

## GoPro Open Source Software Notice

HERO9 Black includes open source software component packages as listed in the Table below. Please refer to the full HERO9 Black Open Source Software Notice document for more details on the components, their respective licenses and terms and conditions of their use.

For information about HERO8 Black and previous camera models, please refer to the article [HERE](#) and [HERE](#).

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### HERO9 Black Open Source Package List

PACKAGE NAME	PACKAGE VERSION	LICENSE	Website
<b>avahi-daemon</b>	0.6.31	GPLv2+ & LGPLv2.1+	<a href="http://avahi.org">http://avahi.org</a>
<b>base-files</b>	3.0.14	GPLv2	<a href="http://www.debian.org">http://www.debian.org</a>
<b>base-passwd</b>	3.5.29	GPLv2+	<a href="ftp://ftp.debian.org/debian/pool/main/b/base-passwd/">ftp://ftp.debian.org/debian/pool/main/b/base-passwd/</a>
<b>busybox</b>	1.23.1	GPLv2 & bzip2	<a href="http://www.busybox.net">http://www.busybox.net</a>
<b>busybox-syslog</b>	1.23.1	GPLv2 & bzip2	<a href="http://www.busybox.net">http://www.busybox.net</a>
<b>busybox-udhcp</b>	1.23.1	GPLv2 & bzip2	<a href="http://www.busybox.net">http://www.busybox.net</a>
<b>connman</b>	1.28	GPLv2	<a href="http://connman.net/">http://connman.net/</a>
<b>connman-client</b>	1.28	GPLv2	<a href="http://connman.net/">http://connman.net/</a>
<b>connman-tools</b>	1.28	GPLv2	<a href="http://connman.net/">http://connman.net/</a>
<b>dbus-1</b>	1.8.10	AFL-2   GPLv2+	<a href="http://dbus.freedesktop.org">http://dbus.freedesktop.org</a>
<b>e2fsprogs</b>	1.42.9	GPLv2 & LGPLv2 & BSD & MIT	<a href="http://e2fsprogs.sourceforge.net/">http://e2fsprogs.sourceforge.net/</a>
<b>e2fsprogs-badblocks</b>	1.42.9	GPLv2	<a href="http://e2fsprogs.sourceforge.net/">http://e2fsprogs.sourceforge.net/</a>
<b>e2fsprogs-e2fsck</b>	1.42.9	GPLv2	<a href="http://e2fsprogs.sourceforge.net/">http://e2fsprogs.sourceforge.net/</a>
<b>e2fsprogs-mke2fs</b>	1.42.9	GPLv2	<a href="http://e2fsprogs.sourceforge.net/">http://e2fsprogs.sourceforge.net/</a>
<b>iperf</b>	2.0.5	BSD-2-Clause	<a href="http://software.es.net/iperf/">http://software.es.net/iperf/</a>

