# (Product Guide)

Version 4.12(Rev.E)

September 30, 2011



#### **Class A Digital Device (industrial & commercial environment)**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to CE and FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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#### **About This Document**

This document is prepared for users of FW1177 supplied by Seyeon Tech Co., Ltd. It is assumed that the users are familiar with Microsoft Windows operating systems and Web browsers such as Internet Explorer. It is also assumed that the users are well aware of how to install and use the network equipment such as LAN, Hub, router, and having basic knowledge of network terminologies. If you have any questions regarding network installations, please contact your network equipment vendor or network administrator or Internet service providers.

For updated contents, detailed features and other applications from Seyeon Tech, please refer to the user's manual in CD-ROM provided with the product you purchased, or visit Seyeon Tech's Internet homepage at <a href="http://www.flexwatch.com/">http://www.flexwatch.com/</a>.

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#### **Technical Support**

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## 1. Product Overview

#### 1.1. FW1177

FlexWATCH® 1177 is a stand-alone device transmitting video from built-in PTZ camera over IP(Internet Protocol) network. There is one type of FW1177 model: DE.

It can transmit up to 30fps@D1 over the existing network. You can monitor video of FW1177 through web browser(ie. MS Internet Explorer), if FW1177 is connected to network. FW1177 supports video compression both Motion-JPEG and H.264 simultaneously so that user can choose appropriate video compression for the purpose. For both Motion-JPEG and H.264, FW1177 provides 6 levels of video quality.



Picture 1 : FW1177-DE

#### 1.2. Key Features

- Standalone device built-in web server
- 10M/100M Auto Sensing Ethernet
- Configuring and controlling through Web browser
- Max 30 fps transmission speed on TCP/IP network
- Effective Bandwidth & Bit-rate Control (VBR/CBR) by H.264
- Supports Dual Stream (Motion JPEG & H.264)
- 1ch Voice Encoding / 1ch Voice Decoding
- Support Dynamic IP users by IPCCTVDNS server
- Support PTZ (Pan/Tilt/Zoom) function
- Support Sensor Input, Digital Output
- Support Transparent
- Built-in 2 way Audio transmission (1ch A-in, 1 A-out)
- Encryption function by user authentication
- Image transmission function via FTP, Email

### 1.3. Technical Specification

	FW1177-DE
Hardware	32bit Embedded CPU NAND Flash 128Mbytes / DDR2: 128Mbytes Linux version 2.6.xx operating system Battery backed up real-time clock
Image sensor	1/4"Sony 410K Super HAD CCD Resolution: 520 TV Lines [Detail] S/N ratio: 50dB or more (AGC OFF) Electronic shutter speed : 1/60 ~ 1/100,000 sec (NTSC) 1/50 ~ 1/100,000 sec (PAL) White Balance: ATW (1,800K~10,500K),AWC,MWB
Lens	IRIS control : Auto & Manual F1.4-30, f=3.3 mm wide to 99.0 mm tele Angle of view : 2.3~62.0 horizontal Shutter speed : Auto or 1/120~1/60,000 sec
Minimum illumination	Color : 0.4 Lux (F1.6) B*W : 0.1 Lux (F1.6) DSS( Digital Slow Shutter) : 0.0007 Lux (F1.6)
Video related special functions	DIS (Digital Image Stabilizer) - protection from variation AGC (Auto Gain Control) DSS (Digital Slow Shutter) BLC (Back Light Compensation) ICR (Day & Night) SSNR (Noise Reduction at Low Light)
Video compression	Motion JPEG H.264
Resolution	720x480, 704x480, 352x240, 176x112
Frame rate (each channel)	Motion JPEG : Up to 30 fps @ 4CIF (Other Stream at QCIF) H.264 : Up to 30 fps @ 4CIF (Other Stream at QCIF)
Video Streaming	Motion JPEG and H.264 Dual Streaming (Simultaneously) Controllable frame rate and bandwidth
Image setting	Compression levels: 6 (Motion-JPEG, H.264) Color: color, black & white
Pan/Tilt /Zoom	Zoom : x33 (Optional: x27, x37), digital x12 Max Speed : Pan 360%sec, Tilt 200%sec@preset mode Rotation Angle : Pan 360%endless), Tilt: 92° (auto f lip) 32 Preset Positions Swing, Group, tour, 16 privacy zone
Audio	8 bit PCM (G.711-u-low), Sampling rates 8KHz, Mono Audio 1ch in & 1ch ou
LAN interface	10/100BaseT Ethernet auto sensing
Alarm I/O Interface	1 Photo-coupled inputs and 1 Relay output
Alarm I/O Interface	1 Photo-coupled inputs and 1 Relay output

