ICATS Setup Guide

Welcome to Your ICATS Setup

This guide walks you through every step of installing and configuring your ICA Training System (ICATS Pro or EZ). Follow the steps in order -- each one builds on the previous, and skipping ahead can create problems that are harder to sort out later.

The full process takes roughly 3-5 hours. Most of that time is the physical projector mounting. The software setup at the end is straightforward and usually wraps up in under an hour.

What You Will Do

1. Confirm your components and room are ready
2. Choose and verify your projector mount position
3. Physically mount the projector
4. Connect ICATS to the projector and join WiFi
5. Calibrate the projected image to your table
6. Update software and set your table size
7. Load your first drill

Two Items You Supply

Two items are required that do not come with your ICATS and must be sourced separately before you start.

Projector -- Not all projectors work with ICATS. Check the projector compatibility list before purchasing or mounting anything. Using an incompatible projector is the most common cause of installation problems.

Mounting hardware -- The right hardware depends on your ceiling type, ceiling height, and which mount configuration suits your room. Step 2 walks you through choosing the right one.

> **Training videos**
> Tutorial videos are available at icatraining.com/tutorials to supplement this written guide. The support hub has answers to the most common installation questions if you get stuck at any point.

Ready to Start?

Begin with Step 1 to confirm everything in your box is present. That inventory check takes about 15 minutes and prevents surprises later in the process.

Unbox & Inventory

What You'll Do

Check every item in the box against the inventory list below. Catching a missing part now saves a much longer delay once mounting is underway.

Before You Start

- [x] Find a clear, well-lit surface to unpack onto
- [x] Have the original packaging nearby -- you may need it if anything is damaged

Inventory Check

Your ICATS package includes the following items. Locate each one and check it off before moving on.

1. Pool Training System -- Raspberry Pi unit with micro SD card installed
2. Power supply
3. Keyboard / Trackpad (Pro: Logitech K400+ or similar; EZ: compact keyboard)
4. USB Dongle for the keyboard (see note below for where to find it)
5. HDMI cable

> **Finding the USB Dongle**
> On the ICATS Pro keyboard (typically a Logitech K400+), the USB Dongle is stored in the front center edge of the keyboard. On the smaller EZ keyboard, remove the rear battery cover to find it.

Content -- Downloaded at First Power-On

ICATS does not ship with drills pre-installed on the unit. Content downloads automatically on first power-on, once WiFi is connected. Your system includes access to the ICA Starter Module, the Gnarly 90 runout drill set, and sampler content from third-party authors including Tor, Dr. Dave, Sharivari, and Artistic Pool. All of this downloads during Step 4.

Items You Provide

Two items are required for installation but are not included in the box:

- **Projector** -- Not all projectors are compatible with ICATS. Review the projector compatibility list before proceeding. If your projector is not on the list, contact support before mounting anything.

- **Mounting hardware** -- The correct hardware depends on your room. Step 2 covers mount selection, and Step 3 covers the physical installation.

Troubleshooting

Common Issues

> **An item appears to be missing**
>
> Check the original packaging carefully -- the USB Dongle in particular is easy to overlook. If an item is genuinely missing after a thorough check, contact support before proceeding.

> **The micro SD card is not seated in the Raspberry Pi**
>
> The SD card slots into the underside of the Raspberry Pi unit. Press it in firmly until it clicks. Do not power on the unit until the card is fully seated.

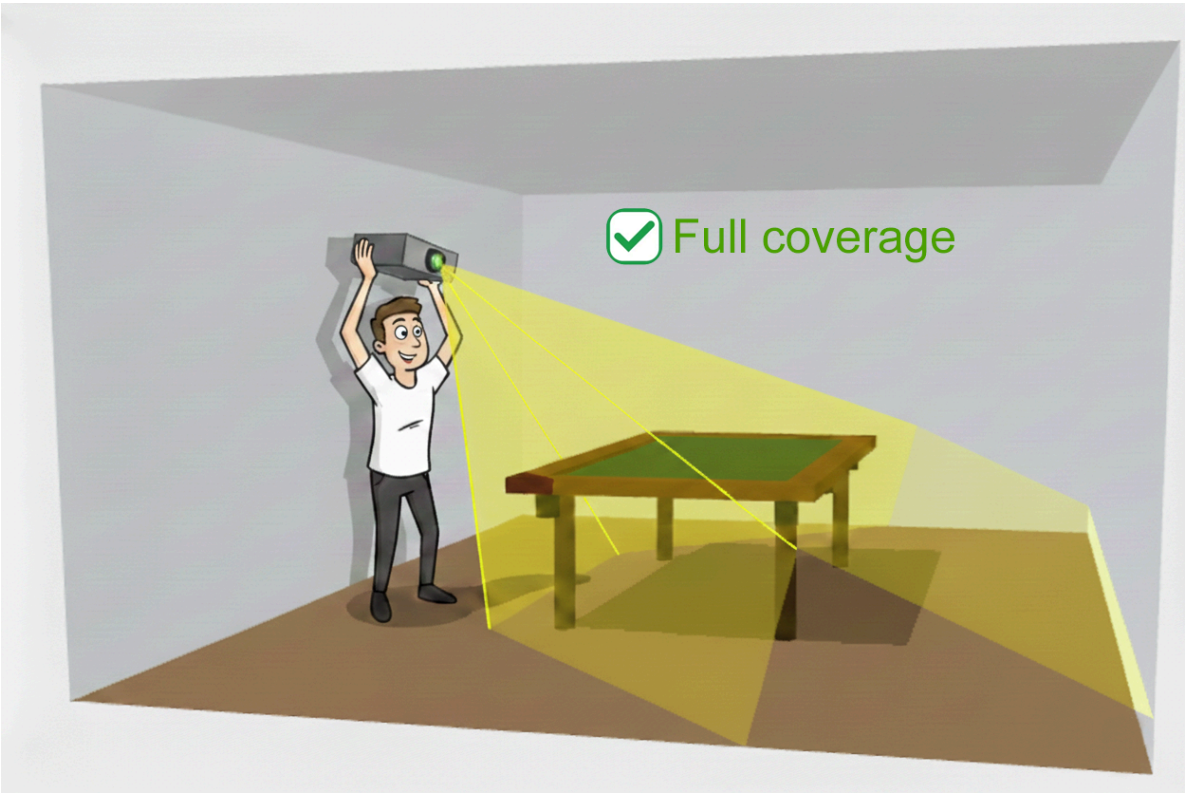
What's Next?

With your inventory confirmed, Step 2 covers your room dimensions and helps you decide which of the three mount configurations -- End-Mount, Side-Mount, or Vertical-Mount -- is right for your space. That decision drives everything in Step 3, so it is worth taking time to get it right.

