This document is for v1.3.240. AKA V240

Thank you for choosing RDM Integrity as part of your RDM development tool set.

Please find a summary of the many revisions added since the last public release (v173)

Startup Log

There is considerably more detail in the Startup log and Runtime startup log pane**.** This pane is at the bottom of the Test Results pane, and is normally minimised. Drag it up to see what happens at startup, before the tests are run.

Very handy if you cannot get to first base on a suspect device!

Any errors in the Startup or Runtime logs will now force a pop-up reminder, so they do not get overlooked.

Basic Improvements

The program now records both Fault type errors and any Timing errors. The presence of timing errors no longer masks other faults where possible.

Improved cross references to clauses in the Standards documents when we reject a response.

Various bugs fixed that related to the Show Timing tick box.

Added the SourceID to the Startup log, and provided more log detail.

This version extends the DMX Interleave options. Please note that DMX interleaving is not available on all of the supported Controller interfaces.

Extensive improvements in the testing of sub-devices added.

File Menu

All the file saves of logs and summary data is now brought together here.

You will be promoted for a file name, with a default name seeded from the UID of the device under test.

The "save all files" makes it easy to work through saving a complete summary of your tests.

Text files can be saved to record the Netview summary, and Statistics displays.

Stress Testing

A new checksum stress test has been added. This sends an invalid checksum with each message. Compliant responders should reject any message with an invalid checksum, and not action or reply to the request message

Reset Tests

The reset tests (accessed from the Reset Test menu) now wait a delay time and tries to use the GET:DEVICE_INFO message to verify that the device under test responds after the reset command.

Time Stamps

Tests can be timestamped to give an indication of the time lapse between each test. Please note that some of the time between each outgoing message is a function of the host computer being used to run the Integrity application.

Timestamp display can ne enabled or disabled.

String Analysis

Although the RDM standard does not expressly prohibit “empty” strings”, Manufacturer labels, slot labels or Personality Descriptions are not very user friendly if they are null strings or comprised only of the space character. Integrity will now check all text string responses and advise if there are empty strings.

MANUFACTURER PID menu

This scan is one to run while you go to lunch!

It trials a GET of each possible PID value in the defined range, and then seeks the declaration for that PID. A tool to flush out PIDs that perhaps should be hidden that aren't, or ones that should have been added to the list of supported PIDs but were not.

AutoTest Menu

A complete analysis of a product should really run the tests for each of the DEVICE PERSONALITIES, as they can have different footprints, sensors or sub-devices.

This menu allows just that, saving the result of the scan of Personality 1, before switching to P2 and re-running the test.

We have not yet tested this to destruction, but there is a Philips Showline Strobe device with upward of 19 Personalities. It is expected that such responders would take several HOURS to get through the entire test!

FAILURE Sorting

We have made improvements to the naming and classification of the Failure Sort feature, but please be aware we have more to review in terms of classifications here.

Failures are categorised as follows:

Critical

High

Medium

Low

AckOverflow testing

A new test has been added to the menu, to test all PIDs that could possibly return an ACK_OVERFLOW.

HARDWARE DEBUG assistance!

There are times when it would be jolly handy to issue the same command over and over whilst prodding about with a 'scope**.**

In the Build RDM packet section there is now a small but power-full "Repeat" tick-box.

Select this before hitting the RUN button, and your selected GET or SET or DISC command will get sent out repeatedly until you UNCHECK the "Repeat" tick-box.

The repeat time may be set within the Timings menu.

A new single step function allows each test in a sequence to be run manually so as to allow data to be captured by a sniffer or scope.

A new line number breakpoint allows the tests to be run up to a defined point, so that a sequential test or failure condition can be duplicated.

NetView and Statistics

There are improvements and corrections in the Net-View and Statistics popups.

The sort order of the discovered PIDs in the NetView display has been improved.

Manufacturer PIDS are shown separately to Standard PIDs, but included in the overall count.

DLL Version support

We have added a support DLL option to the Help Menu, to assist in checking for any version issues with old support dlls

ManufacturerID check

We now run a check against the ESTA list of registered Manufacturer ID's, to weed out the unscrupulous developers too lazy or too ignorant to register correctly. They run the risk of picking a value that has already been allocated, which breaks things for everyone.

Known limitations

In some instances, products that do **not comply** with the RDM standard, especially those that use incorrect timings on the RDM responses, may not be fully discoverable using theController interfaces supported by RDM Integrity, even if they do appear to be discoverable using other RDM controllers. If you are having issues, please contact us for further advice.

Future Developments

RDM Integrity has the hooks for supporting the additional commands defined in E137-4,E137-5 and E137-7 when they are formally released.

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