

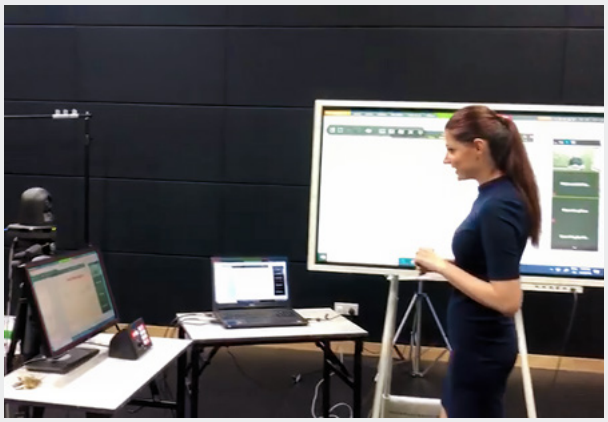
HYFLEX TEACHING SOLUTIONS

APPLICATION GUIDE FOR FLEXIBLE LEARNING ENVIRONMENTS



Extron

Online, Hybrid, and HyFlex Teaching Explained



ONLINE

Online teaching is a method where students learn in a fully virtual environment. It may be in the form of synchronous, where all students participate together at the same time, or asynchronous where students are not together and use discussion threads or email to communicate.

Asynchronous uses lecture capture, allowing the teacher to start, stop, and upload the recorded lesson automatically. The student can access the content at any time and location by logging into the institution's learning management system (LMS).



HYBRID

Hybrid teaching is a model where some students attend the live class in-person, while others join the class at the same time, virtually from another place. This widens the opportunity for education to be more attainable.

In recent years, hybrid teaching has evolved to adopt Unified Communications (UC), enabling remote participants to have two-way communication with the teacher or lecturer.



HYFLEX

HyFlex combines the best of online and hybrid teaching, offering both teacher and peer interactions.

Students can attend the live lessons and participate in the discussions or they can view them online afterwards. This allows students to review content not fully understood, as well as prepare for an exam.

HyFlex can support approaches like Flipped Learning – where the lesson content is pre-recorded (Online) and is followed by live exercises and discussion (Hybrid).

APPLICATIONS



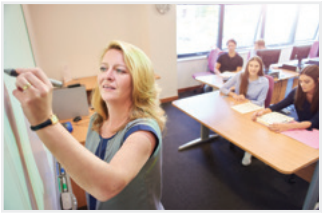
HYBRID TEACHING WITH ENHANCED ROOM AUDIO – PAGE 4

A classroom with laptop-enabled Unified Communications requires a solution that extends the reach of the audio and provides simple, intuitive connection to the camera and audio system via USB.



HYBRID TEACHING WITH PRO VIDEO AND AUDIO SOURCES – PAGE 6

A larger classroom with a professional camera and a mobile teacher provides the ability for students to participate via a remote microphone.



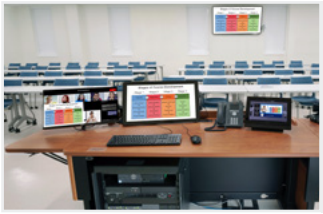
HYBRID CLASSROOM WITH MICROSOFT TEAMS ROOM – PAGE 8

A larger classroom with Microsoft Teams Room and a content camera provides either presentation or whiteboard content to the remote participants. The room also supports Bring Your Own Meeting (BYOM) conferencing from the teacher's laptop.



HYFLEX LECTURE HALL – PAGE 10

A lecture hall supports Unified Communications from any platform using the instructor's laptop. The lecture is also recorded and uploaded to a Content Management System (CMS) for online learning. The system is controlled from a simple button panel.



HYFLEX LECTURE HALL WITH PC & CONTROL – PAGE 12

An advanced lecture hall supports Unified Communications from any platform using a laptop or a PC built into the lectern. Audio is distributed from a wireless microphone and the content is recorded and uploaded to a CMS for online learning, with control and video preview from a touchpanel.



PRESENTATION SPACE WITH DYNAMIC PRESENTER TRACKING – PAGE 14

A larger space allows multiple cameras to be used together with beam forming microphones to cover the entire space, without the need for a roaming camera or microphone.



LECTURE HALL WITH ADVANCED VIDEO MIXING – PAGE 16

An instructor can present a variety of different sources and combine them for professional results, which is ideal for subjects such as science. This supports live presentation, hybrid teaching, or pre-recorded lesson content.

HYBRID TEACHING WITH ENHANCED ROOM AUDIO



Requirements

The teacher needs to instruct local and remote students simultaneously using the teacher's laptop for Unified Communications.

The teacher's voice must be amplified within the room and transmitted to the students participating remotely.

Support multiple microphones to enable local students to communicate with remote students and eliminate the need for battery changes.

Provide intelligible speech locally and remotely with low noise and echo cancellation.

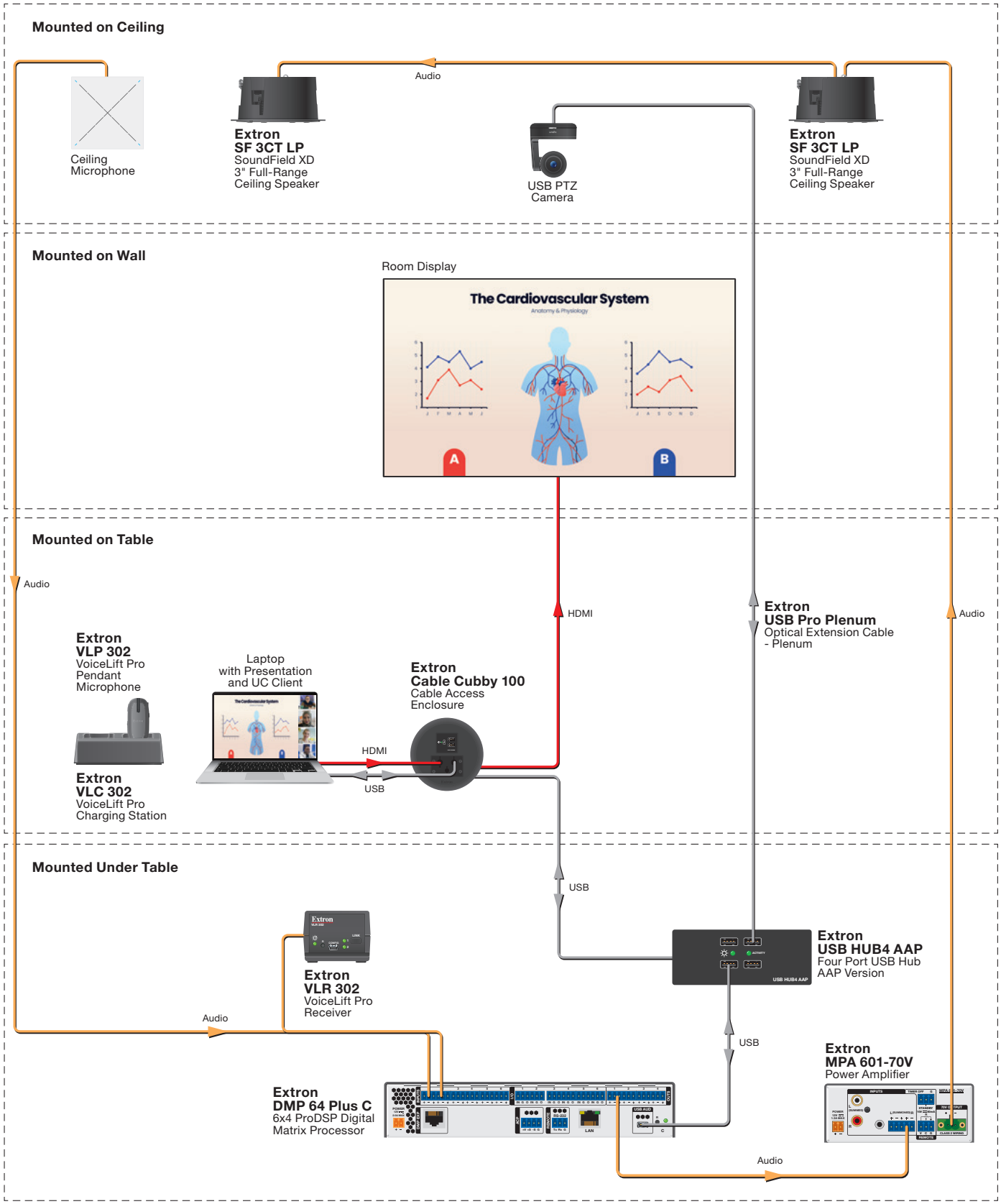
Overcome the distance limitation of USB to extend a camera back to the teacher's desk.

