

English (GB)

2008

**SHIMANO**

**MOUNTAINBIKE  
COMPONENTS  
SYSTEMS**

# Great performance and great

When you're flying down a back woods trail you can't afford to worry about how your bike's going to respond. We design our mountain bike components so they do what you want them to - instantly. Shimano components create a more efficient bicycle-to-rider interface that demands less of your energy. We do it through low-effort and precise shifting systems and through V-BRAKES and disc brakes that deliver superior power and modulation. By using components that work for you, you can focus more on the task at hand — riding your bicycle. DEORE XT has been completely redesigned and remastered following on the technology and

## Contents

"XT Concept"	4	DXR	13	MTB Wheels	21	Shimano Original Functions	27
Classification of MTB riding styles	6	LX	14	ALIVIO	22	Dual Control Lever	28
XTR	8	HONE	16	Mechanical Disc Brakes	23	Instant Release	29
XT	10	DEORE	18	ACERA / ALTUS	24	Multi-Release	29
SAINT	12	Disc Brake Performance	20	Non-Series Components (Crankset)	26	2-way Release	29
				Hydraulic Disc Brakes	26	RAPIDFIRE Plus Shifter	30

# fun on or off the road

options concept of XTR. The new SHIMANO SHADOW RD is designed for more aggressive riding. Together with double-servo-panta mechanism derailleurs, you have the right choice for your riding style. The new XT disc brake features high power braking with servo-wave brake levers and a beefed up caliper. FC-M582/ HOLLOWTECH II crankset with steel spindle saves 20g from FC-M580 previous model. SL-M530 RAPIDFIRE Plus shifter, RD-M531-SGS Top Normal rear derailleur and FC-M532/ M533-K 2-piece construction cranksets are added to the DEORE series. Shimano MTB components support a wider range of riding styles for riders' fun.

Wide Link	30	Low Normal Shifting System	33	Free Stroke Adjustment	35	Internal Grease Sleeve	37
SIS-SP41	30	Optical Gear Display	34	Reach Adjust	35	Shimano Disc Brakes	38
HG / Hyperdrive	31	TOP SWING Front Derailleur	34	2-piece Crankset Construction	36	Center Lock System	38
Shimano Shadow RD	32	DUAL SIS	34	HOLLOWTECH Crank Arm & OCTALINK	36	Development of Braking System	39
Double Servo-Panta Mechanism	33	Advanced Light Action	34	Cup & Cone Bearing Hubs	37		
Top Normal Shifting System	33	SERVO WAVE Action	35	Labyrinth & Contact Sealing	37		

ENGINEERED FOR





# THE WAY YOU RIDE



SHIMANO SHADOW RD

## Engineered for the way you ride

As Mountain bikes continue to become more diverse, obviously components must evolve. New Shimano Deore XT addresses the various needs of today's riders. The new rear derailleur "Shimano Shadow RD", was specially designed for more aggressive all mountain riding. Together with double servo-panta mechanism derailleurs, you have the right choice for your riding style. The new XT disc brake with Servo-Wave, features high power braking and superior modulation. Featuring new technologies and plenty of options like XTR, the all new Deore XT is truly engineered for the way you ride.

# Classification of MTB riding styles

When we at Shimano develop MTB components, we take into consideration such factors as strength, durability, compatibility and cost-performance based on the classification of MTB riding styles. HONE, for instance, is developed as "All Mountain" and "Cross Country" component. So its strength and durability are quite different from those of SAINT although they have common features such as hub axle mount type rear derailleurs. Therefore, every component of HONE cannot be used as a replacement of SAINT component or as a component for "Freeride". We sincerely ask our dealers to strongly recommend that users should make intended use clear and use products appropriate to it.

## Product combination is also important.



































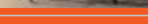
Product combination as well as product category is very important for safe and comfortable riding. We at Shimano design every product giving careful consideration to the dynamics of related products to achieve a high level of performance. So, you may not get satisfactory performance out of the combination with the products of different categories even if they are all Shimano products.



## Don't use a bike equipped with casual MTB / CTB components on aggressive off-road trail.

ALIVIO, ACERA and ALTUS components are not developed for the serious MTB riding, while making a clear distinction with the high-end MTB components such as DEORE and SAINT groups in terms of purpose of use. For instance, the use of a bike equipped with ALIVIO or ACERA components for aggressive riding may cause damage and possible injury. Also, TOURNEY components are the MTB-look product group for casual city riding on paved roads. We will appreciate that you understand the product level and intended use of each component group and please give guidance to users on safe riding.

