) Register another user account for the SIP device from the same SIP server;
- 3) Call the camera User ID from the SIP device, you will get the video on the SIP device.

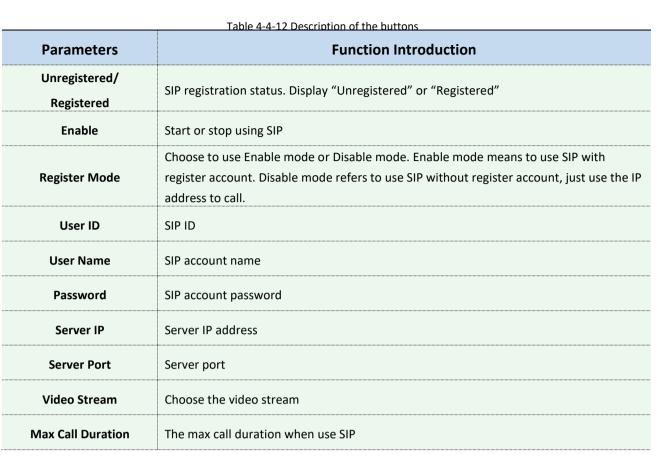
SIP Settings

R	legistered	
Enable:	\checkmark	
Register Mode:	Enable	
User ID:	616	
User Name:	sipclient	
Password:	•••••	\mathbf{k}
Server IP:	192.168.1.200	
Server Port:	5060	
Video Stream:	Secondary Stream 💊	
Enable Audio in SIP Call:		
Max Call Duration:	1800 s A settings of 0 disables the timeout.	

Figure 4-4-14 SIP Settings







Note:

- 1) SIP supports Directly IP call;
- 2) SIP only supports H.264 or MPEG4 Video Compression.

Alarm Phone List

Phone Type:	Phone Number
To Phone Number:	
Remark Name:	
Duration:	From 00 🗸 : 00 🗸 To 23 🗸 : 59 🗸









Parameters	Function Introduction
Phone Type	Phone Number(Call by phone number) or Direct IP Call(Check to accept peer to peer IP call).
To Phone Number/ IP Address	Call by phone number or IP address.
Remark Name	Display name.
Duration	The time schedule to use SIP.

White List

Phone Type:	Phone Number
Phone Number:	
	Add
Enable White List Number Filter:	
	Save

Figure 4-4-16 White List

Table 4-4-14 Description of the buttons

Parameters	Function Introduction
Phone Type	Phone Number(Call by phone number) & Direct IP Call
Phone Number/ IP Address	Including the phone number or IP address on the white list
Enable White List Number Filter	When enabled, only the designated phone number or IP address can visit





4.4.5 Logs

The logs contain the information about the time and IP that has accessed the camera through web.

Show 50 v en	itries						Log Searc
Time	Main Type	Sub Type	Param	User	IP	Detail	Main Type:
15:32:33							All Types
2017-10-19 15:32:33	Operation	RTSP Session Start	ы	1	192.168.1.86	start one session.	Sub Type:
2017-10-19 15:32:23	Operation	RTSP Session Stop		-	192.168.1.86	stop one session.	All Types Start Time:
2017-10-19 15:32:23	Operation	RTSP Session Start		100	192.168.1.86	start one session.	2017-11-19 00:00
2017-10-19 15:31:08	Operation	Video Param Set Remote	÷	-		change main codec resolution(2>5)	End Time: 2017-11-19 00:56
2017-10-19 15:30:57	Operation	Login Remote	-	admin	192.168.1.64	-	<u>Search</u>
2017-07-11 15:00:45	Information	System Restart	-	-	-		Ð
2017-07-11 14:39:11	Information	System Restart		121	-	-	
2017-07-11 14:37:35	Information	System Restart	2	-	-	2	
2017-07-11 14:35:59	Information	System Restart	5				

Figure 4-4-17 Logs

Table 4-4-15	Description of the buttons
	Description of the battons

Parameters	Function Introduction
Main Type	There are five main log types: All Type, Event, Operation, Information, Exception, Event
Sub Type	On the premise of main type has been selected, select the sub type to narrow the range of logs
Start Time	The time log starts
End Time	The time log ends
Go	Input the number of logs' page







4.5 System

All information about the hardware and software of the camera can be checked on this page.

System	
Device Name:	IPCAM
Product Model:	XonTel S20P
Hardware Version:	V1.4
Software Version:	20.5.17.110
Kernel Version:	2.2.0.7
MAC Address:	D4:67:61:9A:C6:2D
System Up Time:	130 days 9 hours 42 minutes
v	
	Save

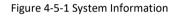


Table 4-5-1 Description of the

Parameters	Function Introduction	
Device Name	The device name can be customized. It will be seen in file names of video files	
Product Model	The product model of the camera	
Hardware Version	The hardware version of the camera	
Software Version	The software version of the camera can be upgraded	
Kernel Version	The kernel version	
MAC Address	Media Access Control address	
System Uptime	The elapsed time since the last restarted of the device	







4.6 Maintenance

The software can be upgraded by the following steps:

Step1: Browse and select the upgrading file;

Step2: Click the "upgrade" button after it prompts upload file successfully. After the system reboots successfully, the update is done.

Note:

1) Do not disconnect the power of the device during the update. The device will be restarted to complete the upgrading.



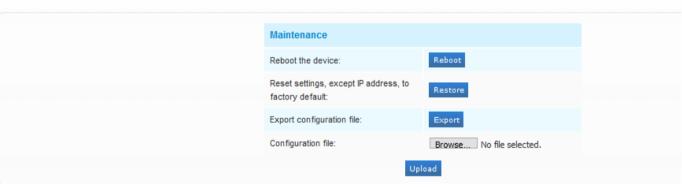


Figure 4-6-1 Maintenance

Table 4-6-1	Description of the buttons
-------------	----------------------------

Parameters	Function Introduction		
	Hardware Version: The hardware version of the camera Software		
Sustana Un grada	Version: The software version of the camera Kernel Version: The		
System Upgrade	kernel version		
	Firmware File: Select the firmware used to upgrade		
	Reboot the device: Click "Reboot" button to restart the device immediately		
	Reset settings: Click "Restore" button to reset the camera to factory default settings		
	Export Configuration File: Click this button to export the configuration file		
Maintenance	Configuration File: Click this button to import the old configuration file then click "Upload"		





Chapter V Services

XonTel provides customers with timely and comprehensive technical support services. End-users can contact your local dealer to obtain technical support. Distributors and resellers can contact directly with XonTel for technical support.

