TORUS TRAIN OPS

Installation Guide

Installing Torus Train Ops, activating your licence, and connecting your crew.

Railworks Studio · Version 1.0 · 2026-11-02

Installation & Setup

System requirements

- Windows 10 or 11 (64-bit)
- About 200 MB of free disk space
- A local WiFi or wired network, if you want phones, tablets or other computers to join as crew

> **Note:** Torus Train Ops runs entirely on your own computer and local network. No internet connection is needed for day-to-day use, including running a full session with a crew. The only exceptions are activating your licence — a one-time step — and the optional update check at startup. Offline, the update check is skipped and everything else carries on normally. You do need a WiFi network for crew devices. See **Connecting crew devices**.

Installing

1. Download the installer from the link provided after your purchase.
2. Double-click it to run.
3. Windows may show a blue **"Windows protected your PC"** screen. This is normal for newly published software and is not a sign anything is wrong. Click **More info**, then **Run anyway**.
4. The installer runs automatically and creates a **Torus Train Ops** shortcut on your desktop and in your Start Menu.
5. Open it from that shortcut.

> **Note:** If your antivirus flags the installer, this is a known false positive that new, unsigned software sometimes triggers. Torus Train Ops does not collect or transmit any of your layout data anywhere except your own devices on your own network.

Activating your licence

The first time you open the application, an activation window asks for a licence key.

1. Find the key in the email receipt from your purchase.
2. Copy it and paste it into the box.
3. Click **Activate**.

Once activated, your licence is remembered on this computer. You won't be asked again unless you reinstall Windows or move to a different machine.

> **Note:** Each licence activates a limited number of devices, shown on your purchase page. There is currently **no way to deactivate a device from inside the application** — if you need to move to a new computer, or you've reached your limit, email support and we'll free the slot for you.

Windows Firewall

The first time it runs, Windows may ask whether it can communicate on your network.

- Click **Allow**
- Make sure **Private networks** is ticked

This happens once, and it's required for crew devices to connect.

If a crew device still can't connect, search Windows for **Allow an app through Windows Firewall** and make sure Torus Train Ops has **Private** ticked. Your layout network should be set to Private too (**Settings** → **Network & internet** → **Wi-Fi** → **your network**). There's no need to turn the firewall off.

Signing in and choosing a role

Each person signs in with their name and a role. Roles decide what that person can see and do, so a whole crew can work from their own devices at once.

Role	What they can do
Operator	Run assigned trains and work their cars
Dispatcher	Build the work, issue orders and assign crews; everything an Operator can do
Trainmaster	Configure the railroad, change settings, restore backups — full access

The Trainmaster role can be protected with a PIN, set in **Trainmaster** → **Security**. On a fresh install there is no PIN.

> **Note:** Keep your Trainmaster PIN somewhere safe. There is no automatic "forgot PIN" recovery — contact support if you get locked out.

Connecting crew devices

The application runs a small server on the computer it's installed on. Any phone, tablet or laptop on the same network can join as crew — nothing to install on those devices.

1. Open Torus Train Ops on the layout computer.

2. Go to **Trainmaster** → **Connect Crew Devices** and read the address shown there — something like `http://192.168.1.5:3000`.
3. On the crew device, open a browser and enter that address.
4. Sign in with a name and role.

Changes made on any device appear on all the others automatically.

> **Note:** Every device must be on the same network as the host computer. If one can't connect, check that your router isn't isolating devices from each other — this is sometimes called "AP isolation" or "client isolation".

> **Note:** This is designed for a private network — the one your layout room's router creates. Avoid running it on public or open WiFi, such as at a show or a club open house, where other people's devices share the network.

No WiFi where your layout is? Torus doesn't need the internet, just a WiFi network that the computer and the phones can share. If your layout is in a barn, shed or basement out of reach of your home WiFi, an inexpensive WiFi router plugged in near the layout is all it takes. It doesn't need an internet connection. Set it up once with your phone, connect the layout computer and your crew's phones to it, and you're running. The phones may say "No Internet". That's fine; tell them to stay connected. Use the router's main network, not its Guest network, because guest networks keep devices from seeing each other.

Optional: keep the address from changing. Your router may give the layout computer a different address from time to time, which means a new QR code. If you'd like it to stay the same, so you can print the QR code and pin it up for your crews, look in your router's settings for **Address Reservation** (sometimes called DHCP reservation) and reserve one for the layout computer. You can also set a static IP in Windows itself; searching "how to set a static IP Windows 11" will find current instructions.

Where your data lives

Your layout database, photos and backups all live in one folder:

```
%APPDATA%\Torus Train Ops
```

Paste that into the File Explorer address bar to open it. Backups are in the `backups` subfolder.

> **Note:** Uninstalling does not delete this folder, so your railroad and its backups survive reinstalling or upgrading.

Backups

Save a backup before any big change and at the end of every session. It takes seconds and it's the best protection you have.

1. Go to **Trainmaster** → **Backup & Restore**.
2. Type a name — `after-session-3`, for instance — and click **Save Backup**.
3. To restore, click **Restore from File**, choose the backup, then close and reopen the application.

Backups are plain files, so you can copy them to a USB drive or cloud storage for a second copy.

> **Warning:** Restoring replaces everything currently in the application. Save a backup of your current state first.

Adding photos

Locomotives and cars can each carry a photo.

1. Edit any locomotive or car.
2. Click the 📁 button beside the photo field.
3. Browse to your photo — it's copied into your data folder automatically.

Supported formats: JPG, PNG, GIF, WebP.

Tip: name photo files after the road number — `BRW-487.jpg`, `NS-7511.png` — so they're easy to find.

Uninstalling

Go to **Windows Settings** → **Apps**, find Torus Train Ops and uninstall.

Your layout data and backups are **not** deleted. Back them up first if you want to keep them.

Installation troubleshooting

The application won't open

Check the taskbar — only one copy can run at a time, and a second attempt will do nothing if one is already running.

A crew device can't connect

- Confirm both devices are on the same network.
- Check the address on the device matches exactly what the Trainmaster page shows, including the `:3000` port.
- Some routers isolate devices from one another for security; check that setting if nothing else explains it.
- Make sure the layout network is set to Private in Windows, and that Torus Train Ops has **Private** ticked under **Allow an app through Windows Firewall**.
- Check the crew device is on the router's main network, not the Guest network.

The licence won't activate

- Check the key was copied completely, with no trailing space.
- Activation needs a brief internet connection.
- If you've reached your device limit, contact support to free a slot.