Extron Equipment List

- **DMP 64 Plus C –** Pro DSP 6x4 Digital Matrix Processor
- **MPA 601-70V –** Mono 70 V Power Amplifier
- **SF3 CT LP –** SoundField® XD 3" Full-Range Ceiling Speaker
- **VLM 3001 –** VoiceLift® Pro Microphone and Charging Station
- **USBA Pro Plenum –** SuperSpeed 5 Gbps USB-A 3.2 Optical Extension Cable
- **Cable Cubby® 100 –** Cable Access Enclosure for AV connectivity and power
- **USB Hub4 AAP –** Four-Port USB Hub - AAP Version

Capabilities

- Supports popular software communications platforms including Microsoft Teams®, BlueJeans®, Cisco WebEx®, Citrix®, GoToMeeting®, Google Meet®, and Zoom™
- Expands audio of UC call to cover the entire classroom while providing easy USB connectivity to the teacher's laptop
- Ceiling speakers coupled with a compact but powerful amplifier provide excellent voice reproduction from the teacher and remote students throughout the classroom
- Multiple microphones support ducking to enable a focus on the active speaker and acoustic echo cancellation. These include:
  - Pendant microphone for the teacher
  - Ceiling microphone(s) for students
- Microphones that don't require battery changes
- Digital audio processing including gain, mixing, parametric EQ, filtering and dynamics to improve speech intelligibility
- Extends USB connection to the camera from the teacher's desk using an optical USB extension cable


Mounted on Ceiling
Ceiling Microphone
Audio
Extron SF 3CT LP SoundField XD 3" Full-Range Ceiling Speaker
USB PTZ Camera
Extron SF 3CT LP SoundField XD 3" Full-Range Ceiling Speaker
Mounted on Wall
Room Display
The Cardiovascular System
A
B
Mounted on Table
Audio
HDMI
Extron USB Pro Plenum Optical Extension Cable - Plenum
Audio
Extron VLP 302 VoiceLift Pro Pendant Microphone
Laptop with Presentation and UC Client
Extron Cable Cubby 100 Cable Access Enclosure
HDMI
USB
Extron VLC 302 VoiceLift Pro Charging Station
Mounted Under Table
USB
Extron VLR 302 VoiceLift Pro Receiver
Extron USB HUB4 AAP Four Port USB Hub AAP Version
Audio
USB
Extron MPA 601-70V Power Amplifier
Extron DMP 64 Plus C 6x4 ProDSP Digital Matrix Processor
Audio

HYBRID TEACHING WITH PRO VIDEO AND AUDIO SOURCES



Requirements

This classroom requires the integration of professional grade cameras, microphones, and speakers into software conferencing platforms for hybrid teaching.

The teacher needs to have mobility in the classroom with a wireless microphone.

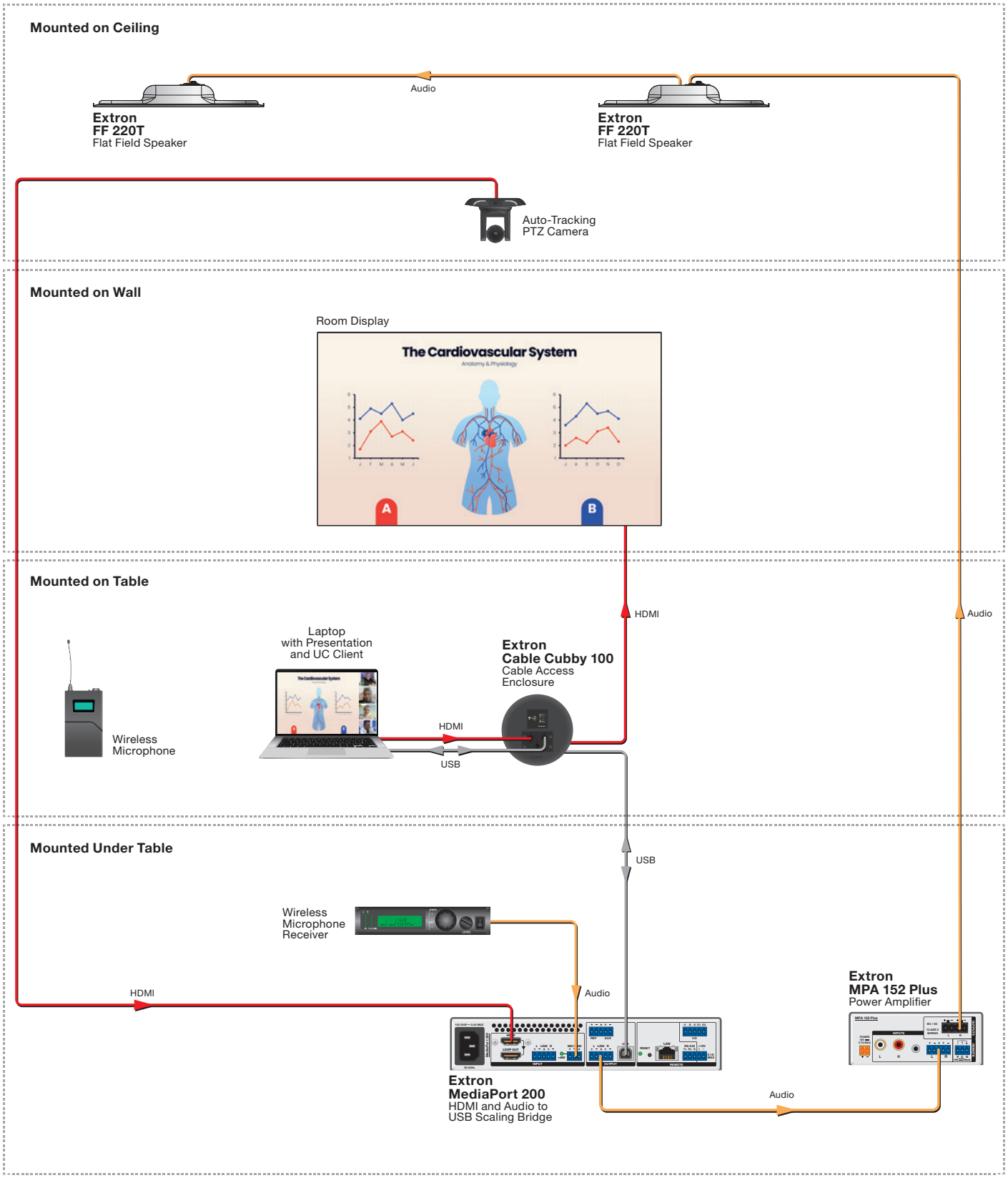
The teacher's voice needs to be heard in the classroom using voice reinforcement and also relayed to the remote students.

