Digital & LED Designer's Glossary

This document has been created by the "Digital Sign Company" to enable our customers to better understand the terminology used in the Digital-Out-Of-Home (DOOH) and LED Industry.

A

Accent lighting- Lighting that adds interest to a room or landscape by drawing attention to an object or architectural detail.

Access mode - In Content Manager, a setting that allows users to determine which of several logged-in users is the one permitted to modify settings within the program at that time.

Ad Audience- Refers to the number and type of people exposed to the specific ad, with an opportunity to see.

Ad Exposure Time- The number of seconds spent watching and listening to the ad.

Ad rotation Duration- the number of seconds required to view all of the ads in a rotation or loop.

Adjacency- A commercial time slot immediately before or after a specific ad or program.

Advertising Agency- A company that does media buying, planning and trafficking, which are carried out by credited advertising agencies. Selecting an advertising agency can ensure your advertisements are placed where you will gain maximum exposure and agencies will make decisions about the elements of design and content of your advertisement.

Advertising Displays - Any location-based display that carries advertising. Advertising displays can be anything, including... End Caps, ATM Toppers, Posters, Billboards, Point-of-purchase displays (pop displays), Cardboard displays

Advertising Display Networks – Digital signage network displaying third-party ads for brands selling products and services in a given venue.

Advertising Spot- A unit interval (e.g. 10second, 15 second, 20 second, 30 second etc.) containing a commercial message supplied by an advertiser for insertion in the transmission of a TV Channel or digital signage network.

Ambient Humidity- The humidity of the area or atmosphere around the electronic led display in which it will show no problems and will be working properly without showing malfunctions.

Ambient Lighting- Over all illumination in a room or space, may include both natural light and artificial light.
Light on a bright sunny day, a deep foggy day, a city at night...in other words, any kind of pre-existing light.

Ambient Temperature- The temperature of the area or atmosphere around the electronic led display (not the operating temperature of the led

display itself) in which it will be working properly without showing malfunctions.

Artifact- In the AV world, it's any unwanted object, visual distortion, or defect on a video screen.

Attenuation- The loss of signal strength as it flows through a cable usually expressed in decibels (dB)

Animation - a sequence of frames that, when played in order at sufficient speed, presents a smoothly moving image like a film or video. An animation can be digitized video, computer-generated graphics, or a combination.

Aspect Ratio- Relationship of screen width to screen height in a video screen e.g. 16:9 which is digital TV standard and established sound quality goals.

Authoring Station - a machine running software, used for authoring and publishing the scripts that are sent to Players.

AV Distribution System- The chain of audio and video devices used to distribute audio and video signal from the media player, PC, or other audio/video sources to the point of display.

AVI - AVI is an early Microsoft video file format that stands for Audio Video Interleave

B

Back Channel - A data pathway through which a player can send information back to Content Manager.

Background - The graphic image or plain colour used as the basis for a screen page, on which elements are placed.

Back (rear) projector- Is a technique in which video is projected from a translucent screen material, rather than in front of a screen, to make better use of available space, cast an unobstructed image.

Bandwidth- In video applications, the range of available frequencies that can be encoded and decoded as well as the signal-carrying capacity in a video path; measured in Hertz(Hz) or bits or bytes per second (bps/Bps)

Banner Advertising- promotional content formatted as a text crawl or graphic that displays horizontally at the bottom or top of a digital screen.

Back to back- The running of more than one ad with one immediately following the other.

Billboard- A sponsor announcement at the beginning or end of program content.

Broadband- a technique for sending data, voice, and video traffic over long distances by transmitting high frequency signals over coax, UTP, and fiber optic cable or wireless.

Bitmap - A type of font or graphics file that is stored in the form of a pattern of memory bits, each of which specifies the colour of a pixel of the stored image. Bitmap file formats include BMP, PCX, PCD, JPG, TIFF, GIF, and IFF.

Bluetooth- Wireless radio data transfer specification working on the 2.4 Ghz band that allows for   PAN (Personal Area Network) to communication between devices.

Blue-Ray Disc- Recording format that has the ability to store several hours of high definition video signals on a disc the same size and shape as a conventional DVD.

Brightness- Offered used incorrectly with respect to illuminance lux, an objective measurement of the visible power of light source. The term is correctly used when describing screens brightness in a display or television.

Broadband- High-speed data (typically an Internet connection) to the home via the telephone line,

fiber, CATV, mobile telephone network or a combination of satellite dish.

Broadcast- a type of connection in which Content Manager sends information to many Players all at once, rather than making a separate connection to each Player one at a time.

Broadcast folder- a folder on the Broadcast Server machine in which published files are received for subsequent broadcast transmission.

