

COMFORT BIKE COMPONENTS SYSTEMS

Contents

"ALFINE Concept"	4
ALFINE	6
CyberNexus	8
NEXAVE C810	9
INTER-8	10
Internal Geared Hubs / REVOSHIFT Levers	11
Hub Dynamos	12
Roller Brakes	13
XT for Trekking Bikes	14
NEXAVE C500	16
NEXAVE T300	17
Comfort Wheels	18
TOURNEY	20
CI-DECK / Cycle Computer / Lamp	22
Shimano Original Functions	23
Shift Support Mechanism	24
Inter-8 Gearing	25
SMARTCAGE Pulley Plate	26
Cable Roller Guide	26
Low Normal Shifting System	27
TAP FIRE Shifter	28
Optical Gear Display	28
REVOSHIFT Shifter	28
Coaster Brake	29
Roller Brakes	30
POWER MODULATOR	31

Components Designed for more comfortable cycling

The idea behind comfort is to combine the efficiency of a road bike with the stability and comfort of a mountain bike. Shimano continues to refine the comfort concept with innovative components designed to create an enhanced feeling of comfort and control. A bike equipped with Shimano comfort components is easier to ride, so cycling becomes more fun especially for new cyclists, leisure riders or occasional riders. An enhanced feeling of confidence makes the cyclist feel either more relaxed on the bike. ALFINE Series for sport and fashionable cycling was released for developing the new market for stylish bikes. ALFINE components will also be available in a shiny black finish and several new ALFINE wheel sets were added to the range as well. We present a new approach with those highly enhanced Shimano Components in the quest for diverse styles of comfort bikes.





Alfine is a stylish, premium-level component group sure to appeal to quality-minded consumers. Consider the endless possibilities for bikes that can launch new ways of thinking about the joys of cycling and potential new markets. Premium quality, style, versatility, and effortless operation define Alfine. Use the clean look and wide-range gearing of this internal 8-speed hub to enhance your bicycle brand.







TEINE



SHIMANO

For sporty and fashionable cycling

Alfine is a stylish, premium-level component group sure to appeal to quality-minded consumers. Premium quality, style, versatility, and effortless operation define Alfine. Use the clean look and wide-range gearing of this internal 8-speed hub to enhance your bicycle brand. Now available in black and silver, furthermore a new FC-S400 OCTALINK crankset, V-BRAKE compatible wheel sets and 2.5-finger brake lever are lined up.

SG-S501 (1814)

8-speed Internal Hub Gear for Disc Brake Use

- Highest Shimano internal hub efficiency
- Double roller clutch engagement for smoother, quieter shifting
- Center Lock rotor mount

CS-S500 Sprocket

- Special Single Gear Design with Chain Tensioner
- Revised tooth profile to prevent chain skip
- 18T, 20T available

CT-S500 Chain Tensioner

• For vertical drop-out

FC-S500 Crankset with Chainguard

FC-S400 (MEN)

OCTALINK Crankset with Chainguard (BB-ES25)

- Chainring : 45T, 39T
- Single or double chainguard integrated design
- Iconic Shimano cap-free design (FC-S500)
- OCTALINK splined axle crank arm interface (FC-S400)
- Use with CN-HG53 super narrow chain because of the 9-speed compatible chainrings

SL-S500

RAPIDFIRE Plus Shifting Lever (for Inter-8)

- Refined & Sporty with Optical Gear Display
- Precise shifting

BL-S500 Hydraulic Brake Lever (4-finger)

- BL-S502 Hydraulic Brake Lever (2.5-finger)
- Smooth integration with Alfine SL

BR-S500 Hydraulic Disc Brake SM-RT62 Disc Rotor

- Opposed 2-piston design
- Easy and fast set-up
- Center Lock system
- Resin and metal pads are available
- Compatible with International and Post-type mounts

DH-S500 Hub Dynamo

- 6.0V-3.0W
- Use with Center Lock disc brake

WH-S501-V-3D/8D

WH-S501-V (MEW)

- Center Lock and V-BRAKE compatible
- WH-S501-3D/8D (19)
- Use with Center Lock disc brake only (See page 18)



Automatic shifting

- 3 modes (Ds, D, L) serve each rider's purpose, preference and situations.
- Choice of 8 different gear shift timings
- Can switch to manual shifting
- 14 pulses per wheel rotation create high precision automatic shifting.

