

Crestron AirBoard™ – Whiteboard Capture System

- > Turns your dry-erase board into an electronic whiteboard
- > View whiteboard content on any video display in real time
- > View remotely in a web browser^[1]
- > Open-platform compatible with any UC or VTC solution
- > More intuitive to use and cost-effective compared to an interactive display or document camera solution
- > Ideal for enterprise, education, and conference center applications
- > Produces a high-contrast, full-color video image of the whiteboard
- > Eliminates distortions, shadows, reflections, backgrounds, and body parts from the video image
- > Works with any white or coated glass dry-erase board up to 6 x 4 ft (1.8 x 1.2 m)^[2]
- > No special markers required
- > Automatically saves a snapshot of each change as you draw
- > Produces a complete slide deck of session content^[1]
- > HDMI® output via a DGE-100 Digital Graphics Engine (sold separately)
- > Touch screen controllable via a Crestron® control system^[3]
- > Secure, encrypted network communications
- > PoE or 100-240V AC line powered



The Crestron AirBoard™ whiteboard capture system (CCS-WB-1) turns any dry-erase board into an electronic whiteboard. Crestron AirBoard lets you use your whiteboard like normal, and share it in real time on video displays and web browsers. As you draw on the board, each change you make is captured and saved as a snapshot. A complete slide deck of snapshots can be downloaded or emailed at the end of the session. Crestron AirBoard perfectly preserves the intuitive whiteboard experience while extending its capabilities to accommodate large audiences and remote viewers.^[1]

Advanced optics and image processing

Crestron AirBoard technology employs advanced optics and image processing to produce a crisp and colorful digital whiteboard image. A compact camera mounted above the whiteboard captures each stroke you make, while enhancing the ink colors and contrast for a clean, vibrant image. No special markers are required. Shadows, reflections, backgrounds, and body parts are automatically removed, so the onscreen video image looks just like you're standing square in front of the whiteboard.

Powerful and practical presentation

Crestron AirBoard doesn't rely on expensive large-screen touch displays, and won't lock you into a single-manufacturer collaboration platform. It simply works with any dry-erase board (white or coated glass^[2]) up to 6 ft wide x 4 ft high (1.8 m wide x 1.2 m high). This affords a writing surface equivalent to an 86.5 inch (220 cm) diagonal electronic whiteboard. The great thing is, since the whiteboard image is flawlessly reproduced on any video screen, there's no need for the physical whiteboard to be positioned where it can be seen by the whole audience. Just put it wherever it's practical to use and present from, and let the audience view the whole thing on the big screen.

Video presentation and conferencing system integration

Crestron AirBoard can function alone or as part of any AV presentation system, collaboration system, or videoconferencing system. Composed of a sleek, unimposing camera unit and separate control pad, Crestron AirBoard is easy to install. The camera mounts to the wall above the whiteboard, the control pad mounts to the wall at either side of the whiteboard, and a 6 ft (1.8 m) cable connects them together. The control pad connects to the LAN via Ethernet, and the complete system can be powered using PoE or the included 100-240V power pack.

Connection to the room display, AV system, or conferencing codec is handled by a Crestron® DGE-100 Digital Graphics Engine (sold separately). The captured presentation is streamed to the DGE-100 over the network and fed to the room system via the DGE-100's HDMI® output.

Basic operation is provided via the control pad or a web browser. Enhanced touch screen operation is enabled through integration with a [Crestron control system](#). From the [touch screen](#) (sold separately), anyone can easily start a session, route the signal to the room display(s), and distribute summary content to email recipients when the session has ended.^[1,3]

Remote viewing and content distribution

Remote participants can view a whiteboard session from any location using just the web browser on their computer or mobile device. No extra downloads, apps, or plugins are required. At the end of the session, the remote viewers can download the session content as a multi-page PDF timeline, or as individual PNG snapshots. Content may also be sent out to any email recipient using a touch screen or computer within the room.^[1]

CCS-WB-1 Crestron AirBoard™ – Whiteboard Capture System

Safe, secure, and private

Whatever you write or draw on your whiteboard, you decide who to share it with. To keep your content private, all network communications are encrypted. A capture session can only be initiated from within the room (unless otherwise programmed via a control system). The secure cloud service ensures only authorized viewers can access the live stream or download the session content. No one outside the session can access your session content without an invitation or approval. Content is stored locally on the Crestron AirBoard device, not in the cloud, and is available for a maximum of 30 minutes (or less if desired) after the session ends.