Broadcast Server- a machine that prepares and transmits broadcast files received from a Content Manager machine. Also may refer to the broadcasting software that runs on this machine, or the Content Manager definition of the machine's location.

Bug- An embedded graphic icon or logo used to brand digital place-based program.

Byte- the basic unit of computer storage, comprising eight bits. Typically, two bytes can store one character of text in any writing system and four bytes can store one pixel. A Byte is the unit used to express the size of files.

C
Cable TV (CATV)
Television, phone and data services delivered to the home together using an underground cable rather than an aerial or satellite dish and separate from the usual telephone line. Typically uses a coax or fiber-optic cable.

CABLING
- **Category 5 Enhanced (Cat5e)** A data cable consisting of 4 twisted pair conductors used for home networks but can also be deployed for telephone and other low voltage communications.
- **Category 6 Augmented (Cat6)** As "Cat5e" but with additional physical spacing

internally and thicker wire cores to allow faster data speed and or longer cable lengths to be used.
- **Fiber-optic** A type of cable which uses light, rather than electricity, to pass data from one end to the other. Often made from a glass core surrounded by a protective covering, cheaper variants use a plastic material. Used for very high-speed data.

Captive Audience Networks - A captive audience network is a digital advertising media network installed where your target audience is assured to remain in place for a period of time. Typical captive audience networks are installed in supermarket queues, gas station pumps, banks, and wherever people gather and wait.

CEC- Specific features on HDMI-enabled equipment that allows communication between HDMI-connected devices via simple commands (like "play") that control other devices without any special programming.

Channel - a script that has been published in such a way that when its contents change, the updated material is forwarded to machines running the viewer that have subscribed to the channel.

Clip - A predefined graphic image, such as a picture, drawing, symbol, etc., that can be imported and positioned on a Scala background.

Closed Circuit Television - Traditionally, a private television network broadcasted internally within an organization. Modern narrowcasting solutions work over the Internet, deploying custom video and messaging anywhere in the world.

Codec - A software module responsible for compressing and/or decompressing an encoded media format such as AVI digital video.

Color Definition- The color of uniformly illuminated objects described using three terms:

- **Hue:** Describes the situation when the appearance of different colours is similar (e.g. matching blues and pinks).
- **Lightness:** Describes a range of grayness between black and white.
- **Chroma:** Describes the degree of departure from gray of the same lightness and increasing color (e.g. red, redder, pure red).

Colour Depth - The number of possible colors in a graphic image, stored as a given number of bits per pixel. A color depth of 8 bits provides 256 colours; 16 bits (also known as "High Colour") provides about 65,000 colours; 24 bits (also known as "True Colour") provides about 16,000,000 colours.

Colour Spectrum / Visible Spectrum- The visible spectrum is the portion of the electromagnetic spectrum that is visible to the human eye, typically between 390nm and 750nm.

Compliance- fulfilling the terms and requirements of a buy; delivery what is due.

Composite video - A standard video signal containing colour, brightness, and sync information. VCRs and laser disc players almost always include a composite video output.

Compression - The process of condensing a file, video, or animation using special hardware, software, or both so that it requires less storage space.

Content - Any files that are played back, including graphics files, sound files, video files, and script files themselves.

Content Folder - A folder on the Player machine in which all content files sent to the Player are stored.

Contrast Ratio- Is a measure of a video display's luminosity specifying the difference between the blackest of black and the whitest of whites.

4

Closed Circuit Television (CCTV)- Security cameras and connected monitors and recorders typically used for security purposes.

Computer aided design (CAD)- When a piece of software running on a computer is used to create drawings and schematics that represent the system that is going to be installed.

Convergence- Is the integration of the three primary communications channels (data, voice, and video) into one using the same network appliances, one standard network infrastructure, and the same administration. This high-bandwidth, combined-transmission method is known as Internet Protocol, or IP.

CPS (cost per screen)- refers to the total cost of advertising distribution over the network on a per screen basis.

CPU (Central Processing Unit) - The "Brain" of a computer that executes all calculations and machine instructions. Sometimes referred to simply as the central processor, but more commonly called processor. In terms of computing power, the CPU is the most important element of a computer system.

D
Data Casting - Broadcast of digital information over networks to receivers and players. Datacasting is sometimes used as an alternative to traditional video broadcasting, because the receivers and player units can have the "intelligence" to customize their playback programming for the location and intended audience. The system of receivers set up to receive messages from a particular datacast is known as Datacasting Networks, which are a venue for advertisers.

Decompress - The process of expanding a file to its original uncompressed form after it has been compressed.

Default - A value or option that system uses if you do not specify anything.

Degradation- The standard method used to express the life of a display is the time it takes to reach 50% of its day one brightness.