Auto light sensor

- CPU equipped with sensor automatically turns lamp on and off
- Compatible with wide variety of different lights

Display

- Easy-to-read large digital display
- Light yellow backlight gentle on the eye

Auto suspension

- Automatically adjusts riding conditions, switching between "HARD" and "SOFT"
- Suspension can be switched manually



SHIMANO Cyber Nexus



The ultimate components for comfort bikes

The Di2 CyberNexus offers various features and benefits created by the leading-edge technology for advanced comfort and excitement. The dynamo supplies the operation power for a completely environmentally-conscious system-ECOVISION.



Digital Drive System

- Computer selects optimum gears in response to the speed. Ensured ideal gear ratios allow comfortable riding at all times.
- Synchronized gear changing and suspension.
- 11 internal dynamo magnets for immediate speed sensor input at 11 signals per rotation
- Instantaneous response to riding conditions
- No more wheel magnet systems

Digital Suspension

 Hard ride at uphill and on start-up not to waste power; soft ride at normal riding. Computer selects optimum hardness.

Self-energized by Freehub Dynamo

 No battery power for the system provides environmentally-friendly ECOVISION, no batteries needed.

Display

- Simple and easy-to-read display
- Light orange backlight gentle on the eye



SHIMANO NEXAVE 3×8-speed C810





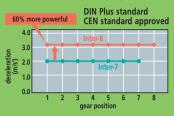


Flagship components with Di2 for the ultimate comfort bike

The NEXAVE C810 offers a lot of features and benefits for advanced comfort and excitement. The Freehub dynamo supplies the operating power for an environmental friendly system. SPCM3 offers enhanced smooth front triple gear shifting for wider range comfort cycling.

NEXUS INTER-8 Internal geared hubs

- INTER-8C (SG-8C31) : 60% more braking power compared to INTER-7C
- New seal design improves sealing performance.
- Needle bearing increases durability and offers high driving efficiency (SG-8R31).



 Gear change support mechanism / Shimano's gear change support mechanism uses pedaling power to aid down-shifting. The result is fast and accurate down-shifting with an exceptionally light feeling. • Smooth gear change / The smaller idling angle realizes shockless, smoother shifting for stressless comfortable shifting.

INTER-7 INTER-8



- Smoother rotation
- Close ratio wider range / The INTER-8 hub has increased its gear ratio to 307%, compared to 244% of the current INTER-7 hub. The INTER-8 hub also incorporates a closer gear ratio allowing a more efficient and comfortable pedaling cadence.

• Better sealing

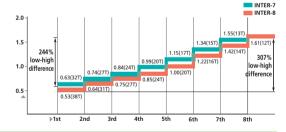
- Robust construction / Durable planetary and step-up gear sets assure long trouble-free service.
- Premium version availlable / INTER-8 Premium Version is lighter in weight, more driving-efficient and more durable.

Shift and brake levers

- Fast and light shifting
- Easy-to-read gear indicator







Nexus

INTER-8

The table at left shows the relative gear ratio for the INTER-7 and INTER-8 gear hubs when used with a 20T sprocket. The numbers in parenthesis show the sprocket size that each gear ratio corresponds to in a derailleur system.

The standard in internal geared hubs

The NEXUS 8-speed system delivers a high level of design, quality and function. Many technical advances have been achieved, like incorporating Shimano's unique gear change support mechanism that makes truly a real low effort shifting.

Internal Geared Hubs



REVOSHIFT Levers

SB-3S30



SR-7545



INTER-7, and INTER-3 wide-range gearing

The table at right shows the relative gear ratio for the INTER-7, and INTER-3 hubs when used with a 20T sprocket. 0.5-The numbers in parenthesis show the sprocket size that each gear ratio corresponds to in a derailleur system.



NEXUS internal geared hubs

- Gear shifting action is independent of pedaling. You can shift gears anytime, while standing still, pedaling
- Rugged planetary and step-up gear sets assure long trouble-free service.
- Integral coaster brake (SG-7C18/3C41) / Back pedal braking action eliminates the need for a brake cable to
- Integral roller brake (SG-7R46/3R40) / Cable activated roller brake works effectively in all weather conditions.
- Shift modulator mechanism / Smoothes out the shifting action
- Gear change support mechanism



