

UwTerminalX

Quick Reference Guide



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The screenshot shows the UwTerminalX application window with the following callouts:

- Tab navigation:** You must accept the terms before switching tabs. (Points to the menu bar)
- Click to decline the terms and close the application.** (Points to the 'Decline' button)
- Click to access this doc from UwTerminalX** (Points to the 'Help' button)
- Click to display third-party license info.** (Points to the 'Licenses' button)
- Displays the terms for use and command line arguments for UwTerminalX.** (Points to the main text area)
- Click to accept the terms and to begin using the application.** (Points to the 'Accept' button)
- UART line icon explanations.** (Points to the N/A, Busy, and Clear status indicators)
- Displays the UwTerminalX version, platform, architecture, build date, and applicable QT/OpenSSL versions.** (Points to the footer text)

The main text area contains the following content:

This application is provided by Laird without warranty. You are welcome to check our website for the latest version. This version is UTF-8 compliant.

This message is displayed EITHER because "accept" is not specified in the command line OR at least one command line option has been specified with an invalid parameter.

You can launch this application and bypass this window by creating a shortcut link and passing ACCEPT as a command line option. Other command line options are:-

ACCEPT
Bypass About screen on startup

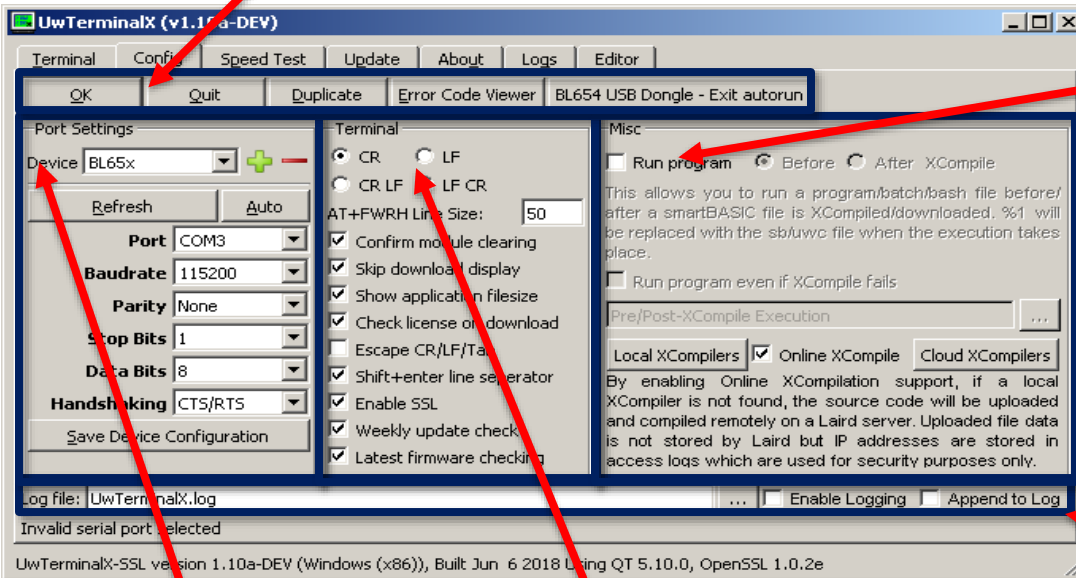
COM=n
Windows: COM[1..255] specifies a comport number
GNU/Linux: /dev/tty[device] specifies a TTY device
Mac: /dev/[device] specifies a TTY device

BAUD=n
[1200..5000000] Could be limited to 115200 depending on PC hardware (limited to 230400 on most Macs)

STOP=n
[1..2]

UwTerminalX-SSL version 1.10a (Windows (x86)), Built Jun 6 2018 Using QT 5.10.0, OpenSSL 1.0.2e

OK	Quit	Duplicate Session	Error Code Viewer	BL654 USB Dongle - Exit Autorun
Click to establish a connection using the selected settings	Click to close the application	Click to launch a second instance of UwTerminalX with the same settings	Click to open the error code lookup dialogue	Click to exit autorun mode on a selected BL654 USB dongle



