Trackman Simulator: Standard Operating Procedures (SOP)

1.0 Introduction to Your Trackman Experience

Welcome to the official Standard Operating Procedures (SOP) manual for your Trackman simulator facility. This document is the definitive guide for all users, from first-time members to facility owners, and is designed to ensure a consistent, reliable, and high-quality simulator experience for everyone. Adherence to these procedures is the key to maximizing system performance, preventing operational downtime, and enjoying every session to its fullest potential.This manual covers the essential operational protocols for the Trackman simulator environment, including daily startup and shutdown, system calibration, key software features, routine maintenance, and common troubleshooting steps. Its scope is to provide a clear, accessible framework for the day-to-day management and use of the simulator.By following this guide, you contribute to a seamless and professional environment. Let's begin with the first steps to power on the system and start your session.

2.0 Daily Operating Procedures

Following standardized startup and shutdown procedures is a strategic necessity for maintaining the long-term health and readiness of the Trackman system. A consistent daily routine protects the sensitive electronic components, ensures that all software initializes correctly, and provides a seamless, predictable start for every user. This discipline prevents common technical issues before they can occur, guaranteeing a premium experience from the first shot to the last.

System Startup Procedure

1. Turn on the main facility lights.
2. Press the power button to turn on the **Computer Tower** .
3. Using the provided remote control, power on the **Projector** . Allow a few moments for the projector lamp to warm up.
4. Power on the secondary **TV/Monitor** . Using its remote, ensure the input source is set to **COMPUTER/PC** .
5. On the Windows login screen, enter the provided facility credentials or PIN to access the desktop.

Launching TPS and Starting a Session

1. Locate the orange **TPS Trackman** icon on the computer's desktop and double-click it to launch the software.
2. If a pop-up message asks to "update firmware," always select **NO** . Firmware updates should only be performed during scheduled maintenance periods to avoid interrupting a session.
3. An automatic calibration screen ("auto target") will appear. Wait for this process to complete (approximately 45 seconds). Once finished, select the **CONTINUE** button.

4. Log in to your personal Trackman profile. The primary method is to scan the **QR code** in the top right of the screen using the Trackman Golf app on your mobile device. Alternatively, you may sign in manually.
5. The "SELECT ACTIVITY" screen will appear, presenting the main options: **Practice, Courses, Games, and Tournaments** . Select your desired activity to begin.

End-of-Session Shutdown Procedure

1. Properly exit the Trackman Performance Studio (TPS) software by closing the application window.
2. Navigate to the Windows Start Menu and select the option to shut down the **Computer** .
3. Using their respective remotes, power off the **Projector** and the **TV/Monitor** .
4. Turn off the facility lights as you exit.A consistent daily process protects the hardware and software. Just as important is ensuring the system's accuracy, which relies on proper calibration.

3.0 System Calibration: Ensuring Accuracy

Proper calibration is the foundation of data accuracy within the Trackman ecosystem. This process is fundamental because it tells the system precisely where it is located within the room and where the player is aiming, which directly dictates the aim of the Trackman unit. A recalibration is necessary upon initial system setup, after a major software update, or any time ball flight data appears incorrect or inconsistent with the shot you've hit.

3.1 Calibrating the Trackman 4 Unit

1. Launch the Trackman Performance Studio (TPS) software.
2. From the home screen, click the **Trackman logo** located at the bottom center of the screen. This will open the Target Image section.
3. Select the **"Auto Target"** option. This is the simplest and most effective method for standard calibration when hitting from the center of the bay. The system will automatically detect the hitting area and align itself.
4. For manual adjustments, you can aim the **yellow crosshair** . The vertical line represents your target line. The horizontal line of the crosshair should be moved to align perfectly with the **blue line** on the screen, which indicates where the impact screen meets the floor.

3.2 Calibrating the Trackman iO Unit

The Trackman iO calibration is a guided, multi-step process essential for its fixed, ceiling-mounted installation.
1. When prompted by the software, take the provided calibration board and hold it up against the impact screen. The system will automatically detect the board and calculate the precise distance from the unit to the screen.
2. Next, place the calibration board flat on the hitting mat in the designated tee area.
3. The software will project a **white cross** onto the hitting area. Adjust the position of the board on the mat until the physical **purple cross** on the board is perfectly aligned with the projected white cross.

4. Once aligned, the system will confirm that the board is detected correctly. You can then choose between **static aim**, where the target line is fixed, or **dynamic aim**, where the target line automatically adjusts to follow the player's ball position within the hitting zone.With the system properly calibrated for accuracy, you can now confidently explore the powerful features within the software.

4.0 Using the Trackman Performance Studio (TPS): A Player's Guide

The Trackman Performance Studio (TPS) is more than just a simulator; it is a powerful software suite with dedicated modes for serious practice, ultra-realistic course simulation, and engaging entertainment. Understanding the core features and how to navigate them will significantly enhance both your training sessions and your overall enjoyment.