Hub Dynamos



Hub Dynamo Features

- No batteries needed / Get bright illumination for safer night riding without the need and expense of replacing batteries.
- Less rolling resistance / Compared to previous model, Inter-L hub dynamos rotate with significantly less drag with the lamp off and when starting from stop.
- Light Weight / Hubs are significantly lighter than conventional model and offer a smaller axial cross section for improved appearance.
- Plug-In Wiring / Wiring harnesses use push-in connectors that make installation fast and easy.
- **Contact Seal** / Contact-type rubber seal enhances water resistance.
- Disc brake mount compatible (DH-3D30)
- Roller brake compatible (DH-3R30/2R30-E)

Auto Lighting System Features

- In-switch light sensor / Ambient light sensor is located in the switch assembly.
- Manual ON-OFF Switch / Lighting system can be turned off when not needed or to prevent lamp illumination when not desired.
- Lamp compatibility / Various lamp types can be used with the Inter-L lighting systems.







Roller Brakes

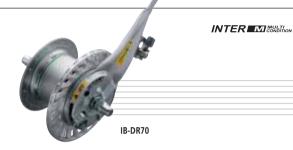


INTER-M hub roller brakes

- Hub mounting / No external calipers. Braking surfaces are sealed for all-weather performance.
- Cam-roller activation / Strong, easy-to-control braking power.
- Cooling disc / Better heat dissipation reduces fade, extends lubricant life.
- Meets DIN-79100 specification / Reliable DIN certified performance.

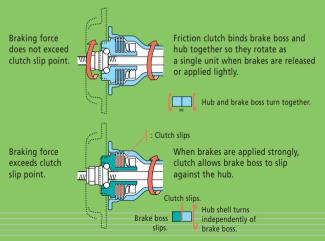
INTER-M front brakes and hubs

- Braking POWER MODULATOR / Prevents accidental front wheel lockup.
- Size specific design / HB-NX50 and HB-IM40 are designed for 26-27" wheels, HB-IM30 for 20-24" wheels.
- Sealed mechanisms / Rubber seals keep out dirt and water.
- Squeal suppression / Brake and modulator operate silently.
- Meets DIN-79100 specification / Reliable DIN certified performance.



Braking POWER MODULATOR system (Front roller brake)







FC-M771-K HOLLOWTECH II Crankset

- Chainguard / chaincase compatible
- Gearing : 48-36-26T

FD-M772 TOP SWING Front Derailleur

- FD-M773 Down Swing Front Derailleur
- For trekking bike
- Great shifting performance
- Angled adjustment screws for easy access with a screw driver.
- Lighter cage (chain guide)
- Increased tire clearance through modified cage tail shape
- More clearance behind the seat tube for down swing FD, mud guard, or suspension (FD-M773)

BL-M770 V-BRAKE Lever (1.5-finger) BL-M771 V-BRAKE Lever (3-finger)

BR-M770 V-BRAKE

- Super light-weight
- 152g lighter (compared to previous model)
- Proven performance of Shimano's super Linear Response system
- Cartridge shoe holder

SL-M770 RAPIDFIRE Plus Shifter

- 2-Way Release for different riding styles or shifting (indexfinger or thumb) from various riding positions
- Instant Release for quicker shifts
- Choice of inboard and outboard position
- New concept, removable Optical Gear Display

RD-M771 Top Normal Rear Derailleur

- Double servo-panta mechanism
- Smooth operation and light action
- Capacity : GS 33T, SGS 45T

HB/FH-M770 Hub set for V-BRAKE

- Quicker engagement freehub body (10 degrees)
- Grease sleeve for longer durability
- Spoke holes : 32H/36H

CS-M770 Cassette Sprockets

- Increased stiffness
- Gearings : 11-32T, 11-34T

CN-HG93 9-speed HG Chain

- Super-narrow 9-speed construction
- Precision construction
- Improved durability







3×9-speed









For comfortable trekking

DEORE XT, the flagship model of mountain bike components, which has established a high reliability, underwent a full model change. The completely new DEORE XT makes a debut bringing in a full lineup including the trekking version with features such as 3-finger type brake lever and crankset with 48T largest gear.

High-end recreational components

The NEXAVE C500 series feature lighter weight and fine-tuned cosmetics. The SPCM3 for triple chainring cranks offers the ultimate in easy and low-effort shifting. LinkGlide sprockets are also an important component of the series for less-shock and comfortable shifting.



Rear CS-LG50 LinkGlide derailleur cassette sprocket

9-speed HG chain



1) Low effort derailleur shifting

- SPCM (Shimano Power Change Mechanism) / The triple shifting by ultralight button operation has finally created a genuine and authentic comfort riding scene.
- LinkGlide sprocket / Assures power transfer while the chain is moving from one sprocket to another, resulting in smoother and more accurate shifting.
- Cable roller guide / Rotating cable guide pulley allows light cable action and direct cable routing.

