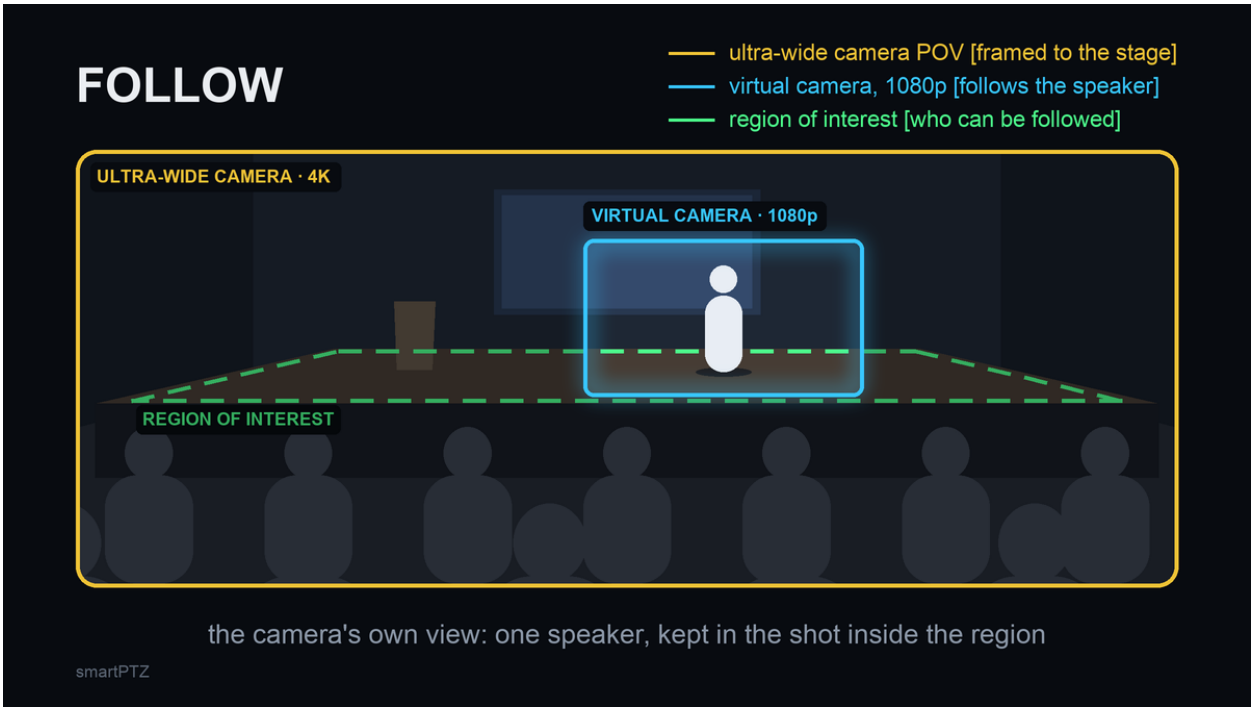
smartPTZ

Follow

User manual for smartPTZ Follow: a virtual camera that keeps one person in the shot. What it does, how to set it up, how it knows who to follow, and what it does when it loses them.



The camera's own view: the ultra-wide (yellow) sees the whole stage and room; the virtual camera (blue, the shot that goes out) stays on the speaker; only people inside the region (green) can be followed.

Applies to smartPTZ 17.7 or later and the current web console. Covers Follow with the phone on a tripod, not moving.

1. What Follow does

Follow keeps one person in the shot: a speaker, a presenter, a coach, a performer, or one player. The phone stays still on a tripod and records the whole scene on its ultra-wide (0.5×) lens in 4K. Inside that picture, Follow moves a **virtual camera**: a 1080p window that pans and zooms to keep the person framed. The window is what goes to your stream, your recording and your switcher.

- **One person, kept:** Follow locks on to the person you pick and knows them by how they look and, when it can read it, by their shirt number. Someone walking through the middle of the picture does not take the shot.
- **A region of interest:** you draw the area the person uses, such as a stage. Follow picks only from inside it, and shows the whole area when the person steps out.
- **Lost, not replaced:** if the person disappears, Follow waits and looks for them; it never switches to someone else on its own.

Follow locked on one player



From the October 4 test: everyone the detector found (blue) and the locked subject, #20 (green). The phone learned his number from his back within a second and kept him through the crowd.

Remember. Follow cannot show what the ultra-wide does not see. Mount the phone so the whole area the person uses is in the picture.

2. What you need

Item	Notes
iPhone	iPhone 14 or later, running iOS 18 or later.
smartPTZ app	smartPTZ 17.7 or later on the phone, from the App Store. Free: no Pro plan needed.
Tripod and mount	A tripod at the back or side of the room, high enough to see over the audience, with the whole area the person uses in view.
Web console	Set up Follow from the console: on the **Track** tab, select **Follow**, then press **Follow** to arm it, set the region of interest and Save, and pick the subject.

Aiming the camera

- The whole area the person uses must be in the ultra-wide picture, with room above their head.
- Mount it high enough that the audience does not block the person: their heads at the bottom of the picture are fine; the region keeps them from being followed.
- Keep the phone level, and leave it where it is once the region is set.

3. Setting up Follow

You can do all of this from the web console, so nobody needs to touch the phone once it is mounted, or on the phone itself (see *On the phone* below).

