



ADR Plus Product Line

ADR Plus v5.57 Firmware

Quixote Traffic is pleased to announce the release of Version 5.57 firmware for the ADR Plus Product Line. This update provides a list of enhancements and bug-fixes that were requested by customers using the v5.55 firmware. These include changes to the information stored in Setup files, the order of a couple of the ADR menus to increase usability, the available options on the Vehicle Monitor screen, and several other items.

Product **Firmware for the ADR Plus Product Line**
Version **Version 5.57**
Release Date **3/20/06**

Product Compatibility

This firmware upgrade is compatible with all **ADR-1000 Plus**, **ADR-2000 Plus**, and **ADR-3000 Plus** automatic data recorders. This firmware will *not* work with the older ADR-1000, ADR-2000, and ADR-3000 units (i.e. non-“Plus” units.) This update is not typically performed as a field upgrade. It is normally installed during manufacturing or during factory repair work. Version 5.57 of the firmware can be installed with one of the following language files installed: American, American/Spanish, or American/Canadian French.

Contents	
Updating the Firmware.....	2
Enhancements	3
Issues Addressed in this Release	4
Additional Guidance.....	5
Documentation	5
Technical Support	5

This product is compatible with **TOPS™**, Quixote Traffic’s Windows-based ADR data retrieval software. The update requires version 3.6 or higher of the TOPS software. ADR Version 5.57 firmware is also compatible with version 1.0 and higher of Quixote’s **Z-Link** ADR data retrieval software for the Palm™ OS.



Note It is recommended that this firmware should not be used with any version of TOPS older than version 3.6. Additional information stored in the ADR files starting with the version 5.53 firmware may cause unpredictable results when used with older versions of TOPS.

Information furnished by Quixote Traffic is believed to be accurate and reliable, however Quixote does not warranty the accuracy, completeness, or fitness for use of any of the information furnished. No license is granted by implication or otherwise under any intellectual property. Quixote reserves the right to alter any of the Company's products or published technical data relating thereto at any time without notice.

Protocol Support

This version of the firmware supports the standard Quixote ADR protocol. It can be used with any software package that is compatible with this protocol.



Note ADR Plus devices running **Version 5.57** firmware may no longer be fully compatible with TDP.

Support for the StopWatch+ Add-on Module

Version 5.57 firmware continues to support Quixote Traffic's StopWatch+ add-on module for the ADR 3000 Plus. StopWatch+ expands the functionality of an ADR-3000 Plus; retaining the full historical data collection features of the standard ADR-3000 Plus, while adding simultaneous real-time data gathering capabilities. These StopWatch+ functions can be used to assess the performance of roadway systems during emergency and disaster situations. For more information about StopWatch+, including how to purchase the package, contact your nearest Quixote Traffic distributor. For the nearest distributor in your area, call 1-800-245-7660.

Updating the Firmware in an ADR Plus Unit

To update the firmware in an ADR Plus unit in the field via a direct connection, you will need the following items:

- Notebook or portable PC that has Quixote Traffic's **ADR Firmware Upload Utility** installed
- DB-9 to CPC-8 direct-connect serial cable (p/n 81-321) (**ADR-1000 Plus and ADR-2000 Plus**)
or
DB-9 to DB-9 direct-connect serial cable (p/n 81-296A) (**ADR-3000 Plus**)
- the ADR **Version 5.57** firmware update file:

Table 1 — Version 5.57 firmware files

Firmware version	Filename
v5.57 firmware - American English	V557-A_97-508-D.bin
v5.57 firmware - American / Spanish	V557-AS_97-508-A.bin
v5.57 firmware - American / Canadian French	V557-AC_97-508-E.bin

If you need additional assistance to perform the ADR Plus firmware update, contact the Quixote Traffic Technical Service Center using the contact information provided on page 5 of these release notes.

Enhancements

Several new features and functions have been added to the ADR in firmware Version 5.57. Some of these are core functions, while others require additional hardware (such as the WIM functions.)