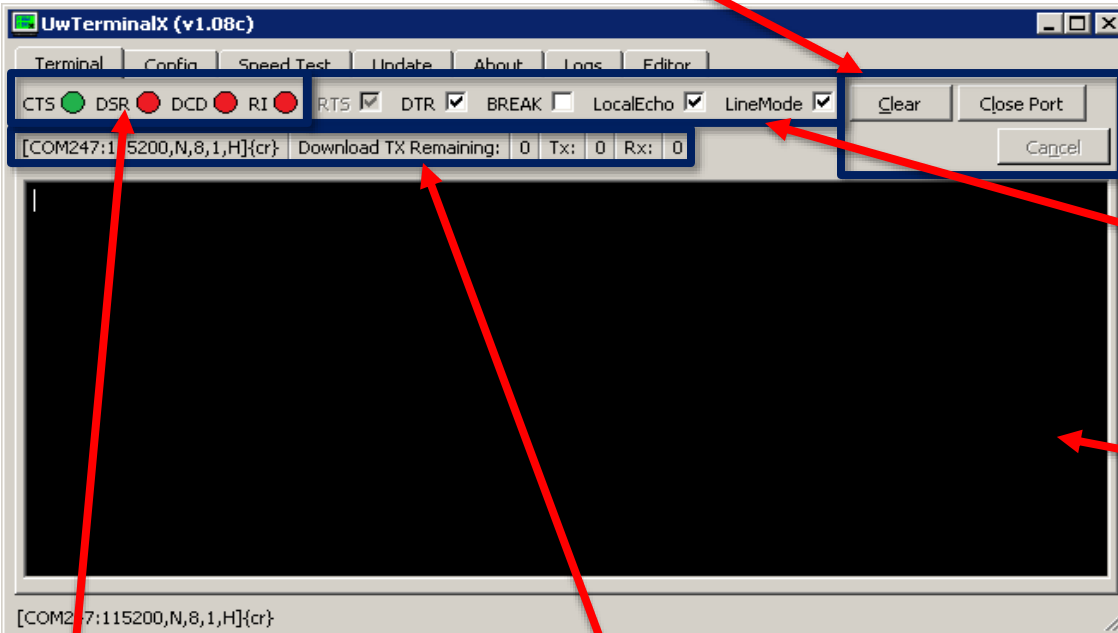
Misc	
Run Program, Before/After	Select to run a program before/after an Xcompilation occurs
Run program even if XCompile fails	When selected, the program runs whether/not XCompile is successful
...	Click to navigate to and select the path to the executable/script that runs before/after XCompilation
Online XCompile	Online XComile – When selected, smartBASIC files are compiled on the Laird server cloud if no compatible Xcompiler is available on your local system
Supported Devices	Will show the modules supported by the Online XCompile server

Port Settings	
Device drop-down	Select the applicable device
+/-	Add/remove a device
Refresh	Refresh device list
Settings	Use the drop-downs to adjust settings for the identified device
Save Device Configuration	Click to save setting changes

Terminal	
CR/LF/CRLF/LFCR	Select the desired line ending for when you click Enter
AT+FWRH Line Size	The length of each line sent when downloading a file to a device
Confirm module cleaning	When selected, a confirmation is made before the module is cleared
Skip download display	When selected, data associated with a file download does not display in the terminal window
Show app. file size	When selected, the compiled application file size is shown
Check License on Download	Checks if the module has a license and displays an error if not when downloading
Escape CR/LF/Tab	When selected, control characters (i.e. tab/newline) are escaped as \t, \r, \n
Enable SSL	When selected, SSL is used for web connections
Weekly update check	When selected, a weekly check that the UwTerminalX and error code file versions will be performed
Latest firmware checking	When selected and using the online XCompilation service, the firmware of the modules will be checked to ensure it is the latest version.

Log file	The file name into which data logging is placed
Enable Logging	When selected and when the port is opened, sent/received data is logged to the identified log file
Append to Log	When selected and when logging is enabled, opening a port appends data to the log file. When unselected, the log file is cleared first.

