

TECHNICAL SUPPLEMENT BROADCASTER APPROVED PHOTOCESITIVE EPILEPSY TEST DEVICES

Photosensitive Epilepsy Test Devices

Photo Sensitive Epilepsy (PSE) affects around one in four thousand people, with the age group, seven to twenty years old being five times more likely to be susceptible than the rest. PSE is triggered by visual stimuli that overload the brain temporarily and cause a seizure. The triggers are commonly flashes or repeating changes between dark and light (such as stroboscopic effects or flash photography), some geometric patterns, and certain colours such as deeply saturated red.

All broadcasters in the UK must comply with Section 2.12 of the Ofcom Broadcasting Code (detailed in Annex 1 of the Ofcom Guidance notes) which provides guidance to UK TV broadcasters and producers on how to avoid causing PSE complaints. In 2018 the International Telecommunications Union (part of the United Nations) has revised the Photosensitive Epilepsy advice document [ITU-R BT.1702](#) to clarify the definition of a sequence of potentially harmful flashes. Applying this revision is a further step in reducing the inconsistencies between devices.

The Digital Production Partnership Delivery Document mandates that **every** programme (Live or File) submitted for transmission must satisfy the Ofcom Photosensitive Epilepsy guidelines. Any programme failing to meet these requirements may be rejected and returned to the supplier for repair.

Please be aware that the Producer of the programme as well as the Broadcaster may be liable for any action taken by Ofcom or a member of the public, for a breach of the Photosensitive Epilepsy requirements.

The following list contains products that have been agreed by the UK broadcasters to competently perform PSE testing. The aim is to provide producers with a guide to available products that may automatically identify any PSE failures in file-based content that would require re-work before delivery to the broadcasters.

This list is not exhaustive and will be updated if other approved products become available. It does not represent a recommendation or endorsement by the DPP or any UK broadcaster. Manufacturers are invited to submit appropriate candidate products for testing.

Note: Ofcom has stated that use of automatic testing devices is *not* a guarantee of compliance with the Broadcasting Code.

Product List

The PSE algorithm version is noted, and provided the same PSE algorithm is used subsequent AQC product updates or revisions can be made without affecting the PSE test algorithm.

This Supplement is *not* a DPP document – the Broadcasting Code makes it clear the Broadcasters are responsible for ensuring the safety of their audiences.

If you have any queries about this, please contact the relevant broadcaster. The DPP will pass your enquiry to the relevant broadcaster if you are unsure who to contact. (info@digitalproductionpartnership.co.uk).

TECHNICAL SUPPLEMENT BROADCASTER APPROVED PSE TESTING DEVICES

| Company | Product Version(s) | PSE Version incorporating the BT.1702 revision | Comments |
|----------------------------|--------------------------------------|--|---|
| Cambridge Research Systems | FPA Desktop V3.5 or later | FPA V3.4 | Note: Cambridge Research devices can be used to test Live (or as Live) programmes including the FPS Legacy Mode V2.54 (Note: legacy mode should not be used to test files) |
| | FPA Server V3.0.0 or later | | |
| | FPA UK Digital V0110 or later | | |
| Tektronix | Cerify V7.8.0 or later | FPA V3.4 | Cerify uses a licensed Cambridge Research Systems algorithm. |
| | Aurora V3.6 or later with FPA option | FPA V3.4 | Aurora uses a licensed Cambridge Research Systems algorithm. |
| Interra | Baton V7.4 or later | Version ITU-R BVT.1702 2018 (1.0) | |
| Vidcheck | Vidapps-PSE V1.0 or later | Vidcheck PSE V5.1 | |
| | Vidchecker V8 or later | | |
| | Vidfixer V8 or later | | |
| Cel-Soft | PSE-Check V2.410 or later | Cel-soft PSE V2.0 | |
| | Reel-Check Solo V1.410 or later | | |
| | Reel-Check SE V3.410 or later | | |
| Venera | Pulsar V4.3 and higher | FPA V3.4 | Pulsar uses a licensed Cambridge Research Systems algorithm. |
| EditShare | QScan One | Quales V1.1.0 | |
| | QScan Pro | | |
| | QScan Max | | |
| Hybrik | Hybrik Test Products | Hybrik PSE V2.0 | Hybrik is now part of the Dolby group |

Appendix A – Version Control

| VERSION | DATE | REQUIRED / INFORMATION | UPDATE |
|---------|------------|------------------------|--|
| 1.0 | 15/10/2013 | Required | 'A Product Guide for file-based Photo Sensitive Epilepsy Testing' first published on the DPP website |
| 1.1 | 12/11/2014 | Information | Header note added confirming inconsistency and Venera Pulsar added to product list. |
| 1.2 | 24/11/2014 | Information | Updated product versions and algorithm version information added. (Vidcheck) |
| 1.3 | 02/12/2014 | Information | Updated product versions and algorithm version information added. (Interra) |
| 1.4 | 08/01/2015 | Information | Updated product versions and algorithm version information added. (Tektronix and Cel-Soft) |
| 1.5 | 09/01/2015 | Information | Updated product versions. (Cambridge Research Systems) |
| 2.0 | 23/01/2015 | Information | Updated product versions (Vidcheck) and explanatory notes around algorithm versions. |
| 2.1 | 19/02/2015 | Information | Updated product version and PSE algorithms version (Digimetrics) |
| 2.2 | 22/04/2015 | Information | Tektronix and Digimetrics rows merged, providing Tektronix with 3 device options. |
| 3.0 | 07/04/2018 | Required | Clarified relationship of stakeholders with regards to PSE testing. |
| 3.0 | 07/04/2018 | Information | Updated product information added. (EditShare QScan) |
| 3.1 | 01/10/2018 | Required | Updates to Algorithm versions to comply with ITU-R BT.1702-1 2018 |
| 3.2 | 26/11/2018 | Required | Final updates to Algorithm versions to comply with ITU-R BT.1702-1 2018 |
| 3.3 | 04/02/2019 | Required | Removes versions not compliant with ITU-R BT.1702-1 2018 |
| 3.4 | 03/03/2019 | Required | Correction to Vidcheck PSE version – 5.1 (from 5.0) Adds Hybrik PSE test option |