

HARDINGTEST.com

ENSURING YOUR VIDEO IS BROADCAST COMPLIANT

Background to Photosensitive Epilepsy (PSE) Problems in Broadcasting

People with photosensitive epilepsy (PSE) can suffer seizures when exposed to 'flashing' or rapidly changing lights. These seizures can be caused by emergency vehicles, clubs, movies, video games or television programmes. PSE can affect anybody, but it seems that the age group most at risk are 7 to 20 year olds. Television programmes viewed in a darkened or semi-darkened room are often common 'triggers' for causing seizures.

During recent years programme makers have had access to a wide range of new production techniques and while colour grading and 'fast cut' edits certainly enhance the impact of their programmes, some of the resulting rapidly changing images result in epileptic fits in susceptible persons.

The **Pokémon Dennō Senshi Porygon** episode that was broadcasted in Japan on the 16th December 1997 contained flashing images that caused some 685 children to suffer seizures which required them to be taken to hospital. More than 150 of them were admitted and two of them for over two weeks! This episode, needless to say, has been banned from transmission anywhere in the world. The first airing of the **2012 London Olympics** animated logo also caused 30 confirmed seizures and had to be quickly amended.

In 2005, the International Telecommunication Union (ITU)'s *Guidance for the reduction of photosensitive epileptic seizures caused by television (BT.1702)*, advised all their members (over 180 worldwide) to put compliance measures in place to minimise the amount of television material that can induce epileptic fits in viewers.

In the UK and elsewhere in the world, broadcasters use a device developed by Cambridge Research Systems Ltd. called the 'Harding Flash & Pattern Analyser'. This device, named after Professor Graham Harding (whose research work is the basis of the analyser) scans footage for patterns which could cause epileptic seizures in PSE sufferers.

If programme material fails the Harding Test it is rejected and has to then be edited to correct the offending areas. These editing costs if undertaken by the broadcaster would normally be deducted from any fee.

Getting material analysed before submission ensures that unforeseen costs and delays are avoided.

Frequently Asked Questions

What is a 'Harding Test' for?

A Harding Test checks video for areas which could potentially trigger seizures in sufferers of photosensitive epilepsy.

What does the Harding FPA do?

The Harding Flash & Pattern Analyser is the device itself. Video is played through the analyser, either from tape or file such as QuickTime or AVI and a Pass or Fail certificate is issued. The 'Passed' certificate shows the footage is unlikely cause problems with viewers and is now required by many broadcasters with submission of programmes/commercials. The 'Failed' certificate gives an indication of areas of concerns and broadcasters will generally not use programmes that contain failures.

If a programme fails, what can be done?

If a programme fails, it usually means re-editing the offending scenes. Normally this can be rectified by reducing the number of flashes in the scene and/or reducing the intensity of colours (most notably red). After re-editing the problem areas, the entire programme has to be re-tested.

What do we do?

We provide a quick and reliable service for testing programme material, from virtually any video format. We can accept tapes or video files. Files can be supplied on a disc or hard drive or uploaded to our FTP server. The facility to accept uploads means we can receive video for testing from anywhere in the world and then hopefully e-mail you a 'Passed' certificate!

If the material has failed, we can advise you on how to make changes so that it passes (the first re-test is free of charge). Alternatively, we can give you a quote for our in house facilities to make the changes for you.

Please get in touch if you require any further information or advice:

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Further information:

Harding Tests and Failure Corrections	http://www.hardingtest.com
Harding Flash and Pattern Analyser	http://www.hardingfpa.com
Photosensitive Epilepsy (Wikipedia)	http://en.wikipedia.org/wiki/Photosensitive_epilepsy
The offending Pokémon episode	http://en.wikipedia.org/wiki/Dennō_Senshi_Porygon
The offending London Olympics logo	http://en.wikipedia.org/wiki/2012_Summer_Olympics
PSE – Epilepsy Action	http://www.epilepsy.org.uk/info/photo.html
Ofcom Code – Flashing Images	http://www.ofcom.org.uk/consult/condocs/Broadcasting_code/broadcasting_code/annex8/
ITU Publications	http://www.itu.int/ITU-R/index.asp?category=information&mlink=disabilities-divide

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