Extron Equipment List

- **MediaPort 200 –** HDMI and Audio to USB Scaling Bridge
- **MPA 152 Plus –** Stereo Amplifier - 15 Watts Per Channel
- **FF 220T –** Full-Range Flat Field® Speakers with Low Profile Enclosure
- **Cable Cubby 100 –** Cable Access Enclosure for AV Connectivity and Power

Capabilities

- Seamlessly integrates Pro AV cameras and microphones into software codec applications
- Supports popular software communications platforms including Microsoft Teams, BlueJeans, Cisco WebEx, Citrix, GoToMeeting, Google Meet, and Zoom
- Local audio and voice reinforcement with 2 x 15 watt amplifier and Flat Field ceiling speakers for wide coverage
- Single USB connection for Camera, Microphone, Speakers and Remote Communication to enable easy, intuitive connection to a teacher's laptop without the need for IT support
- Integrated audio DSP to reduce background noise and mix voice and program audio
- Digital audio processing including gain, mixing, parametric EQ, filtering, dynamics, and ducking
- Video scaling provides high quality USB video at the resolution required by the UC software
- Lapel microphone for teacher


Mounted on Ceiling
Audio
Extron
FF 220T
Flat Field Speaker
Extron
FF 220T
Flat Field Speaker
Auto-Tracking
PTZ Camera
Mounted on Wall
Room Display
The Cardiovascular System
Anatomy & Physiology
A
B
Mounted on Table
HDMI
Audio
Laptop
with Presentation
and UC Client
Extron
Cable Cubby 100
Cable Access
Enclosure
Wireless
Microphone
HDMI
USB
Mounted Under Table
USB
Wireless
Microphone
Receiver
HDMI
Audio
Extron
MPA 152 Plus
Power Amplifier
Extron
MediaPort 200
HDMI and Audio to
USB Scaling Bridge
Audio

HYBRID CLASSROOM WITH MICROSOFT TEAMS ROOM



Requirements

This hybrid classroom should support three different modes of operation:

- Microsoft Teams Room
- Software conferencing from the teacher's laptop to support any UC solution
- Local presentation using HDMI from a laptop

The teacher needs the flexibility to present wirelessly from any PC, tablet, or smartphone together with whiteboard content to local and remote students.

A single point of control for all room AV functions should be available from the Teams Room touchpanel.

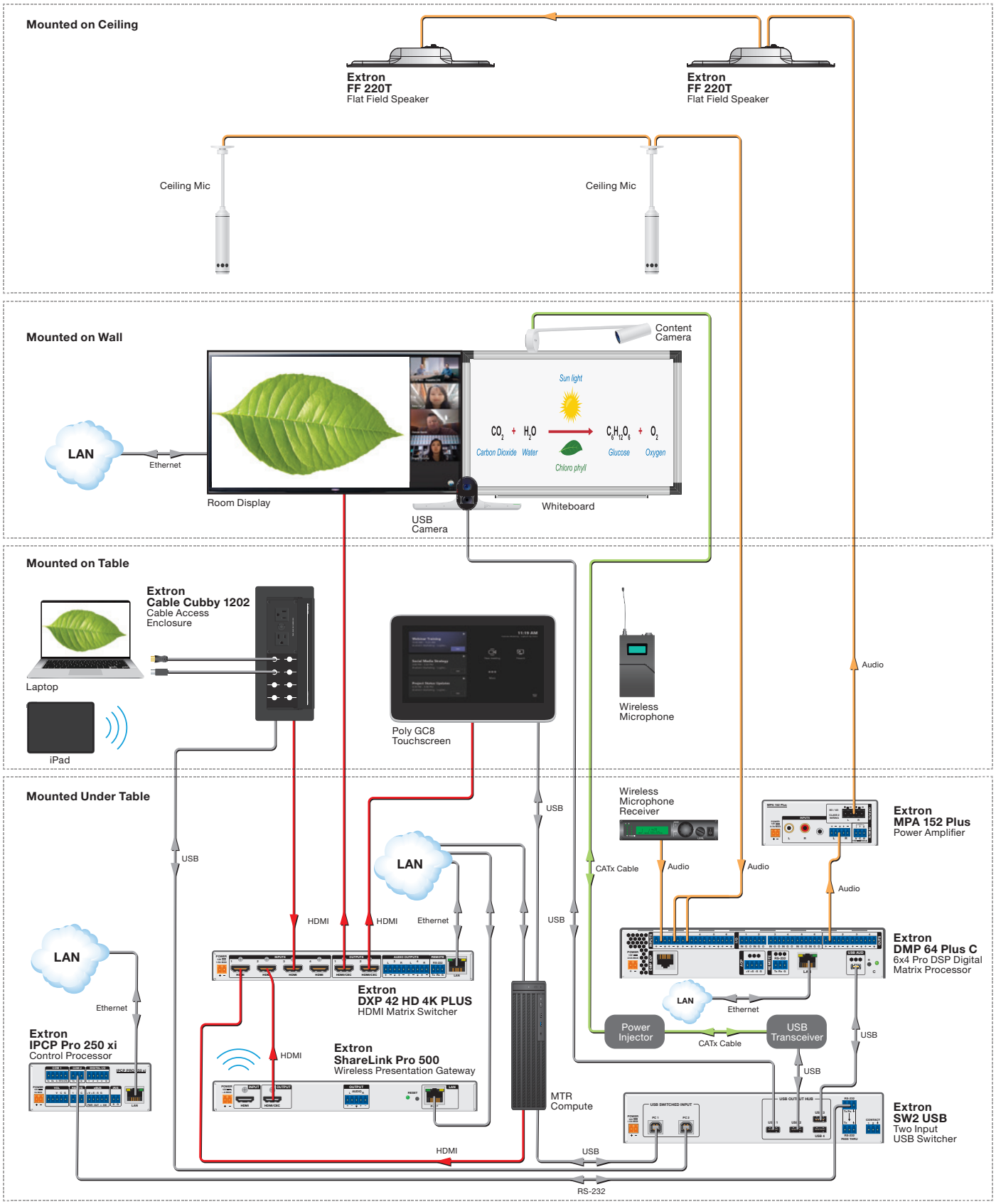
Teams Certified Audio Processing with voice reinforcement to provide intelligible speech without echo or background noise.

