

Signage

The current signage solution utilizes a Samsung panel with no additional hardware required to drive the presentation. The panel will automatically display a web page and this can be set to a Google Slides presentation. Anyone with permissions can edit the slides from any location. Most installs use a 55" panel and the complete mounted cost is ~\$1,050, installed.

Admin Office Display

Most projects include a 55" panel that supports wireless casting from a Principal laptop. Options include a wireless keyboard using a desktop PC. Complete cost ~\$1,100.

Conference Room non-touch display

Conference rooms benefit from a larger 75" display to clearly display spreadsheets and text. Content can be displayed wirelessly or with a direct connection to an existing PC/chromebox and wireless keyboard. Wireless casting from ChromeBooks is supported by adding a ChromeCast. Touch panels are of limited value in conference rooms as most participants will be seated. If the space is used for staff development, a touch panel may be appropriate. Complete cost ~\$2,100.

Classroom Touch Panel

MCPS is no longer installing Promethean boards. 75" 4K Touch panels are now a lower-cost alternative with no ongoing bulb replacement costs. Boxlight panels supports wireless casting with 'USB control back to the desktop' which allows more flexible placement of the teacher desk compared to a wired Promethean. The primary difference in install costs are mounting. A fixed-height system can be installed for ~\$2,700. An adjustable-height or mobile cart are ~\$2,925 complete. Some locations will have walls that do not support the weight of a touch panel and require an adjustable-height floor standing mount. Those solutions start at \$3,400 and remain at a lower-cost than previous adjustable-height Prometheans.

Options include: \$35 Wireless keyboard with Touchpad for classroom roaming and student input from their desks; \$99 iPevo Document camera for art or math manipulatives; \$73 ChromeCast to support chromebook casting; \$98 Presentation remote with software highlighting and control; \$200 soundbar for music classrooms.

Laptops can connect by 1) Direct HDMI Wire, 2) Windows-P from the laptop to screen mirror, 3) Chromebooks will be able to cast to the ChromeCast, 4) Use the PC/Chromebox to drive the TV and the wireless keyboard to control the computer while sitting at the table.

Installation for 1 to 3 panels can be requested from the Carpentry Depot via Maximo ticket at no local cost to the school. Larger installations will be contracted at a cost of \$300 per panel.

Ordering

Requests should be emailed to Paul McCabe. Include a brief description of the need & room number and also include a **wide** photo of the room showing the mounting location and a **close** photo that includes nearby electrical and network connections. A quote will be provided along with additional steps to complete the installation.

Flat panels have a 'wide' 16:9 aspect ratio as compared to the 4:3 ratio in older TVs and 17" computer displays. A newer wide-format 24" display (FMS: **P2419HC** \$224) is needed to ensure that the images appear clearly on the large displays and without black bars.

Standard MCPS flat panels are slightly more expensive but offer several advantages:

- Long-life screens designed for use 10+ hours per day without burn-in
- Consistent software and security updates over a longer time periods
- Ability to prevent unauthorized casting in public areas.
- Standard mounts that avoid wasted cost & effort on installations.
- Sturdy mounts designed to support heavier touch panels and avoid injury.
- Auto-play slideshows saving the cost & technical effort & NO external PC or ChromeBox
- MCPS Depot installation to avoid \$300+ custom contractor costs.
- Future centralized emergency notifications

When ALL Parts have arrived, Building Service Managers should place a 2nd Maximo request to the Carpentry Depot for install. They may make an early visit to install wall support and a second for panel installation. Include a project summary with parts and exceptions to the request.