

APPLICATION SOFTWARE
ST-ID50A

This application is used to crop an image used for the Share Picture function of the ID-50A/ID-50E transceiver, transfer images to the transceiver, and view the received image.

- Photos taken, or photos/images saved on the device can be converted into the format used for the Share Picture function of the D-STAR transceiver.
- You can crop the image and enter text such as a call sign.
- The cropped image can be transferred to a D-STAR transceiver.
- You can load and view the received image.
- You can also save the cropped image as a file.

System requirements

The following system is required to use the application. (As of July 2023)

Android device:

Confirm your USB cable meets following conditions:

- Android 8.0 or later is installed
The ST-ID50A has been tested with Android 8.x, 9, 10, 11, 12, and 13.
- ① This Instruction document is based on using Android 11, and the ST-ID50A version 1.00.
- Compatible with the USB host (USB OTG) function

NOTE:

- The application may not be usable, even if your device is compatible with the USB host function.
- Some functions may not work correctly:
 - Depending on other applications installed in the Android device.
 - Depending on the memory capacity.

USB cable (User supplied):

Confirm your USB cable meets following conditions:

- Fits the transceiver’s USB port (Type-C) and your device’s USB port (Micro-B/Type-C)

- ① A shorter cable is preferable, as the longer one may be unable to transfer the data.
- The cable compatible with the USB host function.

Disclaimer:

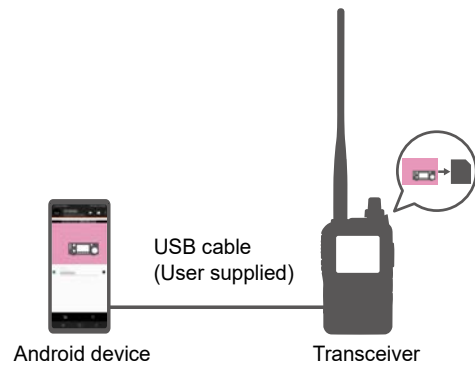
- The application may not work properly, depending on the OS version, installed applications, or other reasons.
- The indications or items may differ, depending on the OS version or settings.
- The screenshots on these Instructions are just examples, so the contents may differ from the actual ones.

TIP: The USB host (USB OTG) function enables using a USB device with an Android device. To check the compatibility of your Android device with the USB host function, ask the Android device’s manufacturer.

To transfer a picture to the transceiver:

With this application, you can transfer a picture to the transceiver through a USB cable. The transferred picture data is saved on the microSD card that is inserted into the transceiver.

① Confirm a microSD card is inserted to the transceiver.



NOTE: Confirm the USB connect setting is set to “Serialport” in the Set mode before using the USB cable. ([MENU] > SET > Function > **USB Connect**)

Icom and the Icom logo are registered trademarks of Icom Incorporated (Japan) in Japan, the United States, the United Kingdom, Germany, France, Spain, Russia, Australia, New Zealand, and/or other countries. Google, Google Play and Android are trademarks or registered trademarks of Google LLC. All other products or brands are registered trademarks or trademarks of their respective holders.

D-STAR (Digital Smart Technology for Amateur Radio) is a digital radio protocol developed by JARL (Japan Amateur Radio League).

About the licenses

This product includes “Android-Image-Cropper” open source software, and is licensed according to the open source software license.

This product includes “ColorPickerView” open source software, and is licensed according to the open source software license.

This product includes “usb-serial-for-android” open source software, and is licensed according to the open source software license.

This product includes “Native-Floyd-Steinberg-Dithering” open source software, and is licensed according to the open source software license.

This product includes “Glide” open source software, and is licensed according to the open source software license.

Refer to the “About the Licenses” page at the end of this manual for information on the open source software being used in this product.

Find and download the application

Android device:

1. Touch "Play Store."
2. Enter "ST-ID50A" in the search field.
3. Touch "🔍."
 - "ST-ID50A" will be displayed as the search result.
 - ① You may need to enter "ST-ID50A" as a complete word to get the search result.
 - ① If your Android device does not support the application, it may not appear as the search result.
4. Touch "ST-ID50A."
 - Displays the introduction screen of the application.
5. Touch <INSTALL>.
 - Installation starts.
 - After the installation is finished, the ST-ID50A icon is displayed on the screen.



Operating notes

- Disconnect the transceiver from your mobile device when not using the application. Otherwise, it will waste your mobile device's battery.*
*If "USB Power Input (Phone, Tablet, PC)" in the Set mode is set to "ON."(Default)
- This application is not usable with other applications related to the transceiver simultaneously.
- The application requires permission from the device to use some functions. See your mobile device's instructions for details.

Operating screen

Picture Transfer screen:

Transfers the displayed picture to the transceiver. (p. 5)

Saves the displayed picture.

1 Auto Saving of TX Picture

2 Update Font List

3 Security Policy

4 Legal Notices

Touch for 1 second to display the Select Picture window. Select where the picture you want to edit is stored.

