



How to Choose an Indoor Bike Trainer

Basic Types of Trainers

Wind: This is one of the original trainer styles. Pedaling powers a fan that provides resistance. Resistance increases as the rear wheel spins more quickly—either because you’re pedaling faster or using a bigger gear.

- Pros:** Wind trainers are among the cheapest trainers around; they're very simple and durable.

- Cons:** Wind is the noisiest style; its resistance level is not adjustable; it's often limited to basic features; and it doesn't simulate real road feel very well.

Magnetic

In place of a fan, a magnetic or “mag” trainer uses a magnetic flywheel to provide resistance.

Note: You may see some newer trainers marketed as electronic; most are actually variations on traditional magnetic trainers, with an electromagnetic resistance unit that can be controlled via remote or vary automatically based on a software app (dedicated or third-party).

- Pros:** Affordable options abound; resistance can be adjustable; they're much quieter than wind trainers; newer electromagnetic versions are some of the most fully featured models available; and they have a wide variety of options.

- Cons:** Their resistance range is limited, and they aren't as durable.



Fluid

Fluid trainers are a type of magnetic trainer, as they're based on a magnetic flywheel—but a fluid trainer adds chambers of viscous fluid to further tune the resistance options. This is the most common type of stationary trainer available today.

- Pros:** They have the best “road feel” of any style of trainer; fluid offers a wide range of resistance adjustment (electronically controlled on the nicer models); they're very quiet; and they have a wide variety of features and options (like power and connectivity).

- Cons:** Fluid trainers improve on durability every year, but they're susceptible to overheating and cooking the fluid.

Rollers

Rollers are the oldest of the indoor trainer styles; here, the bike sits freely on three precision drums inside a frame, which turn as you pedal. Resistance can be provided by the rollers themselves (smaller-diameter drums provide more resistance) or via magnetic, fluid or wind add-on elements.

- Pros:** Elite cyclists swear by them for some workouts, and they're great for improving your form.

- Cons:** Resistance range isn't great, and they take some practice to get used to so you don't slide off.

Indoor Bikes

These fully featured machines are similar to what you'd see in a high-end spin class studio. They can use fluid or magnetically controlled resistance, and many of them have integrated electronic dashboards and wireless connectivity to interface with apps and training programs.

- Pros:** They're the most stable setup for indoor riding; they're the



quietest option (particularly in terms of vibration); and they reduce wear and tear on your bike.

- Cons:** They're expensive, large, and heavy enough to require a dedicated space; they may not fit very large or small riders well; and they need a second set of pedals.

Options to Think About

•Do you need a power meter?

Many trainers now have the option to add power tracking. Sometimes this is dedicated to the trainer with its own head unit, or it can be part of a “smart” trainer as mentioned below. If you don’t already have a power meter on your bike, it may make more sense to add one that can also be used outside than to pay for a trainer with this (often expensive) option.

•Do you want connectivity?

A true smart trainer is different than a model with electronically controlled resistance. “Smart” means it can communicate to other devices to download a training program to, say, a phone-based app that automatically adjusts resistance, or syncs to online training platforms like Zwift. This is a premium feature and can significantly boost the price of a trainer, but for riders who want lots of variety, it may be worth the cost. Some third-party training platforms support non-connected trainers, but you’ll still need extras, like an external “speed” sensor from Garmin or CycleOps, and possibly a power meter as well.

•Do you want an articulating attachment?

A few trainers, like Kurt Kinetic’s Rock and Roll, pivot on an articulating base. That means you can stand up and pedal while leaning the bike side to side just as you do on the road. Kinetic markets this partly as a way to help maintain core strength, but if you’re looking for core workouts, an indoor trainer probably isn’t the place to start. This feature does matter if you’re looking for a more genuine “road feel.” Another option:



InsideRide's E-Motion Rollers, which sit on a free-moving frame, which means you can stand up and sprint (try this with most rollers and you'll crash). Bear in mind: no trainer can 100-percent faithfully simulate outdoor ride feel.

•Do you want direct-to-frame attachment?

Some stationary trainers—LeMond's Revolution series and the Wahoo KICKR, for instance—offer a direct attachment to the rear dropouts; the trainer replaces the bike's rear wheel. This provides a crisper, more efficient connection between the bike and the trainer because it doesn't rely on tire friction to produce resistance, which then also saves tire life (trainers are very hard on tires). However, direct-attachment trainers may not work with all drivetrains or axle standards.

Which Is Right for You?