Table 2 – New features included in Version 5.57 of the ADR Plus firmware

Feature	Description	ECR#
Detector Graphical Display (the new Array Monitor screen)	Customers have asked for a graphical display of the sensor activations within the sensor array in each lane.	725
ADR Comm ID and Stopwatch configuration Storage to Setup File	After requests from several customers, the ADR now stores its communications ID, and if the StopWatch+ function has been installed, the StopWatch settings to Setup, Backup, and Setup+CTree files.	1795, 1974
ADR File Collisions (reduce to 10 from 26)	The file system was configured to allow files of the same type to sequence in naming from file00 up to file025. But customers reported that this many variations of a single file type is never needed, so to simplify (and shrink the size of) the file handling code, files are now sequenced from file00 to file09.	1968
ADR Autoexec Operation	When an autoexec file is loaded on an ADR, the ADR will now automatically arm the ADR, as long as it is IDLE at the time.	1971
ADR CPU shutdown LED indication	The ADR now indicates a request to shutdown by flashing the CPU LED and turning off as the unit is shut down. This does result in a slight reduction in battery life, but it provides user feedback to verify that the unit is, in fact, actually shutting down.	1975
ADR Sensor Mapping	The new ADR Array Monitor screen includes the ability to map sensor inputs to selected arrays.	1976
ADR Check Menu re-order	The order of commands on the Check menu has been rearranged to make better logical sense.	1977
Reduce data throughput requirements of a live view of the ADR interface over a communications link	The ADR Main Screen user interface is only updated every 5 seconds when reported over a remote communications link, rather than the 1 second update that was used in the past. This was done to reduce the amount of data that must be sent back and forth from the device to maintain a 1 second update.	1978
ADR Opto/Alarm Operation	We've enhanced the ADR Alarm feature so that you can now select the lane, select the classes, set AND/OR conditions on alarm limits, and set the opto delay time and the opto ON time.	2091

Issues Addressed in this Release

The following are known issues that existed in previous releases of the ADR Plus Firmware which have been rectified in Version 5.57:

Table 3 – Issues fixed in this release

Issue	Resolution	ECR #
Corrected operation of Axle Weights on Vehicle Monitor screen	Previously, when a filter on the Vehicle Monitor screen was set up to allow only First Axle Weight information to appear, the setting was then ignored and all axle weights were displayed. This has been corrected so that only First Axle Weight values can be viewed in the Vehicle Monitor screen, if desired.	1027, 1972
ADR Initialization upon communications	ADR firmware v5.55 could cause a problem with a running study when remote communications were established through ADR Commander or TOPS. The establishment of the comm. link was causing the ADR to re-initialize (reboot). This issue was verified to first appear in v5.55 and it has been repaired in v5.57.	1838
ADR Peak Intervals	The old established rule for peak intervals within the ADR was that they were only available when the main interval duration was set to a value less than 60 minutes, but if the main duration value was changed from a value above 60 to one less than 60 from TOPS, the peak interval option was not being disabled. This has been corrected, so now the ADR will not use peak interval times if the unit is switched to a main interval duration of less than 60 minutes, no matter how the change is made.	1969
ADR Configuration for a binned study showed 'Single' twice as a heading option.	When setting up a Custom Setup with binned data, the Single option was showing up twice in the list of headings. The second instance of 'Single' has been removed from this list.	1973

Additional Guidance

These are some other sources of information on the ADR Plus series of automatic data recorders.

Documentation

These documents are available for the ADR Plus products and other related products available from Quixote Traffic.

Table 4 — Additional documentation available for ADR Plus products and related hardware

Document	Part Number
ADR Plus User's Manual	99-133
StopWatch+ Release Notes	99-348
TOPS Installation Manual	81-896
TOPS Operating Manual	81-897
TOPS v3.6 Release Notes*	99-291
ADR-1000/ADR-2000 Getting Started Guide	119c/507

Technical Support

In order to receive customer support on your ADR unit, you must register it with Quixote Traffic. This contact information will connect you with the ADR technical support staff of Quixote Traffic Corporation, should you require additional help concerning this firmware update.

Quixote Traffic Corporation - ADR Technical Support

2511 Corporate Way
 Palmetto, FL 34221
 toll free in the U.S.: 1.800.245.7660
 tel: 1.941.845.1200
 fax: 1.941.845.1504
 email: tech.support@quixotecorp.com

* The TOPS Installation CD also includes copies of these documents in PDF format.