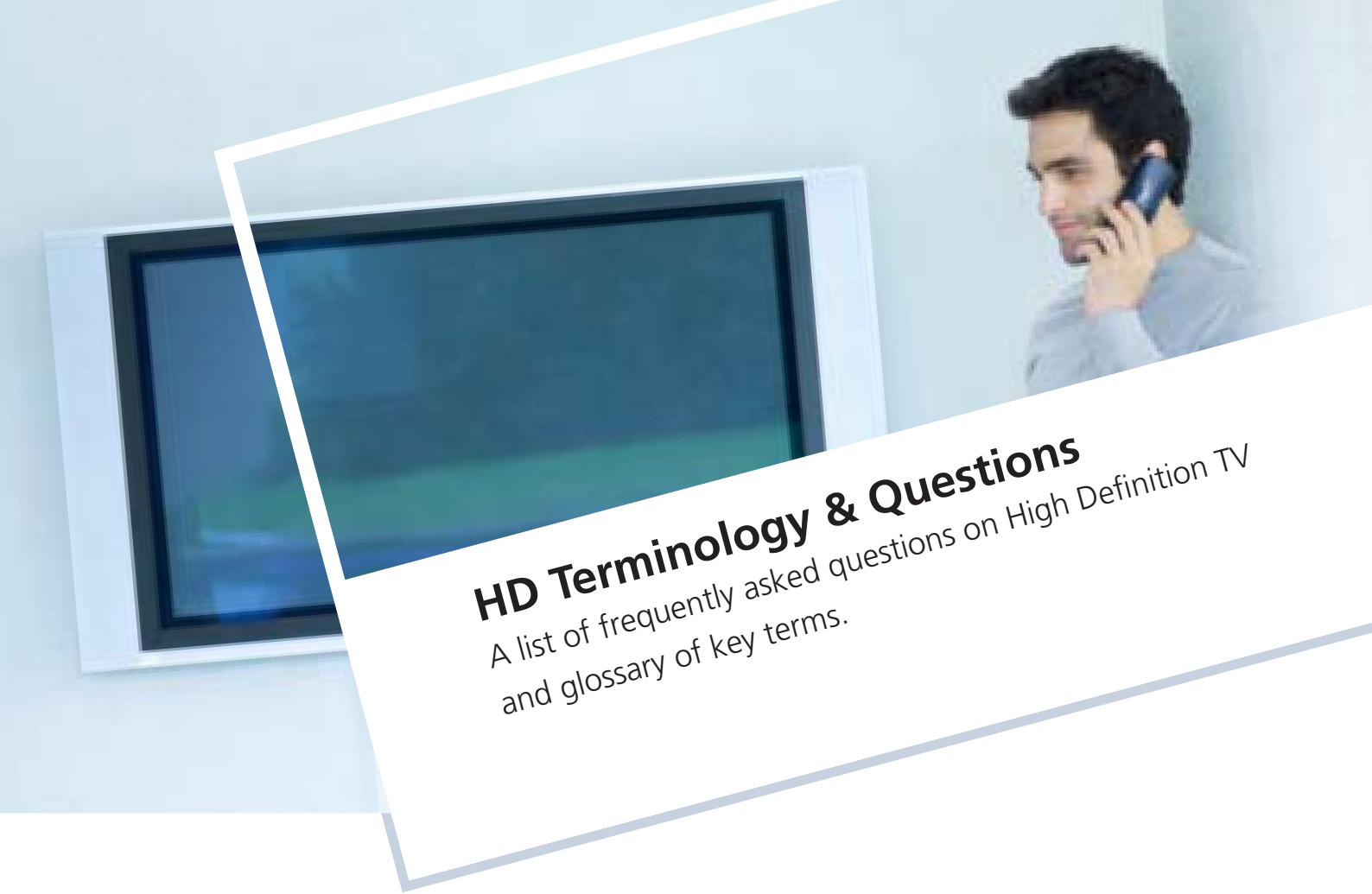


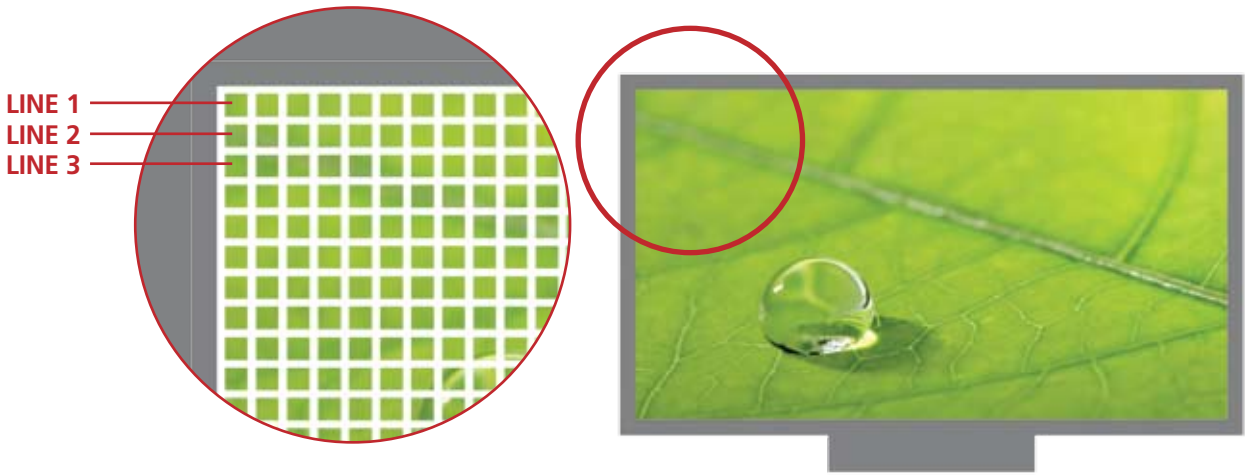
HD Terminology & Questions

A list of frequently asked questions on High Definition TV and glossary of key terms.

What are lines and pixels?

The picture on your television screen is made up of hundreds of horizontal lines. In Standard Definition (SD) television, images are made up of 576 lines. With High Definition (HD), images are made up of either 720 or 1080 lines, which allows for greater sharpness of detail on your display. Each of the lines of the image is built-up by a large number of pixels.

You can calculate the total number of pixels that contribute to the picture you finally see on your screen by multiplying the number of pixels per line of a source signal by the number of lines it uses.



HD Terminology & Questions

What do the P's & I's mean?

Video signals are often referred to by the number of lines they use, followed by a letter "p" or "i". In high definition broadcasting you will for example find references to 720p and 1080i.
The "p" stands for "progressive", and the "i" for "interlaced", and both of these terms are related to how the source signal is created and/or transmitted. In Europe, video sources are using 50 samples within each second, and a "p" would indicate that video signal has 50 complete snapshots, whereas an "i" says it has 50 snapshots with an alternation of the odd and the even lines. In the real world – where bandwidth is an important factor – and after adding the number of pixels to the equation, both formats have their merits: 1280 x 720p progressive signals are particularly good for motion, whereas 1920 x 1080i interlaced signals may have an edge on resolution.

