



Use it here. Use it there. Use it anywhere.

Protean – [proh-tee-uhn] – adjective

1. able to change frequently or easily: able to do many different things; versatile
2. displaying great diversity or variety

General Description of Protean Technology

Protean is a digital audio/video technology that allows unfettered placement of Digital Signage Displays *anywhere* within a physical retail space. This technology DOES NOT require cabled or wireless connectivity or AC power to operate. It is capable of independently delivering high quality digital media content in a linear fashion (loop video or graphics) and/or information requested by the shopper through a touch screen, interactive user interface.

The hardware required for this service is comprised of two basic elements:

1) Digital Signage Displays (Display) – There are two types of Displays available:

(i) Portable Display – This is a self-contained thin Display which requires AC power when used on the retail Floor. This Display is equipped with the following:

- Video screen size ranging from 4” to 42” (other sizes are available)
- Touch Screen, motion detector and/or bar-code or magnetic card reader
- Each Digital Signage Display has its own unique name (ID)

Software:

- User interface (interactive)
- Custom regionalized display
- Network control
- Self Auto-Identify program
- Statistics

(ii) Mobile Display - Mobil Display incorporates the above described Portable Display with added, integrated All-In-One wheel-locking caddy. This integrated fixture encompasses a height adjustable Display post, Wide Area Network (WAN) and four-sided horizontal tracks for placement of custom-printed material. The caddy (12”W x 8”D x 10”H) is also outfitted with 170 Hour Powerpak with built in charger and LED display power meter.

2) Docking Station:

The Docking Station is an integral part of the Protean system designed to be placed in the designated area of the store equipped with AC power and WAN connection. A single or multi-port Docking Station is outfitted with an appropriate number of Wide Area Network (WAN) ports and a single AC Power receptacle. The sole purpose of the Docking Station is for hands free “changing out” of the digital content and for recharging the system. Each Docking Station can be configured to service a single or multiple Displays.



There are two types of Docking Stations:

- b) **Servicing Portable Display(s)** – This configuration is designed to facilitate digital content change out for Portable Displays. Each Docking Station is equipped with one or more independent tracks used for vertical docking of each Portable Display. Each track is equipped with a single connector for AC power and WAN.
- c) **Servicing Mobile Display(s)** – This configuration is designed to facilitate digital content change out as well as to recharge a Powerpak which is an integrated part of the Mobile Display, power-free fixture. Each dock can be configured to service a single or multiple Mobile Displays by way of tethered AC power and WAN within a single connector.

Operational Description of the Protean

The main benefit of the Protean service is the “process” by which the retailer can easily control the placement of the Display(s) on the retail floor space and manage the refresh process for the desired content to be used on an as needed basis. Protean is specifically created to accommodate frequent and on-demand promotional events throughout the store. It is, by design, a manual process requiring the store employee to bring either the Portable Display to the Docking Station or bring the Mobile Display to the tether station for content change out after the original promotion expires.

Once each Display is connected to the WAN and powered up, it goes through its boot-up and initiation process. After the boot-up is completed, each unit automatically connects with ACD’s **Remote Data Control Services (RDCS)** signaling its “ready” status. RDCS now knows how many and what kind of devices are present in the specific store. From this point on, RDCS has all the necessary information required to remotely manage one or multiple store chains with any number of store outlets per chain.

Digital Content Management/Refresh

Each Display is equipped with software to manage clock and screen display to be ON or OFF. When docked or tethered each Display is positioned vertically. As such, each screen of the Display is clearly visible to all store employees in the vicinity. The main concept of this service is to preload each Display with digital content coordinated with the scheduled store promotion in the designated department for specific product(s) or service. The participating retailer provides ACD with the appropriate information related to: the desired number of promotional events, the designated store department(s), products/services, participating manufacturer(s), and scope of the promotion as well as the beginning and duration of the event and a clear description of the placement of the device. With that information, ACD assumes responsibility for procuring or creating device-specific content for the desired promotional event. Once the promotional presentation is completed, it is ready for distribution to each participating retail outlet. A Display which is not scheduled for an event has its screen turned off (remotely controlled by RDCS).



After the event related content is uploaded to each designated Display, its screen is turned ON. Along with new content, RDCS sends a time-sensitive visual message scheduled for that specific Display. Twenty four hours prior to the scheduled placement of each Display, the screen clearly displays a large static message signifying in which department the unit needs to be placed, date and time of the promotion and product(s) or service(s) to be promoted, etc. Twelve hours prior to the placement of the devices, the same template message becomes more animated. If the Display has NOT been removed (from WAN) and placed as scheduled, the message on the display takes on an “URGENT” nature with flashing messages designed to trigger greater attention from store personnel.

Once the Display is disconnected from WAN/power, RDCS registers disconnect. Also, once the Display is placed in the designated location of the store and turned on, a clock monitors the total running time. In addition, the Display monitors its operation by keeping track of every A/V presentation during the scheduled period, as well as shopper selections of all interactive functions (if interactive application is allowed for the specific promotion).

At the end of the scheduled promotional event, the Display automatically purges itself of all original promotional event material and reverts to displaying a generic message specific to that department, along with a periodic reminder to remove the device. If the Display is still NOT removed from its originally designated location (not connected to WAN) in 24 hours, a static message will prompt for immediate removal of the device.

When units are returned to the designated area, the Display needs to be docked or tethered appropriately. Once the Display is connected back to the WAN, RDCS detects the unit, confirms that it is properly powered, retrieves all operating statistics and turns the screen OFF.

The entire process is repeated for each new scheduled promotion.