

How to Upgrade FlexWATCH Firmware

● Before Upgrade,

You should prepare

- Latest firmware which is kernel binary file and named '**kernel.bin**'
- Serial Cable (Blue Cable included in the FlexWATCH Package, or RS232C Cross Cable)
- Hyperterminal Application (Included in Windows, if you don't have it, Add it using Windows Install CD-ROM)
- Ftp tool (application like as ws-ftp, or cute-ftp etc).

● To Download firmware (Kernel binary file)

- Access the web site <http://www.FlexWATCH.com>, and download kernel. File
- or Request your dealer the recent kernel binary. or
- or Request the recent kernel binary file to Seyeon Tech Co., Ltd.(sytech@seyeon.co.kr) via e-mail , fax, etc.

*** After Receiving the appropriate keener binary file which is for the model you have, rename the binary file (ex. K300V15.bin) as **kernel.bin** if it is named in different way(lowercase character only)**

● Hyperterminal Configuration.

- 38400 bps, 8 bit, None Stop bit, 1 Parity.
- more detail, Please refer to manual

● Upgrade Procedure.

WARNING !!!

- *During upgrading FlexWATCH, do not access FlexWATCH to see pictures. It may result I unpredictable behavior.*

WARNING !!!

- *If you have more earlier version than V.1.3 (2K1013), then you may have some problem during (or after) the upgrade, please contact your dealer or Seyeon Tech before upgrade.*
- *Only system that has version v.1.4 or above can be upgraded from remote site using telnet.*

NOTICE !!!.

- *During the upgarding, you may encounter some difference from this document. For example, you might see the different prompt or log message ,which is dependent on your current version . However, it doesn't have major difference, just follow the procedures step by step.*

1) Connect Serial Cable between FlexWATCH Serial port and PC COM Port, and Execute Hyperterminal ..

2) When you turn on the system, and meet the prompt, and then type "ls" on the console!(hyperterminal window)
You will see files described as below.

```
$>ls
BITMAP.SYS      FLIST.SYS      flexwatch
```

- 3) To make an enough space for transferring a new kernel file in the FlexWATCH file system , you should erase the directory “flexwatch” which has the current html files in the system. it has another reason for prohibiting the access during the upgrade.

```
$> rm -r flexwatch
```

In some situation, several files wouldn't be erased because those are opened and display error message, then please retry "rm -r flexwatch".

- 4) Make sure that the directory “flexwatch” is erased ,by using "ls" command again.

```
$> ls
BITMAP.SYS      FLIST.SYS
```

- 5) Upload the new kernel file(kernel.bin) to FlexWATCH using FTP
If ftp is not connected, then please check the network configuration, physical line and HUB, or network setting of PC etc.

- If you have the application like as WS_FTP Pro , cute ftp, etc.
just move the new kernel file to the system
- If you do not have that kind of utility, just type ftp command on Dos Command Window and follow the procedure described as below
ex. C:\> ftp 10.10.10.10
and type login id as " root", and proper password (default password is also "root")

```
ftp> binary
ftp> hash
ftp> put kernel.bin
ftp> bye
```

- check if there is error occurred during the transfer
- after completing transfer, then if you type "ls -al" command in our system, and check the uploaded file size is same as original file size that you received.

```
$> ls -al
-r--r--r--      1 root          512 Jul 21 2000 17:25 BITMAP.SYS
-r--r--r--      1 root        38912 Jul 21 2000 17:25 FLIST.SYS
-rwxrwxrwx      1 root       961276 Jul 21 2000 17:25 kernel.bin
$
* file size is dependent on the version of FlexWATCH
```

* Notice !

If you use WS_FTP or some other FTP program which leaves LOG FILE (such as WS_FTP.log) after uploading the file to the system, You must delete that FTP Log file from the folder.

- 6) Type the command "chgkernel". Then just wait for completing the command. (it takes about 1 minute)

WARNING !!! :

If you have version 1.4 ,
then unplug the LAN cable from FlexWATCH before command "chgkernel".

