ScreenBeam Classroom Commander Wireless Orchestration

for Windows 10 Classrooms with Interactive Touch

Give your teachers the tools they need to succeed.

The modern classroom thrives with interactive learning.

According to the 2015 Gallup Student Poll, *Engaged Today—Ready for Tomorrow*, three-quarters of fifth graders feel "involved in and enthusiastic about school" but only one-third of eleventh graders feel the same.

Increasing student engagement is a critical objective when planning and implementing personalized, digital learning strategies so all students can achieve their full potential. To help students become lifelong learners who are responsible citizens and able to compete in today's job market, technology integrated in the right way can have a huge impact on student success. The one-to-one ratio classroom—in which each student and teacher are equipped with a device—provides educators the flexibility to supplement core curriculum with interactive online content and digital learning materials to create more highly customized lessons.

Educators also know that students perform better when their teacher moves around the classroom. In fact, as mobile technology progresses, school IT professionals and educators are seeing the benefits of enhanced mobility.

ScreenBeam Classroom Commander creates agile classrooms by giving teacher and students mobility to move freely around the classroom, increasing opportunities to interact, collaborate and create. Designed for Windows 10-equipped classrooms, ScreenBeam Classroom Commander is a classroom orchestration solution that enables great learning outcomes in one-to-one ratio classrooms by combining wireless display connectivity with premium orchestration functionality. Teachers can walk around and interact with students instead of being tied to a computer or a projector, while maintaining complete control of student devices to keep students focused and engaged in the lesson.

Mobility is key for classroom agility, and ScreenBeam Classroom Commander provides that mobility to spark more collaborative and interactive learning environments.

What is classroom agility?

Classroom agility is the ability to quickly and easily move in the classroom, and through that movement quickly observe, assess and respond to dynamics in the classroom. Teachers in an agile classroom are constantly in motion: displaying lessons, monitoring students, answering individual questions, making suggestions, utilizing proximity control and re-tasking those off task. Classroom agility should also apply to students. Students need to feel comfortable moving around the room, collecting resources and collaborating with peers. In this agile learning environment, teachers and students become collaborators, and interactions are made more valuable for learners.

ScreenBeam Classroom Commander helps teachers teach.

Untethers teachers. Move and interact with the lesson being displayed, making it easy to watch student reaction and understanding—without interrupting instruction.

Supports interactive learning. Annotate comments and questions directly onto the student screen from the classroom display—even when student devices are not touch-enabled.

Monitors student devices. View screens and active applications in real time, blank all student screens simultaneously to gain classroom attention, drive URLs across all student screens and send private messages. Teachers ensure that students stay on task and learn at the same pace.

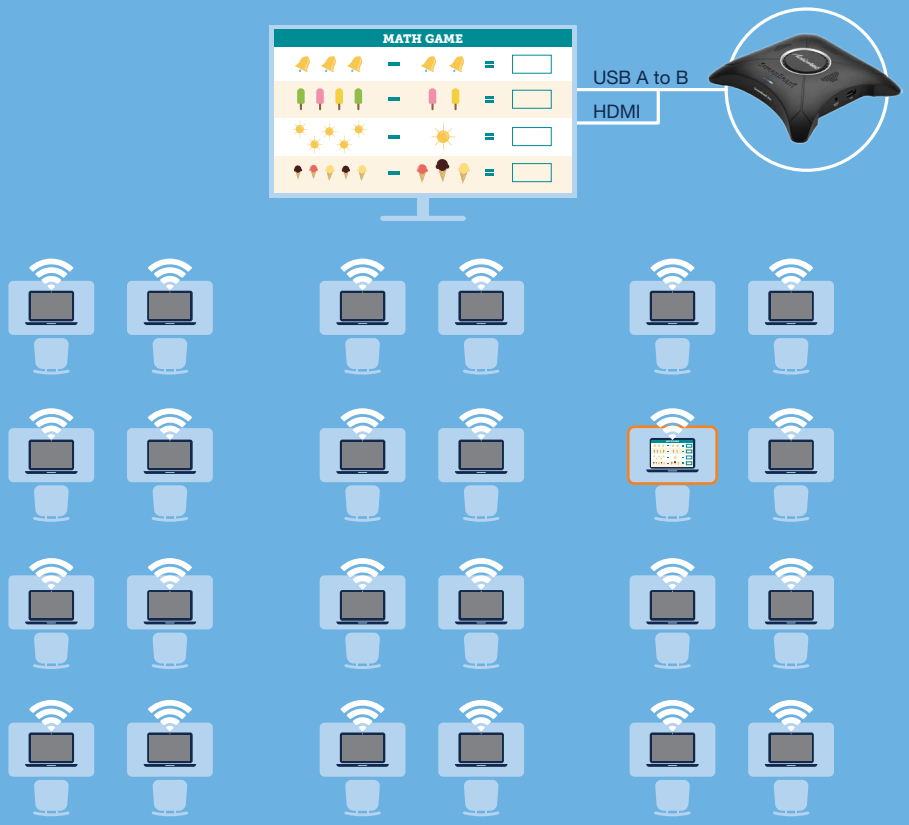
Enables proximity control. Monitor student behavior to identify issues faster and help off-task students refocus, without interrupting instructions.