<b>iperf3</b>	3.0.10+gitAUTOINC+de420cc741	BSD	<a href="http://software.es.net/iperf/">http://software.es.net/iperf/</a>
<b>iptables</b>	1.4.21	GPLv2+	<a href="http://www.netfilter.org/projects/iptables/">http://www.netfilter.org/projects/iptables/</a>
<b>kmod</b>	19+gitAUTOINC+fd56638aed	GPL-2.0+ & LGPL-2.1+	<a href="http://packages.profusion.mobi/kmod/">http://packages.profusion.mobi/kmod/</a>
<b>libacl1</b>	2.2.52	LGPLv2.1+	<a href="http://savannah.nongnu.org/projects/acl/">http://savannah.nongnu.org/projects/acl/</a>
<b>libattr1</b>	2.4.47	LGPLv2.1+	<a href="http://savannah.nongnu.org/projects/attr/">http://savannah.nongnu.org/projects/attr/</a>
<b>libavahi-common3</b>	0.6.31	GPLv2+ & LGPLv2.1+	<a href="http://avahi.org">http://avahi.org</a>
<b>libavahi-core7</b>	0.6.31	GPLv2+ & LGPLv2.1+	<a href="http://avahi.org">http://avahi.org</a>
<b>libblkid1</b>	2.25.2	GPLv2+ & LGPLv2.1+ & BSD	<a href="https://github.com/karelzak/util-linux/tree/master/libblkid">https://github.com/karelzak/util-linux/tree/master/libblkid</a>
<b>libboost-filesystem1.57.0</b>	1.57.0	BSL-1.0 & MIT & Python-2.0	<a href="http://www.boost.org/">http://www.boost.org/</a>
<b>libboost-system1.57.0</b>	1.57.0	BSL-1.0 & MIT & Python-2.0	<a href="http://www.boost.org/">http://www.boost.org/</a>
<b>libboost-thread1.57.0</b>	1.57.0	BSL-1.0 & MIT & Python-2.0	<a href="http://www.boost.org/">http://www.boost.org/</a>
<b>libc6</b>	2.21	GPLv2 & LGPLv2.1	<a href="https://www.gnu.org/software/libc/">https://www.gnu.org/software/libc/</a>
<b>libc6-dev</b>	2.21	GPLv2 & LGPLv2.1	<a href="https://www.gnu.org/software/libc/">https://www.gnu.org/software/libc/</a>
<b>libc6-extra-nss</b>	2.21	GPLv2 & LGPLv2.1	<a href="https://www.gnu.org/software/libc/">https://www.gnu.org/software/libc/</a>
<b>libc6-thread-db</b>	2.21	GPLv2 & LGPLv2.1	<a href="https://www.gnu.org/software/libc/">https://www.gnu.org/software/libc/</a>
<b>libcap2</b>	2.24	BSD   GPLv2	<a href="http://freecode.com/projects/libcap-ng">http://freecode.com/projects/libcap-ng</a>
<b>libcidn1</b>	2.21	GPLv2 & LGPLv2.1	
<b>libcom-err2</b>	1.42.9	GPLv2 & LGPLv2 & BSD & MIT	
<b>libcrypto1.0.0</b>	1.0.2a	openssl	<a href="http://www.openssl.org/">http://www.openssl.org/</a>
<b>libdaemon0</b>	0.14	LGPLv2.1+	<a href="http://0pointer.de/lennart/projects/libdaemon/">http://0pointer.de/lennart/projects/libdaemon/</a>
<b>libdbus-1-3</b>	1.8.10	AFL-2   GPLv2+	<a href="http://dbus.freedesktop.org">http://dbus.freedesktop.org</a>
<b>libe2p2</b>	1.42.9	GPLv2 & LGPLv2 & BSD & MIT	<a href="http://e2fsprogs.sourceforge.net/">http://e2fsprogs.sourceforge.net/</a>