Extron Equipment List

- **DXP 42 HD 4K PLUS –** HDMI Matrix Switcher
- **SW2 USB –** Two input USB Switcher
- **ShareLink® Pro 500 –** Wireless Presentation Gateway
- **DMP 64 Plus C –** 6x4 ProDSP Digital Matrix Processor
- **IPCP Pro 250 xi –** Control Processor
- **Cable Cubby 1202 –** Cable Access Enclosure
- **MPA 152 Plus –** Stereo Amplifier - 15 Watts Per Channel
- **FF 220T –** Full-Range Flat Field Speakers with Low Profile Enclosure
- **HD Pro Plenum –** HDMI Premium High Speed Optical Cables
- **USBA Pro Plenum –** SuperSpeed 5 Gbps USB-A Optical Cable

Capabilities

- Microsoft Teams Room Unified Communications
- BYOM (Bring your own Meeting) support for other UC platforms including BlueJeans, Cisco WebEx, Citrix, GoToMeeting, Google Meet, and Zoom
- Present directly to the display via HDMI
- Wireless Presentation from Windows, MacOS, iOS, Android, and ChromeOS
- Auto-tracking camera follows the teacher
- Whiteboard camera enables remote viewing of whiteboard content
- Touchpanel control of:
  - Calls
  - Calendar
  - Camera switching
  - PTZ control
  - Moderation
  - Media playback


Mounted on Ceiling
Extron
FF 220T
Flat Field Speaker
Extron
FF 220T
Flat Field Speaker
Ceiling Mic
Ceiling Mic
Mounted on Wall
Content
Camera
Sun light
Carbon Dioxide
Water
Glucose
Oxygen
Chloro phyll
LAN
Ethernet
Room Display
Whiteboard
USB
Camera
Mounted on Table
Extron
Cable Cubby 1202
Cable Access
Enclosure
Laptop
iPad
Poly GC8
Touchscreen
Wireless
Microphone
Audio
Mounted Under Table
Wireless
Microphone
Receiver
Extron
MPA 152 Plus
Power Amplifier
USB
LAN
CATx Cable
Audio
Audio
Audio
HDMI
HDMI
Ethernet
USB
Extron
DMP 64 Plus C
6x4 Pro DSP Digital
Matrix Processor
LAN
Ethernet
Power
Injector
CATx Cable
USB
Transceiver
USB
USB
LAN
Ethernet
Extron
IPCP Pro 250 xi
Control Processor
Extron
DXP 42 HD 4K PLUS
HDMI Matrix Switcher
HDMI
Extron
ShareLink Pro 500
Wireless Presentation Gateway
MTR
Compute
Extron
SW2 USB
Two Input
USB Switcher
HDMI
USB
RS-232

HYFLEX LECTURE HALL



Requirements

This lecture hall will support hybrid teaching and simultaneous recording for offline viewing via Content Management System (CMS).

Hybrid teaching will be enabled for platforms such as Microsoft Teams, Zoom, Cisco WebEx, and more using a software client on the instructor's laptop.

The instructor's voice will require reinforcement to be heard throughout the space and will also be relayed to remote students. As the instructor can present from a variety of positions, a wireless microphone will be used to enable mobility.

A projector with an HDBaseT input will be used for presentation. This will also require control to enable powering on and off.

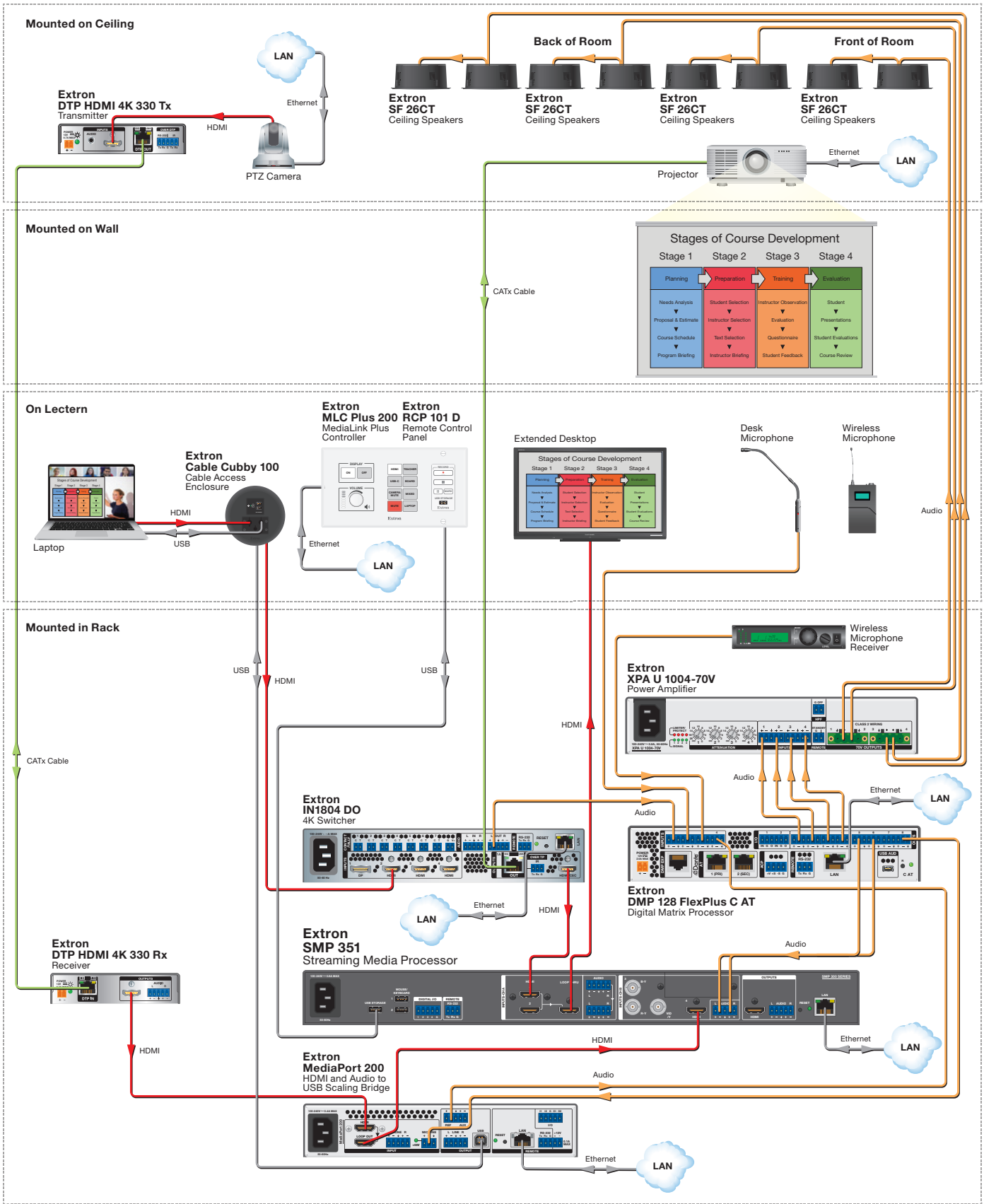
For online students, a combined recording of the lecturer and presentation will be scheduled and published to CMS. The instructor will be able to control the recording layout.

