Welcome to the Lightweight Lecture Capture program.

There are now 31 classrooms at MIT set up to automatically livestream and record lectures. The list of classrooms and link to request form can be found here.

This service is largely automated, only the audio needs be set up by its users.

Jump to the quick start!

**Audio**

**IS&T-Provided Microphone Solution**

**Quick Start**

**Procedure**

1. Press and HOLD the power buttons on each component of the microphone kit. Lights will turn **solid blue** when they are on and paired. Note that they do not have to be pressed simultaneously.

2. Connect the receiver component to the **pink** port (marked "IN") on the audio interface, using the standard patch cable (the cable with two 90-degree-angled terminators, see diagram below.)

3. Open the link to the livestream to check to see that audio is being streamed correctly. Note: there will be a ~30 second delay behind real time.

That's it! The livestream and subsequent recording are all set and ready to use.

**Notes**

⚠️ The microphone kits hold about 5 hours of charge. Make sure to charge them after each recording session.
The Saramonic mic kits are paired one transmitter/mic to one receiver, and CANNOT be mixed and matched. Be sure to keep your microphone and receiver pair together to avoid accidentally picking up components from someone else's kit.

If voice reinforcement is also needed, a second microphone will be provided.

See also Adjust Input Levels of Saramonic Blink500 Transmitter.

Diagram

![Diagram of Lecture Capture Audio Setup]

Above is a copy of the laminated diagram handed out with the microphone kits.

**Equipment**

<table>
<thead>
<tr>
<th>Component</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microphone/Transmitter</td>
<td>Records and transmits audio signal. Identifiable by a small metal grate on top over the microphone.</td>
</tr>
<tr>
<td>Receiver</td>
<td>Receives audio signal and outputs it via 3.5mm headphone cable. Identifiable by the red power button.</td>
</tr>
<tr>
<td>Audio Interface (or &quot;Audio Injector&quot;)</td>
<td>Small white plastic device on the wall, which routes the audio signal into the lecture capture system.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Accessory</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard 3.5mm Patch Cable</td>
<td>Identifiable by the 90-degree-angled terminators on each end, with 3 segments on the pin. This is the one we use for Lightweight Lecture Capture.</td>
</tr>
<tr>
<td>TRRS 3.5mm Patch Cable</td>
<td>Has one 90-degree-angled terminator and one straight terminator. End with straight terminator has 4 segments. This is for use in modern combo audio ports, e.g. those on cellphones and tablets. This is NOT for use with the audio interface.</td>
</tr>
<tr>
<td>2x USB-C to USB-A charging cables</td>
<td>Used to charge the microphone and receiver.</td>
</tr>
<tr>
<td>Lapel Microphone Attachment</td>
<td>This can be used for a more professional look, where the transmitter is clipped on a belt or waistband, and the label microphone clipped up by the speaker's mouth.</td>
</tr>
</tbody>
</table>

"One Microphone" Solution

Select rooms now have a "one microphone" setup for both voice reinforcement and lecture capture:
A technician will come by at the start of the first lecture to demonstrate the use of the Shure wireless microphone. This microphone will be patched into BOTH the Lightweight Lecture Capture system as well as the house speakers to amplify the lecturer's voice throughout the room. This Shure mic will stay in the classroom, in its charging cradle, between lectures.

The technician will also test the levels on the livestream/recording; nothing is required of the lecturer and their staff.

⚠️ **NOTE:** If you alternate between projection and lecturing, do not shut the projector down. Use the Projector Mute function on the Crestron touch panel instead. Shutting the projector down will cause the system to stop sending signal to be recorded; using the Projector Mute function will pause projecting while leaving the system on and passing signal to the lecture capture system.

### Video

The video recording is all handled automatically. Starting and stopping manually is **NOT** required or possible.

### Schedule

The recording will start and stop exactly on the schedule provided by the Registrar. Notably, this includes the first and last 5 minutes of the lecture.

### Links to Videos

Once a week, a digest email will be sent containing a summary of and link to each scheduled recording for that week.

One hour before each lecture, an email will be sent with a summary of and link to the coming lecture.

The links to lecture captures are ONLY sent to the lecturer, and to teaching staff if requested. The lecturer and their staff can distribute these links to whomever needs access, e.g. via an email to an ill student, or via a Canvas course page.

### Viewing of Videos

Video is livestreamed by and stored in Panopto.