4.1 Navigating the Main Interface

The TPS software is organized into three primary tabs, located in the top-left corner of the application:

- **Home:** This is your starting point. Use this tab to select from the main applications, including practice modes, virtual golf, games, and tournaments.
- **Live:** This is the primary screen used for active data collection. During a session, this tab displays real-time shot data, ball trajectory, dispersion charts, and video swing analysis.
- **Analyze:** After a session, this tab allows for a more detailed post-shot review. It provides a comprehensive table of every shot hit, complete with customizable data points and associated video.

4.2 Key Activities and Game Modes

TPS offers a diverse range of activities to suit any goal, from data-driven improvement to friendly competition.

Activity/Mode	Purpose & Key Benefit
Shot Analysis	The core of data-driven practice. Provides real-time feedback on over 40 club and ball data parameters. The AI assistant **Tracy** is available here to provide personalized tips for improvement.
Virtual Golf	Play full, realistic rounds on hundreds of world-famous courses that have been meticulously lidar-scanned for unparalleled accuracy.
Performance Center	Benchmark your skills against specific handicap levels. This mode tests your approach play and tee shots, providing Strokes Gained feedback to identify strengths and weaknesses.
Map My Bag	Dial in precise carry and total distances for every club in your bag. This tool helps you understand your yardage gaps and improves on-course club selection.
Speed Training (TM4 Only)	A unique training mode that allows you to focus solely on improving swing velocity and clubhead speed without the distraction of hitting a golf ball.
Games (Bullseye, ShuffleGolf, etc.)	A suite of engaging and competitive games designed to make practice more fun and accessible for all skill levels.

4.3 Personalizing Your Experience

To get the most out of your session, always use your personal Trackman profile.

- **Trackman Profile Login:** Logging in via the **Trackman Golf App** by scanning the QR code is the most efficient way to personalize your session. This action automatically

connects all your historical data, saved virtual rounds, and previously mapped bags to the simulator.
- **Map Your Bag for Precision:** The "Map My Bag" feature is a powerful tool for serious improvement. After creating a bag in the mobile app, you can launch the Map My Bag activity in TPS. Hit between 6 and 30 shots with each club to establish highly accurate stock yardages, personalized dispersion patterns, and a clear understanding of the gapping between your clubs.Using the software to its full potential is key, but so is performing the essential background tasks of maintaining the system for optimal, long-term performance.

5.0 System Maintenance & Best Practices

Proactive maintenance and adherence to established best practices are the most effective ways to ensure system stability, prevent common errors, and avoid operational downtime. Regular checks are simple yet crucial for keeping the simulators running smoothly, particularly during peak hours.

5.1 Routine System Reboots

This simple task clears the system's memory and cache, preventing common issues like software freezing, lagging, and data processing delays.
- **Trackman Unit (TM4/TMiO):** Reboot the unit every one to two days.
- **PC:** Reboot the computer once a week.

5.2 Software & Firmware Updates

Keeping your system software and hardware firmware up to date is critical for performance and accuracy.
- **Updating TPS Software:** When a software update is available, a notification will appear in the top-right corner of the TPS home screen. Click "Install Now" to begin. If no notification is present, you can manually check by navigating to **Advanced Settings > About** and selecting "Install" next to the Trackman Performance Studio version.
- **Updating Trackman Unit Firmware:** Firmware updates are typically pushed automatically through TPS. However, a manual check can be performed by navigating to **Settings > About**. Be aware that a firmware update on a TMiO unit can take up to an hour to complete and should only be performed during scheduled maintenance. Keeping firmware current provides several key benefits:
- **Enhanced Accuracy:** Updates often include improved algorithms for more precise data capture.
- **Improved Stability:** Regular updates reduce the likelihood of system crashes or errors.
- **Access to New Features:** Ensures you have the latest game modes, training tools, and enhancements.
- **Security Patches:** Protects the device from potential vulnerabilities.

5.3 PC & Environment Best Practices

The physical setup of the PC and its components is a common source of performance issues. Following these rules is mandatory for a stable system.

- **Direct Connections:** The Trackman unit must be connected via an Ethernet cable **directly to the PC's motherboard** . Do not use USB-to-Ethernet adapters, as they are a frequent cause of disconnections.
- **GPU for Displays:** All monitors and projectors must be plugged **directly into the dedicated Nvidia GPU (graphics card)** ports. Using the motherboard's display outputs will bypass the powerful graphics card and cause severe lag and software instability.
- **Antivirus Software:** Third-party antivirus software should **not be installed** on the simulator PC. These programs can slow system performance, block critical network access for TPS, interrupt software updates, and incorrectly flag safe files as threats. The built-in Windows Defender provides sufficient protection without interfering with Trackman operations.While preventative maintenance is the best strategy, some issues may still arise. The next section provides clear steps to resolve them quickly.

6.0 Troubleshooting & Player FAQ

While regular maintenance prevents most issues, this section provides clear, step-by-step solutions for the most common problems users may encounter. Rest assured that most issues can be resolved quickly and easily without the need for expert assistance.

