

# TECHNICAL REQUIREMENTS

Programmes delivered to Channel Four on videotape are subject to a comprehensive technical review process prior to acceptance and transmission. This is not just to ensure the programmes will play on transmission successfully - vital though that is - VT transport compatibility is rarely a problem with current VT formats. All technical parameters are checked for compliance with our delivery specification which are based upon Ofcom guidelines and recognised television broadcast standards documents. The checks centre primarily upon:

- vision parameters - eg video levels within limits, resolution and general technical quality of pictures
- aspect ratio and safe areas
- flashing images and patterns
- audio parameters - eg noise levels, distortion, dynamic range, stereo image and mono compatibility
- timecode.

All these and much more are described in detail in our engineering guide - Technical Requirements for Commissioned Programmes - which also addresses some issues concerning live programmes.

This document can be found at:

<http://www.channel4.com/4producers/resources/documents/FullTechnicalRequirements.pdf>

Programmes which do not comply will usually be rejected and returned to the production company for correction, so please contact the Engineering department at the earliest possible stage if you have any doubts about technical compliance - we are here to help. Problems associated with flashing images and patterns incorporated into programmes (and any other broadcast material) deserve a special mention. Those viewers susceptible to Photosensitive Epilepsy can suffer an epileptic fit induced by watching sequences of pictures which change in brightness at fairly high repetition rates, and by patterns of certain frequencies especially if they oscillate back and forth across the screen.

Ofcom have issued notes for guidance on this topic. Details of these requirements can be found on the Ofcom website and as with all guidelines are subject to periodic revision. This topic area is far from simple and the analysis of complex moving images and how they relate to risk can take considerable expertise. Whilst there are devices available to aid the detection of picture sequences likely to induce an epileptic fit, a detailed picture analysis is the only way to be sure of compliance. This requires the right knowledge, equipment and adequate time to detect and correct problems prior to transmission. Channel 4 treat this topic with the utmost seriousness on all its broadcast services, and if you suspect your programme may breach Ofcom guidelines you must discuss it with the Engineering dept as soon as possible. This will allow us to advise you at the planning stage ideally, but certainly well before final edit and delivery.