2) Confident Braking

- Multi-Purpose Roller Brake / The V-shaped brake shoes increase the braking power.
- Mechanical disc brake / Mechanical caliper and 4-finger lever delivers powerful braking with responsive fingertip control.
- POWER MODULATOR unit / SM-PM50 power modulator for BR-M465 also makes easier to control braking.

3) Comfortable cycling functions

- TAP-FIRE shifters / Left side rocker-type push-button for front derailleur, right side lever and release button for low-effort rear derailleur shifting.
- Low normal rear derailleur / Left and right shift levers work in uniform directions for a more logical, easy-to-understand shifting action.





Mechanical Disc Brake

3×8-speed



SHIMANO NEXAVE T300

TAP FIRE Lever Set

- Easy TAP FIRE shifting
- More intuitive shifting
- Optical Gear Display

Rear Derailleur

- Advanced Light Action design
- 11-tooth pulleys

Front Derailleur

- TOP SWING design
- DUAL SIS front index shifting

Crankset

Cartridge Bottom Bracket

- Chaincase compatible
- Sealed cartridge assembly
- Chainguard availability
- DUAL SIS compatible

Front Hub

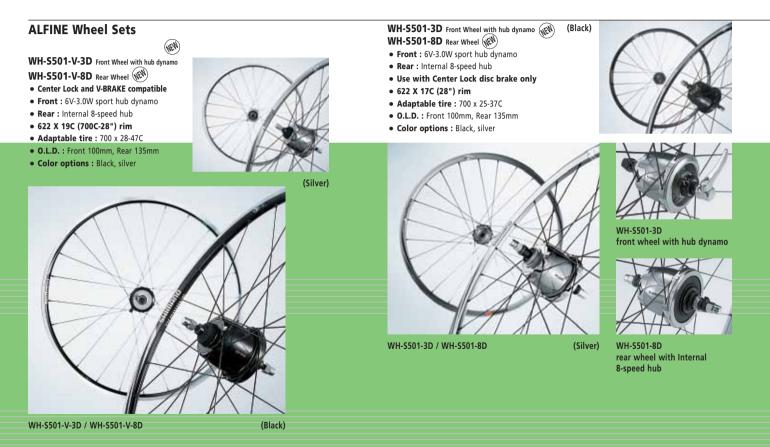
Roller Clutch Rear Freehub

- Engages instantly and freewheels silently(FH-T300).
- Light alloy quick release

Exclusively designed for comfortable cycling

NEXAVE T300 component series offers a comfortable riding experience to casual and recreational cyclists with its easy-to-operate designs. NEXAVE T300 is featured with a TAP FIRE shifter and V-BRAKE MODULATOR mechanism. The NEXAVE-equipped bicycles provide a comfortable feeling that gives cyclists more confidence in their skill to shift gears and control brakes.

Comfort Wheel Sets







New looks and performance for entry model sports bikes

TOURNEY group has been developed to give entry level sports bikes a boost. It fully incorporates advanced Shimano functions including DUAL SIS Front and Rear Index Shifting and MEGARANGE 34T Super Low Gear. TOURNEY is also compatible with Hub Dynamo and Hub Roller Brake components. Best of all, its visual appearance has the high-level impression that is in no way inferior to the upper classes, its finished form sets the appealing standard in this category.

Rear Derailleur

- 7/6-speed SIS rear index shifting (RD-TX71/TX51/TX31/FT30)
 6-speed SIS rear index shifting (RD-TZ50)
- Slant Pantograph / Precise shifting, reliable shifting
- SMARTCAGE pulley plate (RD-TX71/TX51/TX31)
- Short cage / Smallest cage in all Shimano rear derailleur. Fit for folding bike. For 16x1.75 and larger wheel (RD-FT30).
- * Compatible with single chainwheel only.
- Aluminum right link (RD-TX71)
- Wheel type cable guide pulley / Light action shifting effort (RD-TX71/TX51/FT30)

Multiple Freewheel

- 7-speed : MF-HG37/TZ31-CP/TZ31/TZ21-CP/TZ21/TZ07 6-speed :
 - MF-TZ30-CP/TZ30/TZ20-CP/TZ20/TZ06
- Close ratio gears with MEGARANGE 34T Gear for easy climbing (MF-HG37/TZ31-CP/TZ31/MF-TZ30-CP/TZ30)
- Integrated chain protector (MF-TZ31-CP/TZ21-CP/TZ30-CP/TZ20-CP)