WARNING !!! :

**Don't rebooting or Power-off during the this process ,
It will crash FlexWATCH system.**

\$> chgkernel

[] Do you want to update above kernel block ? (y/n)y

Kernel block is being Erased.....!

#####

Kernel block is being Updated.....!

- 7) Just wait for completing the update, and then the FlexWATCH will be rebooted automatically and the new system software will be working on it. (you can find out new Version No.)

NOTICE !!! : If you are waiting more than several minutes because system is not rebooted automatically, or system display some erroneous message, please contact your dealer or seyeon tech.

System will be rebooting.

FE Code fffffff

System Initialize...

Reinitialize ...

FLEXWATCH 300 Ver 1.3 (BUILD:2K1013) , S/N : 2000B0000

\$

NOTICE !!!.

Next Steps are not needed for Kernel version 1.5 or above.

Version 1.5 restore the previous configuration data and convert it appropriate format for version 1.5 so, there is nothing for user to do.

- 8) Now you have new version of FlexWATCH, and then get into configuration mode (type "config" and enter key), and type "@" ("@" is hidden command , not seen in the System Config menu) , then the system configuration will be initialized as a default.

\$ config

----- System Configuration Setup Menu -----

GENERAL CONFIGURATION

[v] Video mode setup	[n] lan setup
[t] date & Time setup	[p] Password setup
[z] ptZ device setup	[d] Di/do mode setup

----- ADVANCED CONFIGURATION

[E] Encryption setup	[I] Ip filtering setup
[V] Video delay setup	[U] dial-Up setup
[D] Dns setup	[W] Wan setup
[F] Ftp uploading setup	[M] e-Mail sending setup
[P] server Port setup	[A] Aoip setup
[C] dl-cgi service control	[@] Set Factory Default Config

[s] Save configuration & quit	[q] Quit without saving
-------------------------------	-------------------------

[] select menu (case sensitive) =@

Default Setting is Written to NVRAM

- 9) After typing "@", you have to set the configuration again for your environment like that IP address , password , time etc. please refer to manual to set the configuration.

System Configuration Setup Menu

GENERAL CONFIGURATION

[v] Video mode setup	[n] lan setup
[t] date & Time setup	[p] Password setup
[z] ptZ device setup	[d] Di/do mode setup

ADVANCED CONFIGURATION

[E] Encryption setup	[I] Ip filtering setup
[V] Video delay setup	[U] dial-Up setup
[D] Dns setup	[W] Wan setup
[F] Ftp uploading setup	[M] e-Mail sending setup
[P] server Port setup	[A] Aoip setup
[C] dl-cgi service control	[@] Set Factory Default Config

[s] Save configuration & quit	[q] Quit without saving
-------------------------------	-------------------------

[] select = n

10) To Take Effect your new configuration, you should write configuration

System Configuration Setup Menu

GENERAL CONFIGURATION

[v] Video mode setup	[n] lan setup
[t] date & Time setup	[p] Password setup
[z] ptZ device setup	[d] Di/do mode setup

ADVANCED CONFIGURATION

[E] Encryption setup	[I] Ip filtering setup
[V] Video delay setup	[U] dial-Up setup
[D] Dns setup	[W] Wan setup
[F] Ftp uploading setup	[M] e-Mail sending setup
[P] server Port setup	[A] Aoip setup
[C] dl-cgi service control	[@] Set Factory Default Config

[s] Save configuration & quit	[q] Quit without saving
-------------------------------	-------------------------

[] select = w

New Setting is Written to NVRAM

11) Reboot the FlexWATCH by type "reset" .

\$ reset

**Kernel : Kernel doesn't mean the original meaning used in OS, or computer science. FlexWATCH's Kernel means Execution Code including OS kernel, system s/w Drivers ,daemon s/w and applications etc. This terminology is just used to distinguish execution code from Web Page and Web Application code included in system.*