Clear	Open Port/Close Port	Cancel
Click to clear the terminal display	Click to open or close the serial port	Click to cancel a file download/batch/file stream



Checkboxes

RTS	Allows you to switch between RTS (if hardware flow control is not used) and DTS signals
DTR	Select to hold the Tx line low (resets the modules)
BREAK	Select to display typed data on the output terminal
LocalEcho	Select to only send data when you press Enter; when not selected, data is set as soon as a key is pressed
LineMode	

Displays to where the data is transmitting and from where it is received; provides the ability to communicate with the module

Right-click for a list of options

Status
Displays the current status of the CTS, DSR, DCD, and RI pins from the module.

[COM3:115200,N,8,1,S]{cr} Download TX Remaining: 0 TX: 0 RX: 0			
Displays current port settings	Number of bytes left to be downloaded	# of bytes sent	# of bytes received

Type the error code in the error code search bar to view its description

Error lookup selection

Error code database version

Error description

Click to copy the error description

The screenshot shows the 'Error Code Lookup' window with the 'Code lookup' tab selected. A search bar at the top contains the text 'Type your 4-character error code:'. Below the search bar, the main area is empty. At the bottom, there is a text field containing 'Invalid.' and a 'Copy' button. The status bar at the very bottom reads 'Error code file version 1.00'. Red arrows point from callout boxes to the search bar, the 'Code lookup' tab, the 'Invalid.' text, and the 'Copy' button.

Full list of errors
Select a line to show the error

The screenshot shows the 'Error Code Lookup' window with the 'Full list' tab selected. The main area displays a list of error codes and their descriptions, such as '0200: GENERIC_FAIL: There is a generic error whilst att...', '0201: MALLOC_FAIL: An error occured whilst trying to s...', '0202: NULL_POINTER: A null pointer was returned, there...', '0203: TIMEOUT: A timeout has occurred.', '0204: CODE_TOBE_WRITTEN: This function has not yet been...', '0205: RESOURCE_FULL:', '0206: RESOURCE_EMPTY:', '0207: RESOURCE_DELETED:', '0208: ACCESS_DENIED:', '0209: INCORRECT_MODE: The mode of the device does not a...', '020A: EOF:', '020B: OPEN_FAIL:', '020C: INVALID_HANDLE: An invalid handle was provided to...', '020D: IGNORED:', '020E: PARAM_CLIPPED: A parameter supplied was too long', '020F: NOT_IMPLEMENTED: The function being used is not i...', and '0210: INVALID_KEY_STR...'. At the bottom, there is a text field containing 'Invalid.' and a 'Copy' button. The status bar at the very bottom reads 'Error code file version 1.00'. Red arrows point from callout boxes to the 'Full list' tab and a line in the error list.