Audio Input(MIC)	Input Impedence : 4 KOhm Pantom Power : 3.3 Volt Gain : 20 dB Jack : 3.5mm Mono
Audio Output(SPK)	Output Impedence : 160 Ohm Output Power : 50 mWatt Output Voltage : Peek To Peek 1 Volte Jack : 3.5mm Stereo
Power Over Ethernet	None
Serial Interface	Two serial ports for console, serial input/output device, PTZ COM Port is RS-232, <i>Max Baudrate : 115200 bit/</i> s
Security features	Multi user level protection for amera access PTZ, Alarm I/O
Advanced Service	Up to 5.6M memory for Pre/Post alarm buffer E-Mail, FTP, IP notification, Alarm Notification to e-mail CGI Call by event or schedule
Built-in Motion detections	Accuracy : 12x12=144 blocks Motion Sensitivity : -100 ~ 100 : 100 is hypersensitive
PTZ & UART Control Support	Built-in PTZ device is controled through AUX UART control X10 device Dial in/out via PSTN or GSM modem
Management	Configurable by serial, web or telnet Remote system update via telnet, FTP OR web browser
Developer support	Provides HTTP CGI API ActiveX control development kit
PWR Supply	Transformer Input : 100~240VAC, 1A Output : AC 24 Volt, 1.5A
PWR Consumption	AC 24Volt 1.0A
Operating Environment	Temperature : 32°~ 122年 (0°~ 50℃) Humidity : 20 ~ 80% RH(non-condensing)
Miscellaneous	Freely downloadable NDVR Software Work with FW-Manager( NDVR S/W) Dynamic IP support through IPCCTVDNS
Simultaneous users	Live-cast for up to 16 clients
Installation, management and maintenance	Installation CD and web-based configuration Firmware upgrades over HTTP or FTP, firmware available at www.flexwatch.com
Video access from Web browser	Video access from Web browser
Minimum Web browsing requirements	Pentium 4, 2 GHz, 2GB(RAM) or higher Video Card: 256MB RAM, 1024x768 resolution or higher 100Mbps Network Adaptor or faster Windows XP Pro or later Internet Explorer 6.x or later

System integration support	Powerful API for software integration available at http://www.flexwatch.com, including Simple Viewer API, FlexWATCH Control SDK, event trigger data in video stream, embedded scripting and access to serial port peripherals over HTTP/TCP User can be installed user program daemon for event notification or sending image Embedded operating system: Linux 2.6
Supported protocols	HTTP, RTP/RTSP, TCP/IP, FTP, Telnet, RARP, PPPoE, PAP, CHAP, DHCP, SMTP client(e- mail), NTP
Applications (not included)	FlexWATCH Manager 16/32/128/256
Included Accessories	Power supply 24 V AC / Power cord CD (User's Manual, installation wizard and etc)
Approvals	MIC FCC : Class A CE : Class A RoHS IP66
Dimensions (HxWxD) and weight (1lbs = 454g)	216.8Ø x 289.2(H) (in mm) About 5.5kg without power supply

\* All specifications are subject to change without prior notice.



#### 1.4. FW1177 Packing List

FW1177-DE (Bracket Included)	1ea	
Power Supply Unit (24V AC Power Cord)	1ea	
CD (User's Manual, installation wizard and etc)	1ea	

Table 2 : FW1177 Packing List

Note: Please check all the listed items are included in your package. For any missing items, please contact your local distributor.

# 2. Hardware Description

#### 2.1. FW1177-DE



Picture 2 : FW1177-DE

	Name	Description	
А	PTZ Camera	Camera supporting PTZ(Pan/Tilt/Zoom)	
В	BODY Frame	Body Frame for Camera	
С	Bracket	Wall Mount Bracket	

Table 3 : FW1177-DE

## 3. FW1177 Installation and Basic Setup

#### 3.1. Before Installation

- Read carefully User's Manual.
- Check User's Network (IP Address, Network Mask and default gateway)
- Secure IP address for FW1177.

#### 3.2. Factory Default Settings

The following table shows the factory default condition. Please refer to this when you need to change the values on admin menu.

	Factory Default	
Admin ID	root	
Admin password	root	
IP address	10.20.30.40	
Network mask	255.255.255.0	
Gateway	10.20.30.1	
Wireless LAN (Option)	Disabled	
Table 5 - Fastam, Default		

Table 5 : Factory Default

Note: Factory default Admin ID and Password are all lower case letters. You can change the password with Capital letters.

#### 3.3. Installing FW1177

Following steps are the physical installation process for FW1177.

- 1. Fix the FW1177 in place
- 2. Connect the FW1177 to the Internet cable through the LAN port.
- 3. Connect the power supply of FW1177.

After that, you need to follow the steps below.

- Network Configuration: Refer to "IP Installer User's Manual"
- Camera Configuration: Refer to "FlexWATCH Admin Menu User's Manual"
- Service Configuration: Refer to "FlexWATCH Admin Menu User's Manual"