

Drawing Board

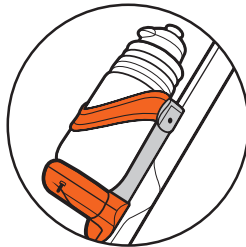
ILLUSTRATIONS BY JAMESON SIMPSON

A Radical Shift

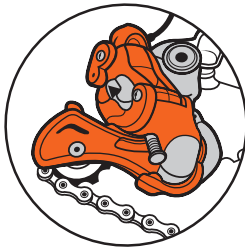
Bike derailleurs still rely on the same basic mechanics that have been at the core of bicycle shifting since its advent, in the early 1900s. But major manufacturers are now developing electronic systems that promise faster and more precise shifts, lighter weight, customizable features, and improved ergonomics. Though nothing's official, production versions could be offered as early as 2009. **1. Computer:** Integrated computers might register not only the usual speed and distance but also the current gear and remaining battery life. **2. Wires:** Shifters and derailleurs will still be linked, but instead of steel cables pulling levers, it will be insulated wires carrying electrical impulses.



3. Hoods: Since designers won't have to contend with bulky mechanical internals, they'll be able to deliver more ergonomic shapes and possibly even built-in gear indicators on the brake hoods.



4. Battery: Power will come from an on-board battery. Lightweight lithium-ion cells are small enough to integrate into existing parts, such as water-bottle cages, and would last for days on a single charge.



5. Derailleurs: They won't look all that different. But inside, fast-acting motors will deliver quick, precise shifts of up to several gears at a time. There will likely be adjustment screws like those on current models.



1



3



2



4

Helmets

ROAD

1. Giro Ionos \$225

Worn by legends like Greg LeMond and Lance Armstrong, Giro has long been a preferred brand of top pros. And the new 21-vent Ionos is the company's coolest lid yet, in terms of both looks and breathability. giro.com

KILLER VALUE \$

2. Rudy Project Zuma \$90

Surprisingly inexpensive despite its radical design, the fin-like Zuma cuts through the air but not your budget. rudyprojectusa.com

3. Specialized S-Works \$210

At just nine ounces, the über-flashy S-Works is the lightest lid on the planet. Deep vents, Kevlar reinforcement, and an ingenious full-head fit system make it as sensible as it is light. specialized.com

MOUNTAIN

4. Uvex Supersonic GT \$100

The beefy visor and netted vents can handle the worst gunk, while its snug retention system and padded chin strap keep everything in place. uvexsports.com

JAMES JUNG