Type the error code or description for which you want to search

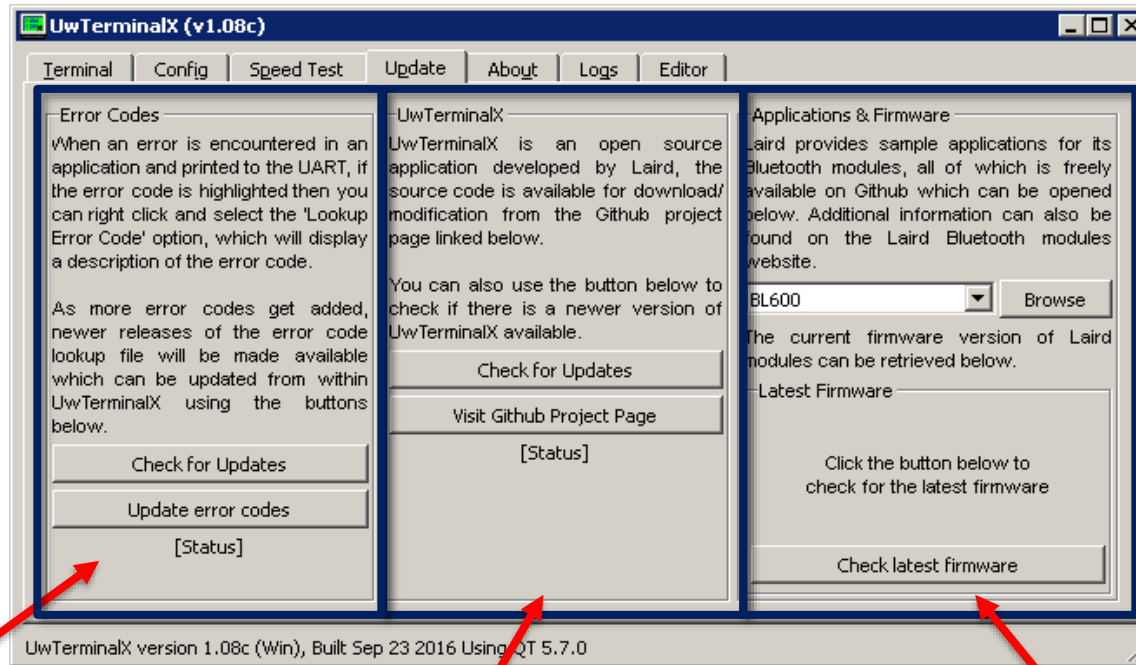
Press Search

Matching error codes will be displayed here.
Click the applicable error code to show a full description

The screenshot shows the 'Error Code Lookup' window with the 'Search' tab selected. At the top, there is a search bar with the placeholder text 'Enter part of error description...' and a 'Search' button. The main area is empty. At the bottom, there is a text field containing 'Invalid.' and a 'Copy' button. The status bar at the very bottom reads 'Error code file version 1.00'. Red arrows point from callout boxes to the search bar, the 'Search' button, and the main area.

The screenshot shows the UwTerminalX (v1.09) Speed Test interface. The interface includes a menu bar (Terminal, Config, Speed Test, Update, About, Logs, Editor), a status bar with hardware indicators (CTS, DSR, DCD, RI, RTS, DTR) and checkboxes for Show RX, Show TX, and Show Errors. A 'Clear' button is located next to the Show Errors checkbox. Below the status bar, there are fields for 'Data type' (String), 'Display' (Bytes), and 'Data' (escape sequence). A 'Sync Receive Time' checkbox and a 'Start Test' button are also present. A 'Copy Stats' button is located at the bottom right of the control area. The main area contains statistics for Bytes and Packets (Sent, Received, Average/1s, Good, Bad, Error Rate (%)). At the bottom is a large black terminal window for displaying TX/RX data and errors. The callout boxes provide the following explanations:

- When enabled, displays received data in box below:** Points to the 'Show RX' checkbox.
- When enabled, displays sent data in box below:** Points to the 'Show TX' checkbox.
- When enabled, displays errors in the box below:** Points to the 'Show Errors' checkbox.
- Click to clear the display:** Points to the 'Clear' button.
- Click to open or close the port:** Points to the 'Close Port' button.
- When enabled, starts the receive timer upon reception of the first incoming data packet:** Points to the 'Sync Receive Time' checkbox.
- Click to start or stop the testing:** Points to the 'Start Test' button.
- Used to copy testing statistics to the clipboard:** Points to the 'Copy Stats' button.
- When ticked will escape character codes:** Points to the 'Un-Escape String' checkbox.
- Speed test type and data:** Points to the 'Data type' dropdown menu.
- Statistics for the speed test:** Points to the 'Bytes' and 'Packets' statistics sections.
- Speed test log for TX/RX data and error display:** Points to the large black terminal window at the bottom.



