



**Firmware Version:** V1.16.01  
**Prom Code Version:**  
**Published Date:** 2019/06/17

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## Revision History and System Requirement:

Firmware Version	Date	Model	Hardware Version
V1.16.01	2019/06/17	DCS-5020L	A1
V1.15.12	2018/07/16	DCS-5020L	A1
V1.14.06	2016/07/29	DCS-5020L	A1
V1.13.05	2015/11/18	DCS-5020L	A1
V1.12.03	2015/9/9	DCS-5020L	A1
V1.11.08	2015/9/2	DCS-5020L	A1
V1.10.02	2015/4/01	DCS-5020L	A1
V1.06.01	2015/2/06	DCS-5020L	A1
V1.05_b8	2015/1/29	DCS-5020L	A1
V1.04_b5	2014/10/3	DCS-5020L	A1
V1.03_b8	2014/3/12	DCS-5020L	A1
V1.02_b5	2013/9/25	DCS-5020L	A1
V1.01_b2	2013/5/28	DCS-5020L	A1

## Upgrading Instructions:

Follow the steps below to upgrade the firmware:

1. Download the latest firmware file from the D-Link website. The file is in .bin file format.
2. Log-in camera web UI and enter setup/Maintenance/Firmware upgrade
3. Click Browse... and specify the firmware file.
3. Click Upgrade. The camera starts to upgrade and will reboot automatically when the upgrade completes.

## New Features:

Firmware Version	New Features
V1.16.01	<ol style="list-style-type: none"> <li>1. Upgrade mydlink agent to v2.2.0-b63</li> <li>2. Change the default system time to 2019/01/01.</li> <li>3. Change the open source to GPLv2.</li> </ol>
V1.15.12	<ol style="list-style-type: none"> <li>1. Upgrade mydlink agent to 2.2.0-b32n</li> <li>2. Update ActiveX Plugin to v1.0.1.15</li> <li>3. Re-sign the ActiveX plugin with the new certificate</li> <li>4. Re-sign the Java applet with the new certificate</li> <li>5. Re-sign the macOS plugin with the new certificate</li> <li>6. Change the default system time to 2018-01-01</li> <li>7. Support digest authentication for Web UI (Cannot support basic authentication for Web UI)</li> <li>8. Upgrade MatrixSSL to v3.9.3 that resolve the vulnerabilities in MatrixSSL</li> <li>9. Add XSS protection mechanism for CGI command</li> </ol>
V1.14.06	<ol style="list-style-type: none"> <li>1. Upgrade mydlink agent to 2.1.0-b01.</li> <li>2. Change the HTTPs self-signed certificate to SHA2 algorithms.</li> <li>3. Support Mydlink UID mechanism (mdb get dev_uid)</li> <li>4. Change to support page hyperlink of Firmware Upgrade web-UI to <a href="http://www.dlink.com">www.dlink.com</a>.</li> <li>5. Updated OpenSSL to v1.0.1t.</li> <li>6. Updated mDNSResponder to 625.41.2.</li> <li>7. Change the default system time to 2016-01-01</li> <li>8. Update the years in the copyright statement for IP Camera's web-UI to 2016.</li> <li>9. Add authentication to CGI /config/stream_info.cgi.</li> <li>10. Offer the password validation on console port. (Console's Password is synchronized with the admin's password)</li> </ol>
V1.12.03	<ol style="list-style-type: none"> <li>1. Update the mydlink agent to v2.0.20-b10.</li> <li>2. Remove the Direct Mode function.</li> <li>3. Upgrade OpenSSL library to 1.0.1f.</li> </ol>
V1.12.03	<ol style="list-style-type: none"> <li>1. Update mydlink agent to 2.0.19-b73 to fix the issue of unstable remote connection</li> </ol>

