

Advanced Camera **CCTV**

Setup checklist review

- Battery + Power
- Card Settings
- Standard audio setup
- Auto/Manual switch

Manual Control Features

- Manual mode
- Iris/Gain
- White balance
- Focus

Audio Run Bag

- XLR cable
- 635a
- SM58
- Clip-on

Using mics

- Inputs vs. Channels
- How to set switches
- Plug in mic
- Headphones
- Meters / adjusting levels

Other audio available

- SM57
- Audio Technica Shotgun
- Mic stands

Wireless mics

- How to set up

Pro tips

- Alternate record modes
- Zoom control on tripod
 - Using manual Iris + Focus

XLR cable

This is the standard cable for almost all audio production. The run bag contains one 30-ft cable and two 15-ft cables.

635a handheld mic

This is a basic microphone suitable for a single person or for the ambient sound of a large group. This mic has a wide pickup pattern. A pickup pattern means the area around the mic where sound will be picked up. The 635's pattern is 360 degrees around the mic, also referred to as an **omnidirectional pickup pattern**.

SM-58 vocal mic

This is a popular, even recognizable microphone used most often for vocals, frequently by hand-holding the mic at about chest-level. This mic has what is called a **cardioid pickup pattern**. Cardioid pickups are very directional. That means it's designed to pick up sound directly above it and close to it. If you hold this mic too far away from your mouth you won't hear much.

Clip-on mic

This is the standard microphone used in sit-down interviews so that the person doesn't have to hold a mic or talk into a mic on a stand. It's designed to be discreetly clipped to a person's lapel, which is why it's sometimes called a "lapel mic".

The clip-on has a cardioid pickup pattern, so it's very directional. It should be clipped at about chest-height directly under the speaker's mouth: if they will be looking to one side during shooting, the mic should also be placed on the same side.

SM-57 acoustic mic

The SM-57 is an all-purpose microphone with a cardioid pickup pattern. It can be used for instruments, amp cabinets, or a large group (such as a choir or orchestra). It's also okay for vocal applications, though the wind screen is not as ideal as the 58 for this function.

Audio Technica shotgun mic

Shotgun mics have what's called a hyper-cardioid pickup pattern because it's extremely directional. It actually cancels out the sound coming in from both sides and sends just the sound coming from the front to be recorded.

EXTERNAL MICS

Step 1: Turn camera off

Whenever you're going to be swapping mic cables, the safest practice is to simply turn off the camera.

Step 2: Plug your microphone into INPUT 1

The shotgun mic can stay plugged into the other input, though you may choose to disconnect it later.

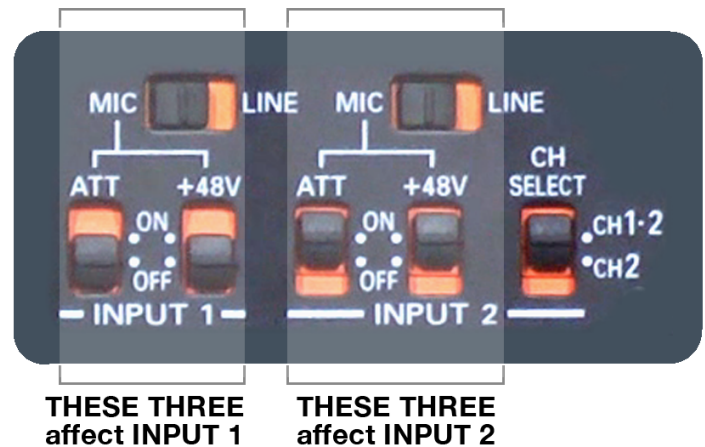
Step 3: Set the INPUT 1 switches for the mic you're using

This step requires you to know about the microphone you're using, what it needs, and what the individual switches mean:

MIC/LINE sets what kind of input is plugged in. Set this to MIC unless you are plugging in an audio mixer or other LINE source.

ATT stands for "attenuate", which means it reduces the level coming in. It should be ON for mics producing a strong signal.

+48V sends power to the mic. Only "condenser" mics, like the attached shotgun, require this.



Step 4: Set the CH SELECT switch to "CH 2"

The purpose of this switch is to "send" the INPUT 2 mic to either **one channel** or **both channels**. When we're using the shotgun mic only we set it to "CH 1-2" so that the shotgun will be on both channels. However, when we're using a second mic on INPUT 1, *we need CH 1 free*. Setting this switch to "CH 2" makes it possible to record separate mics on both channels.

Step 5: Confirm that each channel is recording a separate mic

Take a look at the level meters and speak directly into each mic to confirm. This is also an ideal time to *put on your headphones!*

NOTE: You can also choose NOT to use the attached shotgun mic at all, and instead plug a **second external microphone** into INPUT 2.

Just turn off the camera, unplug the shotgun mic, plug a different mic into INPUT 2, and follow these steps again using the other set of switches.



CH 2 is the shotgun mic



CH 1 is your attached mic