

TECHNICAL SUPPLEMENT BROADCASTER APPROVED PHOTOSENSITIVE 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 DPP 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@thedpp.com).

TECHNICAL SUPPLEMENT BROADCASTER APPROVED PSE TESTING DEVICES

Company	Product Version(s)	PSE Algorithm Version	Comments
Cambridge Research Systems	FPA Desktop V3.5 or later	FPA V3.4	Note: Cambridge Research devices can also 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 V.3.6 or later with FPA option	FPA V3.4	Aurora uses a licensed Cambridge Research Systems algorithm.
	Aurora v5.1.331 or later ProVersion	Tektronix PSE v5.1	Newer versions of Aurora use a Tektronix PSE algorithm unless the FPA option has been added.
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	Celsoft 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
3.4.1	28/02/2020	Information	Update to contact information