V1.11.08	<ol style="list-style-type: none"> <li>1. Update mydlink agent to 2.0.19-b52</li> <li>2. Add the denoise mechanism to reduce the background noise</li> <li>3. Add the login check mechanism to solve Brute Force Attack issue</li> <li>4. Add Hardware Version item on the Status page of the camera's web-GUI.</li> <li>5. Remove the reboot function at reset button. (For the previous firmware, you can press and hold the reset button for less than 3 seconds to reboot the device)</li> </ol>
V1.10.02	<ol style="list-style-type: none"> <li>1. New mydlink agent 2.0.19-b07</li> <li>2. Add direct mode (v0.5) support</li> </ol>
V1.06.01	<ol style="list-style-type: none"> <li>1. New mydlink agent 2.0.18-b66</li> </ol>
V1.05_b8	<ol style="list-style-type: none"> <li>1. New mydlink agent 2.0.18-b62</li> <li>2. Remove SSL, change to support TLS.</li> </ol>
V1.04_b5	<ol style="list-style-type: none"> <li>1. Mydlink agent updated to v2.0.18-b13</li> <li>2. Changed DynDNS items in DDNS to reflect new DynDNS policies.</li> <li>3. Adjustments to comply with EN300.328 1.8.1 wireless regulations</li> <li>4. Allows name change display in OSD</li> <li>5. Improved NIPCA support for the following commands <ul style="list-style-type: none"> <li>• /config/notify_stream.cgi and /users/notify_stream.cgi.</li> <li>• /config/portal_info.cgi.</li> <li>• /common/info.cgi for hw_version parameter.</li> </ul> </li> <li>6. Improved handling of symbols in /sitesurvey.cgi, /wireless.cgi and /iwireless.cgi.</li> <li>7. Security enhancements</li> </ol>
V1.03_b8	<ol style="list-style-type: none"> <li>1. New mydlink agent 2.0.17-b40.</li> <li>2. Change the default FTP to passive mode</li> <li>3. Support Win8.1 + IE11</li> <li>4. Change WPS led on 10 seconds after WPS succeed.</li> <li>5. Change LANDAP protocol's password length to 0 - 32 characters</li> <li>6. Support Java 7 Update 51</li> <li>7. SSL Certificate will be automatically self signed (regenerated) during initial configuration/factory reset.</li> </ol>
V1.02_b5	<ol style="list-style-type: none"> <li>1. Update mydlink agent to v2.0.17-b28.</li> <li>2. Add user can configure interval setting for motion/sound detection of mail/ftp.</li> </ol>
V1.01_b2	<ol style="list-style-type: none"> <li>1. Update mydlink agent to v2.0.17-b06.</li> <li>2. Update h.264 Activex to v1.0.0.12.</li> <li>3. Only allow 0-9, a-z, A-Z, ".", "-", "_" as the user account name.</li> </ol>

## Problems Fixed:

Firmware Version	Problems Fixed
V1.16.01	<ol style="list-style-type: none"> <li>Fixed an issue that when set motion sensitivity to 0%, the motion alarm still occurs.</li> <li>Fix an authenticated buffer overflow vulnerability issue.</li> </ol>
V1.15.12	<ol style="list-style-type: none"> <li>Fixed home position issue when flip/mirror enabled.</li> <li>Fixes the issue that Cross Site Request Forgery (CSRF) vulnerability for FTP setting.</li> <li>Fixes the issue that denial of service (DoS) vulnerabilities for upload firmware and restore configuration.</li> <li>Remove crossdomain.xml to fix a security vulnerability issue.</li> <li>Fixed a command injection issue in the change admin's password configuration (/setSystemAdmin).</li> <li>Fixed the issue where sending long password on password field of html page.</li> <li>Fixes the D-Track issue (HQ20171011000008) that get jpeg image</li> <li>Fixed the D-Track issue (HQ20180123000009) that audio and video stream are out of sync when view the camera's video feeds via ActiveX viewer in Internet Explorer browser.</li> </ol>
V1.14.06	<ol style="list-style-type: none"> <li>Fixed an issue that Time zone setting for Minsk should be GMT+3.</li> <li>Fixed an issue that /config/ptz_move.cgi doesn't move the camera view in the correct direction if the camera is installed upside down and Flip and Mirror are both enabled.</li> <li>Fixed the "RSA-CRT key leaks" vulnerability.</li> <li>Fixed the "LANDAP stack overflow" vulnerability. (discovered by search SEARCH-LAB)</li> <li>Remove the "Arbitrary file upload interface" vulnerability. (Discovered by search SEARCH-LAB).</li> <li>Fixed vulnerability - Authenticated Arbitrary File Upload with Root Privileges. (discovered by IOActive Security)</li> <li>Fixed vulnerability - Authenticated Root OS Command Injection in File Upload. (discovered by IOActive Security)</li> <li>Fixed an XSS vulnerability - Stored XSS in User Name. (discovered by IOActive Security)</li> <li>Fixed an XSS vulnerability - Reflected XSS in HTTP Host Header. (discovered by IOActive Security)</li> </ol>
V1.13.05	<ol style="list-style-type: none"> <li>Fixed an issue where IP Camera blocks CGI requests from Chrome and Edge.</li> <li>Added CSRF protection</li> </ol>