Digital Advertising Networks – Ad-based digital signage networks displaying third-party ads from brands selling products and services in a given venue

Digital Dynamic Signage - Digital dynamic signage is a term used to describe the emerging industry where flat panel devices such as plasma screens and liquid crystal displays are used as moving posters, electronic bulletin boards, and the like.

Digital In-Store Merchandising - Digital in-store merchandising refers the use of digital audio/visual equipment in retail environments to help compete for consumer attention. Increasingly, flat panel display devices, such as plasma screens, liquid crystal display (LCDs), and LED (light emitting diodes) signs are being used to fill all available merchandising "real estate".

Digital Media Network - The term digital media network can refer to anything from multiple websites, to multiple television stations being centrally owned and operated. With the reduction in cost of custom controllable player devices, a new breed of digital media network is emerging, known under many different terms. The industry appears to be settling on the term digital signage to describe these new digital media networks, where custom images are digitally delivered to sign-like devices located throughout retail environments, or the enterprise.

Digital Menu Boards – LCD, Plasma, TV or LED screens that take the place of static menu boards in restaurant venues. Content is delivered to the menu board through a central content manager and changes are displayed to the menu dynamically based on the requirements of the venue.

Digital Signage Player- Is a device at customer sites where Digital Signage Software accesses and displays digital signage information that is "received" from the controlling server. Digital Signage Players automatically communicate with a primary server and is in some cases; roll over to backup servers in the event of an interruption. The player may further assure consistency and uninterrupted signage presentation by preloading pagers while other are being displayed.

Digital Signage Software – An end-to-end software solution for digital signage networks. The software provides a content creation solution, a content management solution managed from a central location and playback functionality located near the display screens. The software also provides for system maintenance, health checking, advertising affidavit creation and management, automatic scheduling, playlist creation and management, meta tagging and user security.

Digital Sign- a singular reference to a screen that is running digital signage content and typically replacing static billboard and posters.

Digital Signage Solution – The complete end-to-end digital signage solution available in one software platform.

Directivity- The property of the led display of being more sensitive in one direction than in another

Display Area- The area used for displaying the information show on the led display.

Display
- **OLED**
  •Short for organic light-emitting diode, a display device that sandwiches carbon-based films between two
    Charged electrodes, normally in glass.
    • OLED displays are emissive devices - they emit light rather than modulate transmitted or reflected light.

• OLED is beginning to replace LCD technology in handheld devices such as PDAs and cellular phones

Because the technology is brighter, thinner, faster and lighter than LCDs, uses less power, offers higher

contrast and is cheaper to manufacture.

- **Plasma or PDP (Plasma Display Panel)**
A type of fl at panel technology common to large TV displays. The screen technology utilizes small cells
containing electrically charged ionized gases or plasma cells to make up the pixels in the screen, and   varies the voltage to generate the different colours from the gas. Use more electrical power, on average, than an LCD TV.

- **LED TV-** is a type of LCD television that uses light-emitting diodes (LEDs) to backlight the display. An LED is a semiconductor device that emits visible light when an electric current passes through it.
   LED TVs has significantly lower power requirements and convert power to light more efficiently and LED also lasts much longer than most other lighting technologies.
 The most commonly used LED technology is edge-lit LED, in which white LEDs are situated around the edge of the screen and a diffusion panel employed to illuminate the display evenly. Edge-lit LED displays can
be manufactured very thin.

- **CRT (Cathode Ray Tube)-** is the technology used in traditional computer monitors and televisions. The image on a CRT display is created by firing electrons from the back of the tube to phosphors located towards the front screen. Once the electrons hit the phosphors, they light up and are projected on the screen. The color on the screen is produced by a blend of red, blue, and green light, often referred to as RGB.

This technology is being replaced rapidly with LCD and LED technologies.

DOOH (Digital- Out- of- Home) - Refers to digital media used for marketing purposes outside of the home. This excludes TV advertising and radio advertising, but includes digital signage. This is sometimes hyphenated as digital-out-of-home or abbreviated as DOOH.

DPT (Dynamic Pixel Technology)- The display comprises pixels and dots. Pixels are generated dynamically. Dynamic pixels are generated variable from existing dots. By combining adjacent dots, pixels form a dynamically generated logical unit, with adjacent pixels overlapping physically. This will have the effect that the electronic led display flowery colour collocated from red, green, blue LED show the actual nature colour again.

Dwell-time- the amount of time a customer remains in a venue, or a specific area within the venue. Dwell-time is an important variable in determining display placement, advertising size(seconds), content loop duration, advertising-to-content ratio, and advertising cost. One of the primary objects of Digital signage is to increase dwell-time, and therefore often form part of the Return on Investment(ROI) metrics and cost justification value proposition.

