

DPP Compliance Programme
AMWA AS-11 DPP
Product Test Report (See note 5, on next page)
 DPP Lab, BBC R&D, Centre House, 56 Wood Lane, W12 7SB, UK

OEM	Tektronix
Product (Note 6)	Hydra Player
Product Version (Note 6)	4.0.258.0
Test Report Date	22 September 2014

OVERALL TESTING RESULT	PASS
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HD Test Artifacts Used	
Writer Functionality	Reader Functionality
File Conformance Test Suite	File Reader Tests
(Note 1, on next page)	(Note 2, on next page)

Not Tested	R1.0
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SD Test Artifacts Used	
Writer Functionality	Reader Functionality
File Conformance Test Suite	File Reader Tests
(Note 1, on next page)	(Note 2, on next page)

Not Tested	Not Tested
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GENERIC FUNCTION CATEGORIES		Functionality Tested
File Writers	Products that write AS-11 UK DPP HD files. Tests are carried out to determine whether a file written by a device conforms to the AMWA AS-11 UK DPP HD Shim v1.1 as defined by the rules for conformance [available at the link below], as well as the requirements for Descriptive Metadata. http://www.amwa.tv/projects/rules/as-11/	Not applicable
File Readers - Players	Products that have the ability to read AS-11 DPP HD files and then play the contents of the file to a video and audio monitor. These devices may additionally include the ability to display Timecode, Descriptive Metadata and Programme Parting/Segmentation information. It is not a requirement that products should have all possible functionality. Products are only tested for the features that they have.	Tested
File Readers - Transcoders	Products that have the ability to read AS-11 DPP HD files and then transcode the contents to a different format. Transcoded output files are then tested following the Player testing procedure.	Not applicable

AMWA CERTIFICATION AUTHORITY The AMWA Certification Authority uses these TEST REPORTS as the basis for awarding Certification. Please see the web page below. http://www.amwa.tv/certification

Template version	v1.0	09 September 2014	Release version
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Product Test Report - Update Test Report R1007 re-issued as version R1007a with OEM Name changed from Digimetrics to Tektronix	07/04/2015
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NOTES	
Note 1	Writer Functionality, File Conformance Test Suite: This identifies the tests carried out on AS-11 DPP OUTPUTS of the product and describes the file conformance tests used. This document is available from the DPP Compliance page on the DPP website.
Note 2	Reader Functionality, File Reader Tests: This identifies the File Reader Test procedure, including the list of tests carried out by the OEM on their own product, with the results to be noted. This document is available from the DPP Compliance page on the DPP website.
Note 3	Input media used: For Writer tests this identifies the INPUT MEDIA files and / or SDI and metadata sources to be used for the creation of output AS-11 DPP files specified.
Note 4	Input AS-11 DPP files used: For Reader tests this identifies the a set of AS-11 DPP test files that are used as INPUTS to the product.
Note 5	This Product Test Report is also known as the TEST REPORT for the purposes of applying for AMWA Certification.
Note 6	The test results (and any Certificate ultimately issued) will be tied to the version of the product tested. This means that an actual 'release' of a product must be submitted for testing.
Note 7	Certain faults are classed as 'warnings'; certain faults are classed as 'errors' but result in 'Pass with Conditions' rather than 'Fail'. The overall test result takes the worst case result from individual tests. That is, if any individual test result is a 'Fail' then the overall test result is a 'Fail'.