Crankset (FC-M151)

- 8,7,6-speed
- Gearings : 42-34-24T, 48-38-28T
- Chainline : 47.5mm
- Chainguard option available
- Crank arm length variation : 170mm

Front Derailleur

- TOP SWING FD (FD-C051/C050) Down Swing FD (FD-TY10/TZ31/TZ21/TZ30/TZ20)
- 48-38-28T compatible (FD-C051/TZ31/TZ21) 42-34-24T compatible (FD-C050/TY10/TZ30/TZ20)
- Dual Pull cable anchor (FD-C051/C050)
- Multi Clamp system (FD-C051/C050)
- DUAL SIS front index shifting (FD-C051/C050/TY10)

HG/UG Chain

 HG/UG chain for precise SIS / DUAL SIS index shifting

EZ FIRE Plus Shifter

- ST-EF50 : 3x7-speed, ST-EF40 : 3x7/6-speed
- DUAL SIS front index shifting
- Easy gear changing and lever reach adjustment
- Optical Gear Display

REVOSHIFT Shifter

- DUAL SIS front index shifting (SL-RS43/RS41A/RS41/RS45)
- SIS rear index shifting (SL-RS43/RS35)
- Easy gear changing with REVOSHIFT shifter
- Optical Gear Display
- CI-DECK gear indicator compatible

Thumb Shifter Plus

- 3x7-speed : SL-TX50/TZ20, 3x6-speed : SL-TX30/TZ20
- DUAL SIS front index shifting (SL-TX50)
- SIS rear index shifting (SL-TZ20/TX30)
- Optical Gear Display

Hub Roller Brake

- Require less maintenance at all, such as toe-in adjust, balancing L & R spring, shoe angle adjustment on V-BRAKE
- All-weather performance (performs same in rain condition)
- Almost no noise

Rear Hub

- Roller brake compatible rear hub for multi-speed
- O.L.D : 133mm (6-speed), 135mm (7-speed)

Front Hub

- Roller brake compatible front hub for 26" wheel or larger
- Braking POWER MODULATOR system









MEGARANGE



CI-DECK / Cycle Computer / Lamp

The CI-DECK features easy assembly. The bracket uses a single-piece construction so there will be minimal to no damage even if it is tampered with in shops. The common drive cable drastically reduces the number of parts. The cycle computer SC-TX50 / SC-TX30 / SC-TX31 are lined up for the high-grade version of CI-DECK. It is an advanced system that hub dynamo supplies electric power and the cycling information is always visible by backlight. The Xenon/LED dual lamp LP-M300 and the cycle computer SC-M300 are also available.

CI-DECK

ID-TX50/SM-TX50

- Dual gear position display / Easy-to-read gear indicators
- Single-piece construction (SM-TX50)
- Easy assembly
- Simplified ordering
- Multi-clamp band / Fits both 22.2/25mm handlebars

SM-TX30 *1

- Single-piece construction / Assembly time reduced to one-fourth
- SM-TX31 Cowling
- SM-TX32 *1 Analog Compass

Lamp

- LP-M300 *3
- Xenon/LED dual lamp
- Position light (LED) / It is possible for LED to light up and for a position to be shown even at low speed.
- In-switch light sensor
- No switch operation
- *1 It can be used together with existing SC-TX50/SM-TX50
- *2 Does not meets DIN standard
- *3 Cannot be used with 3.0W hub dynamo

Cycle Computer

SC-TX30

- Large display figures
- Analog-look/digital dual displays
- Speedometer, watch function
- EZ-cable clamp & cable length adjuster equipped

SC-TX31 *1

- Gear change timing indicator
- Analog-like cadence display
- EZ-cable clamp & cable length adjuster equipped

SC-M300/SC-TX50 *2

- Hub dynamo electric power supplies back light
- Display is possible at once in two or more data
- Easy assemble : Without sensor (Rotation signal is received from hub dynamo)
- Easy to read by a big character
- SC information is always visible by back light
- Keep back light for 10 seconds after stopping