E
Electronic Billboards- Billboards that can be updated electronically. This term covers a wide array of products. Sometimes it is used to refer to television channels run by computers, and sometimes it refers to very large screen video displays actually being used outdoors as billboards. Both are growing trends in advertising.

Electronic Kiosks- Terminals that disseminate information and services to the public through touch-screens and video displays. Electronic kiosks come in all shapes and sizes. They are often built by display companies and customized to individual

needs by multimedia developers and value added resellers. They often incorporate card readers, coupon printers, and other devices specific to their application. The use of electronic kiosks as Internet Access Terminals is a growing trend.

Electronic LED Display- A numerical readout in which the digit segments are delineated by light emitting diodes.

Element transition- An effect that defines the way one or more elements (text and/or graphics) of a screen page moves onto and/or off the page.

Ethernet-Network data communication using wired or wireless connections. Local-area network (LAN) architecture. Deploys the IEEE802 standards and is used for distributing Internet access, media and other communications around a home. Newest version, Gigabit Ethernet supports data rates of 1 gigabit (1K meg)

Eye Tracking- Intelligent camera sensor technology that detects the viewing of a screen by a person, reflected light is used to determine when person's eyes turn in the direction of the screen: in some cases, the camera can recognize the gender and age range of the person.

F

FM (Frequency Modulation)-An electrical method of using a high frequency "carrier" to move lower frequency content. Used as a generalized term to describe VHF analogue radio services in the frequency range of 88MHz to 108MHz.

File - A named and saved collection of computer data, such as a script, background, sound effect, animation, or clip.

File format - The structure of a file that defines the way it is stored and used. Generally, a file-type extension to the file name identifies the format. For example, some common bitmap graphics file formats supported by are BMP, GIF, TIF, PCX, and JPG. Common animation formats are AVI, FLI, FLC and MPG. A common audio file format is WAV.

7

Firewall-Security measures (hardware and/or software) that blocks unauthorised users from gaining access to a computer or network.

Frame Rate The number of video images captured or displayed each second.

Frames Per Second - The speed at which an animation, film or video is displayed. The frames per second setting for an animation should be at least 12 to create the illusion of movement.

Frequency of Frame Display- This is the frequency of the cycle which sends the data for one display. The optimum value is determined after taking into consideration flicker and uneven contrast.

FTP - (File Transfer Protocol) a standard protocol for transferring data over the Internet. To use FTP, FTP software must be set up on both sending and receiving ends of an FTP transmission, and the client (initiator) must have a user name, password and a valid target address on the server.

Future-proof-As we do not know what the future holds with regard to technology, it is recommended that a cabling infrastructure is installed in order to make the property "Future-Ready".

G

Gamma Correction- The correction of tonal ranges in an image, normally by the adjustment of tone curves. Before being displayed, the linear RGB data must be processed (gamma corrected) to compensate for the gamma of the display.

Gateway (AKA Router)- A piece of hardware which connects one network to another. Most commonly this will be the link from a home network to the Internet.

GBE (Giga Bit Ethernet) - The fastest form of Ethernet network currently in use within homes. Offers a maximum data speed of 1Gb/s.

Gross Ad Cost- Is the full cost of advertising and is the amount that advertisers pay for their ads to be aired.

Gross Opportunity to View Audience-Is the total number of incidences, over a period of time, where consumers are in an area where they have the opportunity to view an installed network.

Grey Levels -Scale of grey varieties between the black and the white. Graphical software generally proposes 16 or 256 grey levels.

GUI (Graphical User Interface) -Tools or software that allow people to interact with a machine, device, computer program, or other complex tool. i.e. Touchscreen design.

H

Hardwired System A system using wires to communicate rather than through the air (or wireless)..

HDMI High-Definition Multimedia Interface- A compact audio/video interface used to transmit uncompressed digital streams, digital surround sound, control and network information and two channels of audio return signal. It has a fairly high bandwidth and is severely limited by distance.

HDTV (high definition television)- the next generation of video content, capable of almost three times the clarity and resolution of standard NTSC broadcasts. Digital television format that provides a high-quality widescreen picture (16:9) with digital surround sound

Head-end - An installation that is the final point from which video feeds for multiple channels are sent to broadcast or cable television customers. In addition to transmitting equipment, a head-end can contain feeds for various channels

Health Monitoring - In information technology and multimedia terms, health monitoring refers to

checking on the status of computers and networks to see if they are still operating..

High Colour - A setting describing graphics that have 16-bit color, providing up to approximately 65,000 colors in the image.

Home Automation-The electronic connection and control of electrical and mechanical devices by a wider, unified control system, e.g. curtains, blinds, lighting, audio / video systems, HVAC, telecoms, internet etc.