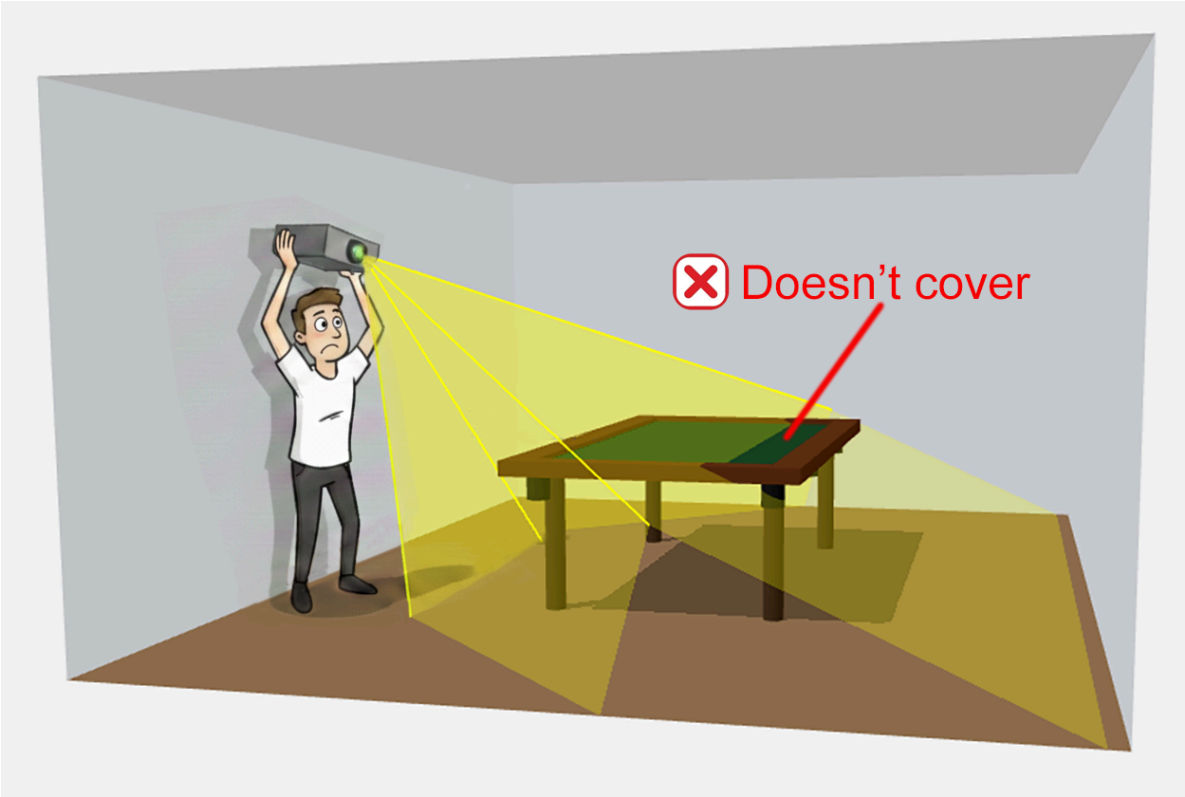
Room & Projector Check

What You'll Do

Measure your room and ceiling, review the three mounting configurations, and decide which one is right for your space. This decision drives the hardware you need and the physical steps in Step 3 -- getting it right here saves rework later.



Good - light fully covers playing surface



Not good - playing surface not fully lit

Before You Start

- [x] Tape measure available
- [x] Projector on hand or already selected -- verify it is on the compatibility list
- [x] Table size known (7', 8', or 9')

Room Clearance

ICATS requires at least 5 feet of clearance around the table for unobstructed play with a standard-length cue. Measure the open space on all four sides before going further.

> **Clearance is a hard requirement**
> If any side of the table has less than 5 feet of clearance, play will be obstructed. Address room layout before committing to a mount location.

Choosing a Mount Configuration

Three mounting configurations are supported. Each has different height and distance requirements. Review all three and select the one that fits your ceiling height and available space.

Configuration	Projector Position	Approx. Height	Approx. Distance
Side-Mount	Table side	7' -- 8'	2' -- 3'6"
Vertical-Mount	Table side, pointing straight down	See diagram	~1" from ceiling
End-Mount	Table head or foot	6'5" -- 7'	4' -- 6'

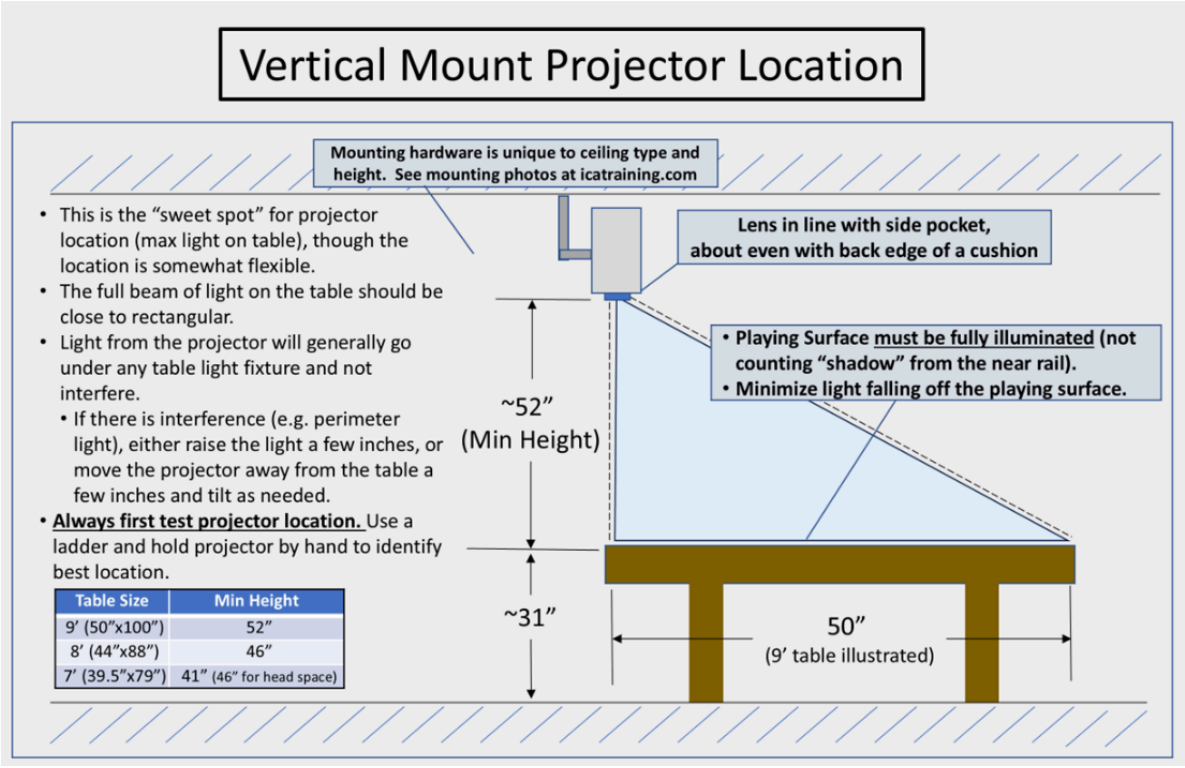
The height and distance values are approximations. Shorter distances generally apply to 7' tables; longer distances to 9' tables. Step 3 walks you through finding the exact "sweet spot" for your projector with a hands-on test before you drill anything.