Makes learning fun. Engage students by supplementing core curriculum with interactive online content and digital learning materials. Popular apps such as Skype in the Classroom, OneNote, FluidMath, Minecraft for Education and LifeLiqe are easier to implement without the constraints of wires.

Gives students confidence. With teacher permission, students can share work right from their desks to avoid the anxiety of standing to deliver it, giving shy students an opportunity to safely participate.

"ScreenBeam changes the dynamics of our classrooms. When both teachers and students can move freely around the classroom, the level of interaction exponentially increases."

—Jason Murray, District Technology Coordinator
Cornwall-Lebanon School District



Teacher and student apps on each device provide functionality

Miracast provides point- to-point wireless connection between every device and the classroom display

No on-premises servers or infrastructure are required

Teacher and student devices can still connect to the Internet

A wireless environment made easy.

Create an in-room hub for wireless connectivity that is automated, extremely easy to use and optimizes instructional time.

Windows 10 plus ScreenBeam is the only enterprise-class wireless display solution to natively support UIBC wireless touchback.

Miracast™ is the global standard for wireless display technology specifically designed to enable modern devices to connect directly to ScreenBeam and maintain connectivity to the school network for Internet and LAN services. This enables the wireless display functionality, student device monitoring and control to happen off the school network, eliminating the heavy bandwidth impact of traditional student device monitoring and the extraordinary costs to add dedicated servers to support the application. The result is IT administrators get a very streamlined, easy-to-implement solution for wireless connectivity that saves valuable resources.

Within this wireless environment, teachers can interact with the content on the student display, using the classroom interactive display via touchback. By connecting the USB cable from the touch screen or interactive projector to the USB input on the ScreenBeam receiver, teachers are untethered from the display while maintaining all the benefits of an interactive touch screen display. For example, students can display work from their desks, and while the teacher provides constructive feedback on the touch screen using the digital ink tools in Windows, those annotations are instantly captured and saved on the student screen, even when the student device is not natively touch-enabled.

Three Components, One Complete Solution

ScreenBeam 960 Wireless Display Receiver

CATALOG # SBWD960A

- Creates a secure in-room hub enabling local wireless connectivity with no impact on school network.
- Miracast technology provides a dedicated point-to-point connection between device and ScreenBeam receiver.
- Reduces the communication latency between teacher and student devices.
- Does not require additional bandwidth and on-premises server to deploy.
- Supports up to 28 simultaneous connections.

Classroom Commander Software License

CATALOG # SBCC01L

- Software license enables wireless orchestration features.
- Teacher and student device apps are available at the Microsoft Store.
- Covers maintenance, fixes, and firmware updates for duration of one year license.

Central Management System (CMS) Software

INCLUDED WITH SCREENBEAM 960 RECEIVER

- Receiver includes CMS software for centralized management of wireless display receivers on the network.
- School IT administrators monitor status, organize and group ScreenBeam receivers by location.
- Push firmware updates, reset and change individual preferences, change network settings and enable remote help-desk service.

Watch the Video

See ScreenBeam Classroom Commander for Windows 10 / 10 S Classrooms in this **short video**.

Request a Trial

Visit **www.screenbeam.com/forms/request-a-trial** to request a demo kit which includes all features and supports a total of three connections: one teacher PC and two student PCs.

Get students engaged.

Create dynamic learning experiences in the classroom with a full-featured platform that's easy for teachers to use and administrators to deploy and manage.