Standard definition broadcasts have been using 576i interlaced signals, and typically SD TV sets also bring the image to the screen in an interlaced way. Many of the new displays do however operate in progressive mode, whereby incoming interlaced signals will be converted to progressive ("de-interlaced") inside the display.

What equipment do I need to watch HD broadcasts?

In order to watch HDTV programming, it is first necessary to have a display device capable of displaying programs in HD ("HD ready" or "HD TV"). For "HD ready" display devices, you will also need a device capable of receiving, decoding and transferring the digital HD signal such as a "HD TV" set-top box.

Are all flat-screen televisions capable of displaying HD signals?

No. However, all flat screens with the "HD ready" or "HD TV" logo will be capable of accepting and displaying HD signals.

Will all the programmes I watch on my HD TV be displayed in HD?

HD displays with a fixed screen resolution will typically use their full resolution capability regardless of whether the actual source signal is SD or HD. It should however be obvious that – e.g. in the case of broadcasting - only programmes broadcast in HD will offer the most enhanced picture resolution. As your country moves closer to the digital switchover, more and more programmes and channels may become available in HD.

Will I still be able to watch my DVDs and VHS tapes on my HD TV?

Yes, however these SD source signals will – surely in the case of HD displays with a fixed screen resolution – require "up-scaling" processing prior to being displayed in high definition, which will not offer the same enhanced picture resolution as with native HD signals, as also pointed out under the previous question.