V1.11.08	<ol style="list-style-type: none"> <li>1. Fixed the IE11 compatibility issue in Windows 10.</li> <li>2. Change WPS LED behavior blinking time on WPS error/timeout to 10 seconds.</li> <li>3. Remove the reboot function by pressing and holding the reset button in less than 3 seconds.</li> <li>4. Add the pop-up warning message when the user creates an existing user account on Device Web GUI.</li> <li>5. Support to auto-create FTP folder if the folder doesn't exist on FTP server.</li> </ol>
V1.10.02	<ol style="list-style-type: none"> <li>1. Fixed HTTPS issue that caused Pan/Tilt and Day/Night control to fail in Portal and apps.</li> </ol>
V1.06.01	<ol style="list-style-type: none"> <li>1. Fixed issue where device would not respond properly to portal commands under relay mode.</li> </ol>
V1.04_b5	<ol style="list-style-type: none"> <li>1. Resolved NTP Time Synchronization failure on restart when using PPPoE</li> <li>2. Resolved issue where IR-Cut filter flips continuously under "Always Day Mode" in certain situations.</li> </ol>
V1.03_b8	<ol style="list-style-type: none"> <li>1. Adjust sensor settings for sometimes video flash issue.</li> <li>2. Fixed sometimes incorrect ICR control.</li> <li>3. Fixed Lens move left/right/up/down incorrect from mydlink portal/app when mirror/flip is enabled</li> <li>4. Fixed sometimes bad frame issue.</li> <li>5. Fixed mydlink event (sound detection) timing issue.</li> </ol>
V1.02_b5	<ol style="list-style-type: none"> <li>1. Fixed schedule time of motion detection/sound detection incorrect issue when start time &gt; end time.</li> <li>2. Fixed h.264 streaming issue tested on ios6.</li> <li>3. Fixed IP task will be restarted issue on DHCP renew time.</li> <li>4. Fixed OSD disappear issue.</li> <li>5. NTP source port change to port 123.</li> <li>6. Adjust sensor settings.</li> </ol>
V1.01_b2	<ol style="list-style-type: none"> <li>1. Fix the problem that mydlink Agent will run twice when the camera is connecting to DIR-850L using WPS Push button.</li> <li>2. Fixed OSD color issue</li> <li>3. Fixed the direction of P/T control panel incorrect issue when Flip/Mirror enabled</li> </ol>

**Known Issues:**

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<b>Firmware Version</b>	<b>Known Issues</b>
V1.16.01	Not support webUI access in Safari 12
V1.04_b5	Use of continuous snapshot upload to FTP feature will cause overload in system and ultimately system reboot. This is exacerbated by increasing the number of snapshots per second required. Feature will be revised in future release.

**Related Documentation:**

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N/A