<b>libexpat1</b>	2.1.0	MIT	<a href="http://expat.sourceforge.net/">http://expat.sourceforge.net/</a>
<b>libext2fs2</b>	1.42.9	GPLv2 & LGPLv2 & BSD & MIT	<a href="http://e2fsprogs.sourceforge.net/">http://e2fsprogs.sourceforge.net/</a>
<b>libffi6</b>	3.2.1	MIT	<a href="https://sourceware.org/libffi/">https://sourceware.org/libffi/</a>
<b>libgcc1</b>	4.9.2	GPL-3.0-with-GCC-exception	<a href="https://gcc.gnu.org/">https://gcc.gnu.org/</a>
<b>libgcrypt</b>	1.6.2	GPLv2+ & LGPLv2.1+	<a href="http://directory.fsf.org/project/libgcrypt/">http://directory.fsf.org/project/libgcrypt/</a>
<b>libglib-2.0-0</b>	2.42.1	LGPLv2+ & BSD & PD	<a href="http://ftp.gnome.org/pub/gnome/sources/glib/">http://ftp.gnome.org/pub/gnome/sources/glib/</a>
<b>libglog0</b>	0.3.3	BSD	<a href="https://code.google.com/p/google-glog/">https://code.google.com/p/google-glog/</a>
<b>libgmp10</b>	6.0.0	GPLv2   LGPLv3	<a href="http://gmplib.org/">http://gmplib.org/</a>
<b>libgnutls28</b>	3.3.12	LGPLv2.1+	<a href="http://www.gnu.org/software/gnutls/">http://www.gnu.org/software/gnutls/</a>
<b>libgpg-error0</b>	1.18	GPLv2+ & LGPLv2.1+	<a href="http://www.gnupg.org/related_software/libgpg-error/">http://www.gnupg.org/related_software/libgpg-error/</a>
<b>libkmod2</b>	19+gitAUTOINC+fd56638aed	LGPL-2.1+	<a href="http://packages.profusion.mobi/kmod/">http://packages.profusion.mobi/kmod/</a>
<b>liblzma5</b>	5.2.0	PD	<a href="https://tukaani.org/xz/">https://tukaani.org/xz/</a>
<b>libmount1</b>	2.25.2	GPLv2+ & LGPLv2.1+ & BSD	
<b>libnl-3-200</b>	3.2.25	LGPLv2.1	<a href="http://www.infradead.org/~tgr/libnl/">http://www.infradead.org/~tgr/libnl/</a>
<b>libnl-3-cli</b>	3.2.25	LGPLv2.1	<a href="http://www.infradead.org/~tgr/libnl/">http://www.infradead.org/~tgr/libnl/</a>
<b>libnl-3-genl</b>	3.2.25	LGPLv2.1	<a href="http://www.infradead.org/~tgr/libnl/">http://www.infradead.org/~tgr/libnl/</a>
<b>libnl-nf-3-200</b>	3.2.25	LGPLv2.1	<a href="http://www.infradead.org/~tgr/libnl/">http://www.infradead.org/~tgr/libnl/</a>
<b>libnl-route-3-200</b>	3.2.25	LGPLv2.1	<a href="http://www.infradead.org/~tgr/libnl/">http://www.infradead.org/~tgr/libnl/</a>
<b>libnss-mdns</b>	0.1	LGPLv2.1+	<a href="https://archive.mozilla.org/pub/security/nss/releases/">https://archive.mozilla.org/pub/security/nss/releases/</a>
<b>libreadline6</b>	6.3	GPLv3+	
<b>libss2</b>	1.42.9	GPLv2 & LGPLv2 & BSD & MIT	
<b>libssl1.0.0</b>	1.0.2a	openssl	<a href="http://www.openssl.org/">http://www.openssl.org/</a>

<b>libstdc++6</b>	4.9.2	GPL-3.0-with-GCC-exception	<a href="https://gcc.gnu.org/">https://gcc.gnu.org/</a>
<b>libtinfo5</b>	5.9	MIT	
<b>libunwind</b>	1.1	MIT	
<b>libuuid1</b>	2.25.2	GPLv2+ & LGPLv2.1+ & BSD	
<b>libx11-6</b>	1.6.2	MIT & MIT-style & BSD	
<b>libxau6</b>	1.0.8	MIT-style	
<b>libxcb-xkb1</b>	1.11	MIT	
<b>libxcb1</b>	1.11	MIT	
<b>libxdmcp6</b>	1.1.1	MIT-style	
<b>libxkbcommon</b>	0.5.0	MIT & MIT-style	
<b>libz1</b>	1.2.8	Zlib	<a href="http://zlib.net/">http://zlib.net/</a>
<b>linux-libc-headers-dev</b>	3.19	GPLv2	
<b>linux</b>	linux-4.4.15	GPLv2	<a href="http://www.kernel.org">http://www.kernel.org</a>
<b>mtpserver</b>	1.0.0	Apache-1.0	
<b>ncurses-terminfo-base</b>	5.9	MIT	<a href="http://invisible-mirror.net/archives/ncurses/">http://invisible-mirror.net/archives/ncurses/</a>
<b>netbase</b>	5.3	GPLv2	
<b>nettle</b>	2.7.1	LGPLv2.1 & GPLv2	<a href="https://ftp.gnu.org/gnu/nettle/">https://ftp.gnu.org/gnu/nettle/</a>
<b>openssl</b>	1.0.2a	openssl	<a href="http://www.openssl.org/">http://www.openssl.org/</a>
<b>openssl-conf</b>	1.0.2a	openssl	<a href="http://www.openssl.org/">http://www.openssl.org/</a>
<b>os-release</b>	1	MIT	
<b>packagegroup-core-boot</b>	1	MIT	
<b>run-postinsts</b>	1	MIT	
<b>shadow</b>	4.2.1	BSD   Artistic-1.0	<a href="http://pkg-shadow.alioth.debian.org">http://pkg-shadow.alioth.debian.org</a>
<b>shadow-base</b>	4.2.1	BSD   Artistic-1.0	<a href="http://pkg-shadow.alioth.debian.org">http://pkg-shadow.alioth.debian.org</a>
<b>shadow-securetty</b>	4.2.1	MIT	<a href="http://pkg-shadow.alioth.debian.org">http://pkg-shadow.alioth.debian.org</a>
<b>strace</b>	4.9	BSD	<a href="http://strace.sourceforge.net">http://strace.sourceforge.net</a>
<b>systemd</b>	219-stable+gitAUTOINC+85a6fabdd3	GPLv2 & LGPLv2.1 & MIT	<a href="http://www.freedesktop.org/wiki/Software/systemd">http://www.freedesktop.org/wiki/Software/systemd</a>

