












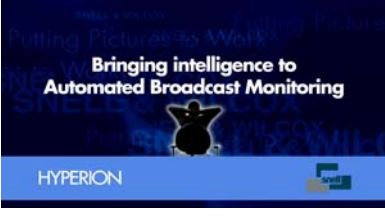


Hyperion HD Test Sequence (50Hz Version)

Start Timecode & Image	Duration	Description / Indications / Errors	Explanation
0:00:00 	15 sec	Still slide: Hyperion, "Bringing intelligence to Automated Broadcast Monitoring"	Introduction
0:00:15 	10 sec	Black	Hyperion can detect all standard technical errors, as would be detected by most multiviewers and other products, such as full screen black video.
0:00:25 	10 sec	Bars	Similarly fully-frozen non-black video is detected by Hyperion, whether test patterns...
0:00:35 	10 sec	Pure frozen video: Sea view	...or other frozen video, ...
0:00:45 	20 sec	Still slide: Hyperion, as above	...or frozen graphics.

Start Timecode & Image	Duration	Description / Indications / Errors	Explanation
0:01:05 	50 sec	Moving blackish video: Darkened ducks, with moving logo and crawl	Hyperion is designed to go beyond the standard technical alarming, and includes more subjective measurements that help guide an operator to potential and actual faults that can not be detected by conventional monitoring products. For example, an operator might have adjusted a video proc-amp to correct for an incoming feed that was too bright, and then forgotten to reset the proc-amp, so the next job using that incoming line ends up with the picture being too dark. Even though there is full brightness logo and crawling text, Hyperion can warn the operator that the main video is suspiciously dark, using the unique “Blackish” detector.
0:01:55 	10 sec	Black with same logo and crawl continuing	Hyperion’s regionalised detectors warn the operator that the main video is now fully black, even though the logo and crawl is normal.
0:02:05 	30 sec	Frame freeze with inter-field movement: Moving pigeon, logo continues	Even though there is lots of inter-field movement, (twitter), Hyperion warns the operator about the frozen video,
0:02:35 	50 sec	Moving stillish video: Mount Fuji (© Aske Dam), logo continues	This sequence is perfectly legal moving video, and for some types of channel or expected program content, this should not raise an alarm. However, if this was a music channel like MTV, or a kids cartoon channel, then this low amount of movement persisting for a period of time is very unlikely to be the correct content. Hyperion’s detectors can all be configured for different thresholds and different time periods before an issue is raised as a warning (yellow alarm) or escalated as an error (red alarm). These could be set statically for each channel or, based on information in the playout automation schedule, different settings could be activated for different styles of programming. In this case, Hyperion is warning the operator that this content has suspiciously low amounts of movement compared to what is expected. This can help alert the operator to more subtle types of errors, e.g. the wrong content being played on the channel, as well as simple technical failures such as a pure freeze.

Start Timecode & Image	Duration	Description / Indications / Errors	Explanation
0:03:25 	10 sec	Still slide: Hyperion as above, logo continues	The stillish alarm will remain, but a full freeze alarm will now be raised.
0:03:35 	30 sec	Moving video (ducks) with moving logo and moving text crawl (Hyperion message)	Back to legal video with no alarms present.
0:04:10 	30 sec	Frozen video (ducks) with same moving logo and crawl continuing	A common problem with simple freeze detectors, (e.g. in multiviewers), is that they notice movement of ancillary parts of the video, e.g. animated logos or crawling text, and can fail to spot that the main background video has frozen. Here Hyperion's regional detectors are able to warn the operator that the background video has frozen even though the logo and text is still moving.
0:04:40 	30 sec	Moving video OK, Audio mono	Hyperion continually monitors hundreds of parameters from the video, up to 16 channels of embedded audio, and the metadata within the SDI stream. Only a small subset of these are directly shown on the On Screen Display, (OSD), however if any alarm is present then the Global Hyperion indicator at the bottom right of the screen will alert the operator, who can then use Centra to find out more details. This section of the sequence shows a number of types of audio failure detected by Hyperion, including a stereo pair reverting to mono, ...
0:05:10 	20 sec	Audio inverted on same video	... Audio phase inversion within a stereo pair, ...
0:05:30 	20 sec	Audio silent on same video	... Low-level or silent audio. Hyperion analyses up to 16 channels of audio and assigns each channel to one of 5 levels: silent, quiet, normal, loud, or overflow. The thresholds between each level are fully adjustable on a channel-by-channel basis, as are the time periods before an alarm is escalated to the operator.

Start Timecode & Image	Duration	Description / Indications / Errors	Explanation
0:05:50 	10 sec	Moving video: audio OK	Back to legal video and audio with no alarms.
0:06:00 	20 sec	Dolby replaced by PCM	Here Hyperion is warning the operator that an audio channel that should be Dolby-E has been replaced with PCM.
0:06:20 	30 sec	Still slide: Hyperion as above	Audio alarm continues, and video freezes.
0:06:50	-	END of sequence – plays in continuous loop	