5 Align Top Left

6 Font Default

7 Size 95

8 Color

9 Bold

10 Italic

11 Outline 5

12 Outline Color

Enter the text you want to add to the picture.

Select whether or not to add the text to the picture.

Displays the Picture Transfer screen.

Displays the Received Picture screen.

Crop screen:

Goes back the previous screen.

Rotates 90 degrees to the right. (Clockwise)

Flip horizontally

Flip vertically

Crops the picture.

Set the frame around the portion that will be cropped by dragging the anchors on the corners.

1 Auto Saving of TX Picture

The application automatically saves the transferred picture to the mobile device.

2 Update Font List

Updates the font list through the Internet.

3 Security Policy

Displays the security policy.

4 Legal Notices

Displays the information on the open source software being used in this application.

5 Align

Select the display position of the text.

6 Font

Select the font.

① You can use the font registered in Google Fonts. The selected font is downloaded through the Internet.

Some fonts are not usable.

① If you update the font list, touch "Update Font List" (2) on the Menu list.

7 Size

Select the font size of the text.

8 Color

Select the text color.

9 Bold

Select whether or not to make the text bold.

① You may not be able to select bold, depending on the font.

10 Italic

Select whether or not to make the text italic.

① You may not be able to select italic, depending on the font.

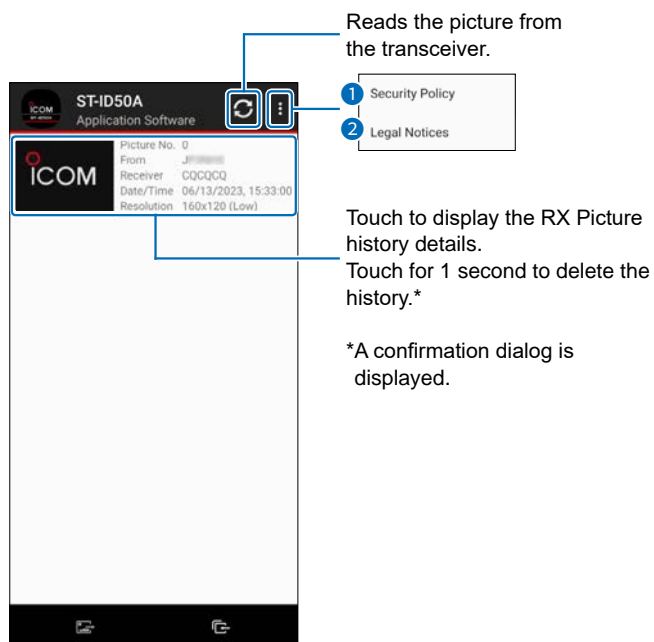
11 Outline

Select the outline width of the text.

12 Outline Color

Select the outline color of the text.

Received Picture screen:



1 Security Policy

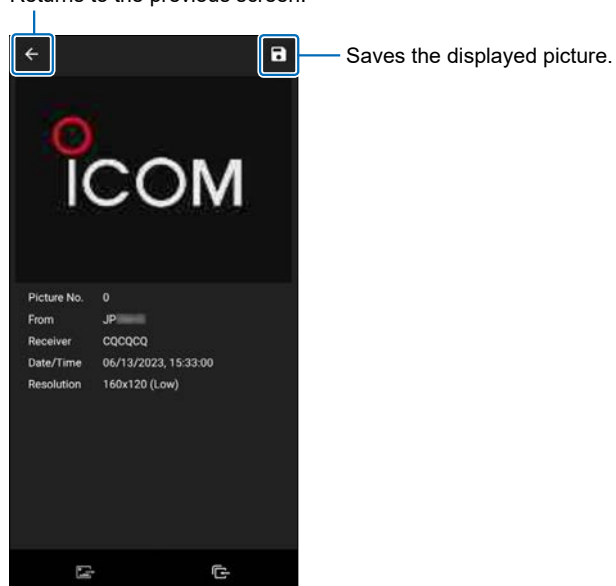
Displays the security policy.

2 Legal Notices

Displays the information on the open source software being used in this application.


Received Picture Detail screen:

Returns to the previous screen.





Operation



Cropping a picture

1. Touch  on the bottom left of the screen.
 - The Picture Transfer screen is displayed.
2. Touch the black area for 1 second.
 - The Select Picture screen is displayed.
3. Select where the picture you want to edit is stored.
 - The Crop screen is displayed.
4. Set the frame around the portion that will be cropped by dragging the anchors on the corners, and then touch "CROP."





Adding a text to the picture

1. Touch  on the bottom left of the screen.
 - The Picture Transfer screen is displayed.
2. Enter a text.
 - ① Enter a checkmark to the check box on the left side of the text box.
3. Touch .
4. Set the text font, size, color, and so on.
 - ① See page 3 about each item.