<b>systemd-compat-units</b>	1	MIT	<a href="http://www.freedesktop.org/wiki/Software/systemd">http://www.freedesktop.org/wiki/Software/systemd</a>
<b>systemd-serialgetty</b>	1	GPLv2+	<a href="http://www.freedesktop.org/wiki/Software/systemd">http://www.freedesktop.org/wiki/Software/systemd</a>
<b>udev</b>	219-stable+gitAUTOINC+85a6fabdd3	GPLv2 & LGPLv2.1 & MIT	<a href="https://www.freedesktop.org/software">https://www.freedesktop.org/software</a>
<b>udev-hwdb</b>	219-stable+gitAUTOINC+85a6fabdd3	GPLv2 & LGPLv2.1 & MIT	<a href="https://www.freedesktop.org/software">https://www.freedesktop.org/software</a>
<b>update-alternatives-opkg</b>	0.1.8+gitAUTOINC+53274f0875	GPLv2+	<a href="https://github.com/shr-project/opkg/blob/master/utis/update-alternatives.in">https://github.com/shr-project/opkg/blob/master/utis/update-alternatives.in</a>
<b>update-rc.d</b>	0.7	GPLv2+	
<b>util-linux-agetty</b>	2.25.2	GPLv2+ & LGPLv2.1+ & BSD	<a href="https://www.kernel.org/pub/linux/utis/util-linux/">https://www.kernel.org/pub/linux/utis/util-linux/</a>
<b>util-linux-fsck</b>	2.25.2	GPLv2+ & LGPLv2.1+ & BSD	<a href="https://www.kernel.org/pub/linux/utis/util-linux/">https://www.kernel.org/pub/linux/utis/util-linux/</a>
<b>util-linux-mount</b>	2.25.2	GPLv2+ & LGPLv2.1+ & BSD	<a href="https://www.kernel.org/pub/linux/utis/util-linux/">https://www.kernel.org/pub/linux/utis/util-linux/</a>
<b>util-linux-sulogin</b>	2.25.2	GPLv2+ & LGPLv2.1+ & BSD	<a href="https://www.kernel.org/pub/linux/utis/util-linux/">https://www.kernel.org/pub/linux/utis/util-linux/</a>
<b>volatile-binds</b>	1	MIT	
<b>wireless-tools</b>	30.pre9	GPLv2 & (LGPLv2.1   MPL-1.1   BSD)	<a href="https://hewlettpackard.github.io/wireless-tools/Tools.html">https://hewlettpackard.github.io/wireless-tools/Tools.html</a>
<b>wpa-supPLICant</b>	2.3	BSD	<a href="https://w1.fi/wpa_supPLICant/">https://w1.fi/wpa_supPLICant/</a>
<b>wpa-supPLICant-cli</b>	2.3	BSD	<a href="https://w1.fi/wpa_supPLICant/">https://w1.fi/wpa_supPLICant/</a>
<b>wpa-supPLICant-passphrase</b>	2.3	BSD	<a href="https://w1.fi/wpa_supPLICant/">https://w1.fi/wpa_supPLICant/</a>
<b>android-tools</b>	5.1.1.r37	Apache-2.0 & GPL-2.0 & BSD-2-Clause & BSD-3-Clause	
<b>android-tools-conf</b>	1	MIT	
<b>gdbserver</b>	7.8.1	GPLv2 & GPLv3 & LGPLv2 & LGPLv3	
<b>bash</b>	4.3	GPLv3+	