Hz - the abbreviation for hertz, or cycles per second. This is a measurement for frequency. You often hear Hz referred to in a computer's CPU speed, or a monitor's refresh rate. The CPUs in Personal Computers just passed from commonly being measured in MHz to being measured in GHz. Monitor refresh rates are most frequently measured in KHz. Khz means kilo-hertz. Kilo means 1,000. So 2 KHz is 2000 hertz. MHz means mega-hertz or 1,000,000 Hz. GHz means giga-hertz or 1,000,000,000 Hz. THz mean tera-Hertz or 1,000,000,000,000 hertz.

I

Illuminance- The intensity of light falling on a surface area. If measured in square meters, the unit of Illuminance is lux (lx)

Info graphic- Information graphics are graphic visual representation of information, data or knowledge. These graphics present complex information quickly and clearly, such as signs, maps, journalism, technical and educational, e.g. using single symbols to process information.

Integrated System-Several sub-systems connected so that they work together and can be controlled easily.

IP Address (Internet Protocol Address) -Unique number that each device on a computer network uses for identification. An address in four-part

numerical format that uniquely identifies a computer accessible over a TCP/IP-based LAN or the Internet. For example, 127.0.0.10.

IPTV- Digital television service delivered via a broadband IP link using data communication wiring.

IP65- The protection classification offered by an enclosure is shown by the letter IP (Ingress Protection) and two digits.
 The first digit indicates two factors:
- Protection for persons
- Protection for equipment

The second digit indicates the protection against water. A rating of IP65 indicates enclosure is totally protected against dust. It also indicates enclosure is protected against low pressure jets if water from all directions - limited ingress permitted.

ISP (Internet Service Provider) -Company that provides connectivity to the Internet.

IT - (Information Technology) IT is used to apply to everything having to do with computers, networking, and information systems.

L

LAN-WAN (Local Area Network) Computer network covering a local area, such as a home, office or small group of buildings.

LCD - (Liquid Crystal Display) LCDs are thin displays used for TV, computer monitors, wristwatches, digital thermometers, microwaves, digital signage, and countless other technologies — possibly the most common and diverse electronic flat screen technology in use today.

LED - (light emitting diode) diodes are electronic components that let electricity pass in only one direction. Light emitting diodes are diodes that emit visible light when electricity is applied, similar to a light bulb. When many LEDs are side-by-side,

they can create pictures, such as the scrolling red LED signs found everywhere. LED displays are often confused with LCDs (liquid crystal displays), but they are different technologies.

Loop - (1) In a script, a sequence of events that repeats. (2) A setting determining the number of times a sound or animation should repeat when it runs.

Lumen- Abbreviated "Im" a unit of measure light wavelength perceived by the human eye; in the AV industry.
It's used to describe the brightness of a projector's image.

M

MCI - (Media Control Interface)- The standard method of controlling multimedia devices before DirectShow/Windows 95. It is a standard for communicating with devices that support VCR-like operations like play, pause, stop, etc., such as MPEG playback cards. A given device might offer both MCI and DirectShow drivers.

MHz- The abbreviation for megahertz, or millions of cycles per second.

Movie clip- a digital video segment in an ActiveMovie-supported format, such as AVI, QuickTime, or MPEG, that has been loaded as a clip. Movie clips are similar to anim clips except that they can also have sound associated with them. Movie clips cannot have their frame rate or color palettes adjusted.

MPEG - (Motion Picture Experts Group) a standard used for the compression of digital video and audio sequences. MPEG sacrifices some image quality to achieve very high compression.

MPEG-4- is the latest compression standard developed by MPEG, the same group that brought us MPEG-1 and MPEG-2. MPEG-4 brings higher levels of interaction with content, controlled by the content developers. It also brings multimedia to

new types of networks, including those employing relatively low bitrates, and mobile ones.

MSF - (minutes, seconds, frames) a way of measuring time on a compact disc (CD), expressed in the format
mm:ss:ff, where mm is minutes, ss is seconds and ff is frames.

MTBF- Mean time between failures- is the predicted elapsed time between inherent failures of a system during operation. MTBF can be calculated as the arithmetic mean (average) time between failures of a system.

Multi-tile - A multi-tile divides the source image into several "slices" that are tiled together to produce a final image of the desired size. See also tiling.

Multimedia - The combination of various presentation media such as text, sound, graphics, animation, video.

Multimedia signs - Multimedia signs, where televisions or flat panel display devices such as plasma screens or LED displays, are turned into updatable signage. Advantages of multimedia signs include the ability to deliver messaging to targeted audiences depending on schedule or environmental conditions.