<b>MTB Cross Country Racing</b>	Riding style
	Trail
	Bike style
<b>MTB Cross Country</b>	Riding style
	Trail
	Bike style
<b>MTB All Mountain</b>	Riding style
	Trail
	Bike style
<b>MTB Freeride Downhill</b>	Riding style
	Trail
	Bike style
<b>MTB Trekking</b>	Riding style
	Trail
	Bike style
<b>Casual MTB</b>	Riding style
	Trail
	Bike style
<b>City Bike</b>	Riding style
	Trail
	Bike style

Cross country racing, marathon racing				
All type of terrain, minimal jumps and drops.				
Most hard tails and short travel full suspension (*less than 100mm travel).				
Cross country, marathon				
All type of terrain, minimal jumps and drops.				
Most hard tails and short travel full suspension (*less than 130mm travel).				
Enduro, expedition				
All type of terrain, with small jumps and drops.				
Full suspension (*less than 150mm travel).				
Extreme, North Shore, dirt jump, downhill racing, street				
Downhill, moderate or larger jumps and drops, technical descents.				
Long travel full suspension (*more than 150mm travel, Strong frame and parts).				
Trekking, cycling				
On-road				
Trekking bike, light				
Casual, sports riding				
Smooth off-road				
Short-travel suspension, Non-suspension				
Casual, city riding				
City paved road				
MTB look-alike				

XTR

LX  
DEORE

XT

HONE

SAINT

XT

ALIVIO  
ACERA  
ALTUS

Tourney





## Engineered for the way you ride.

The XTR pursued the strength and durability like a fine sharpened edge of the sword while challenging the maximum lightweight again.

### RD-M972-GS/SGS Shimano Shadow RD

- **Shimano Shadow RD /** Low profile and top normal design intended for more aggressive riding.
- **Low profile and single tension construction /** No hit to chain stay in rough riding conditions, results in smooth and silent performance.
- **Low profile design**
- **Super lightweight**
- **Direct routing reduces the risk of snagging.**
- **Stronger return spring for more crisp shifting feeling**
- **Capacity :** GS 33T, SGS 45T
- **Weight :** GS 180g, SGS 182g

### RD-M970-GS/SGS Low Normal Rear Derailleur

### RD-M971-GS/SGS Top Normal Rear Derailleur

- **Super Wide Link for higher rigidity**
- **Capacity :** GS 33T, SGS 43T
- **Weight :**  
RD-M970-GS 197g, RD-M970-SGS 199g  
RD-M971-GS 196g, RD-M971-SGS 197g

### ST-M970 Dual Control Lever for V-BRAKE

### ST-M975 Dual Control Lever for Disc Brake

- **Instant release for quicker shifts /** A click of the upper lever releases the cable, same as it always has. The difference is now, cable is released immediately when the lever is depressed making shifting that much faster.
- **Multi-release allows two-gear shifts /** Now shift multiple gears in both directions using the main lever or the secondary release lever.
- **Weight :** ST-M975 442g

### SL-M970A RAPIDFIRE Plus Shift Lever

- **Instant release for quicker shifts**
- **Multi-release allows two-gear shifts**
- **2-way release for different riding styles or shifting from various riding positions /** The upper lever still performs the same function, but now it swings both ways. Pull it with your finger or push it with your thumb-you choose
- **Weight :** 215g

### FC-M970 HOLLOWTECH II Crankset

- **Titanium / carbon composite middle chainring design for improved durability**
- **Left crank arm fixation for easier installation and lighter weight**
- **Gearings :** 44-32-22T, 44-32-24T
- **Weight :** 770g (44-32-22T, 175mm)

### BL-M975 Disc Brake Lever

### BL-M970 V-BRAKE Lever

- **Reach adjustment for a custom lever feeling**
- **Weight :** BL-M975 192g, BL-M970 166g

### BR-M975

Hydraulic Disc Brake Caliper for International A-type

### BR-M975P

Hydraulic Disc Brake Caliper for Post-Mount type

### SM-RT97 Center Lock Disc Rotor

### SM-BH59 Brake Hose

- **Optimum stiffness-to-weight ratio**
- **Rotor variations :** SM-RT9755\*(140mm), RT97(160mm), RT97M(180mm), RT97L(203mm)  
\*For rear only
- **Weight :** BR-M975 217g, BR-M975P 221g  
SM-RT97 135g, SM-BH59 55.2g

### BR-M970 V-BRAKE

- **Proven performance of Shimano's Super Linear Response system**
- **Weight :** 400g

### FD-M970 TOP SWING Front Derailleur

### FD-M970-E BB Mount TOP SWING FD

### FD-M971 Down Swing Front Derailleur

- **Adjustment screws positioning for easier reach**
- **Weight :** FD-M970 125g, FD-M970-E 142g, FD-M971 148g

### CS-M970 Cassette Sprockets

- **3-piece alloy carrier increases stiffness**
- **Gearings :** 11-32T, 11-34T, 12-34T
- **Weight :** 224g (11-32T)