SPECIFICATIONS

Whiteboard Support

Type: White or coated glass dry-erase board^[2]

Size: Up to 6 ft wide x 4 ft high (1.8 m wide x 1.2 m high)

Communications

Ethernet: 100 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, TCP/IP, UDP/IP, CIP, DHCP, IPv4, TLS, HTTPS, HTTPS web browser setup, IEEE 802.3at & 802.3af compliant

Hardware Device Options: Compatible with Crestron [DGE-100](#)^[3]

Web Client Options: Web browser-based application, no downloads or plugins required, use any computer or mobile device, supports up to 15 users (inclusive of all web browsers and DGE-100 devices)^[1]

Controls & Indicators

Control Pad Display: (1) Backlit text, directs presenter to the online session portal

Control Pad Button: (1) Pushbutton, blue LED backlit; flashing blue indicates a request to start a capture session via the online session portal, press to enable capture and sharing (or wait 30 seconds for request to time out), solid blue indicates session in progress, press to end session; press and hold to enter setup mode

Control Pad Indicator: (1) Bi-color red/green LED, alternating red/green indicates system is ready to be set up via a web browser, solid green indicates system is ready for use, solid red indicates no network connection

Camera Indicator: (1) Blue LED, flashing blue indicates a request to start a capture session, solid blue indicates session in progress

Reset: (1) Recessed pushbutton behind pinhole on bottom of control pad for factory reset

Connectors (On Control Pad)

LAN PoE: (1) 8-pin RJ45 connector, female; 100Base-TX Ethernet and PoE PD port; 6 ft (1.8 m) LAN cable included

DC Power: (1) 2.5 mm DC power connector; 5 Volt DC power input; Power pack included; *Connect only if PoE is not used*

Camera: (1) 6 ft (1.8 m) proprietary USB wired connection from camera; *Note: This cable cannot be extended.*

Power

Power Pack (included): Input: 100-240 Volts AC, 50/60 Hz; Output: 1 Amp @ 5 Volts DC

Power over Ethernet: IEEE 802.3at compliant (802.3af compatible) PoE PD (Powered Device);

- Requests 7 Watts (PoE Class 2) from an 802.3af or 802.3at Type 1 PoE PSE;
- Requests 7 Watts from an 802.3at Type 2 PoE+ PSE with LLDP power management;
- Requests 30 Watts from an 802.3at Type 2 PoE+ PSE without LLDP

Environmental

Temperature: 32° to 104° F (0° to 40° C)

Humidity: 5% to 95% RH (non-condensing)

Construction

Camera Housing: Plastic, black and white finishes, includes mounting plate and screws

Control Pad: Plastic, black and white finishes, includes mounting plate and screws

Dimensions

Camera: Height: 8.92 in (227 mm)
Width: 2.44 in (62 mm)
Depth: 19.83 in (504 mm)

Control Pad: Height: 4.02 in (102 mm)
Width: 4.02 in (102 mm)
Depth: 1.07 in (27 mm)

Weight

Camera: 13.1 oz (370 g)
Control Pad: 5.6 oz (157 g)

Compliance

CE, IC, FCC Part 15 Class B digital device

MODELS & ACCESSORIES

Available Models

CCS-WB-1: Crestron AirBoard™ – Whiteboard Capture System

Available Accessories

DGE-100: Digital Graphics Engine 100

PWE-4803RU: PoE Injector

CEN-SW-POE-5: 5-Port PoE Switch

CEN-SWPOE-16: 16-Port Managed PoE Switch

CCS-WB-1 Crestron AirBoard™ – Whiteboard Capture System

Notes:

1. Internet access and a subscription to the Crestron AirBoard cloud service are required to enable remote viewing via a web browser, downloading session content via a web browser, and distribution of session content via email. The CCS-WB-1 includes a free license for subscription to the cloud service.
2. If using a glass-surface board, the back of the glass should be coated to prevent “echoes” in the captured image. Clarus brand glassboards are recommended.
3. AV and control system integration requires additional equipment and services provided by a Crestron authorized systems integrator.

This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at <https://www.crestron.com/How-To-Buy/Find-a-Representative> or by calling 855-263-8754.

The specific patents that cover this and other Crestron products are listed online at <https://www.crestron.com/legal/patents>.

Certain Crestron products contain open source software. For specific information, please visit <https://www.crestron.com/opensource>.

Crestron, the Crestron logo, and Crestron AirBoard are either trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and/or other countries. HDMI is either a trademark or registered trademark of HDMI Licensing LLC in the United States and/or other countries. Other trademarks, registered trademarks, and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Crestron disclaims any proprietary interest in the marks and names of others. Crestron is not responsible for errors in typography or photography. Specifications are subject to change without notice.
©2019 Crestron Electronics, Inc.

