Raptor DS-2CD2xxx Firmware v5.2.0_140721 Release Note

1. **Firmware Version**
   Firmware Version: v5.2.0_140721
   Compatible Camera Model:
   DS-2CD2012-I, DS-2CD2032-I, DS-2CD2112-I, DS-2CD2132-I, DS-2CD2212-I3/I5, DS-2CD2232-I3/I5, DS-2CD2312-I, DS-2CD2332-I, DS-2CD2412F-I(W), DS-2CD2432F-I(W), DS-2CD2512F-I(S)(W), DS-2CD2532F-I(S)(W), DS-2CD2612F-I(S), DS-2CD2632F-I(S), DS-2CD2712F-I(S), DS-2CD2732F-I(S)
   DS-2CD2112F-I(W)(S), DS-2CD2132F-I(W)(S), DS-2CD2T12-I3(I5), DS-2CD2T32-I3(I5)

2. **Firmware Update compared with v5.1.2_140116**
   1. Resolved the bug that camera shutter speed is changed into high speed and image becomes dark at night even IR is on when live view is switched between main stream and sub stream.
   2. Add NTP port setting
   3. OSD and character overlay can be setup with different color
   4. Support main stream or sub stream camera local recording
   5. Add NAS server test function
   6. Add email server test function
   7. Add FTP server test function
   8. Add IP confliction test function
   9. Add NTP server test function
   10. Add FTP snapshot saving path setting
   11. Support G.722 audio encoding
   12. Optimize MJPEG sub stream command, no need inputting username and password after input URL. URL format is "http://ip:port/Streaming/channels/1/preview?auth=xxxxxxx". Here xxxxxxx is base64 encrypted verification.
   13. Improve OnVIF protocol
   14. Change "Video" instead of "Video&Audio" as default stream type
   15. Improve firmware upgrade mechanism
   16. Support video analytic search
   17. Support smart config
   18. Support MJPEG sub stream push function
   19. Delete QR code scan feature
   20. Add video analytic features: Traversing Virtual Plane Detection (1 virtual plane) and Intrusion Detection (1 area).
   21. Add ROI feature (1 area)