Which Configuration Is Right for Your Room?

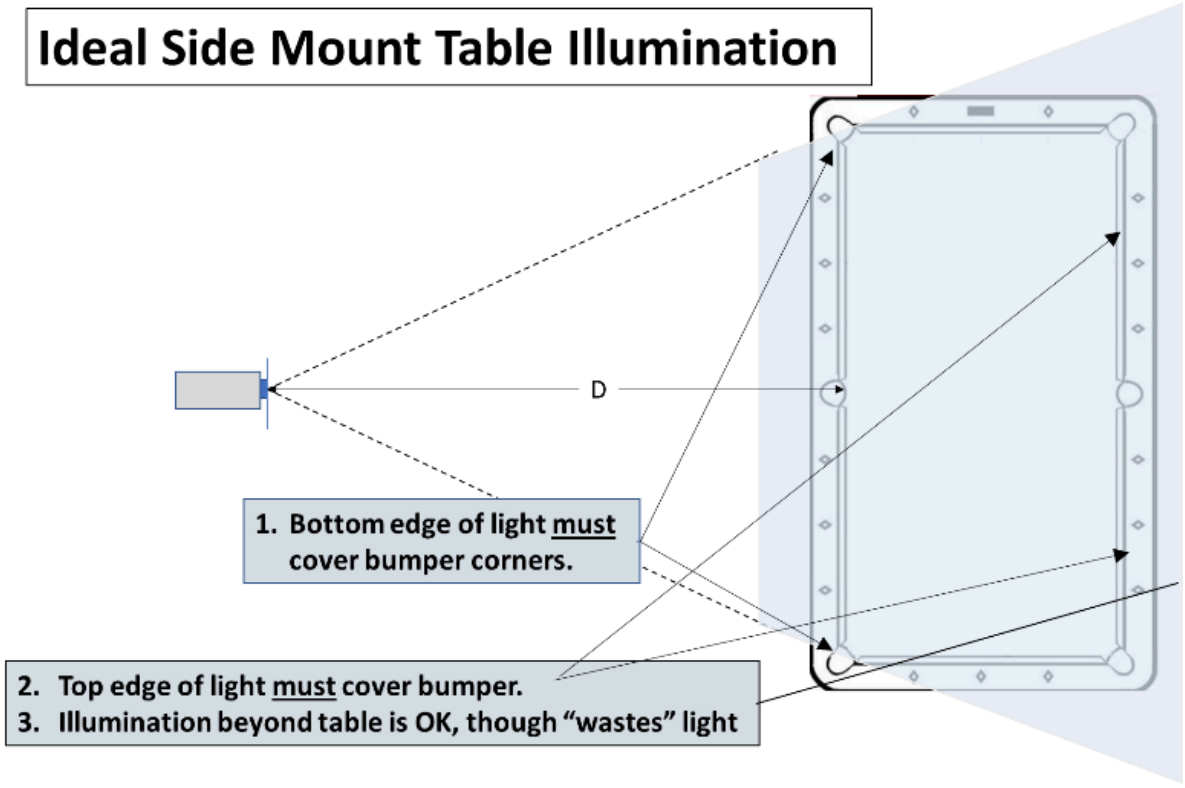
Side-Mount is better suited to higher ceilings (7' and above) and tighter rooms. Because the projector is closer to the table, the image is crisper -- particularly on larger tables. Side-Mount is the factory default configuration in ICATS.

Vertical-Mount points the projector straight down from directly above the table. It requires minimal horizontal clearance and tends to produce the crispest image, but it demands a ceiling directly above the table at the right height. Minimum heights by table size are listed in the diagram below.

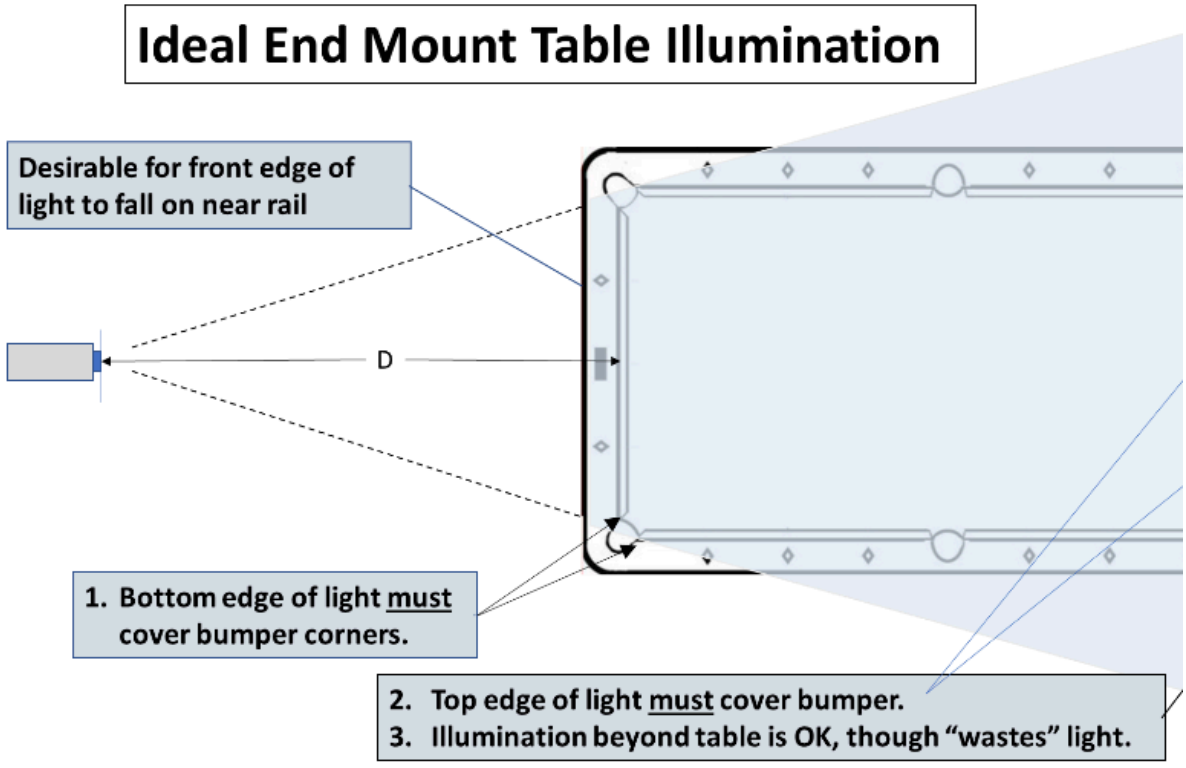
End-Mount works well when ceiling height is between 6'5" and 7'. The projector sits at the head or foot of the table and requires 4-6 feet of clearance beyond the end rail. The minimum height of 6'5" keeps the projector above head level for most players.