N
Narrowcasting - Narrowcasting means delivering highly targeted and customized messages to audiences in public locations at scheduled times. Usually, this is accomplished with a networked multimedia system allowing rapid production, customization, distribution, and playback to multiple locations on display devices such as televisions, plasma display panels, and LED displays (indoors or outdoors). The advantages of narrowcasting over traditional media include lower production costs, greater flexibility, and more attention-grabbing visuals.

Network administrator - An information technology professional responsible for setting up, maintaining, and securing a computer network. Network administrators often work in, or run, the IT department of a company.

Near Field Communication (NFC)- is a short-range wireless technology that enables the communication between devices over a distance of less than 10cm. An NFC device can work in two modes: active (battery powered) and passive (radio energy powered). There are three main ways to use NFC:
Card emulation: The NFC device behaves exactly like a contactless card and can be used to transport fare payments.
Reader mode: The NFC device is active and reads a passive RFID tag .e,g reading a web address.
Person-to-person (P2P) mode: two NFC devices communicate when each exchange information.

Nominal Work Life- The exact or ideal work life for the electronic led displays.

O
OOH (Abbreviation for Out of Home) -Typically used referring to out of home advertising or media networks.

OOHN (Out-of-Home Media Networks)- are like private television channels run by companies, organizations, and advertisers without having to have a complete television studio. For example, a growing number of companies are finding it viable to install small pilot programs where they push rapidly produced content, such as news, weather, and stock quotes, mixing in advertising. As the pilots prove successful in driving consumer behavior, the network can be expanded from dozens of screens, to hundreds or thousands, located throughout a country or region. Such out-of-home media networks are sometimes also referred to as location-based media, or location-based advertising, because they appeal to the target audience at or close to the point of

purchase, such as shopping malls, retail chains, or franchise operations.

Opportunity to See- The probability of being exposed to a medium's content and/or the advertising it contains. OTS does not require actual exposure to all content or advertising.

Optimum Viewing Distance- Generally speaking, The viewing distance of a LED display is determined by 3 factors:

- Pixel Pitch
- Screen Size
- LED Brightness

P4mmLED Display-------------------Best Viewing Distance 2.5m-25m
P5mm LED Display------------------ Best Viewing Distance 3-28m
P6mm LED Display------------------ Best Viewing Distance 3.5-40m
P7.62mm LED Display-------------- Best Viewing Distance 4-42m
P8mm LED Display------------------ Best Viewing Distance 4.5-50m
P10mm LED Display-----------------Best Viewing Distance 5-55m
P12mm LED Display-----------------Best Viewing Distance 8-66m
P15mm LED Display-----------------Best Viewing Distance 12-80m
P20mm LED Display-----------------Best Viewing Distance 18-110m
P25mm LED Display-----------------Best Viewing Distance 20-160m
P31.25mm LED Display-------------Best Viewing Distance 30-300m

- (Good rule of thumb is for every mm in pixel size = 1 meter in viewing distance. These figures apply to Indoor and Outdoor LEDs)

Overlay - A feature of most video cards that allows particularly smooth digital video playback without overloading the computer's CPU.

P

P.O.P.(point-of-purchase) - the term point-of-purchase usually refers to the industry concerned with customer behavior at the location of the purchase decision. POP is considered one of the most important aspects of advertising and merchandising. It is believed that the most critical time to influence buyer behavior is when they have money in hand.

Page transition - An effect that defines the way a page moves onto and/or off a screen.

PAL (Phase Alternating Line)- the colour video and broadcasting standard used mainly in Western Europe and South America. PAL screen resolution is 625 lines and its refresh rate is 50 Hz

PCI (Peripheral Connect Interface)- an advanced expansion-bus standard for internal peripheral devices, used most commonly by high performance graphics adapters.

PDP (Plasma Display Panels)- PDPs, also known as gas plasma displays or plasma screens, are flat screen display devices that are used for television, computer monitors, and dynamic signage.

Periodic scheduling- a type of scheduling that defines ranges of time within which events are allowed to play.

Pitch- The distance between the centers of two adjacent pixels in an array.

Pixel(s)- A pixel is one of the many tiny dots that make up the representation of a picture in a computer's memory. Usually the dots are so small and so numerous that, when displayed on led display panel, they appear to merge into a smooth image. The color and intensity of each dot is

chosen individually by the computer to represent a small area of the picture.

Pixel Composition- The number of led's that make up a pixel.

Pixel Pitch- Refers to the distance, typically in inches or millimeters, between pixels from the center of one pixel to the center of an adjacent pixel. The lower the pixel pitch, the sharper the image.

