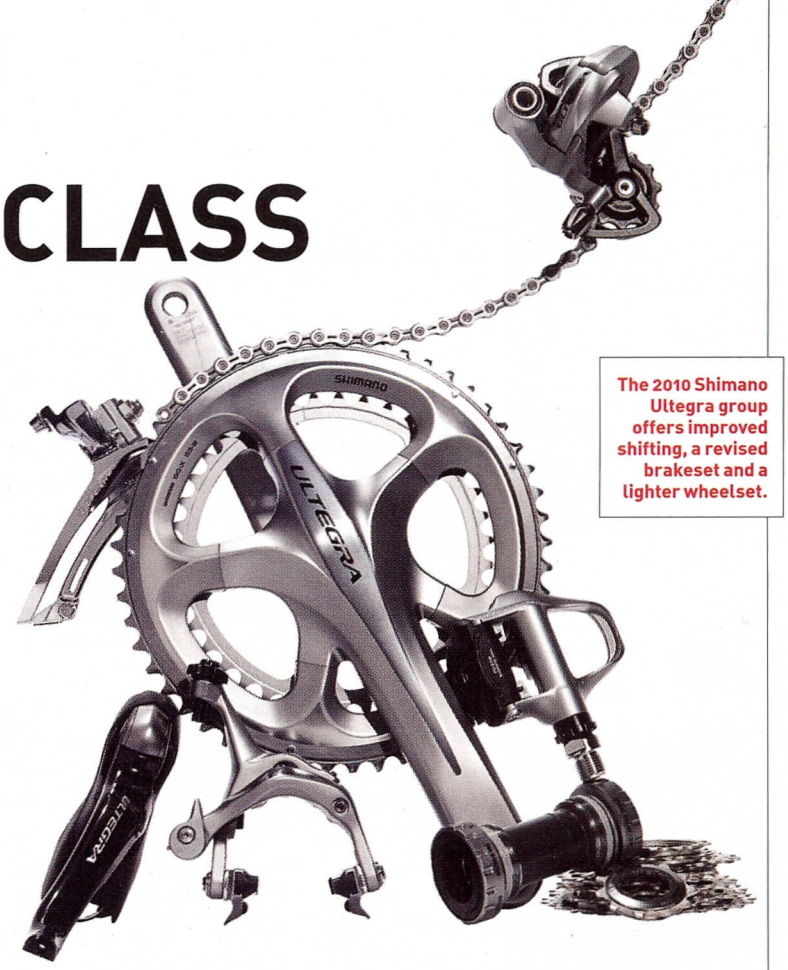
BUSINESS CLASS

2010 SHIMANO ULTEGRA AND SRAM FORCE ARE LOADED—WITH VALUE. BY JOE LINDSEY



The 2010 Shimano Ultegra group offers improved shifting, a revised brakeset and a lighter wheelset.

THE BEST DEALS IN RETAIL ARE FOUND JUST below top-of-the-line. Nowhere is that more true than bicycles, particularly components. "Ultegra has always been the biggest bang for the buck," says Shimano USA's vice president Wayne Stetina. "You could race it at the ProTour level and be competitive." Saunier Duval raced SRAM's Force group at that level in 2007, before Red was introduced. And for 2010, both groups have received significant overhauls that increase the value and performance they offer.

SHIMANO ULTEGRA Shimano's approach has always been to unveil a new Dura-Ace group and in successive years redesign its lower-tier groups with similar changes, and there's no departure here. Ultegra 6700 is clearly the little brother of Dura-Ace 7900, with a few small exceptions, primarily in materials choices.

Overall, Ultegra 6700 weighs about 120 grams more than Dura-Ace 7900, says Stetina. For comparison, he says, "an empty large water bottle weighs about 100 grams." The system is 150 grams lighter than the previous Ultegra group and 45 grams less than Ultegra SL. The entire group weighs 2,348 grams.

Drivetrain Like the Dura-Ace crank, the new Ultegra unit has a hollow-forged outer chainring—the increased stiffness makes for faster, crisper shifts because the chainring deflects less under shifting load. The redesigned STI shift levers have composite levers and carbon-fiber brake blades, and the shifting cable tucks beneath the bar tape.

Both derailleurs feature wider pivot links to improve shifting under load, but in a notable change from Dura-Ace 7900, the new shift levers retain compatibility with existing Ultegra 6600 (and Dura-Ace 7800) rear derailleurs, but the front derailleurs will have what the company calls "B-level" performance.