Vertical-Mount positioning: lens aligned with side pocket, about even with the back edge of a cushion



Side-Mount ideal illumination



End-Mount ideal illumination

Illumination Requirements for All Configurations

Regardless of which configuration you choose, the projected image must meet these requirements:

- The bottom edge of the light must cover the bumper corners
- The top edge of the light must cover the bumper
- Illumination beyond the table edge is acceptable, though it wastes light

Pre-Built Mount Kits

If your ceiling situation is fairly standard, a ready-made mount kit simplifies the hardware selection. See associated products for kits that include mounting hardware and instructions.

For rooms with unusual ceiling types or configurations, the mounting photos gallery shows a variety of real-world installations. One of those approaches should work for most rooms.

A portable projector stand is also available in the shop, which eliminates the need for a permanent ceiling mount entirely.

Troubleshooting

Common Issues

> **Ceiling height is below 6'5"**
>
> End-Mount and Side-Mount both require at least 6'5" to keep the projector above head level. If your ceiling is lower, a portable projector stand may be the only viable option. Contact support to discuss your room.

> **Projector is not on the compatibility list**
>
> Not all projectors produce the throw ratio, resolution, and brightness that ICATS requires. Using an incompatible projector is the leading cause of poor image quality and calibration failures. Visit /support/projector-compatibility to review the list before mounting.

> **Room dimensions seem tight for all three configurations**
>
> Review the mounting photos gallery for examples of non-standard installations. Contact support if none of the configurations appear workable in your space.

What's Next?

With your configuration selected and room confirmed, Step 3 covers the physical mounting process -- finding the exact projector position and attaching it to the ceiling. You will need a ladder, common hand tools, and ideally a second person to help.

Mount the Projector

What You'll Do

Find the optimal projector position by testing it by hand before attaching anything permanently, then mount the projector at that location. The test step is important -- it lets you verify correct illumination without drilling in the wrong spot.

Before You Start

- [x] Mount configuration decided (End-Mount, Side-Mount, or Vertical-Mount) -- see Step 2
- [x] Mounting hardware on hand and suited to your ceiling type
- [x] Ladder available and stable
- [x] Drill, screwdriver, and pliers available
- [x] A second person available to help -- strongly recommended
- [x] Extension cord long enough to reach the approximate mount location

> **Test before you drill**
> The steps below have you power on the projector and hold it by hand to find the right position before attaching anything to the ceiling. Do not skip this. A few minutes of testing prevents a bad mount location.

Mounting Steps

1. **Attach the mount to the projector**
   Attach your selected ceiling mount hardware to the projector body. Do not attach it to the ceiling yet -- that comes after the position test.

2. **Connect power and turn on the projector**
   Run a long extension cord to the approximate mounting area and power on the projector. Connect ICATS to the projector at this point -- leave it for later. The goal right now is just to see where the image lands.

   Set the projector to the correct orientation mode before testing:

   - End-Mount or Side-Mount: set the projector to "front ceiling" mode
   - Vertical-Mount: set the projector to "front desktop" mode

This setting is usually found in the projector's on-screen menu. Refer to your projector's manual for the exact location.

3. **Find the target height and distance**
   Use the table below to find your approximate starting position. Shorter values apply to 7' tables; longer values to 9' tables.

Configuration	Approx. Height (H)	Approx. Distance (D)
Vertical-Mount	See Step 2 diagram	~1" from ceiling
Side-Mount	7' -- 8'	2' -- 3'6"
End-Mount	6'5" -- 7'	4' -- 6'

4. **Test the projector position by hand**
   With a helper holding the projector at the target height (mount facing the ceiling, projector pointing down at the table), check that the image illuminates the table correctly.

   Move the projector up, down, closer, or farther until the illumination meets all three of these requirements:

   - The bottom edge of the light covers the bumper corners on the near rail
   - The top edge of the light covers the bumper on the far rail
   - The center of the lens is aligned with the center of the table

   Additional alignment guidance by configuration:

   End-Mount -- Aim to keep the leading edge of the illumination on the nearest rail, with the bumper corners lit. This makes on-rail setup menus visible, which eases later configuration steps.

   Side-Mount -- The projector sits much closer to the table than End-Mount. The leading edge of light will fall on the floor because of the wide spread. Once you have the right distance, adjusting the projector's tilt is the most effective way to get the full table surface covered.

   Vertical-Mount -- Start by making sure the nearest rail is lit, then raise the projector until the entire playing surface is illuminated.

   > **Close is good enough**
   > Do not aim for a perfect image at this stage. The system's calibration step corrects for small deviations in position. As long as the entire table surface is illuminated, calibration will handle the fine adjustment.

5. **Mark and attach the mount to the ceiling**

With the correct position identified, mark the ceiling at that point. Remove the projector from the area, attach the mount to the ceiling at the marked location, then re-attach the projector to the mount.

Fine-tune the left/right and tilt adjustments available on most mounts to bring the illumination as close as possible to the ideal coverage from the test above.

6. **Make the final electrical connection**
   Route and secure the power cable from the projector to its permanent power source. This is the point for any cable management -- along ceiling joists, through conduit, or along the wall -- that you deferred during the position test.

Troubleshooting

Common Issues

> **Light does not reach the far end of the table**
>
> Move the projector farther back from the table. Height and distance interact -- if you are at maximum height, increasing distance usually extends coverage. For End-Mount, verify you are in "front ceiling" projector mode, not "front desktop."

> **Image is tilted or trapezoidal**
>
> Most projectors have a keystone adjustment in the on-screen menu. Avoid using digital keystone correction if possible -- it reduces image sharpness. Instead, adjust the physical tilt of the projector mount to square the image. Calibration in Step 5 handles small remaining distortions.

> **Projector image extends well beyond the table on one side**
>
> The lens center may not be aligned with the table center. For End-Mount, align the lens with the midpoint between the two corner pockets. For Side and Vertical Mount, align the lens with the side pocket. Adjust the mount position laterally and re-test.

> **Not sure which mount photos apply to your room**
>
> The mounting photos gallery shows a range of real-world installations. Contact support if you cannot find a close match for your ceiling type.

What's Next?

With the projector mounted, Step 4 covers the keyboard setup, the HDMI connection, and WiFi configuration. These are all software steps and go quickly.

First Power-On & WiFi

What You'll Do

Set up the keyboard, make the HDMI connection between ICATS and the projector, power on the system, and complete the one-time WiFi configuration. By the end of this step, ICATS will be running and connected to your network.