6.1 Common Problem Workflows

Problem: Trackman Unit Won't Connect or is Missing Data

If the TPS software cannot find the Trackman unit or is consistently missing data points, a reboot of the unit is the first step.**Soft Reboot Procedure:**
1. Exit the TPS software completely.
2. On the desktop, open the **Trackman folder** and double-click the **Trackman Admin** file. This will open a web browser interface.
3. Click "Login."
4. In the left-hand menu, select "Administration," then choose "Reboot."
5. Click the "Reboot" button and confirm the action. Once the reboot begins, you may close the browser window and relaunch TPS.**Hard Restart (TM4 only):**
6. Gently access the Trackman 4 unit.
7. Push the triangular rear leg down until you hear a click, then fold the leg up towards the unit. This will power it off.
8. Wait for the green light to turn off completely.
9. Extend the rear leg down again until it clicks into place. This powers the unit back on. The unit is ready when the green light becomes solid.

Problem: Software is Freezing, Crashing, or Lagging

- Confirm you are running the latest version of the TPS software. Check for updates via **Advanced Settings > About** .
- Ensure the Trackman unit's firmware is up to date via **Settings > Advanced > About** .
- Set your NVIDIA GPU as the preferred graphics processor in the NVIDIA Control Panel.
- Clear the TPS cache, temporary files, and video folders. Navigate to the following locations in Windows File Explorer and delete the contents of these folders:

- C:\ProgramData\TrackMan\Trackman Performance Studio\Cache
- C:\ProgramData\TrackMan\Trackman Performance Studio\Temp
- C:\ProgramData\TrackMan\VideoManagement
- As a final measure, ensure your GPU drivers are always up to date.

Problem: Projector Screen is Black or Image is on the Wrong Monitor

IMPORTANT: DO NOT CHANGE THE WINDOWS DISPLAY SETTINGS. This issue is almost always resolved within the TPS software.

1. First, locate the projector remote control and press the power button to ensure the projector is turned on.
2. If the image is displayed on the wrong screen (e.g., the golf course is on the small monitor instead of the main screen), you must adjust the settings within TPS.
3. Exit the current activity to return to the TPS home screen.
4. Navigate to **Advanced Settings** , then select **Extended Displays** in the upper-right corner.
5. Ensure that the "Projector" and "TPS" squares are selected under **Screen 1** , not Screen 2.
6. Click the **Save** button to apply the changes. The image should now display correctly on the projector screen.

Problem: "VCRUNTIME140.dll is missing" Error on Startup

This error indicates that a critical Microsoft Visual C++ component required by TPS has been corrupted or is missing. The solution requires a clean reinstallation.

1. Close the error message window.
2. Go to the Windows Control Panel and select "Programs and Features" to **Uninstall** the TPS Software.
3. From the same location in the Control Panel, find and **Uninstall ALL** items that are named "Microsoft Visual C++ Redistributable."
4. **Restart** the computer.
5. **Reinstall** the TPS software using the original installer file. This will also install a fresh copy of the required C++ components.

6.2 Frequently Asked Questions (FAQ) for Players

- **"Why are all the golf courses locked?"**
- **"I'm getting a subscription error, but I thought this was included?"**
- **"Why can't I play any courses?"**
- **Answer:** This issue indicates that the TPS software is not connected to the Trackman unit. To fix this, click the **Trackman logo** at the bottom center of the home screen. This will re-establish the connection and open the calibration screen. Run the **Auto Target** calibration, and the courses should become unlocked.
- **"Why can't I start a game of virtual golf?"**
- **"The Start Game button is greyed out and won't work."**
- **"It says a player needs a handicap. What do I do?"**

- **Answer:** Virtual Golf requires every player in the session to have a handicap assigned. If the "Start Game" button is unavailable, click to **Edit Player** , select **Handicap** , and assign a temporary handicap. Click **Done** and repeat for any other players without a handicap. The game will now be available to start. *Note: When you log in by scanning the QR code with your Trackman profile, the system will manage and remember your handicap automatically for future sessions.*
- **"The cameras aren't working."**
- **"How do I get the cameras to turn on?"**
- **"I can't see my swing video."**
- **Answer:** The most effective remedy for camera issues is to **reboot the computer** . You can do this in one of two ways: 1) Click the Windows icon, select the power icon, and choose "Restart." 2) Locate the physical power button on the PC tower, press and hold it to shut the computer down, then press it again to restart.
- **"Why can't I find the members' tournament?"**
- **"The tournament I signed up for isn't showing in the list."**
- **"How do I join a tournament?"**
- **Answer:** If an expected tournament is not visible, there are two common causes. First, ensure you are logged into the correct **Windows user account** designated for tournaments (e.g., the !PFTour user). Second, ensure you are logged into your personal Trackman profile by **scanning the QR code** with the Trackman Golf app. The system needs to see your profile to find your tournament registrations.By following these procedures, you are ensuring the best possible experience for yourself and every member. Now, let's play better golf.