ID-TX50 SC-TX30 / SC-TX31 SM-TX30 / SM-TX31

ID-TX50 SM-TX50

SC-TX50







LP-M300 Black SC-M300

SM-TX31 Cowling





Shimano Original Functions

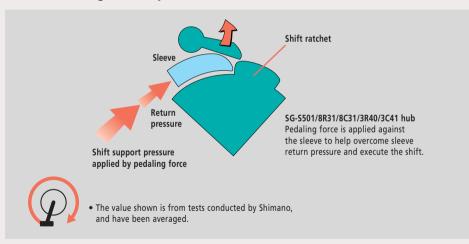
Thanks to the constant challenge to the evolution of bicycle and its functions, the bicycle has become faster, safer, and more comfortable. At Shimano, we have continued to pursue basic performances and advanced functions of bicycle components from the viewpoint of understanding the bicycle as an integrated system. Sometimes we have developed unique functions that were way beyond the bounds of common sense. At other times we have created new functions by analyzing the psychology of cyclists including the professional racers under stress. And now we are working on the further futuristic development themes such as originating products that are easy and more comfortable for everyone and also good for the ecology. The development themes are "Best Shifting Performance" and "Best Braking Performance". We have created all of Shimano original functions introduced here in search of better relationship between bicycles and people.

Best Shifting Performance

Shift Support Mechanism Aids Gear Change (ALFINE, Nexus)

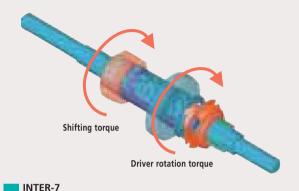
Shimano Gear Change Support Mechanism utilizes some portion of pedaling force at down shifting. The result is a quick and precise downshift with very light feeling. For the automatic shifting system, this Gear Change Support Mechanism is the key. Shifting effort is reduced to the point where the hub can be shifted through a small low-torque DC motor. Less electricity is required, so a smaller battery allows the system to be lighter and more compact.

40% less shifting force required



Inter-8 Gearing (ALFINE, Cyber Nexus, Nexus Inter-8)

The Inter-8 hub has increased its gear ratio to 307%, compared to 244% of the Inter-7 hub. The Inter-8 hub also incorporates a closer gear ratio allowing a more efficient and comfortable pedaling cadence. A truly "all conditions" internal hub has arrived.





The table at left shows the relative gear ratio for the Inter-7 and Inter-8 gear hubs when used with a 20T sprocket. The numbers in parenthesis show the sprocket size that each gear ratio corresponds to in a derailleur system.

Best Shifting Performance

SMARTCAGE Pulley Plate

The use of 13 and 15-tooth pulleys allows for shorter chain cage that can still handle MEGARANGE Gearing, wide ratio gearing and 34-tooth sprockets. The SMARTCAGE pulley plate not only looks better on the bike, it provides the added benefit of more ground clearance.

Cable Roller Guide (NEXAVE C530, C500)

The attached rotating cable guide lightens the frictions for light shifting. The NEXAVE C500 Series can provide comfortable controllability by the lightness equal to the operation of the SPCM3 Front Triple line-up.





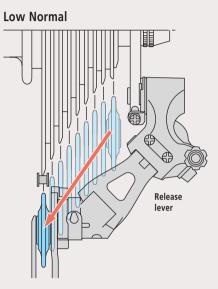


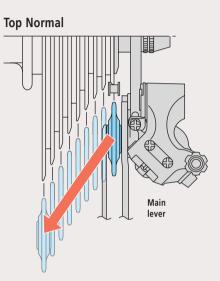
Cable roller guide



Low Normal Rear Derailleur

The low-normal spring allows the left and right shifters to shift up and down by the same operation to realize an intuitive shifting. The shifting to large gears done by spring tension allows shifting at an exact point, noise reduction, and less strain on gears for longer durability.







Light-touch inward shifting during hill climbing



By spring return force Spring force makes entrance into the shifting gate smooth.



By finger force Unequal and excessive power is applied; entrance into the shifting gate is not smooth.

Best Shifting Performance

TAP FIRE Shifter (NEXAVE C530, C500)

Left side shifter uses a rocker-type pushbutton to activate the front derailleur. Right side uses a short-throw lever and release button for the Linear Action rear derailleur and the cable-roller-guide-type rear derailleur. This NEXAVE TAP FIRE Shifter design sets a new standard in responsive low-effort gear shifting.



Optical Gear Display

Visible indicator numbers make gear positions easier to read. Additionally indicator symbols help to understand the direction of shifting progression.







REVOSHIFT Shifter (Nexus)

REVOSHIFT Shifter requires just twisting with thumb and index finger while keeping your hands on the handlebar. Easy and reliable shifting is good for average riders and beginners.