Before You Start

- [x] Projector is mounted and powered on
- [x] HDMI cable is accessible at both the projector and the ICATS unit
- [x] WiFi network name and password are available
- [x] Keyboard and USB Dongle are on hand

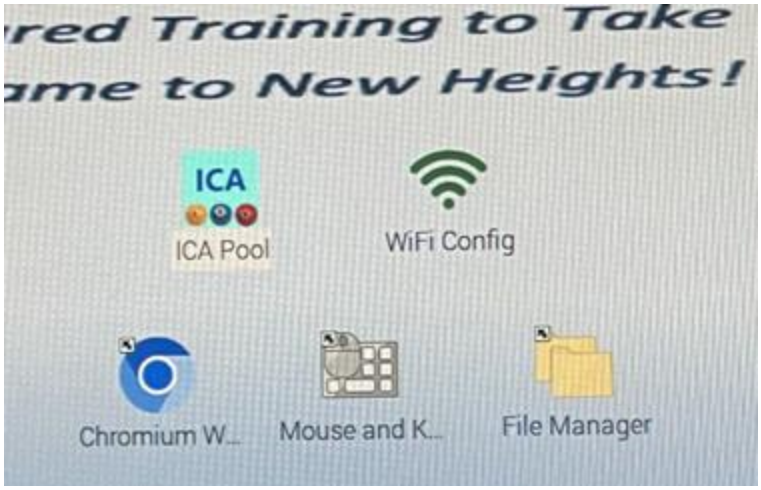
Set Up the Keyboard

1. **Locate the USB Dongle**
   For the ICATS Pro keyboard (typically Logitech K400+), the Dongle is stored in a slot at the front center edge of the keyboard. For the compact EZ keyboard, remove the rear battery cover to find it.
2. **Plug the Dongle into ICATS**
   Insert the USB Dongle into any of the four USB ports on the back of the ICATS unit. Any port works.
3. **Prepare the keyboard**
   If a yellow battery-saver tab is present on the back of the keyboard, pull it out and discard it. Then slide the power switch to the "on" position.

Connect ICATS to the Projector

1. **Power on the projector first**
   Make sure the projector is fully powered on and displaying an image before connecting ICATS. ICATS reads the projector's resolution on startup -- if the projector is not ready, ICATS may not detect the correct display settings.
2. **Connect the HDMI cable**
   Plug one end of the supplied HDMI cable into the ICATS unit and the other end into the projector's HDMI input.

3. **Apply power to ICATS**
   Connect the power supply to the ICATS unit and power it on. The system will boot and the pool program will start automatically. On first boot, it starts in calibration mode -- this is expected.



ICATS desktop showing ICA Pool icon, WiFi Config icon, and File Manager

Configure WiFi

WiFi setup is a one-time step. The pool program does not require the network to run, but content downloads and system updates depend on it.

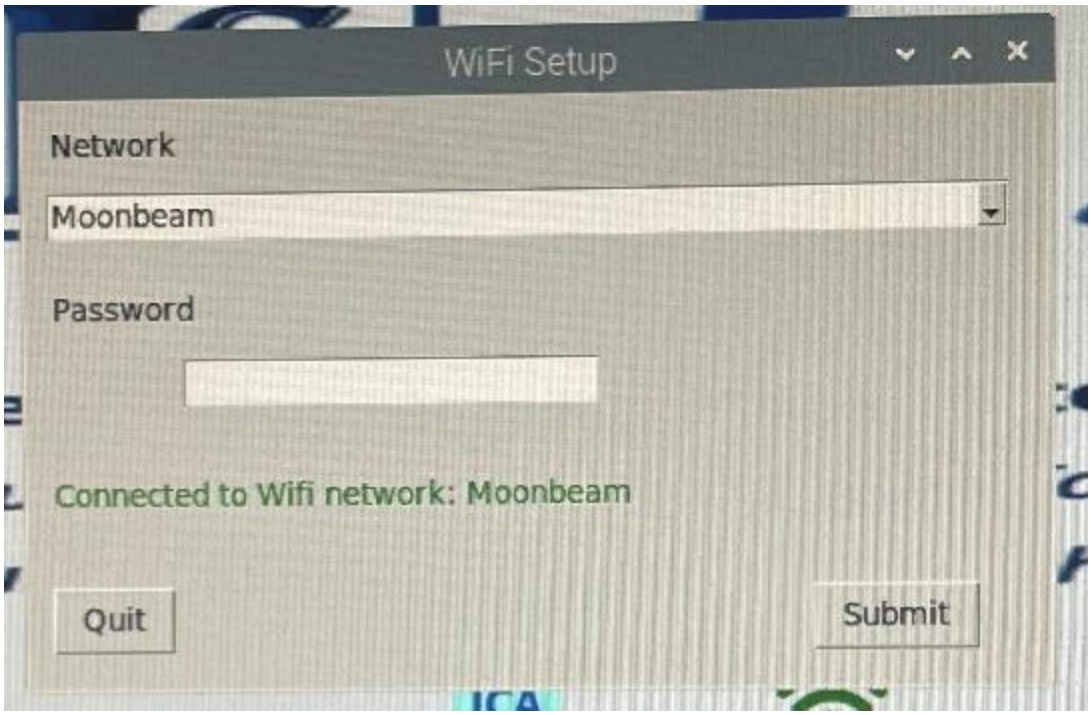
Primary Method -- WiFi Config App

1. **Exit the pool program temporarily**
   Press "Q" (capital Q) on the keyboard to exit the pool program and return to the desktop.
2. **Open the WiFi Config app**
   Double-left-click the green "WiFi Config" icon, which appears near the center of the projected image on the desktop.
3. **Connect to your network**
   Select your WiFi network from the list, enter your password, and click "Submit." When the connection confirms, click "Quit" to close the WiFi app.
4. **Restart the pool program**
   Double-left-click the "ICA Pool" icon near the center of the display. The pool program will relaunch and a QR code will appear on the table, indicating the system is ready for calibration.

Alternate Method -- WiFi Icon on the Desktop

If the WiFi Config app does not appear or is not accessible, you can connect using the system WiFi icon instead.

1. **Locate the WiFi icon**
   The system WiFi icon appears at the bottom right of the projected image. It looks like a "double red X" when not connected. On End-Mount installations it is usually on the near rail toward the right. On Side-Mount it is typically on the floor to the right -- ask your helper to hold a piece of cardboard as a temporary screen to see it more easily.
2. **Connect to your network**
   Left-click the WiFi icon, select your network from the list, enter the password, and click "OK."
3. **Restart the pool program**
   Double-left-click the "ICA Pool" icon to relaunch the pool program.



The WiFi Setup dialog -- select your network, enter the password, and click Submit

Troubleshooting

Common Issues

> **The keyboard is not responding**
>
> Confirm the USB Dongle is fully seated in a USB port on the back of the ICATS unit. Check that the keyboard power switch is in the "on" position and the battery-saver tab has been removed. If using the Pro keyboard, try a different USB port.

ICATS shows a blank screen or no image

The projector must be powered on and fully warmed up before ICATS boots. Power off ICATS, wait for the projector to reach full brightness, then power ICATS back on.

No WiFi networks appear in the list

Confirm your router is broadcasting and within range. If the WiFi Config app shows no networks, try the alternate method using the system WiFi icon. If neither shows networks, contact support -- the WiFi hardware on the ICATS unit may need attention.

Pool program does not restart after clicking the ICA Pool icon

Wait 30 seconds and try again. On first boot, the system may take slightly longer to initialize. If the program still does not launch, power-cycle the ICATS unit.

What's Next?

With ICATS running and connected to WiFi, Step 5 covers calibration -- the process that aligns the projected image precisely to your table surface. A QR code should be visible on the table right now, which is your entry point into the calibration interface.