Portrait Orientation- A screen rotated to the height of the display is greater than the width; portrait orientation can often be more eye-catching than horizontal or landscape orientation, which many more viewers identify with evermore prevalent widescreen TV's.

P.O.S- Point of sale (also called **POS** or **checkout**) is the place where a retail transaction is completed. It is the point at which a customer makes a payment to the merchant in exchange for goods or services.

Proof of Play- A reporting mechanism in which logs are show that an ad actually played back on a digital signage system; some advertisers now also demand "proof of display" verification that the ad was actually shown on the screen as well as third-party audited play logs.

Programming- the overall concept of designing; writing; testing; debugging and documenting home technology systems.

Progressive Scanning (p)- Television format in which information to each pixel in a frame of video sequentially, from left to right and top to bottom to create an image e.g. 1080p; 720p.

PNG- the file-type extension for images in the PNG (pronounced "ping") format. PNG is a relatively new and advanced format, featuring both compression and extensibility.

Port, IP - a numerically designated access point for messages of a particular type in TCP/IP network communications.

Polling interval - the length of time that may elapse before a Player checks for a certain condition, such as whether a job has been delivered to its job folder, or whether its script has been updated.

Purchase Intent- The like hood that an individual consumer will buy a particular product.

Push software - software that pushes news and information from a broadcast server to a player client. Push technology can be used to deliver vital information to screens without the player asking.

Q

QR Code(Quick Response Code)- Is a type of matrix barcode(or two-dimensional code) first designed for the automotive industry. More recently, the system has become popular outside of the industry due to its fast readability and comparatively large storage capacity. The code consists of black modules arranged in a square pattern on a white background. The information encoded can be made up of any kind of data.

R

RAS (remote access service) - a service provided by Windows Dial-Up Networking to establish a network connection with another computer via modem.

Refresh Frequency- The time needed to display an image. The refresh is measured in Hertz: if the refresh frequency is of 60 Hz, the image is completed on the monitor in 1/60 second. A low refresh frequency (up to 75 Hz) is stressing for our eyes, as we can see the creation of an image and we see it trembling.

Resolution- Digital video - the number of pixels present in a device used to produce images. Currently the most common and now fairly standard resolution for digital TV displays will be

1080 x 1920 pixels which is just over 2 million pixels (2MP).

The number of pixels (individual points of color) contained on a display monitor, expressed in terms of the number of pixels on the horizontal axis and the number on the vertical axis. The sharpness of the image depends on the resolution and the size of the monitor.

Audio- resolution in digital music will be a combination of the Bit depth and sampling frequency.   E.g. A CD is 44.1khz 16bit. Today higher resolutions of 24 bit and sampling frequencies ranging from 96khz up to 192khz are more common, which are the same as used in recording studios.

RGB- Stands for the colors Red-Green-Blue. These are the primary colours of light, which computers use to display images on a screen. An RGB computer file must be translated into the CMYK (the primary colours of pigment) color space in order to be printed on a printing press.

Root - a particular folder chosen as the base reference point, relative to which all other paths within a web server or FTP server are defined.

RSS- Acronym for Really Simple Syndication, Web feed technology that automatically detects when content on one site is updated and through subscriber feeds and aggregators, distributes it to another Web site or to a digital signage content player.

RTP- Acronym for Real-time transport Protocol, a standard protocol for formatting packets for transmitting video and audio over the Web.

RTAP-Acronym for Real Time Streaming Protocol, a standardized protocol for the remote control of a streaming media server.

S

SaaS (typically pronounced 'sass') - stands for Software as a Service. SaaS is a model of software deployment where an application is hosted as a service provided to customers across the Internet. By eliminating the need to install and run the application on the customer's own computer, SaaS alleviates the customer's burden of software maintenance, ongoing operation, and support.

Satellite TV (Digital Broadcast Satellite - DBS)- System that sends TV broadcasts directly from a communications satellite to home antennas, or dishes.

Schedule- The advertising purchased from a vendor and defined by the variable of market, number of advertising units, flights, length of advertising and rotations.

Screen Zoning- refers to dividing a digital signage into regions containing separate static or real-time content feeds, or a mix of both.

Self-Directed Engagement- Media delivery in an environment in which the potential audience makes a conscious decision to engage with the message.

Self-running script - also referred to as a continuous script; a script designed to run continuously; for example, to demonstrate a product or service, or provide information without interruption.

Server- Computer or device on a network that manages a network's resources or to store media content.

Site Visit- a visit to the site by a qualified technician to ensure proper equipment installation.

Smartphone- A mobile phone that is able to perform many of the functions of a computer, typically having a relatively large screen and an operating system capable of running general-purpose applications.