TEST PROCEDURE - Overview	
Writer Test Procedure	<p>Stage 1: Once signed up to the DPP Compliance Programme, the OEM should send some representative file samples to the DPP lab to be tested. The File Conformance Test Report then shows how they performed against the conformance criteria. Individual tests <i>may</i> have one of four outcomes: PASS, WARNING, PASS with CONDITIONS, and FAIL. Some tests may just have PASS or FAIL. If the initial files tested are a 'Fail' then new files will need to be submitted once the product has been updated with a fix for the issue. Once the files are a 'Pass', or 'Pass with Conditions' then the manufacturer can move to step 2 and formally request that the lab test the product at Certification Level.</p> <p>Stage 2: The OEM will need to provide the lab with additional information about the product's functionality and operation using the Initial OEM Product Submission Form. The Lab, in discussion with the OEM, will then agree the method(s) by which the product being tested will create files for Certification Level Testing. Once stage 2 testing has been completed and the Product Test Report (showing Pass or Pass with Conditions) is issued to the OEM. They can then go ahead and apply for Certification from the AMWA. Please note: If the device also includes 'Reader' functionality then this will also require a 'Pass' or 'Pass with Conditions', in order for the Product Test Report to be issued.</p>
Reader Test Procedure	File Reader testing is primarily 'self-serve'. The test procedure may be carried out by the OEM at any time. It principally involves downloading the set of AS-11 UK DPP HD Reader test files and asking the product to read each one, and the OEM recording the results. The ability to do this is assessed by The DPP Test Lab against set criteria which include checks for player functionality, and transcode functionality if present. (This is subject to change as new files and tests are included). A declaration form is to be completed and the results returned to the DPP Lab. Results are verified and if they are a 'Pass' or 'Pass with Conditions' a Product Test Report is issued to the OEM. Please note: If the device also includes ' Writer ' functionality then this will also require a 'Pass' or 'Pass with Conditions', in order for the Product Test Report to be issued.
Application to AMWA	Once a Product Test Report has been issued by the DPP, an OEM may follow the AMWA procedure to apply for Certification.

PASS or PASS WITH CONDITIONS	
What it means	The capability of version X of product Y to read and / or write AMWA AS-11 UK DPP HD Shim files has been tested by the DPP Compliance Lab and all the tests performed (as referenced in this report) under the specified "realistic" operating conditions have either "Passed" or "Passed with Conditions".
What it DOES NOT mean	<ul style="list-style-type: none"> a) All files produced by a Writer are always fully conformant to the "AMWA AS-11 UK DPP" Shims b) Files from Writers will always work correctly with Readers c) Files from Writers will never be rejected by UK Broadcasters d) All modes and features of the product have been tested

Overall READER Result (DPP Test Lab review of OEM supplied test results)	PASS
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FILE READER TEST results - For DPP Compliance Testing of PRODUCT to Certification Level

6a Table 1 - GENERAL DETAILS (OEM to complete)	
OEM name	Tektronix (Previously Digimetrics)
Product name	Hydra Player
Product version	4.0.258.0
Date of tests	08-Sep-14

6b Table 2 - PRODUCT DESCRIPTION and CAPABILITIES (OEM to complete)	
Brief description of product / product type	Player for PC & SDI
What are its primary functions in relation to AS-11 UK DPP Reader tests? Please list the main ones.	Reader & playback functionality
Does the device render both video and audio from the AS-11 DPP file for use by the device?	Yes
Player functionality: Does the device render to video on to a display? If so how is this presented to the display?	Yes, via DirectX for PC and via AJA SDK for SDI
Player functionality: Is audio decoded to outputs suitable for monitoring purposes?	Yes, 2 channel output with user selectable programs & channels for PC (can output all 16 channels, if desired, mixed down into a 2 channel PC output); 8 channel output with user selectable programs & channels for SDI
Transcode functionality: Does the device render the AS-11 DPP video to a different file format as part of its operation?	No
Does the device perform a partial file read of video and/or audio?	No
Is there a display of media Timecode?	Yes, on main UI in both PTS with start timecode and TCR, counting from a zero start.
Does the device read AS-11 DM (descriptive metadata) and/or UK DPP DM? If so how is this used and displayed?	Yes, in metadata overlay
Is there any display of programme segmentation / programme parting?	Yes, in metadata overlay
Does the product have the capability to jog, shuttle and jump to a new T/C?	Yes. Keyboard shortcuts (See below), and ability to jump to specific timecode by manual entry on UI

6e NOTES (OEM to complete if there are any other relevant details)

DECLARATION	
7 DECLARATION	<p>The detailed test results for File Reader Tests, and the resulting overall READER result, is based on information provided by the OEM in self testing. When submitting the detailed test results the OEM representative signed the following declaration confirming that they agreed to the statement below. The details were then reviewed by the DPP Test Lab to determine the overall READER result shown at the top of this page.</p> <p>"I confirm that the information in this report has been completed honestly and is an accurate representation of the results obtained. Also, that these results provide a fair assessment of the product's ability to read and work with AS-11 DPP files in a way reasonably expected for a product of this type and functionality, and that these results were achieved when using the product in a configuration which would reasonably be regarded as normal operational use."</p>