Error Codes

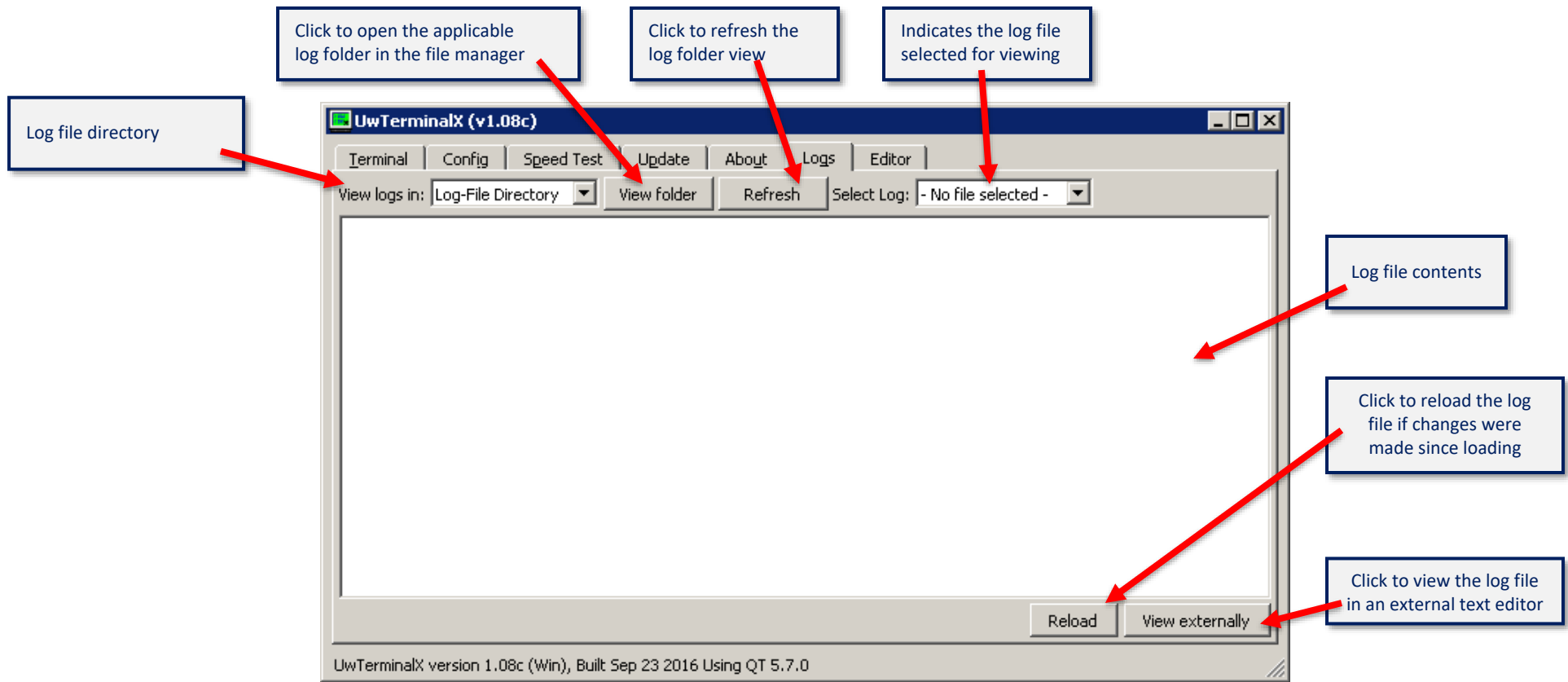
Check for Updates	Click to check for error code file updates
Update Error Codes	Click to download and load the latest error code file
Status	Displays the status of the error code file update check