SB-8520 / SL-8520 / SL-7520 / SL-3542E Dual-diameter shift collar allows any hand size to get a secure grip on the shift collar.





SL-3S41E

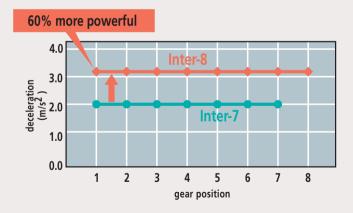
SL-3S42E

Best Braking Performance

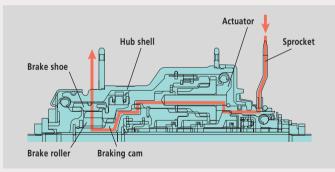
Coaster Brake (NEXUS)

NEXUS Coaster Brake is operated by pedaling backward in a similar way as ordinary types. Its uniqueness is that braking power transmitted to the wheel directly for NEXUS internal coaster brake is independent of the gear shifting mechanism built into the hub. Also it always generates the same braking force regardless of gear position to actualize comfortable and reliable riding. For Inter-7 / Inter-3, it actualizes the braking force to meet the DIN standard. In particular, the Inter-8C is 60% power up than Inter-7C.

Powerful braking force regardless of gear position



Equal braking force in each gear



Best Braking Performance

Roller Brakes

Shimano Multi-Condition roller brakes use a precision cam-and-roller design that delivers strong yet easily controllable braking power. Large disc-type radial cooling fins keep temperatures down, eliminate fade, and extend service life of the lubricant. Sealing channels keep out dirt and water to assure safe and dependable braking performance in wet or dry conditions.

Multi-Purpose Roller Brake (IB-DR70, BR-IM75-F/IM70/C050)

With the adoption of a V-shaped brake shoe, and larger cooling fins, the braking force is closer to that of a mechanical disc brake. The Vshaped brake shoes increase braking power while the large fin raises heat dissipation efficiency that allows it to brake longer and harder without fading. These upgrades make the roller brake more suitable for a wider variety of bicycles.



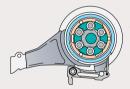




Brake shoe moves up to drum while roller is rotating.



Brake shoe contacts drum to begin braking.





BR-IM70-F

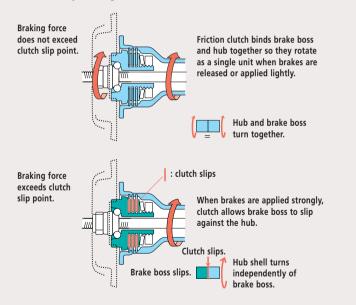




BR-IM75-F Front roller brake for disc mount (International A-type)

Braking POWER MODULATOR System (Front Roller Brake)

As for the Front Roller Brake, the Braking POWER MODULATOR System is built in the hub side to ease sudden lever power input for easy and stable braking control. The braking system is especially user-friendly for beginners.



Braking POWER MODULATOR Unit SM-PM40 / PM50 / PM60



SM-PM40





Mechanical disc brake

*SM-PM40 : For V-BRAKE (MTB use) SM-PM50 : For mechanical disc brake (city use) SM-PM60 : For V-BRAKE (city use)

A CAUTION

SM-PM50

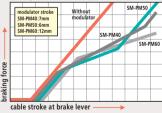
The POWER MODULATOR is a device that makes it easier to control braking by increasing the cable stroke at the brake lever within a certain constant range of braking force. If the effective operating range of the power modulator will be exceeded, the lever

stroke and the brake will operate as a normal disc brake (sensitively and powerfully). In that case, the brakes may operate more powerfully than intended and may cause the wheel to lock up. Therefore it is essential that you fully understand and test the performance of the power modulator before use.

The POWER MODULATOR is not equipped with a function to prevent the wheel from locking up.