<b>libbsd0</b>	0.7.0	BSD-4-Clause & MIT
<b>libgl-mesa</b>	10.4.4	MIT
<b>libglapi0</b>	10.4.4	MIT
<b>libdrm2</b>	2.4.59	MIT
<b>libgomp-dev</b>	4.9.2	GPLv3
<b>libgomp1</b>	4.9.2	GPLv3
<b>libpcre1</b>	8.36	BSD
<b>libtirpc1</b>	0.2.5	BSD
<b>libwrap0</b>	7.6	BSD
<b>nfs-utils</b>	1.3.1	MIT & GPLv2+ & BSD
<b>nfs-utils-client</b>	1.3.1	MIT & GPLv2+ & BSD
<b>qtbase</b>	5.4.2+gitAUTOINC+2 cb17c1fb9	GFDL-1.3 & BSD & (LGPL-2.1 & Digia-Qt- LGPL-Exception-1.1   LGPL-3.0)
<b>rpcbind</b>	0.2.2	BSD

### Application Layer Packages

PACKAGE NAME	PACKAGE VERSION	LICENSE	Website
<b>boost</b>	1.5.0	Boost SW License 1.0	<a href="https://www.boost.org/">https://www.boost.org/</a>
<b>c-ares</b>	1.16.1	MIT License	<a href="https://c-ares.haxx.se/">https://c-ares.haxx.se/</a>
<b>cgic</b>	206	CGIC License	<a href="http://www.boutell.com/cgic/">http://www.boutell.com/cgic/</a>
<b>cghtml</b>	1.69		
<b>cityhash</b>	1.1.1	MIT License	<a href="http://code.google.com/p/cityhash/">http://code.google.com/p/cityhash/</a>
<b>civetweb</b>	1.11	MIT License	<a href="http://civetweb.github.io/civetweb/">http://civetweb.github.io/civetweb/</a>
<b>cJSON</b>	R58	MIT License	<a href="http://sourceforge.net/projects/cjson/">http://sourceforge.net/projects/cjson/</a>
<b>curl</b>	7.37.0	MIT/X derivate license	<a href="http://curl.haxx.se/">http://curl.haxx.se/</a>
<b>dhcp-client</b>	4.3.1	ISC	
<b>dng_sdk</b>		Proprietary Free	<a href="https://www.adobe.com/support/downloads/dng/dng_sdk.html">https://www.adobe.com/support/downloads/dng/dng_sdk.html</a>
<b>gmock</b>	1.7.0	BSD-3c	<a href="https://github.com/google/googlemock">https://github.com/google/googlemock</a>
<b>gtest</b>	1.7.0	BSD-3c	<a href="http://code.google.com/p/googletest/">http://code.google.com/p/googletest/</a>