Calibration & Alignment

What You'll Do

Calibration is the process that tells ICATS exactly where your table is relative to the projector. You will move four calibration handles to the 1-by-1 diamond intersections on the table, and ICATS will use those positions to fit all future images precisely to the playing surface.

The primary method uses the EZUI -- a browser-based interface on your phone or tablet. An alternate keyboard-based method is available if the EZUI is not accessible.

Before You Start

- [x] ICATS is running and a QR code is visible on the table surface
- [x] Phone or tablet is available for the EZUI method
- [x] WiFi is connected (completed in Step 4)

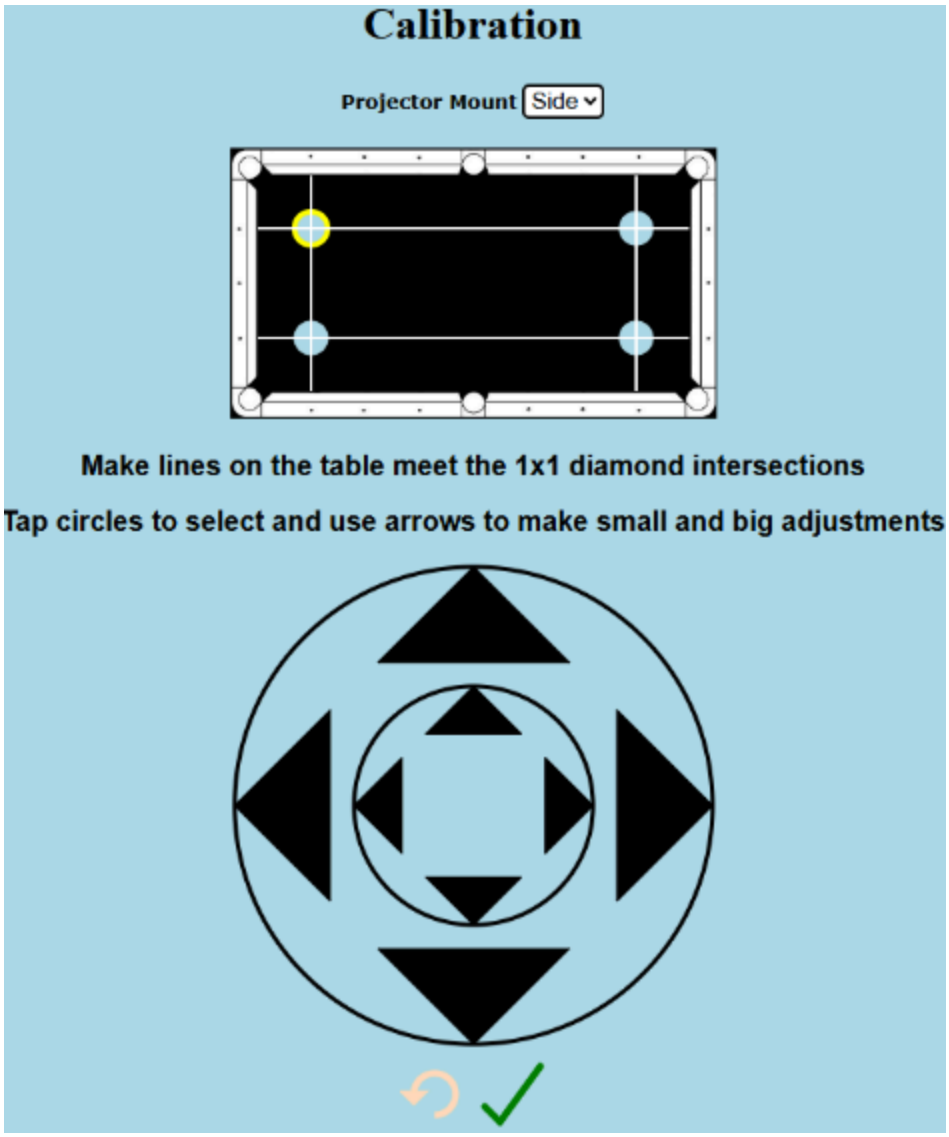
Primary Method -- Calibration via EZUI

Launch the EZUI

1. **Scan the QR code**
   Open the camera app on your phone or tablet and scan the QR code displayed on the table. Tap the link that appears to open the EZUI in your browser.

   If the QR code is not readable -- which is normal before calibration, because the image may be skewed -- type the URL shown on the table directly into your browser's address bar instead.

2. **Navigate to the Calibration screen**
   The Calibration screen should appear automatically. If you see a different screen, tap the gear icon to open Settings, then tap the "Calibrate" button.



The EZUI Calibration screen -- tap a handle to select it, then use the arrows to move it

Set the Projector Mount Type

At the top of the Calibration screen, select your projector mount type: "Side" for Side-Mount or Vertical-Mount installations, or "End" for End-Mount installations. Setting this correctly establishes the starting position for the calibration handles.

Calibrate the Four Handles

On the table surface, you will see four lines and four circles -- the calibration handles. The goal is to move each handle to its corresponding 1-by-1 diamond intersection. When all four handles are correctly placed, the lines on the table will align with the diamond pattern on the rails.

1. **Select a calibration handle**
   Tap a circle (handle) on the table diagram in the EZUI. The selected handle turns yellow.

2. **Move the handle to its diamond intersection**
   Use the large arrow buttons for coarse movement and the small arrow buttons for fine adjustments. Move the handle until the circle on the table is centered on the 1-by-1 diamond intersection.
3. **Repeat for all four handles**
   Tap each remaining handle and repeat the adjustment process. When finished, all four lines should align with the diamond pattern on both the table surface and the rails.
4. **Reset if needed**
   If the calibration becomes hard to follow, tap the pink "Reset" button to return to the default starting position and begin again from step 1.
5. **Save calibration**
   When all four handles are correctly placed, tap the checkmark button to confirm and return to the Settings screen.

> **Align on the table surface, not the rail**
> The rail sits approximately 1.25 inches higher than the playing surface. Where the calibration lines cross the rail, the line position is not accurate. Focus on where the lines lie on the flat table surface when judging alignment.