Extron Equipment List

- **MediaPort 200 –** HDMI and Audio to USB Scaling Bridge
- **SMP 351 –** H.264 Streaming Media Processor
- **DMP 128 FlexPlus C AT –** Digital Matrix Processor
- **SF 26CT –** SoundField XD 6.5" Two-Way Ceiling Speaker
- **XPA U 1004-70V –** Four Channel Power Amplifier
- **MLC Plus 200 with RCP 101D in MLM 200 D –** Button Control
- **Cable Cubby 100 –** Cable Access Enclosure
- **DTP HDMI 4K 330 Tx –** DTP Transmitter
- **DTP HDMI 4K 330 Rx –** DTP Receiver
- **IN1804 DO –** 4K/60 Seamless Scaling Switcher

Capabilities

- Presentation of content to local students and to remote students via conferencing software on instructor's laptop
- Supports popular software communications platforms including Microsoft Teams, BlueJeans, Cisco WebEx, Citrix, GoToMeeting, Google Meet, and Zoom
- Present from laptop to local projector
- Flexible composition of content to support both camera and presentation for recording with layout control
- Lectern and wireless microphones
- Provide voice intelligibility and optimal sound distribution throughout the lecture hall
- Recording of the lesson and integration into CMS systems such as Kaltura, Panopto®, YuJa, and Opencast
- Control via button panel including power, recording controls, and recording layout


Mounted on Ceiling
LAN
Extron
DTP HDMI 4K 330 Tx
Transmitter
Ethernet
HDMI
PTZ Camera
Back of Room
Front of Room
Extron
SF 26CT
Ceiling Speakers
Extron
SF 26CT
Ceiling Speakers
Extron
SF 26CT
Ceiling Speakers
Extron
SF 26CT
Ceiling Speakers
Projector
Ethernet
LAN
Mounted on Wall
CATx Cable
Stages of Course Development
Stage 1
Stage 2
Stage 3
Stage 4
Planning
Preparation
Training
Evaluation
On Lectern
Extron
MLC Plus 200
MediaLink Plus
Controller
Extron
RCP 101 D
Remote Control
Panel
Extron
Cable Cubby 100
Cable Access
Enclosure
HDMI
USB
Laptop
Ethernet
LAN
Extended Desktop
Desk
Microphone
Wireless
Microphone
Audio
Mounted in Rack
USB
HDMI
USB
CATx Cable
Wireless
Microphone
Receiver
Extron
XPA U 1004-70V
Power Amplifier
HDMI
Audio
Ethernet
LAN
Extron
IN1804 DO
4K Switcher
Audio
Extron
DMP 128 FlexPlus C AT
Digital Matrix Processor
LAN
Ethernet
HDMI
Extron
SMP 351
Streaming Media Processor
Audio
Extron
DTP HDMI 4K 330 Rx
Receiver
HDMI
HDMI
Ethernet
LAN
Extron
MediaPort 200
HDMI and Audio to
USB Scaling Bridge
Audio
Ethernet
LAN

HYFLEX LECTURE HALL WITH PC AND CONTROL



Requirements

In addition to the requirements shown in the previous example, this solution should support a PC in the lectern and more advanced touchpanel control with integrated preview to enable a wider variety of camera and content options, such as a whiteboard.

The audio solution will require an additional microphone to pass to students in the lecture hall.

Support dual channel recording to enable greater flexibility for viewing and post-production.

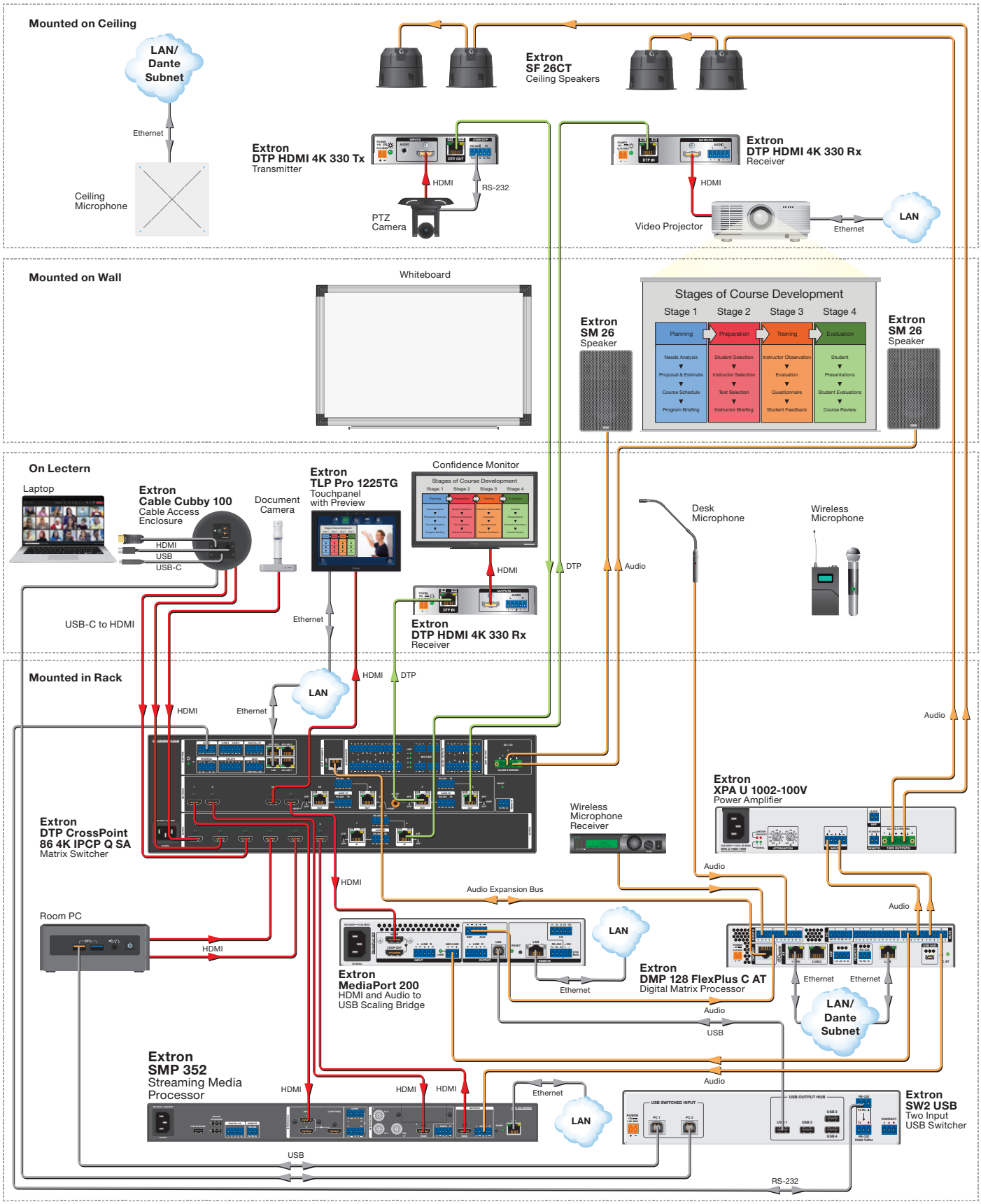
The system should also support HDMI or USB-C presentation from the lecturer's PC with seamless switching between the presentation sources.