Saving the picture on the mobile device





1. Touch  on the bottom left of the screen.
 - The Picture Transfer screen is displayed.
2. Touch .
3. Select the destination to save the picture, and the touch "SAVE."
 - ① The application automatically saves the transferred picture if "Auto Saving of TX Picture" in the Menu is enabled (p. 3).

Transferring the picture to the transceiver


1. Touch  on the bottom left of the screen.
 - The Picture Transfer screen is displayed.
2. Touch .
3. Touch [OK] to transfer the picture.
 - While transferring,  is displayed on the mobile device.
 - ① To cancel transfer, touch  on the mobile device.

Loading the received pictures from the transceiver

To view the received pictures, load them into the application.

- ① The received picture cannot be displayed on the transceiver.
1. Touch  on the bottom right of the screen.
 - The Received Picture screen is displayed.
2. Touch .
3. Touch [OK] to load the pictures.
 - While loading,  is displayed on the mobile device.
 - The loaded pictures are displayed.
 - ① To cancel transfer, touch  on the mobile device.
 - ① Up to 50 pictures can be loaded.
 - ① The transceiver cannot receive a picture while loading received pictures.

Saving the received picture to the mobile device

1. Touch the picture you want to save to your device.
 - The Received Picture Detail screen is displayed.
2. Touch .
3. Select the destination to save the picture.
 - ① The file name is automatically set in the following format: PicYYYYMMDD_“The caller’s call sign”.jpg (YYYY: Year, MM: Month, DD: Day).

NOTE: If you cannot transfer or load the picture, check the following:

On the transceiver:

- The transceiver is turned ON.
- The transceiver’s firmware is the latest version.
- A microSD card is inserted into the transceiver.
- The transceiver is in a normal operating mode.
 - ① The transceiver cannot receive the picture in special modes, such as the clone mode, firmware update mode, import or export mode, or setting save mode.
- “USB Connect” in the Set mode is set to “Serialport.”
([MENU] > SET > Function > **USB Connect**)

On the mobile device:

- The transceiver is connected through the USB cable.

USB cable:

- Usable for data transfer and not for charging only.

About the licenses

Android-Image-Cropper

Apache License
Version 2.0, January 2004
<http://www.apache.org/licenses/>
TERMS AND CONDITIONS FOR USE, REPRODUCTION,
AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

- Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.
- Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

- Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:
 - You must give any other recipients of the Work or Derivative Works a copy of this License; and
 - You must cause any modified files to carry prominent notices stating that You changed the files; and
 - You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
 - If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

- Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.
- Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.
- Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.
- Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.
- Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS

APPENDIX: How to apply the Apache License to your work. To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives.

Copyright 2016, Arthur Teplitzki 2013, Edmodo, Inc.

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

ColorPickerView

License
Copyright 2017 skydoves

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

usb-serial-for-android

MIT License

Copyright (c) 2011-2013 Google Inc.
Copyright (c) 2013 Mike Wakerly

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Native-Floyd-Steinberg-Dithering

MIT License

Copyright (c) 2018 Jeffrey Liu

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Glide

License for everything not in third_party and not otherwise marked:

Copyright 2014 Google, Inc. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY GOOGLE, INC. "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL GOOGLE, INC. OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The views and conclusions contained in the software and documentation are those of the authors and should not be interpreted as representing official policies, either expressed or implied, of Google, Inc.

License for third_party/diskruche:

Copyright 2012 Jake Wharton
Copyright 2011 The Android Open Source Project

Licensed under the Apache License, Version 2.0 (the "License");
you may not use this file except in compliance with the License.
You may obtain a copy of the License at

<http://www.apache.org/licenses/LICENSE-2.0>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
See the License for the specific language governing permissions and limitations under the License.

License for third_party/gif_decoder:

Copyright (c) 2013 Xcellent Creations, Inc.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

License for third_party/gif_encoder/AnimatedGifEncoder.java and third_party/gif_encoder/LZWEncoder.java:

No copyright asserted on the source code of this class. May be used for any purpose, however, refer to the Unisys LZW patent for restrictions on use of the associated LZWEncoder class. Please forward any corrections to kweiner@fmsware.com.

License for third_party/gif_encoder/NeuQuant.java

Copyright (c) 1994 Anthony Dekker

NEUQUANT Neural-Net quantization algorithm by Anthony Dekker, 1994. See "Kohonen neural networks for optimal colour quantization" in "Network: Computation in Neural Systems" Vol. 5 (1994) pp 351-367. for a discussion of the algorithm.

Any party obtaining a copy of these files from the author, directly or indirectly, is granted, free of charge, a full and unrestricted irrevocable, world-wide, paid up, royalty-free, nonexclusive right and license to deal in this software and documentation files (the "Software"), including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons who receive copies from any such party to do so, with the only requirement being that this copyright notice remain intact.