SMS (Short Message Service)- Is a text message service component of phone, web, or mobile communication system, using standardized communications protocol that allows the exchange of short text messages between fixed line or mobile phone devices. SMS text message is the most widely used data application in the world. SMS is also being used as aform of direct marketing know as SMS marketing.

Static IP- A static IP address is an Internet Protocol address assigned to a particular device. This communicates with the router for making it easier for installers to better manage installations such as remote monitoring, CCTV integration & locating a server in the building. A static IP address is a fixed, permanent address that is unique to a device and does not change in contrast to a dynamic IP address, which is one that changes every time you connect to the internet.

Store and forward - a networking term referring to when information is stored at routing points before its ultimate destination. Store and forward can be used to reduce the load on the original server. Players can retrieve their data from other players instead of the original broadcast site.

Streaming Video- Refers to a one-way video transmission over a data network. It is widely used on the Web as well as private intranets to deliver video on demand or a video broadcast. Unlike movies files (MPG, AVL, etc.) that are data played after they are downloaded, streaming video is played within a few seconds of requesting it, and the data is not stored permanently in the computer.

Sunlight-Readable Displays- Panels with coating and film that reduces the amount of reflective light, making them ideal for digital signage in brightly lit or even direct sunlight areas.

Structured Programming- Programming methodology that utilizes a set of well-defined structures, such as condition statements and loops to produce code that is more easily understood and maintained.

Switch- Is used to network multiple computers together. Switches are more advanced than hubs and less capable than routers.

Systems Designer- Industry professional who specifies the components and configuration of integrated electronic systems.

Systems Installer/Systems Integrator- Systems installer: A company or individual who designs and installs various electronic systems. An integrator will do this but also link them together so that they can be controlled easily from one user interface.

T

Tablet- a mobile computer with display, circuitry and battery in a single unit.

TAPI - a standard for PCs that allows applications to easily use serial devices (such as modems) that have already been configured in Windows

Target Audience- refers to a defined group of people at which an adviser's message product or service is aimed

Template- a document or file that contains pre-formatted design elements, enabling the customization of content and text to a specific digital signage application.

Third-party advertisers- agencies used by digital signage operators to coordinate the delivery and sales transactions of advertising content and campaigns from merchants, companies and media resellers.

Ticker- Horizontal text streaming across a screen often used to deliver headlines, promotions, and up-to-date stock information to an audience.

TCP/IP - a networking protocol designed for flexible, high-speed communications, used for LANs and the Internet.

Throw Distance- the distance the projector is from the screen.

Touchscreen- device used to allow control via simply touching a graphical display through a resistive or capacitive screen.

Traffic - Data being transferred over a network. Downloading text and graphics represent low-bandwidth traffic while streaming video is higher.

U

URL (Universal Resource Locator) - a string of text that specifies the location of an object accessible through the Hypertext Transfer Protocol (HTTP), typically a World Wide Web address, as of a home page or i-play channel. A Web URL begins with "http://".

V

VGA- acronym for Video Graphics Array, an analog display standard with a resolution of 600 x 480 and a 256-colour palette, most VGA devices use the HD15 connector, although analog, VGA video from a PC is used in many digital signage applications by using VGA extender and splitter.

Video Wall- A wall mounted or frame-mounted checkerboard configuration of multiple video screens showing different content images or thev same image spread across multiple screens.

Viewing Distance- The maximal distance from a point to the led display, where the picture of the led display is still viewable.

VPN(Virtual Private Network)- a VPN is used in digital signage networks to provide secure, reliable connectivity as a private network but art much lower cost. Using a VPN the digital signage network can operate outside of the internet or other organizational connectivity infrastructure to assure cost-effective, secure and reliable network operations at required levels.

W

Wait-Warping- An effect of certain type of digital place-based advertising, where customers who are entertained while waiting for services experience reduce perceived wait times and increase satisfaction levels

WAN (Wide Area Network)- A network connecting computers over a very large geographical area such as states, countries, and the world. The Internet can be considered a WAN.

Watt- The unit of electrical power as used by an electrical device during its operation. Many lamps come with rating in watts to indicate their power consumption.

Wi-Fi (Wireless Fidelity) - Wi-Fi refers to wireless networking technology that devices are communicate over a wireless signal.

Wireless Access Point (WAP)- A device that allows Wireless Devices to connect to a Wired Network. May be free-standing or built into a router.

Wireless Internet- Provides access to Internet services and other internal devices in the home via a wire-free connection to a home router using short-range radio transmission.

Wireless Local Area Network (WLAN)- Network connecting two or more devices wirelessly, usually also providing access to the Internet.

X

XML (Extensible Markup Language) - XML is a standard data format used for text files and information in computer memory that allows easy data processing and exchange between different applications.

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to add any other Words or Phrases to this
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