Shimano offers several gearing options, including compact (50/34) and triple-ring (52/39/30) setups, with 165, 170, 172.5 and 175mm crankarm lengths. The rear derailleur comes in a short-cage option to handle cassettes with as many as 28 teeth, or in a GS midcage version for triples. Like Dura-Ace 7900, the new system uses an asymmetrical chain.

Brakes The new brakeset features a revised pivot location, similar to the new 7900 series, which Shimano says provides quicker response and better modulation. A lower cable stop improves cable routing for reduced cable friction, and Shimano claims its new pad compound delivers twice the stopping power on wet rims as in the past, without sacrificing power or modulation in dry conditions. However, the new pivot geometry means that while the STI levers are backward-compatible for drivetrain components, they're not for brake levers—if you get the new brakeset, you'll need new levers.

Wheels The new wheelset is lighter (1,650 grams per pair) and tubeless compatible. The finish quality is superb, sporting a brushed industrial-gray look with polished accents. It's spare and understated, but classy.

One thing you won't see is electronic shifting. Our

DRIVETRAIN	SHIMANO ULTEGRA 6700	SRAM FORCE	CAMPAGNOLO ATHENA
PART	WEIGHT (G)		
FRONT DERAILLEUR	85 (BRAZE-ON)	83 (BRAZE-ON)	92 (BRAZE-ON)
REAR DERAILLEUR	191	174	218
BRAKESET	315	280	322
SHIFTERS	446	302	360
CASSETTE	227	210	236
CHAIN	282	257	256
CRANK AND BB	802 (172.5MM)	791 (GXP); 645 (BB30)	869 (ALU); 756 (CARBON)
TOTALS	2,348	2,097 (GXP); 1,951 (BB30)	2,353 (ALU); 2,240 (CARBON)

KENT PELL (X2)

impressions of the electronic version of the Dura-Ace group (Di2) are overwhelmingly positive, but at this point the technology is still prohibitively expensive.

"[Electronic Dura-Ace] is a blend of a mechanical system, an electronic motor and a computer," explains Stetina of the system's complexity. "Even if we saved the cost that we normally do from Dura-Ace to Ultegra, the price for an electronic Ultegra group would be above Dura-Ace mechanical. We want to keep Ultegra quality in terms of materials, finish and function, and at the price we want Ultegra to be at, I'm not sure electronic will fly right now."

As of press time, Shimano hadn't set prices, but expect a jump in cost from the existing Ultegra—a suggested retail of $1,400 for the eight-piece group is probably in the ballpark. The parts should be available in late summer or early fall.

SRAM FORCE Originally introduced as SRAM's top-level component group, Force went into model-line limbo when the company debuted Red in 2008 and revamped the budget Rival group last year. "Force lost out a little when Red came in," says SRAM's road product manager, Bill Keith. "And when Rival came out last year with a lot of the new features, everyone realized that Force was getting dated."

Force gets its makeover for 2010, with more Red-like features, a lighter overall weight and, significantly, no price change from 2009 ($1,400).

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Drivetrain The primary change is the addition of a BB30 crankset option, which drops the overall group weight to a claimed 1,951 grams. (The standard GXP version will drop 10 grams from the prior edition, to 2,097 grams.) BB30 lightens the bike, says Keith, and "it gives frame makers more real estate to work with." The larger shell allows larger-diameter tubing with thinner walls, more surface area to weld or bond, and in the press-fit BB30 option, an easy installation. A press-fit GXP option is also in production. The BB30 option adds $40 to the group price.

The shifters have unidirectional carbon-fiber brake and magnesium shifter-lever blades and retain the ZeroLoss and Exact Actuation technologies SRAM introduced in 2007. One big, Red-influenced change is a reduction in shift-lever throw, from 33 degrees for the full range down to 15. The brake- and shifter-lever blades are also independently reach-adjustable, offering the ability to fine-tune ergonomic fit at the bar. The 1070 cassette and PC1090 chain remain unchanged. Cranksets will be available in regular (53/39) or compact (50/34, 52/36 and 52/38), and in 170, 172.5 and 175mm crankarms.

Brakes The brake calipers use the same forgings as Red, just with a different finish and a few different materials. The Red forging offers a better center- and spring-tension adjustment in a skeleton-style brake, with ball-bearing pivots instead of bushings. The only difference from Force to Red is the substitution of steel hardware for titanium and less machining on the caliper and pad holder. Technophiles take note: The pads say SRAM, but they're made by SwissStop.

