Turbo HD Series DVR v3.1.2
USA GUI Firmware Release Notes

Turbo HD Series DVR Firmware Information:
 Firmware Version: v3.1.2 Build150130

Turbo HD Series DVR Model:
 DS-7204HGHI-SH; DS-7208HGHI-SH; DS-7216HGHI-SH;
 DS-7308HQHI-SH; DS-7316HQHI-SH

Compatible IP Camera Information:

IP Camera Model	IP Camera Firmware
Raptor DS-2CD2xxx Series	V5.2.0_140721
Raptor DS-2CD4xxx Series	V5.2.0_140721
DS-2CD64xx Series	V5.2.0_140721
DS-2CD7xx/72xx/8xx/82xx Series	V5.2.0_140721

Turbo HD Series DVR v3.1.2 Firmware Updates:

1. Support VCA function, such as intrusion detection and line crossing;
2. Support smart search during playback, smart playback supports intrusion detection and line crossing;
3. Support IPC connection via ONVIF protocol (73 series only);
4. Support alarm over cable function (will be supported by future TVI camera with alarm I/O);
5. Support preview and playback IPC channels when DVR are connected by Ezviz (including encryption stream);
6. Support single-window and multi-window switch for Zero-channel by double clicking in live view interface;
7. Support analog and IPC hybrid for 73 series, support one more IPC channel connected if one analog channel is disabled;
8. Support single-window and multi-window switch for Zero-channel by double clicking in live view interface;
9. Support displaying all the channels (including analog & IPC) in one screen by increasing the division window amounts;
10. Add watermark information in RTP stream;
11. User can configure VGA and HDMI's resolution in CVBS output and web GUI.

Turbo HD Series DVR v3.0.2 USA GUI Firmware Release Notes

Turbo HD Series DVR Firmware Information:

Firmware Version: v3.0.2 Build141201, Encoding Version: v5.0 Build140813

Turbo HD Series DVR Model:

DS-7204HGHI-SH; DS-7208HGHI-SH; DS-7216HGHI-SH;

DS-7308HQHI-SH; DS-7316HQHI-SH

Turbo HD Series DVR v3.0.1 Firmware Updates:

Fix RTSP buffer overflow vulnerable issue.

Turbo HD Series DVR v3.0.1 USA GUI Firmware Release Notes

Turbo HD Series DVR Firmware Information:

Firmware Version: v3.0.1 Build140924, Encoding Version: v5.0 Build140813

Turbo HD Series DVR Model:

DS-7204HGHI-SH; DS-7208HGHI-SH; DS-7216HGHI-SH;

DS-7308HQHI-SH; DS-7316HQHI-SH

Compatible IP Camera Information:

IP Camera Model	IP Camera Firmware
Raptor DS-2CD2xxx Series	V5.2.0_140721
Raptor DS-2CD4xxx Series	V5.2.0_140721
DS-2CD7xx/72xx/8xx/82xx Series	V5.1.0_131202

Turbo HD Series DVR v3.0.1 Firmware Updates:

1. Support instantly refreshing network parameters after DHCP successfully launches. DHCP is disabled by default.
2. Add Smart Play in playback menu.
3. Add Single Frame playback in playback menu.
4. Support configure email time interval. Range is 1min, 2min, 5min, and 10min. Disabled by default.
5. Support user MAC and IP address bonding function. Mismatched MAC and IP address will reject user's login attempt.
6. Support mouse sensitivity configuration.
7. Support Auto DST option configuration, enabled and USA time zone by default.
8. Modified live-view screen lock time the same as screen saver time.
9. Support high-speed playback, supporting 16x, 32x, 64x, 128x, 256x, 512x. Multi-channel and reverse playback do not support high speed.
10. Add GetURL in DDNS menu. After registering successful in DDNS server, click on GetURL to get the URL.
11. RTSP port is 10554 by default.
12. Local default output resolution is modified as 1280*1024.
13. Support adding and deleting channels dynamically during playback and playback pause, but main channel cannot be replaced.
14. Playback progress bar can be zoomed in and out by scroll wheel of mouse.
15. Notify admin user to modify password, when user uses default password 12345 to log in, and proceed to password modify menu.
16. Add Password Key Export button in user management menu. We can use Password Key to reset admin password to default.
17. Add password complexity notification.

18. Display channel's real name plus Dx (x here is the channel number).
19. Add Playback button in right-click menu, click on the button to enter the small-screen playback menu directly.
20. Display remaining recording time in record parameter menu. Automatically refresh this time when record parameters are changed.
21. Support backup tag-corresponding record files.
22. Support HDMI output resolution auto-adjust when device launches.
23. Support alarm when user login in with incorrect password, mismatched MAC or IP address.
24. Modified record schedule types.
25. Remove PPPoE function.
26. User can choose whether to merge export files. Single file cannot exceed 2G.
27. Add menu output menu in web GUI, which can configure the device's output resolution and main output interface.
28. The maximum frame rate is modified as Full Frame in both local and web GUI.
29. Add one button to open and close all channels' live view in web GUI.
30. Display IPC version information in web GUI.
31. Compatible with IE 11, Chrome, Firefox and Safari.
32. Remove language option box in web GUI.
33. Remove Manual option in alarm output time-delay configuration. Do not support manually trigger alarm output.
34. Support telnet, disabled by default.
35. Modified Quick Export mechanism, now export record files more precisely.
36. Support Hikvision EZVIZ cloud access, disabled by default. DHCP is disabled by default at the same time.
37. Add eSATA auto-backup function.<only on DS-73XXHQHI series>
38. Fix a bug that DDNS fails, when DDNS has been registered successfully and then modify URL.