Feature	Value	ScreenBeam Wireless Display Receiver		ScreenBeam Classroom Commander
Creates a private, in-room network	Doesn't tax valuable school network bandwidth.	✔		
Provides a dedicated point-to-point connection between all devices and display	Eliminates costly servers and infrastructure upgrades.	✔		
Foster teacher mobility and classroom agility	Untether teachers from the front of the classroom, providing the flexibility to move around the classroom while projecting lessons on the classroom display, enabling proximity control to monitor and help off-task students.	✔		
Wirelessly present a student screen	With teacher permission, students can display right from their desk, removing the anxiety to stand and deliver.	✔	+	✔
Interactive display support plus touchback	Teachers can interact with the content on the student display, using the classroom interactive display via touchback, wirelessly.	✔		
Windows Ink	Supports Windows Ink native in Windows applications. Annotate comments and questions directly onto the student screen from the classroom display—even when student devices are not touch-enabled.	✔		
Real-time student screen monitoring	Teachers have a full screen view of all student screens, and student active applications in real time.			✔
Launch browser	Teachers can guide learning by instantly launching a URL across all student devices for a guided web session with students.			✔
Command attention	Blank and lock keyboard/mouse on single student screen, multiple student screens or the entire class to command attention.			✔
1:1 chat or 1:many group chat	Message a student or group for private communications to collaborate, or identify issues and help off-task students refocus.			✔
Software and teacher/ student app updates	Software license covers receiver firmware updates, and teacher and student app updates for one year.			✔

Technical Specifications

Compatibility

Windows 10 (Pro/Edu/S) device with Miracast wireless display

Requirements

- ScreenBeam 960 receiver
  With latest update to support Classroom Commander (9.23.x.x)
- ScreenBeam Central Management System (CMS, included with the ScreenBeam 960)
- Display TV/Projector with available HDMI/VGA port
  Interactive display/projector with USB HID is required to support wireless touch/ink back
- Microsoft Store (for Classroom Commander app on teacher and student devices)
- Open Non-DFS 5GHz wireless channel (Optional)

System Requirements

Minimum		Recommended	
Teacher Device		**Teacher Device**	
OS	Windows 10 Pro/Edu/Ent/S (64-bit)	**OS**	Windows 10 Pro/Edu/Ent/S (64-bit)
CPU	Fourth generation Intel Core i3 or AMD equivalent	**CPU**	Fourth generation Intel Core i5 or AMD equivalent, or better
Wireless	802.11AC dual-band 2x2	**Wireless**	Intel dual-band wireless AC 726x or better
Memory	4 GB	**Memory**	4 GB or more
HD Space	150 MB	**HD Space**	300 MB or more
Student Device		**Student Device**	
OS	Windows 10 Pro/Edu/Ent/S (64-bit)	**OS**	Windows 10 Pro/Edu/Ent/S (64-bit)
CPU	Intel Celeron N3010 or AMD equivalent	**CPU**	Intel Celeron N3060 or AMD equivalent, or better
Wireless	802.11AC dual-band 2x2	**Wireless**	Intel dual-band wireless AC 726x or better
Memory	2 GB	**Memory**	4 GB or more
HD Space	150 MB	**HD Space**	300 MB or more

ScreenBeam 960 Specifications

Video	H.264; supports up to 1080p30 resolution
Audio	LPCM; stereo 2.0
A/V Interface	HDMI; VGA out; VGA in (pass-through); 3.5mm audio
Ethernet	10 x 100 RJ-45
Wireless	**P2P:** 802.11ac dual-band 2x2 | **CMS/Client:** 802.11n dual-band 2x2
I/O Connector	DC power jack; USB 2.0 type A
Power	**Input:** 5V/2A; Consumption: <5W

"ScreenBeam is secure, very cost-effective, and easy to deploy. These were all very important for us at Juniata Valley."

—David E. Christopher
Superintendent
Juniata Valley School District

Associate
Microsoft
Education
Partner
2016-2017
Microsoft

Microsoft Windows Miracast

IndustryLeader

ScreenBeam wireless display is the only solution that truly enables commercial deployment of secured and IT manageable wireless display. ScreenBeam wireless display is the industry standard for benchmarking and device interoperability, making it the most broadly compatible solution available. ScreenBeam solutions are used as the validation platform for wireless display functionality by companies like Microsoft, Intel, and leading PC OEM and device companies.

Actiontec is Microsoft's co-engineering partner for wireless display technologies in Windows. Because of Actiontec's status as the industry leader, and our ongoing investment in supporting industry device manufacturers, you can be assured that you're deploying the most broadly compatible, feature-rich wireless display platform.

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