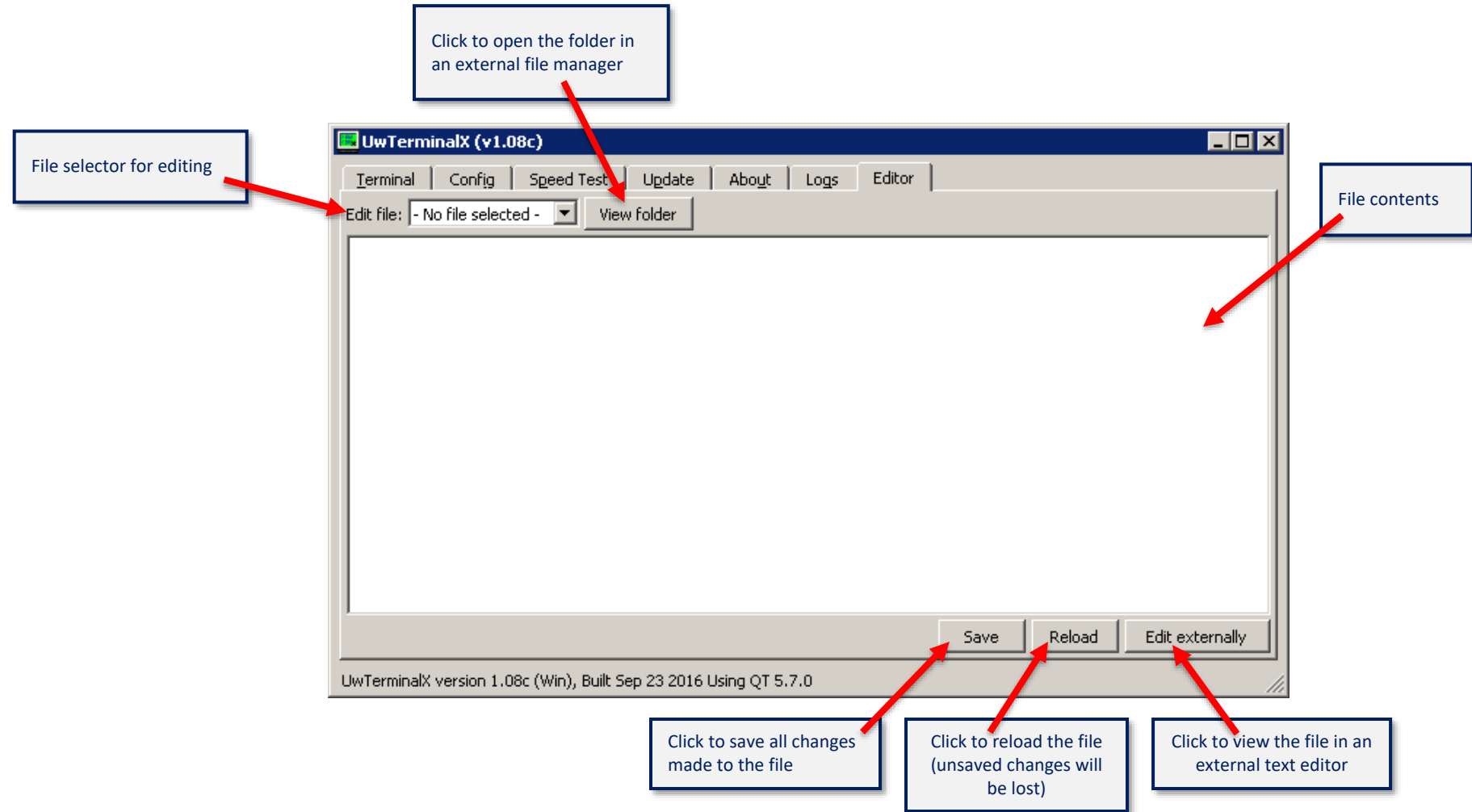
UwTerminalX

Check for Updates	Click to check for UwTerminalX updates
Visit Github Project Page	Click to open the UwTerminalX Github webpage
Status	Displays the status of the UwTerminalX update check

Applications and Firmware

Browse	Click to access a link to the options selected from the drop-down menu
Latest Firmware	Display of current firmware for each device
Check Latest Firmware	Click to check for the most recent firmware versions





REVISION HISTORY

Version	Date	Notes	Approver
1.0	25 May 2015	Initial Release	Jonathan Kaye
1.1	26 Sep 2016	Update with new functionality	Jamie McCrae
1.2	24 Aug 2017	Update with license check and revamped speed test interface	Jamie McCrae
1.3	07 Jun 2018	Update with additional configuration options	Jamie McCrae

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