Alternate Method -- Calibration via Keyboard

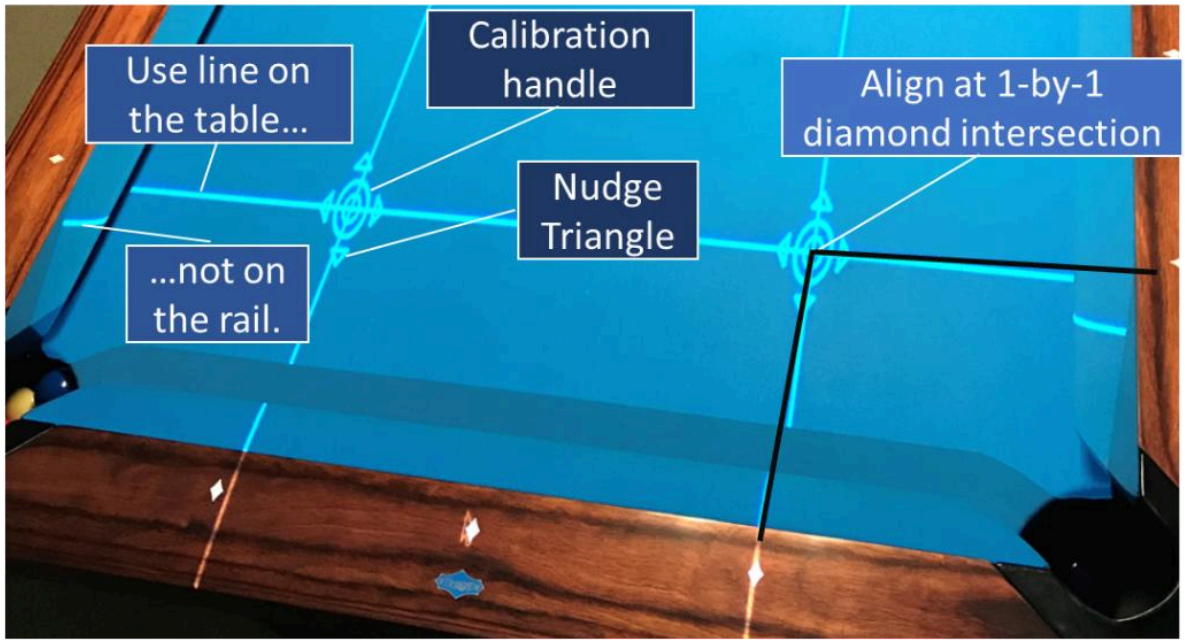
Use this method if the EZUI is not available or the QR code cannot be accessed.

1. **Enter calibration mode**
   After restarting ICATS, the system enters calibration mode automatically. If it does not, right-click on a blank area in the center of the table, select "Settings," then select "Calibrate."
2. **Set the mount type if using End-Mount**
   If your projector is End-Mounted and this is your first calibration, press "P" (capital P) on the keyboard. This switches the system from the factory-default Side-Mount configuration to End-Mount.
3. **Select and move calibration lines**
   Press the "Tab" key to cycle through the four calibration lines. The selected line turns yellow. Use the arrow keys to move that line. Moving a line shifts two handles simultaneously and is best for large initial adjustments.
4. **Select and fine-tune individual handles**
   Press "1," "2," "3," or "4" on the keyboard to select one of the four individual calibration handles. The selected handle turns yellow. Use the arrow keys to nudge the handle for fine-tuning.

Alternatively, use the trackpad to click and drag handles for large movements, or click the on-screen triangles for smaller adjustments.

5. **Check line alignment on the table surface**
   Step back and look at the four lines on the table surface. Facing the table with your back to the projector, align horizontal lines first, then vertical lines.

6. **Save calibration**
   Press "S" on the keyboard, or right-click in the center of the table and select "Stop Calibration."



Calibration handle positioned at a 1-by-1 diamond intersection -- align on the table surface, not the rail

Fine-Tuning Calibration

The initial calibration should get you very close. If you want to check accuracy, place a ball image on the rail and set a real ball on top of the projected image. If the real ball touches the rail and sits on the image, calibration is good. If not, re-enter calibration and adjust the nearest calibration line by one nudge.

Target accuracy is 0.2 inch or better. This is achievable with most projectors, though it varies with projector resolution and table size.

> **Ball images on the near rail**

Ball images placed on the rail closest to the projector will land partially on the rail rather than the playing surface. This is expected -- it results from the projector angle and the height difference between the rail and the surface. It does not indicate a calibration problem.

Troubleshooting

Common Issues

Calibration handles are hard to see on the table

Dim the room lighting. Ambient light -- especially direct sunlight -- reduces projector contrast significantly and can make the calibration image difficult to read.

Lines will not align across all four corners at once

This usually means the projector is not centered over the table or is at an extreme angle. Check that the lens center aligns with the table center as described in Step 3. Small deviations can be corrected in calibration, but significant off-center positions cannot.

EZUI is not loading after scanning the QR code

Type the URL displayed on the table directly into the browser address bar. Confirm your phone is on the same WiFi network as ICATS.

Calibration looks correct but drill images do not align

Re-enter calibration and check all four handles again. Then set your table size in Step 6, as incorrect table size can make ball images appear offset even with good calibration.

What's Next?

With calibration complete, Step 6 covers the system update and table size setting -- two quick configuration steps before your first drill.

Updates & Configuration

What You'll Do

Run the system update to download the latest software and your included content, then set the table size so ball images display at the correct scale. Both steps are done from the Settings screen in the EZUI or the on-screen menu.

Before You Start

- [x] Calibration is complete (Step 5)
- [x] ICATS is connected to WiFi
- [x] ICATS is running and the pool program is active

Run the System Update

Via EZUI

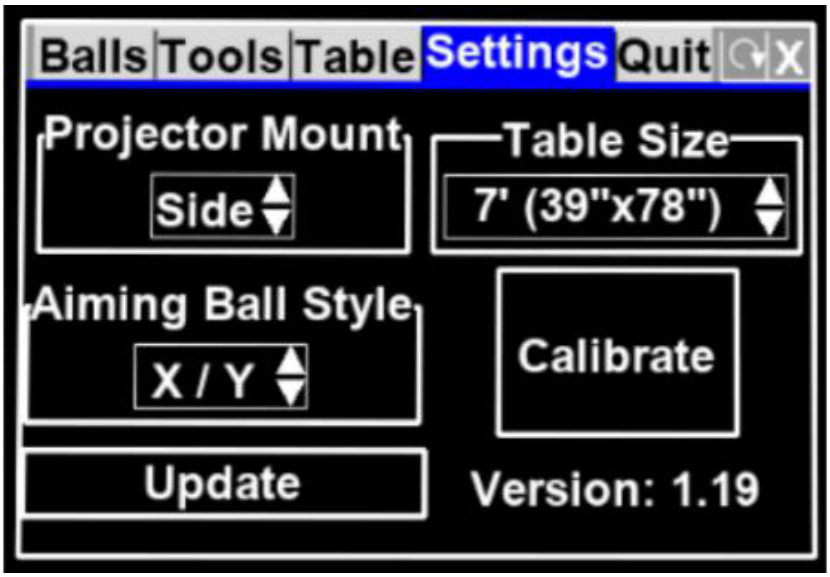
From the Settings screen in the EZUI on your phone or tablet, tap the "Update" button. ICATS will connect to the server, download the latest software version, and pull in all content included with your system.

The first update downloads a significant amount of content -- drill sets will flash across the table as they install. This can take several minutes. Let the process run to completion before doing anything else.

> **Do not interrupt the update**
> Powering off ICATS or disconnecting WiFi during the first update can leave content in a partial state. If this happens, the update can be run again from the Settings screen.

Via On-Screen Menu (keyboard)

If the EZUI is not available, right-click in the center of the table, select "Settings," and click "Update." Alternatively, if ICATS detects an available update on startup, it will display a prompt -- press "Y" on the keyboard to approve and begin the download.