Extron Equipment List

- **MediaPort 200 –** HDMI and Audio to USB Scaling Bridge
- **SMP 352 –** H.264 Streaming Media Processor
- **SF 26CT –** SoundField XD 6.5" Two-Way Ceiling Speaker
- **SM 26 –** SpeedMount® Two-Way Surface Mount Speakers
- **XPA U 1002-100V –** Two Channel Power Amplifier
- **TLP Pro 1225TG –** 12" Touchpanel with Video Preview
- **DTP CrossPoint 86 4K IPCP Q SA –** Matrix Switcher
- **DTP HDMI 4K 330 Tx –** DTP Transmitter
- **DTP HDMI 4K 330 Rx –** DTP Receiver
- **Cable Cubby 100 –** Cable Access Enclosure
- **SW2 USB –** Two Input USB Switcher
- **DMP 128 FlexPlus C AT –** Digital Matrix Processor
- **ShareLink Pro 500 –** Wireless Presentation Gateway

Capabilities

- Presentation of content to local students and to remote students via conferencing software
- Present locally and remotely from laptop or lectern PC
- Supports popular software communications platforms including Microsoft Teams, BlueJeans, Cisco WebEx, Citrix, GoToMeeting, Google Meet, and Zoom
- Flexible composition of content and camera image for recording and streaming
- Wireless microphone for teacher and wireless handheld microphone for students for remote audio
- Preview of shared live content on preview display
- Recording of the lesson and integration into CMS systems such as Kaltura, Panopto, YuJa, and Opencast
- Optional lecturer location detection using pressure pads to control camera position


Mounted on Ceiling
LAN/ Dante Subnet
Ethernet
Ceiling Microphone
Extron SF 26CT Ceiling Speakers
Extron DTP HDMI 4K 330 Tx Transmitter
HDMI
RS-232
PTZ Camera
Extron DTP HDMI 4K 330 Rx Receiver
HDMI
Video Projector
Ethernet
LAN
Mounted on Wall
Whiteboard
Extron SM 26 Speaker
Stages of Course Development
Stage 1
Stage 2
Stage 3
Stage 4
Planning
Preparation
Training
Evaluation
Needs Analysis
Proposal & Estimate
Course Schedule
Program Briefing
Student Selection
Instructor Selection
Text Selection
Instructor Briefing
Instructor Observation
Evaluation
Questionnaire
Student Feedback
Student
Presentations
Student Evaluations
Course Review
Extron SM 26 Speaker
On Lectern
Laptop
Extron Cable Cubby 100 Cable Access Enclosure
HDMI
USB
USB-C
Document Camera
Extron TLP Pro 1225TG Touchpanel with Preview
Confidence Monitor
HDMI
Extron DTP HDMI 4K 330 Rx Receiver
DTP
Audio
Desk Microphone
Wireless Microphone
USB-C to HDMI
Ethernet
Mounted in Rack
LAN
HDMI
DTP
Ethernet
Extron DTP CrossPoint 86 4K IPCP Q SA Matrix Switcher
Extron XPA U 1002-100V Power Amplifier
Audio
Wireless Microphone Receiver
Audio Expansion Bus
Room PC
HDMI
Extron MediaPort 200 HDMI and Audio to USB Scaling Bridge
LAN
Ethernet
Extron DMP 128 FlexPlus C AT Digital Matrix Processor
Ethernet
Ethernet
LAN/ Dante Subnet
Audio
USB
Extron SMP 352 Streaming Media Processor
HDMI
HDMI
HDMI
Ethernet
LAN
Audio
Extron SW2 USB Two Input USB Switcher
USB
RS-232

PRESENTATION SPACE WITH DYNAMIC PRESENTER TRACKING



Requirements

This space requires Zoom Rooms support, with presenter tracking over a wide area from multiple cameras, distribution of the presenter's audio to remote students, and the ability to use configurable framing around the presenter.

Support intelligent mixing of presentation content and cameras.

Provide microphone coverage for the entire space, with noise reduction and echo cancellation.