V-BRAKE



BJARNE EGEDESØ A/S Denmark, Iceland, Greenland Phone 6316-8001 Fax 6316-8004

BJARNE EGEDESØ BALTICS Estonia: Phone +372 (56) 41 951 Latvia: Phone +45 6316 8001 Lithuania: Phone +45 6316 8001

COOLHEAT, S.A.LTD. South Africa Phone 011-8075282 Fax 011-8072998

EBSAT LASTIK VE YEDEK PARCA TIC. LTD. STI. Turkey

Phone 232-4831387 Fax 232-4834663

EUROTRADE Ltd. Southeast Europe Area Phone +30 2610 9114-50,-51,-52 Fax +30 2610 911453

ALBIMI LTD. Kosovo Phone +381 280 20006 Fax +381 280 28540

CS-EUROTRADE D.O.O. Slovenia & Croatia Phone +386 7 49 02 500 Fax +386 7 49 02 549

SHIMANO

www.shimano.com

SHIMANO EUROPE B.V. Industrieweg 24, 8071 CT Nunspeet, The Netherlands Phone: +31-341-272222 Fax: +31-341-272200

SHIMANO AMERICAN CORPORATION One Holland, Irvine, California 92618, U.S.A. Phone: +1-949-951-5003 Fax: +1-949-768-0920

SHIMANO CANADA LTD. 427 Pido Road, Peterborough, Ontario K9J 6X7, Canada Phone: +1-705-745-3232 Fax: +1-705-745-1949

recycled



PLANET BIKE D.O.O. Serbia & Montenegro, Bosnia & Herzegovina, Macedonia Phone +381 11 3149 033 Fax +381 11 3149 101

ROM-EUROTRADE DISTRIBUITOR S.R.L. Romania Phone +40 21 350 5624 Fax +40 21 350 5457

VELOMANIA LTD. Bulgaria Phone +359 2 812 7060 Fax +359 812 7061

FUCHS-MOVESA AG Switzerland Phone +41 56 464 46 46 Fax +41 56 464 46 47

MACARIO LLORENTE, S.A. Spain Phone +34 91 887 37 37 Fax +34 91 882 82 25

MADISON CYCLES PLC UK and Ireland Phone 0845-603 4612 Fax 0208-3853443

M.I.C. MILAN INTERNATIONAL COMMERCE SpA Italy. Malta and Tunesia

Phone 0331-467311 Fax 0331-464790

NIKOS MANIATOPOULOS S.A. Greece and Cyprus Phone 02610-993045 Fax 02610-990424

NORMARK RUSSIA Russia and Belarus Phone +7 (495) 7753732 Fax +7 (495) 9811189 PAUL LANGE & CO.

Germany Phone 0711-258802 Fax 0711-2588305

PAUL LANGE HUNGARY Hungary Phone +361-455 8001 Fax +361-455 8019

PAUL LANGE OSLANY S.R.O. Slovak Republic Phone 046-5492344 Fax 046-5491056

PAUL LANGE OSTRAVA S.R.O. Czech Republic Phone 596 616 835 Fax 596 780 995

PAUL LANGE UKRAINE Ukraine Phone +38 044 5371 466 Fax +38 044 4943 651

R.& P. PAWLAK Poland Phone 061-8787335 Fax 061-8787266 SABA DOCHARKH (CYCLE) CO.LTD. Iran Phone +98 21 87 80 651 Fax +98 21 88 78 72 78

SHIMANO BENELUX B.V. The Netherlands, Belgium and Luxembourg Phone 0341-272327 Fax 0341-272291

SHIMANO FRANCE COMPOSANTS CYCLES France Phone 0321-73-25-25 Fax 0321-55-84-27

SHIMANO NORDIC CYCLE AB Sweden Phone 018-561600 Fax 018-500322

SHIMANO NORDIC CYCLE A/S Norway Phone 0047-66778010 Fax 0047-66778011

SHIMANO NORDIC CYCLE OY Finland Phone +358-20-1550800 Fax +358-20-1550801

SOC. COMERCIAL DO VOUGA LDA. Portugal

Phone 234-601500 Fax 234-601159 THALINGER LANGE GMBH

Phone 07242-4970 Fax 07242-497248

SHIMANO AUSTRALIA PTY. LTD. 35 Mangrove Lane, Taren Point, NSW 2229, Australia Phone: +61-2-9526-7799 Fax: +61-2-9526-7622

SHIMANO INC. 3-77 Oimatsu-cho, Sakai-ku, Sakai-shi, Osaka 590-8577, Japan Phone: +81-72-223-3281 Fax: +81-72-223-3493



When participating in the sports depicted in this brochure, Shimano recommends that you use the proper safety protection for that sport. The riders seen in these pictures are experienced experts or professionals, and Shimano requests that you do not attempt to duplicate any of the actions shown in this brochure that are beyond the capabilities of your equipment or your own abilities.



Specifications are subject to change for improvement without notice. ©2007 by Shimano Inc. 0907 / Printed in Belgium XBC IZM 271370ENGR1

This publication is printed on chlorine-free paper which can be