The Settings screen -- Update downloads content, Table Size sets ball image scaling

Set Your Table Size

Via EZUI

From the Settings screen in the EZUI, tap the "Table Size" button and select your table size from the list. This setting ensures that ball images are drawn at the correct 2.25-inch diameter for your table.

Via On-Screen Menu (keyboard)

Right-click in the center of the table, select "Settings," and adjust the Table Size dropdown to match your table. Click the "X" in the upper right corner to close the menu when done.

> **Table size affects ball images only**
> The Table Size setting controls only how large ball images appear on screen. It does not affect calibration. You can change it at any time without recalibrating.

Confirm Both Steps Are Complete

Before moving to Step 7, confirm the following:

- ☐ Update completed -- drills are visible in the file list
- ☐ Table size is set to match your actual table (7', 8', or 9')

Troubleshooting

Common Issues

Update button does nothing or shows an error

Confirm WiFi is connected. Exit the pool program (press "Q"), check the WiFi icon at the bottom of the screen for connection status, reconnect if needed, then relaunch the pool program and try again.

Update has been running for more than 15 minutes

A slow connection can extend the first update. If the system appears frozen -- no drills flashing, no activity -- power-cycle ICATS and run the update again from Settings.

Ball images look too large or too small after setting table size

Double-check that the selected size matches your physical table. Table sizes are listed by their playing surface dimensions: 7' (39"x78"), 8' (44"x88"), and 9' (50"x100"). If images still look off after selecting the correct size, recalibrate from Step 5.

What's Next?

With the system updated and table size configured, ICATS is fully set up. Step 7 covers loading your first drill and starting your training.

Your First Drill

What You'll Do

Return to the main menu, select a drill from the list, and load it onto the table. Your ICATS is fully configured at this point -- this final step is about getting familiar with the interface and starting your first training session.

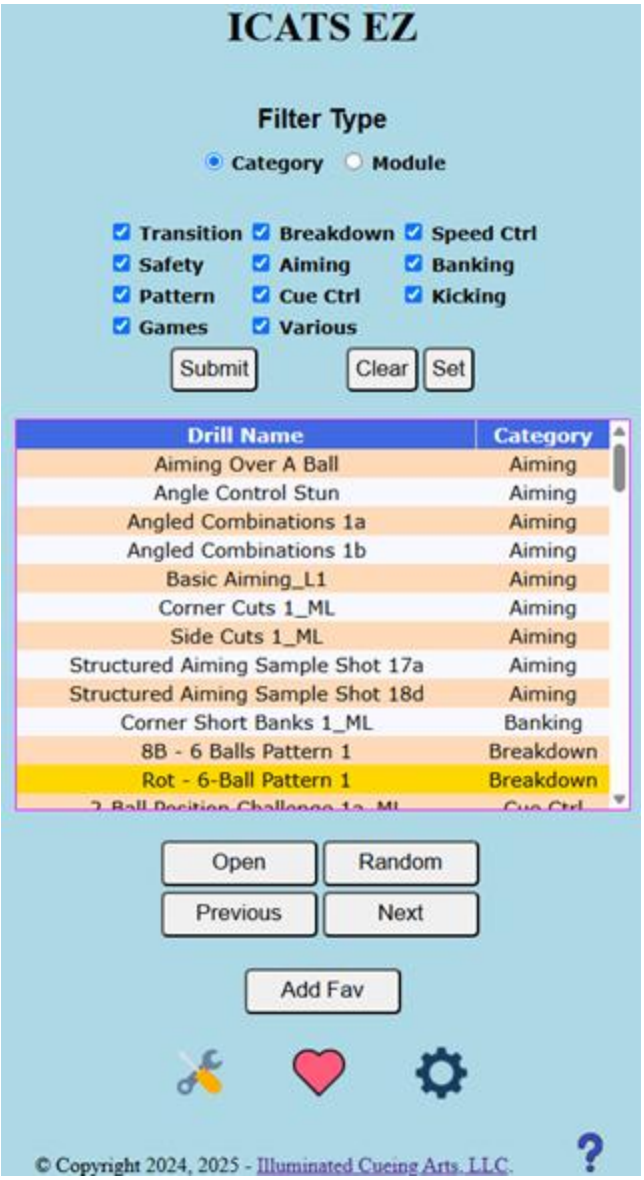
Before You Start

- [x] System update is complete and drill content is downloaded (Step 6)
- [x] Table size is set correctly (Step 6)
- [x] Calibration is confirmed (Step 5)

Load a Drill

Via EZUI

1. **Return to the main screen**
   In the EZUI on your phone or tablet, tap "Back" as needed until you reach the main drill list.
2. **Browse the drill list**
   The list shows all drills available on your system. You can filter by category or module using the filter controls at the top. The ICA Starter Module and Gnarly 90 content downloaded during the update are included here, along with the third-party sampler content.
3. **Open a drill**
   Tap a drill name to select it, then tap "Open." The drill image will appear on your table surface.



The EZUI drill list -- use category filters to browse, or tap Random to let the system choose

Via On-Screen Menu (keyboard)

Right-click in the center of the table and select a drill from the file list that appears. The drill loads immediately onto the table.

Getting Started with Drills

Each drill projects a layout directly onto your table -- target zones, ball positions, and reference lines that guide your shot and show where the cue ball should land. The EZUI controls which drill is active and lets you step forward and backward through a sequence.

Take a few minutes with the Starter Module first. It is designed as a broad introduction and covers a range of skill types. The Gnarly 90 is more challenging -- a set of 90 runout drills suitable once you are

comfortable with the interface.

> **More content is available**
> Additional drill modules covering a full spectrum of skills and skill levels are available at icatraining.com/shop. Tutorial videos at icatraining.com/tutorials demonstrate how to get the most out of each feature.

Where to Go From Here

Your ICATS is fully installed and running. A few resources worth bookmarking:

- ICATS Pro Users Guide -- covers the full feature set, including drill authoring and advanced settings
- EZUI Guide -- detailed reference for the phone/tablet interface (applies to both Pro and EZ)
- Support hub -- the first place to check when a question comes up
- icatraining.com/tutorials -- video walkthroughs of core features

Troubleshooting

Common Issues

> **Drill list is empty after the update** Return to Settings and run the update again. If the list remains empty after a second successful update, contact support.

> **Drill image does not align with the table** First confirm the table size setting is correct (Step 6). If the size is correct and images are still noticeably off, re-run calibration from Step 5. Small alignment errors after calibration are normal near the rail closest to the projector.

> **EZUI is not showing the drill list** Tap "Back" from the Settings or Calibration screen. If the EZUI is unresponsive, close and reopen the browser on your phone and reload the URL shown on the table.

Setup Complete

Your ICA Training System is installed, calibrated, updated, and ready for training. Work through the included content at your own pace -- and when you are ready to go deeper, the Users Guide and EZUI Guide cover everything the system can do.

Setup Guide v1 -- built 2026-06-09

Start setup online at the ICATS website.

For support, visit the ICATS support section.