

TE1070 CONNECTIONS – SEMESTER 2 – EXERCISE 8

DIGITAL MEDIA– VIDEO DISPLAY MONITORS

Environment	Display type	Justification for display technology chosen	Justifications for display technologies rejected
<p>A shop window display on a high street where the video display will be used for in store advertising</p> 	<p>64" Samsung Professional Plasma Display</p> <p>Versus</p> <p>65" Samsung Commercial LED LCD Display</p> <p>Even though the LCD has a lower power consumption than the plasma the plasma has a better contrast ratio and viewing angle and plasmas has less judder and drag when playing video content</p>	<p>Size of display; 64" Diagonal Size</p> <p>Resolution (detail); 1920 x 1080</p> <p>Brightness; 600 cd/m2</p> <p>Contrast range; 10,000:1</p> <p>Viewing angle; Over 160 Degrees</p> <p>Power consumption (how green it is); 480/520 Watts</p> <p>Type of video content it is best at displaying; HD 16:9 widescreen can handle digital and analogue source input</p> <p>Cost; £1,990</p>	<p>Size of display; 65" Edge-lit LED LCD</p> <p>Resolution (detail); 1920 x 1080</p> <p>Brightness; 400 nits</p> <p>Contrast range; 5000:1</p> <p>Viewing angle; 178°/178°</p> <p>Power consumption (how green it is); 170/290 Watts</p> <p>Type of video content it is best at displaying; HD 16:9 widescreen can handle digital and analogue source input</p> <p>Cost; £1,990</p>
<p>A large screen display at a football/sports ground</p> 	<p>21.5" Square Display</p> <p>Versus</p> <p>46" Outdoor LCD Display</p> <p>The LCD panels would be best suited for this type of outdoor display as they can be arranged to form screens 10 by 10 and play various formats of video from a wide range of input sources.</p>	<p>Size of display; 21.6" LED LCD</p> <p>Resolution (detail); 960 x 960</p> <p>Brightness; 450 nits</p> <p>Contrast range; 4000:1</p> <p>Viewing angle; 178°/178°</p> <p>Power consumption (how green it is); 67/72 Watts per/unit</p> <p>Type of video content it is best at displaying; HDMI; DVI-D; RJ-45; RS-232C; Display</p> <p>Cost;£1.200 per/screen</p>	<p>Size of display; 46" CCFL</p> <p>Resolution (detail); 1920 x 1080</p> <p>Brightness; 1500nits</p> <p>Contrast range; 4000:1</p> <p>Viewing angle; 178°/178°</p> <p>Power consumption (how green it is); 345/420 Watts</p> <p>Type of video content it is best at displaying; RS232C/RJ45 MDC, Plug and Play (DDC2B), PIP/PBP</p> <p>Cost;£ 2,140</p>

Environment	Display type	Justification for display technology chosen	Justifications for display technologies rejected
<p>A University class room (ME226)</p> 	<p>65" Touch Screen LCD Display</p> <p>Versus</p> <p>TS Series 82" Interactive LCD Display</p> <p>The choice between these two boards I guess would come down to cost however the touch screen display has a better power consumption and screen resolution so would probably be the better product</p>	<p>Size of display; 65" Edge-lit LED LCD</p> <p>Resolution (detail); 1920 x 1080</p> <p>Brightness; 500 cd/sq m</p> <p>Contrast range; 10,000:1</p> <p>Viewing angle; 178°/178°</p> <p>Power consumption (how green it is); 430 Watts</p> <p>Type of video content it is best at displaying; Multimedia HD interactive app programs</p> <p>Cost; £12,000</p>	<p>Size of display; 82" Glass Diagonal Screen Size</p> <p>Resolution (detail); 1920 x 1080</p> <p>Brightness; 600 cd/sq m</p> <p>Contrast range; 2500:1</p> <p>Viewing angle; 178°/178°</p> <p>Power consumption (how green it is); 930 Watts</p> <p>Type of video content it is best at displaying; Multimedia HD interactive app programs</p> <p>Cost; £4,500</p>

Information Sources:

- <http://lcdtvbuyingguide.com/lcd-vs-plasma-scorecard.html>
- <http://www.shopequip.co.uk/window+display+systems/27+inch+digital+display+screen+kit+kda2r+dc-C68-I2772.html?viewtype=4>
- http://www.samsung.com/us/function/search/espsearchResult.do?input_keyword=new%21+43%22+class+%2843.0+diag.%29+plasma+430+series+tv&keywords=new%21+43%22+class+%2843.0+diag.%29+plasma+430+series+tv
- <http://www.displays2go.com/Product.aspx?ID=19304>
- <http://www.samsung.com/us/business/video-wall-displays>

PLASMA	LCD
<p>Better colour resolution in low light</p> <p>Better viewing angle due to pixel definition and brightness, produces more accurate black backgrounds and video footage with shadows can display at angles up to 45 degrees off centre</p> <p>Plasma only have 720p resolution for static images</p> <p>Durability depends on manufacturer</p> <p>Cheaper than an LCD</p>	<p>LED LCD TVs perform better in very brightly lit rooms due to their inherent anti-glare technology and back light.</p> <p>1080p led screen resolution so good for most image displays</p> <p>Best refresh rate for a LCD is 240hz and there is almost always motion lag or judder issues with live video feed and some video playback</p> <p>Uses less power than a Plasma</p>