1. **Mount and connect.** Mount the phone, open smartPTZ, and open the web console with its PTZ-ID. Check that the camera pill shows it online and that the monitor shows its picture.
2. **Choose Follow.** Open the **Track** tab and click **Follow** once: it is outlined and its settings appear below. Leave **Lens** on **Ultra only** and **People** on **1**.
3. **Arm Follow.** Press **Follow** once. It turns amber (**Follow · Ready**) and the phone switches to the ultra-wide lens. The region editor appears on the monitor by itself: the console turns on Tracker view so you see the phone's full picture, with six green points on the edges of the picture (full screen).
4. **Set the region.** Drag the six points around the area the person uses: a stage, the front of a room. Keep the audience outside it. Press **Save region**. To open it again before starting, use **Edit region** in the amber Ready message. To skip it, press **Cancel**: Follow uses the whole picture.
5. **Pick the subject.** In the Follow settings' **Subject** row, press **Pick subject** and click the person on the monitor. The row then says *Picked*. If you skip this, Follow locks on the person nearest the centre of the region who is wholly in view.
6. **Start.** Press **Follow** again. It turns green (**Follow · On**) and the Subject row shows *Locked*, then *Locked · #20* once it has read the person's number.

You can press **Pick subject** again at any time while Follow runs, to switch to someone else. If the click misses, the console says *Nobody found there*; click on the person's body.

> **Careful.** Tracker view goes to **every** output: the stream, the recording and your switcher. Use it before you go live, or put this camera on Preview in your switcher first. It switches back to Program by itself after 60 seconds unless you press Pin.

On the phone

Tap **Follow** on the phone and the same region editor appears on its screen, the six points on the edges of the picture: drag them with a finger and tap **Save** (or **Cancel** for the whole picture), then tap Follow again to start. While Follow is armed, the green **Region** button at the bottom left reopens the editor with what you just saved. Without a pick, Follow locks on the person nearest the centre of the region.

What the Subject row means

Status	Meaning
Picked	Follow is armed and will start on the person you clicked.
Locked	Following the subject. *Locked · #20*: it has also learned their shirt number.
Searching	The subject has not been seen for half a second. Follow is checking everyone in the region and will move again only when it is sure it has them.

4. The rules Follow follows

Follow looks at the picture ten times a second. Each time, it finds the subject and decides how the shot should move.

Who is followed

Rule	What it means
Inside the region	Follow only locks on to, or looks for, people whose feet are inside the region. The audience in front of a stage is never picked.
One subject	The person you picked, or the one nearest the centre when Follow starts. A new subject only when you pick one, or after the subject has been gone for 30 seconds.
Known by their look	Follow keeps fingerprints of how the subject looks, adding new ones only while they are clear of other people, so a crossing never teaches it someone else's look.
Known by their number	Follow reads the subject's shirt number until it has read the same number twice. After that, the number confirms them, and a different number rules someone out. It needs the person to be large enough in the picture: roughly a tenth of its height or more.

Keeping them

Rule	What it means
Following	From one look to the next, the subject is the person where they just were. If they jump, disappear for a moment or cross someone, their look (or number) has to agree; with several people close, only a clear match counts.
Searching	After half a second without the subject, everyone in the region is compared. Follow moves again on their number, or on a close match that is clearly better than anyone else's, three checks in a row.
Never someone else	While searching, the shot keeps drifting the way it was going for a second, then holds, and after 5 seconds shows the whole region. It never cuts to another person.

The shot

Rule	What it means
Framing	The subject is framed with room around them, and the shot moves smoothly. It zooms in only while their legs are in view, and never closer than 2×.
Leaving the region	Outside the region for 1.5 seconds, the shot backs off to show the whole region. Follow remembers who they are and follows them again when they come back in.
Nobody there	The same wide shot of the region (or the full picture, without a region).

5. Troubleshooting

What you see	Likely cause	What to do
Follow does not start, or stops, when recording at 4K	At 4K the phone records on the wide lens only, and tracking is off.	Set recording to 1080p in the console's Output tab to use Follow.
Follow starts on the wrong person	Nobody was picked, so it took the person nearest the centre.	Press **Pick subject** and click the right person. You can do this before or after starting Follow.
Follow ignores the person you want	Their feet are outside the region.	Arm Follow again and place the region's points to include them.
The shot goes wide while the person is in view	They stepped out of the region, or have been hidden for more than 5 seconds.	If they belong there, arm Follow again and widen the region.
Follow says *Searching* while the person is in view	They are among people dressed alike and their number cannot be read yet, so it is waiting to be sure.	Wait a few seconds; it finds them once they are clear or their number is readable. Or press Pick subject and click them.
The person walks out of the picture	The area they use is wider than the ultra-wide sees.	Move the tripod back or higher so the whole area is in view, then set the region again.
The region editor does not come up when Follow is armed	Lens is not Ultra only, the phone is offline, or the console's preview is not Direct or Bridge.	The amber Ready message says which.
Pick subject is greyed out	Follow is not armed or running, Lens is not Ultra only, the phone is offline, or the console's preview is not Direct or Bridge.	The text under the button says which.
The console says the phone didn't confirm	The phone's build is older than smartPTZ 17.3.	Update smartPTZ from the App Store.
Console says *Phone overloaded · dropping frames*	The phone is doing too much at once.	Keep it cool, lower the stream bitrate, and keep Tracker view off while live.

Quick reference

- **Before you start:** mount high with the whole area in view, press Follow once, set the region and Save, Pick subject and click the person, press Follow again.
- **Who is followed:** the person you picked, inside the region; Follow never switches to someone else on its own.
- **Wrong person:** Pick subject again. **Ignored:** widen the region. **Out of the picture:** move the tripod back or higher.