

# TSL UHF ASCII 2.0 SDK V1.1.0 - iOS README

# **CHANGES IN THIS VERSION**

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This release supports the full ASCII 2.2 command set<sup>1</sup>.

This release has been fully tested for development with devices running iOS7 or greater. The command library framework has not been tested with earlier OS versions but should work.

The sample projects are built and are fully functional on iOS7.

## **GENERAL**

The command library framework now provides native 64-bit support.

## **COMMANDS**

The following commands have been updated or added (ASCII equivalent in brackets):

- TSLLicenceKeyCommand (.lk) added. See Licence Key sample for usage example.
- TSLVersionInformationCommand (.vr) updated for Bluetooth address available in ASCII 2.2 or greater.
- TSLSwitchActionCommand (.sa) updated to add repeat delay parameters.
- TSLSwitchSinglePressCommand (.ps) &

TSLSwitchDoublePressCommand (.pd) updated

- The resetParameters, readParameters and takeNoAction properties are now interpreted correctly
- The *duration* property is now validated
- TSLSleepTimeoutCommand (.st) added

## **KNOWN ISSUES**

TSLReadTransponderCommand and TSLWriteTransponderCommand (continue to) expose an unnecessary QAlgorithm parameter - this parameter will be ignored.

<sup>&</sup>lt;sup>1</sup>The '.bt' command cannot be executed when connected via *Bluetooth*® so this command is not implemented on the iOS platform.

## **SDK OVERVIEW**

#### This SDK consists of:

- TSLAsciiCommands.framework
  - The TSLAsciiCommands API is provided as a universal static framework that can be used with the iOS
    emulator. Note that the ExternalAccessory framework does not provide support for accessories in the
    emulator.
- Inventory quick-start sample project
  - Demonstrates the use of the TSLInventoryCommand & TSLBarcodeCommand.
- ReadWrite quick-start sample project
  - Demonstrates the use of the TSLReadTransponder and TSLWriteSingleTransponder commands.
- Trigger quick-start sample project
  - Demonstrates use of the device trigger to initiate operations in the application using TSLSwitchActionCommand, TSLSwitchStateCommand and TSLSwitchResponder
  - Two approaches are implemented: polling the trigger state and handling asynchronous trigger state reports.
- TSLTerm quick-start sample project
  - This is a simple terminal program that will allow users to experiment with the raw ASCII 2.0 protocol (See the ASCII Protocol 2.0 guide for details).
- Licence Key quick-start sample project
  - Demonstrates addition and removal of licence keys from a reader.
  - Provides an example of storing a reader-specific cryptographic hash as the licence key.
- TSL ASCII 2.0 SDK Documentation
  - appledoc HTML version of the Xcode documentation set
  - Doxygen Docs Extended HTML documentation
- com.uk.tsl.TSL-ASCII-Command-Library.docset
  - TSLAsciiCommands Documentation set for use in Xcode

## INSTALLING THE XCODE DOCUMENTATION

The following commands have been updated or added (ASCII equivalent in brackets):

- 1. Ensure Xcode is not running.
- Copy com.uk.tsl.TSL-ASCII-Command-Library.docset into "~/Library/Developer/Shared/Documentation/ DocSets/"
- 3. Launch Xcode the documentation will appear in the Organizer's Documentation tab

SDK OVERVIEW www.tsl.uk.com

### HTML DOCUMENTATION

The documentation currently comes in two forms.

1. The *appledoc* HTML documentation is provided as a convenience for those who prefer to use a Browser rather than Xcode's in-built documentation viewer. This includes everything in the Xcode documentation set.

2. The *Doxygen Docs* version contains additional information not found in the *appledoc* version, such as, class diagrams and inherited properties in class descriptions.

## **GETTING STARTED**

An introduction to using the SDK can be found on the home page (index.html) of the docset version of the documentation.

Note: The implementation of *TSLAsciiCommands.framework* makes heavy use of protocols and so, descriptions of supported methods for commands will often require viewing the classes adopted protocol descriptions.

Use of this SDK is subject to the UHF ASCII 2.0 Software Development Kit Licence Agreement distributed with this SDK.

The Sample code provided is subject to the following licence:

The software is licensed "as-is." You bear the risk of using it. We give no express warranties, guarantees or conditions. You may have additional consumer rights under your local laws which this license cannot change. To the extent permitted under your local laws, we exclude the implied warranties of merchantability, fitness for a particular purpose and non-infringement.

You are free to reuse the source code in your own applications as long as the application is designed to operate with one or more of Technology Solutions UK Ltd products.

# **ABOUT TSL**

## **ABOUT**

TSL designs and manufactures both standard and custom embedded, snap on and standalone peripherals for handheld computer terminals. Embedded technologies include:

- RFID Low Frequency, High Frequency & UHF
- Bluetooth® wireless technology
- Contact Smartcard
- Fingerprint Biometrics
- 1D and 2D Barcode Scanning
- Magnetic Card Readers
- OCR-B and ePassport

Utilizing class leading Industrial design, TSL develops products from concept through to high volume manufacture for Blue Chip companies around the world. Using the above technologies TSL develops innovative products in a timely and cost effective manner for a broad range of handheld devices.

## **CONTACT**

**Address:** Technology Solutions (UK) Limited, Suite C,

Loughborough Technology Centre, Epinal Way, Loughborough, Leicestershire, LE11 3GE.

United Kingdom.

Telephone: +44 (0)1509 238248

Fax: +44 (0)1509 220020

Email: enquiries@tsl.uk.com

Website: www.tsl.uk.com



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