<b>iperf</b>	2.0.5	BSD License	<a href="https://github.com/esnet/iperf">https://github.com/esnet/iperf</a>
<b>iniparser</b>	3.1	MIT	<a href="https://github.com/ndevilla/iniparser">https://github.com/ndevilla/iniparser</a>
<b>libav</b>	0.8.4	LGPLv2.1	<a href="https://github.com/libav/libav">https://github.com/libav/libav</a>
<b>libexif</b>	0.6.21	LGPLv2.1	<a href="http://libexif.sourceforge.net/">http://libexif.sourceforge.net/</a>
<b>libnl</b>	3.2.25	LGPLv2.1	<a href="https://www.infradead.org/~tgr/libnl/">https://www.infradead.org/~tgr/libnl/</a>
<b>libquicktime</b>	1.2.4	LGPLv2.1	<a href="http://libquicktime.sourceforge.net/">http://libquicktime.sourceforge.net/</a>
<b>librtmp</b>	1.1.1	GPLv2.1	<a href="https://github.com/G-P-S/librtmp">https://github.com/G-P-S/librtmp</a>
<b>libzip</b>	0.11.2	BSD Like	<a href="https://libzip.org">https://libzip.org</a>
<b>node</b>	0.8.18	BSD Like	
<b>openssl</b>	1.0.1	Open SSL License	<a href="https://www.openssl.org/source/">https://www.openssl.org/source/</a>
<b>protobuf</b>	3.0.0-beta-2	BSD-3c	<a href="https://developers.google.com/protocol-buffers">https://developers.google.com/protocol-buffers</a>
<b>Protobuf-c</b>	1.2.1	BSD-2c	<a href="https://github.com/protobuf-c/protobuf-c">https://github.com/protobuf-c/protobuf-c</a>
<b>qrcodegen</b>		MIT	<a href="https://www.nayuki.io/page/qr-code-generator-library">https://www.nayuki.io/page/qr-code-generator-library</a>
<b>rapidJSON</b>	1.1.0	MIT	<a href="https://rapidjson.org/">https://rapidjson.org/</a>
<b>ruby</b>	1.9.1-1.9.3.0	BSD-2c	
<b>sqlite-autoconf</b>	30801000	Public Domain	<a href="http://www.sqlite.org/download.html">http://www.sqlite.org/download.html</a>
<b>tcpdump</b>	4.7.3	BSD-3c	<a href="http://www.tcpdump.org/">http://www.tcpdump.org/</a>
<b>Wireless Tools</b>	3.0.0	GPLv2	
<b>wt</b>	3.3..3-p1	GPLv2	<a href="https://github.com/emweb/wt">https://github.com/emweb/wt</a>
<b>zlib</b>	1.2.11	zlib license	<a href="https://zlib.net">https://zlib.net</a>

### Other Packages

PACKAGE NAME	PACKAGE VERSION	LICENSE	Website
<b>Stubby (Boot Loader)</b>		GPL-v2+	
<b>Openembedded (Tools and Environment)</b>	1.8 (fido)	GPLv2, MIT	<a href="https://github.com/openembedded/openembedded-core">https://github.com/openembedded/openembedded-core</a>

### Source Code Packages available for download

Source Code Package	Location
<b>HERO9 Black Edition Linux Package</b>	<a href="https://www.dropbox.com/s/sh977d633vgb9dr/h9-linux-4.4.15.bz2?dl=0">https://www.dropbox.com/s/sh977d633vgb9dr/h9-linux-4.4.15.bz2?dl=0</a>
<b>HERO9 Black Edition SDK Packages</b>	<a href="https://www.dropbox.com/s/og6i0wd1wkaysnk/h9-sdk-pkgs.bz2?dl=0">https://www.dropbox.com/s/og6i0wd1wkaysnk/h9-sdk-pkgs.bz2?dl=0</a>
<b>HERO9 Black Edition Application Packages</b>	<a href="https://www.dropbox.com/s/9xd1yn42hrimej0/h9-app-pkgs.bz2?dl=0">https://www.dropbox.com/s/9xd1yn42hrimej0/h9-app-pkgs.bz2?dl=0</a>
<b>HERO9 Black Edition Tools and Build Environment</b>	<a href="https://www.dropbox.com/s/e01x14igbc25m1r/h9-sdk-tools.bz2?dl=0">https://www.dropbox.com/s/e01x14igbc25m1r/h9-sdk-tools.bz2?dl=0</a>
<b>HERO9 Black Edition Bootloader</b>	<a href="https://www.dropbox.com/s/jx4m7incdrjajie/h9-bootloader-stubby.bz2?dl=0">https://www.dropbox.com/s/jx4m7incdrjajie/h9-bootloader-stubby.bz2?dl=0</a>

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Version 3.1, 31 March 2009

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