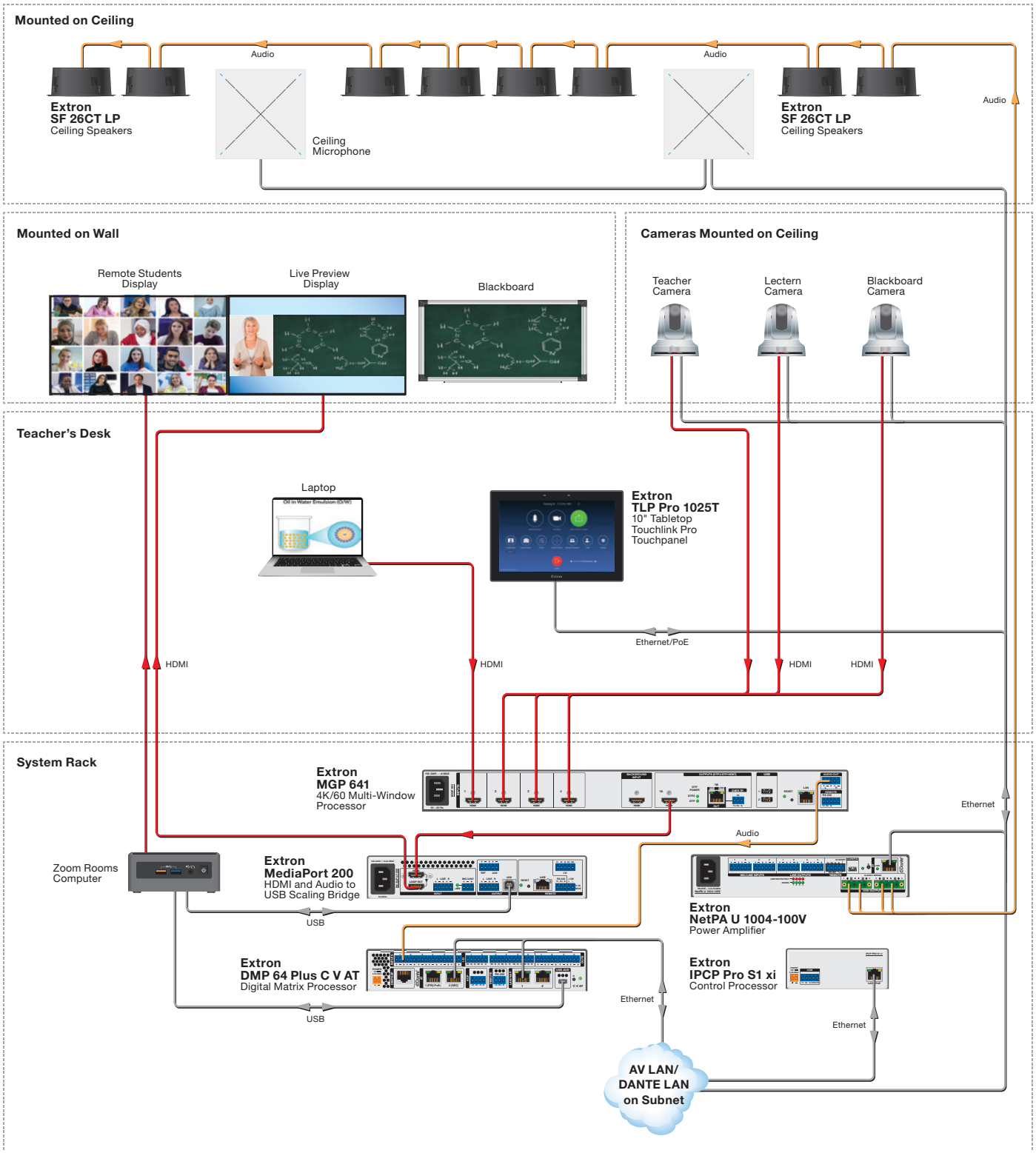
Use touchpanel control for automation of AV devices, lighting, shades, and HVAC to save energy.

Extron Equipment List

- **MGP 641 –** 4K/60 HDMI Multi-Window Processor with DTP2 Extension
- **MediaPort 200 –** HDMI and Audio to USB Scaling Bridge
- **IPCP Pro S1 xi –** Control Processor
- **DMP 64 Plus C V AT –** 6x4 ProDSP Digital Matrix Processor
- **TLP Pro 1025T –** TouchLink® Pro touchpanel
- **NetPA U 1004-100V –** Four Channel Power Amplifier with Dante and DSP
- **SF 26CT LP –** SoundField XD 6.5" Two-Way Ceiling Speaker with Low Profile Back Can

Capabilities

- Presentation of content to local students and to remote students via Zoom Rooms
- Intelligent mixing of presentation content from laptop and video from cameras
- Ceiling tile microphones provide accurate camera positioning and excellent voice reproduction
- Digital audio signal processing including echo cancellation
- Powerful audio with excellent coverage using 6.5" speakers and 100 watt per channel networked power amplifier
- Full control of layout presets and Zoom Rooms calling from touchpanel


Mounted on Ceiling
Audio
Audio
Audio
Extron
SF 26CT LP
Ceiling Speakers
Ceiling
Microphone
Extron
SF 26CT LP
Ceiling Speakers
Mounted on Wall
Remote Students
Display
Live Preview
Display
Blackboard
Cameras Mounted on Ceiling
Teacher
Camera
Lectern
Camera
Blackboard
Camera
Teacher's Desk
Laptop
Extron
TLP Pro 1025T
10" Tabletop
Touchlink Pro
Touchpanel
Ethernet/PoE
HDMI
HDMI
HDMI
HDMI
System Rack
Extron
MGP 641
4K/60 Multi-Window
Processor
Ethernet
Audio
Zoom Rooms
Computer
Extron
MediaPort 200
HDMI and Audio to
USB Scaling Bridge
USB
Extron
NetPA U 1004-100V
Power Amplifier
Extron
DMP 64 Plus C V AT
Digital Matrix Processor
USB
Ethernet
Extron
IPCP Pro S1 xi
Control Processor
Ethernet
AV LAN/
DANTE LAN
on Subnet

LECTURE HALL WITH ADVANCED VIDEO MIXING



Requirements

The teacher needs to be able to instruct students that are physically present in the classroom and enable remote students to follow the class via conferencing.

The teacher has the option to present up to four content sources, such as from a laptop and document camera.

The video of the instructor is combined with the learning content so the remote students can see the instructor as well as the learning content.