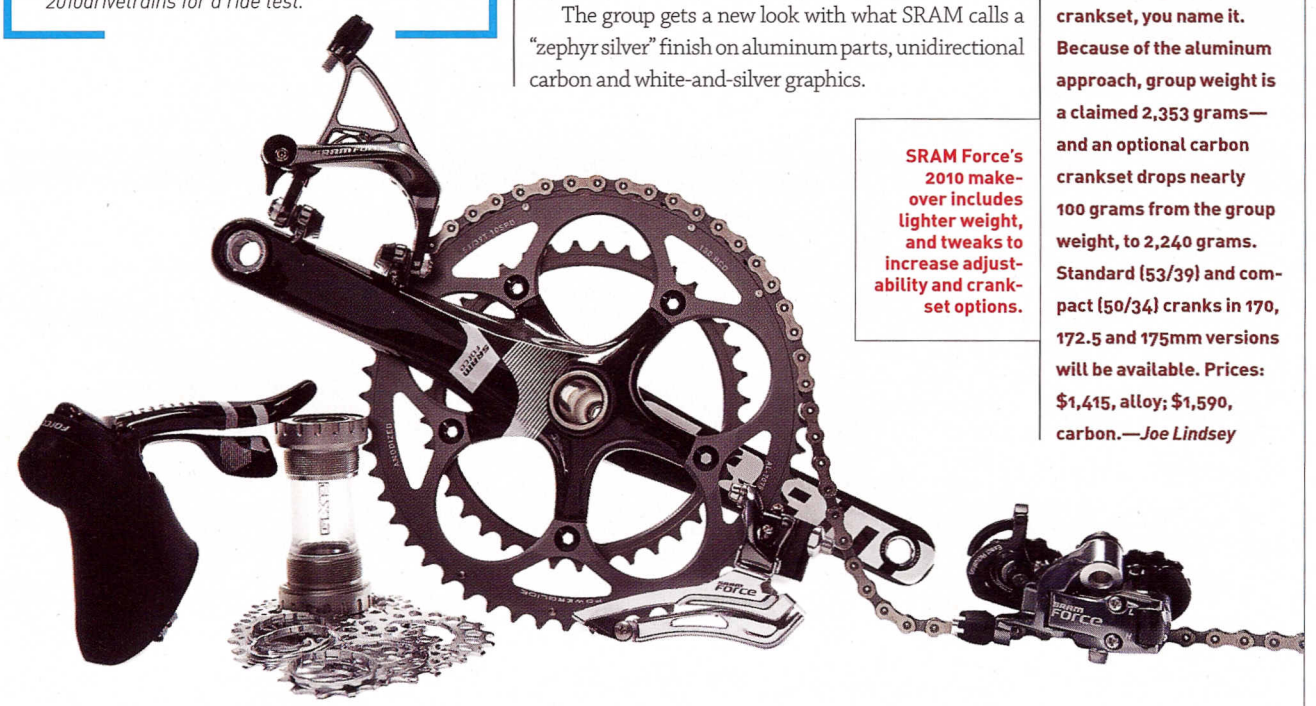
The group gets a new look with what SRAM calls a "zephyr silver" finish on aluminum parts, unidirectional carbon and white-and-silver graphics.

THE ITALIAN OPTION

CAMPAGNOLO REVIVES ATHENA AS A VALUE-ORIENTED 11-SPEED GROUP

FOR YEARS, ITALOPHILES praised the Athena group for its blend of price and performance. It provided Campy quality without top-of-the-line prices. Then it went away, and we were left with a significant jump from Centaur (often sold only as original equipment) to Chorus. But for 2010, Athena is back.

The revived group will blend Campagnolo's new 11-speed drivetrain with a group made mostly of aluminum rather than carbon, as on Chorus and Record. Materials aside, Athena 11 is functionally identical to Chorus—skeleton brakes, new Ergopower lever shape and Ultra-Shift internals, Ultra-Torque crankset, you name it. Because of the aluminum approach, group weight is a claimed 2,353 grams—and an optional carbon crankset drops nearly 100 grams from the group weight, to 2,240 grams. Standard (53/39) and compact (50/34) cranks in 170, 172.5 and 175mm versions will be available. Prices: $1,415, alloy; $1,590, carbon.—*Joe Lindsey*



SRAM Force's 2010 makeover includes lighter weight, and tweaks to increase adjustability and crankset options.