Even within these four broad categories, there's a wide range of choice. Magnetic and fluid trainers in particular go from fairly simple models with a handlebar-mounted remote to vary the resistance, all the way up to ANT+ enabled versions that pair to your computer, track power, and offer downloadable workouts. Here's how to pick:

•If: you just need a basic model for pre-race warmups

Consider: a wind trainer or simple magnetic model with folding legs for easy portability

•If: you want to work on your pedal stroke

Consider: rollers—there's no better tool to smooth out a clunky cadence

•If: you need to do structured workouts

Consider: a fluid trainer that tracks power output, or a smart trainer that pairs to your computer head unit



•If: you get bored easily (who doesn't when riding inside?)

Consider: a smart trainer that can interface with independent training programs like TrainerRoad or Zwift; trying The Sufferfest's downloadable training videos you can ride or race along with.

There's an App For That

Arguably the biggest advance in indoor training over the past few years has been the proliferation of training program options to get the most out of your inside ride. There are at least a dozen companies—including Zwift, BKool, The Sufferfest, Kinetic, and Wahoo—offering indoor training solutions. Some are apps (iOS or Android); some are computer-based and may be Mac- or PC-specific. Some are one-time purchases while others offer subscriptions or pay-per-plan programs.

Other Things to Consider

•Compatibility: With axle attachment standards and widths changing almost yearly, check whether a trainer you're interested in offers different attachment options such as thru-axle adaptors and, for direct-attachment trainers, different freehub options.

•Storage: Some trainers have folding legs for easier storage (some rollers fold in half as well). That can add modest amounts to the cost.

•Noise: All trainers make noise, and produce vibrations that may be annoying to others around you. Particularly if you live in a building with shared walls or floor/ceilings, pay attention to how much noise and vibration a trainer produces.

•Stability: Trainer crashes are rare, but not unheard of when you're going cross-eyed trying to beat your PR on that workout. Typically, the broader the base, the more stable. Some trainers—CycleOps' PowerBeam Pro, for example—have a leveling feature for uneven surfaces.



Accessories

There are all kinds of extras out there, from the essential (axle attachment inserts) to the esoteric (a storage bag!). Here are a few basic ones you might consider, prioritized by importance:

- Axle attachment inserts:** Some trainers that attach via the rear wheel can accommodate different axle standards and offer inserts for that purpose. Make sure the trainer you're buying has compatible options for the bike or bikes you want to use.
- Front wheel block:** Yes, you can just use a stack of phone books, but a dedicated leveling block is much more stable, and typically not very expensive.
- Sensors:** You can buy a basic unit now and upgrade it later with sensors for things like power, cadence, or even virtual speed, which can transform basic units into smart trainers that work with training programs.
- Floor mat:** It protects your floor from scratches and sweat, and absorbs a bit of vibration—useful for nice floors and apartments.
- Trainer tire:** Trainers rely on friction to produce resistance, so they're much harder on tires than road miles—they not only wear out tread, but flex casings to the point that they can eventually fail. If you have high-end tires on your bike and are riding inside most of the winter, consider a trainer-specific tire, which has a beefier casing and tread. They're typically not recommended for outdoor use. Another option: Install an inexpensive heavy-duty training clincher on a spare rear wheel.



FULL LIST OF TRAINING PLANS AVAILABLE

Swimming Programs:

How to Swim Faster in 30 Days: A Freestyle Guide to Dropping Time
[\(Course Details and Video Preview\)](#)

Freestyle Swimming: How to Master the Basics
[\(Course Details and Video Preview\)](#)

Cycling Made Easy:

Drills and Endurance Workouts (4 Weeks)
[\(Course Details and Video Preview\)](#)

Strength and Skills Workouts (4 Weeks)
[\(Course Details and Video Preview\)](#)

Threshold and Speed Workouts (4 Weeks)
[\(Course Details and Video Preview\)](#)

Ultimate Mix: All of the Above (4 Weeks)
[\(Course Details and Video Preview\)](#)

Running Training Plans:

Half Marathon Training Made Easy
[\(Course Details and Video Preview\)](#)

Marathon Training Made Easy
[\(Course Details and Video Preview\)](#)



Beginner Triathlon Training Plans:

Sprint Triathlon Training for Beginners: 8 Weeks /FREE
[\(Course Details and Video Preview\)](#)

Olympic Triathlon Training Plan for Beginners: 12 Weeks
[\(Course Details and Video Preview\)](#)

Ironman 70.3 Training Plan for Beginners: 16 Weeks
[\(Course Details and Video Preview\)](#)

Ironman Training Plan for Beginners: 16 Weeks
[\(Course Details and Video Preview\)](#)

Advanced Triathlon Training Plans:

Advanced Sprint Triathlon Training Plan: 8 Weeks
[\(Course Details and Video Preview\)](#)

Advanced Olympic Triathlon Training Plan: 8 Weeks
[\(Course Details and Video Preview\)](#)

Advanced Ironman 70.3 Training Plan: 12 Weeks
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