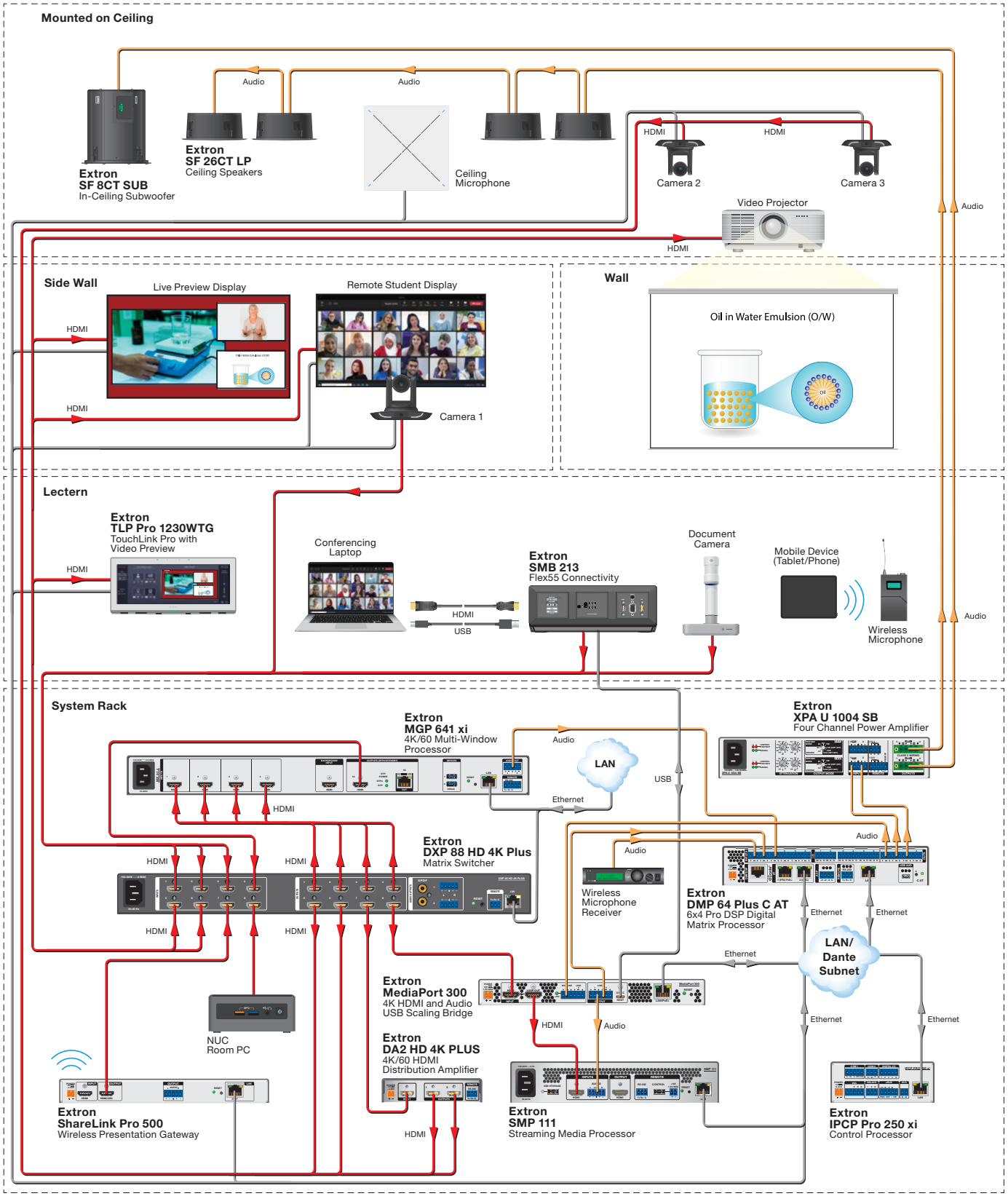
Optionally, the class can be recorded for later playback through a CMS.

Extron Equipment List

- **MGP 641 xi –** 4K/60 HDMI Multi-Window Processor with DTP3 Extension
- **MediaPort 300 –** HDMI and Audio to USB Scaling Bridge
- **ShareLink Pro 500 –** Wired and Wireless Presentation Gateway
- **IPCP Pro 250 xi –** Control Processor
- **TLP Pro 1230WTG –** TouchLink Pro touchpanel
- **DXP 88 HD 4K Plus –** 4K/60 HDMI Matrix Switcher with Audio De-Embedding
- **DMP 64 Plus C AT –** 6x4 ProDSP Digital Matrix Processor
- **SMP 111 –** Single Channel H.264 Streaming Media Processor
- **SMB 213 –** Low Profile Surface Mount Box for Extron Flex55
- **DA2 HD 4K PLUS –** 4K/60 HDMI Distribution Amplifier
- **XPA U 1004 SB –** Four Channel Power Amplifier
- **SF 26CT LP –** SoundField XD 6.5" Two-Way Ceiling Speaker with Low Profile Back Can
- **SF 8CT SUB –** SoundField 8" In-Ceiling Subwoofer

Capabilities

- Presentation of content to local students and to remote students via conferencing software
- Switch between content from laptop, document camera, or wireless device
- Flexible composition of content and camera image of teacher in different presets
- Wireless microphone for teacher
- Preview of shared live content is visible on the preview display and on the touchpanel
- Full control of layout presets and presentation switching via touchpanel
- Live annotation capabilities with optional Extron LinkLicense®


Mounted on Ceiling
Extron
SF 8CT SUB
In-Ceiling Subwoofer
Audio
Audio
Extron
SF 26CT LP
Ceiling Speakers
Ceiling
Microphone
HDMI
HDMI
Camera 2
Camera 3
Video Projector
HDMI
Audio
Side Wall
Live Preview Display
Remote Student Display
HDMI
HDMI
Camera 1
Wall
Oil in Water Emulsion (O/W)
Lectern
Extron
TLP Pro 1230WTG
TouchLink Pro with
Video Preview
HDMI
Conferencing
Laptop
HDMI
USB
Extron
SMB 213
Flex55 Connectivity
Document
Camera
Mobile Device
(Tablet/Phone)
Wireless
Microphone
Audio
System Rack
Extron
MGP 641 xi
4K/60 Multi-Window
Processor
HDMI
Audio
LAN
Ethernet
USB
Extron
XPA U 1004 SB
Four Channel Power Amplifier
Audio
Extron
DXP 88 HD 4K Plus
Matrix Switcher
HDMI
HDMI
HDMI
HDMI
Audio
Wireless
Microphone
Receiver
Extron
DMP 64 Plus C AT
6x4 Pro DSP Digital
Matrix Processor
Ethernet
Ethernet
LAN/
Dante
Subnet
Ethernet
Extron
MediaPort 300
4K HDMI and Audio
USB Scaling Bridge
HDMI
Audio
Ethernet
Ethernet
NUC
Room PC
Extron
DA2 HD 4K PLUS
4K/60 HDMI
Distribution Amplifier
HDMI
Extron
ShareLink Pro 500
Wireless Presentation Gateway
Extron
SMP 111
Streaming Media Processor
Extron
IPCP Pro 250 xi
Control Processor

HyFlex Teaching Technology

Our HyFlex teaching solutions integrate with any UC system and enable interactive classes that can be recorded and consumed offline by students if desired.

Unified Communication Benefits

- Teaching live to local and remote students
- Integration with any UC system, such as MS Teams, Zoom, Webex, BlueJeans, etc.
- USB switching and extension to enable BYOM



Audio Capabilities

- Professional audio with full room coverage
- Digital signal processing to eliminate echo and focus on the active talkers
- Audio power amplifiers featuring a high efficiency design to deliver exceptional performance
- Full range of pendant, wall mount, and ceiling speakers



zoom Certified

Certified for Microsoft Teams

Video Enhancements

- Switch content from laptop, document camera, or wireless student devices
- Combine content via touchpanel
- Video preview on touchpanel



Content Management

- Optional recording and streaming of lessons and integration with popular video content platforms



Control, Automation, and Cable Management

- Control Zoom Rooms via Extron touchpanel
- Control and switch cameras using location data from beam forming microphones
- Automation to power devices on and off:
  - Power control
  - Network control
  - RS-232 control
- Cable Cubby Cable Access Enclosures



NOTES

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