There are 1-5 cameras in each room with different angles of the board and stage, viewers of the livestream and recording will see one main view, and thumbnails of the other available views. Viewers can switch between which view they prefer by clicking on the thumbnail.

More information about the Panopto player and how to use it can be found here.

### Publishing to Canvas

#### Auto-Publishing

LWLC offers the option to make lecture recordings available in Canvas by default. If requested, a navigation link will be added to the relevant Canvas site, like so:
This navigation link will direct to the correct Panopto folder, which stores the lecture recordings.

Note: the navigation link will be at the bottom of the list, right above settings, but this can be changed if desired.

**Manual Publishing**

If the Panopto tab is enabled on the Canvas page for a particular course, it will have created a special folder in Panopto in which to store video files.

For example, here is the location of the Canvas panopto folder for course 3.044:

Canvas/
  3 - Department of Materials Science and Engineering/
      Spring Term (AY 2021-2022) (3 - Department of Materials Science and Engineering)/
      3.044 Materials Processing/

Lightweight Lecture Capture recordings are created and stored in a different directory in panopto, for example the corresponding LWLC folder for 3.044 is here:

Lightweight Lecture Capture/
  Course 3 - Materials Science and Engineering/
      2023FA/
      3.044/

In order to render lecture recordings accessible via Canvas, we recommend making a *reference copy* of the video from the latter folder into the former.

In panopto:

1. Navigate to the lecture capture directory for the relevant course, described above.
2. Hover over an individual video, click on **Settings**
3. Go to the **Manage** tab on the left.
4. Under **Copy Video**, change the destination under "Copy video to" to the Canvas directory described above.
5. Click **Create Reference Copy**

This will create a reference copy of the video in the relevant Canvas folder. This copy isn't a separate file, but rather points to the original, less some meta data, so e.g. any comments posted on the original will not be present on the copy.

This will need to be done on each new video as they get created in the lightweight lecture capture folder.

**FAQ**

**What if I have a session I want to keep private?**

The links to recordings are ONLY sent to the lecturer and teaching staff. Recordings that should be kept private will not be viewable unless the link is given out.

Recordings can also be deleted via Panopto, in the relevant course directory.
It is also possible to restrict availability of the videos in Panopto. This means you can still distribute the links to said videos, but control whether or not the video can be viewed. See section 2 in this document.

**My classroom is not yet part of the program, what can I do?**

If time permits, you can submit a request to the Registrar’s Office to move your class to a classroom that is supported. You can also submit a Lightweight Lecture Capture request form and specify your classroom for consideration in future expansion of the program.

**How do I notify and inform students about classroom recordings?**

A detailed procedure is provided by the Teaching & Learning Lab here, under “Notifying & Informing Students about Classroom Recordings”. Note that the recordings are by default only accessible to members of the MIT community, and the cameras are generally angled such that only the lecturer, stage, and boards are viewable. In cases where the camera angles do capture students, a privacy filter can be requested.

**I have mixed up or lost a component of my microphone kit, can I get another one?**

Please send an email to covidclasshelp@mit.edu and we can provide a replacement.

**I want voice reinforcement in addition to lecture capture, do I have to use two mics?**

There are several classrooms equipped with a “one microphone” solution. All other rooms require the use of two microphones to use voice reinforcement and lecture capture simultaneously.

**Where are my lecture recordings stored in Panopto?**

The recordings are populated in a course specific folder in Panopto. The naming convention for the directory structure is as follows:

```
Lightweight Lecture Capture/
Course <Dept. No.> - <Dept. Name>/
<Term Code>/
<Course No.>/
```

For a specific example, the LWLC Panopto folder for 3.044 can be found here:

```
Lightweight Lecture Capture/
Course 3 - Materials Science and Engineering/
2023FA/
3.044/
```

**How long are my recordings available for? Do they get deleted after the end of the semester?**

The service used to store LWLC videos, Panopto, offers unlimited video storage. As such, videos will never be deleted. A video will get archived after 13 months of no viewing activity, but they can be restored via the Panopto interface. Restoration may take up to 48 hours.

**Request Expansion of Program**

To request that the Lightweight Lecture Capture program be expanded to a new classroom, please submit the request form and specify the desired classroom.

**Support**

Support can be requested by emailing covidclasshelp@mit.edu or by calling 617-32-HELP-U (617-324-3578).