### HB/FH-M975 Hub set for Disc Brake

### HB-M976 Front Hub for 20mm Axle Disc Brake

### HB/FH-M970 Hub set for V-BRAKE

- **Angular contact bearings and oversize alloy axles for increased wheel rigidity, precision bearing adjustment and easy maintenance.**
- **Weight :** HB-M975 145g, FH-M975 270g  
HB-M976 230g, HB-M970 140g, FH-M970 270g  
QR(F) 56g, QR(R) 62g

### PD-M970 SPD Pedal

- **Our lightest MTB SPD pedal ever**
- **Weight :** 325g (w/o cleats)

### WH-M975 Wheel Set for Disc Brake

### WH-M970 Wheel Set for Rim Brake

- **Super light wheel set**
- **Scandium alloy rim**
- **Tubeless & tube tire compatible**
- **Weight :**  
WH-M975 1525g pair (front : 697g, rear : 828g)  
WH-M970 1512g pair (front : 676g, rear : 836g)



3 X 9-speed

### WH-M975



SHIMANO *Deore*  
**XT**

NEW



SHIMANO SHADOW RD

## Engineered for the way you ride

New Shimano Deore XT addresses the various needs of today's riders. The new rear derailleur "Shimano Shadow RD", was specially designed for more aggressive all mountain riding. The new XT disc brake with Servo-Wave, features high power braking and superior modulation. Featuring new technologies and plenty of options like XTR, the all new Deore XT is truly engineered for the way you ride.

### **RD-M772** Shimano Shadow RD

- **Low profile and top normal design intended for more aggressive riding.**
- **Low profile and single tension construction / No hit to chain stay in rough riding conditions, results in smooth and silent performance.**
- **Direct routing reduces the risk of snagging.**
- **Stronger return spring for more crisp shifting feeling**
- **Capacity : GS 32T, SGS 45T**

### **RD-M770** Low Normal Rear Derailleur

#### **RD-M771** Top Normal Rear Derailleur

- **Double servo-panta mechanism**
- **Simple cable routing (straight pull)**
- **Capacity : GS 32T, SGS 45T**

### **ST-M775** Dual Control Lever for Disc Brake

#### **ST-M770** Dual Control Lever for V-BRAKE

- **Compact design, and ergonomic shaped brake lever**
- **Multi-Release allows shifts of two gears.**
- **Instant Release for quick shifts**

### **SL-M770** RAPIDFIRE Plus Shifter

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

### **FC-M770** HOLLOWTECH II Crankset

- **Steel/carbon composite construction and middle gear double durability**
- **Thicker and stiffer 44T ring**
- **Gearing : 44-32-22T**

#### **FD-M770** TOP SWING Front Derailleur

#### **FD-M770-E** BB mount TOP SWING FD

#### **FD-M771** Down Swing Front Derailleur

- **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**

### **BL-M775** Disc Brake Lever

#### **ST-M775** Dual Control Lever

- **New level of high performance and controllability**
- **Servo Wave for quicker engagement, 20% more stopping power**
- **Reach adjustment for personal preference**
- **Free stroke adjustment**

### **BR-M775** Hydraulic Disc Brake Caliper

#### **SM-RT78** Center Lock Disc Rotor

#### **SM-BH59** Brake Hose

- **Stiffer mono-block caliper body**
- **New rotor design to increase pad life**
- **Rotor variations : SM-RT78(160mm), RT78M(180mm), RT78L(203mm)**

### **HB/FH-M775** Hub set for Disc Brake

#### **HB/FH-M770** Hub set for V-BRAKE

#### **HB-M776** 20mm Thru-axle for Disc Brake

- **Light weight : -39g (FH-M775), -10g (HB-M775) (compared to previous models)**
- **Quicker engagement freehub body (10 degrees)**
- **Center Lock rotor mount (HB/FH-M775, HB-M776)**

### **BL-M770** V-BRAKE Lever (1.5-finger)

### **BR-M770** Cassette Sprockets

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

### **PD-M770** SPD Pedal

- **Easy step-in/out**
- **Mud shedding interface**

### **WH-M775** XC Disc Brake Wheel Set

#### **WH-M770** XC Rim Brake Wheel Set

#### **WH-M776** All-Mountain/Enduro Wheel Set

- **Ultra thin wall extrusion reinforced at spoke hole**
- **Straight and 2-across spoke lace for increased torsional rigidity and spoke life**
- **Center Lock rotor mount system (M775/M776)**
- **20mm thru axle (M776)**
- **Weight : WH-M775 1677g pair (front : 755g, rear : 922g) WH-M770 1670g pair (front : 722g, rear : 948g) WH-M776 2043g pair (front : 959g, rear : 1084g)**

### **WH-M775**

Dual Control  
Lever



RAPIDFIRE  
Plus



2-WAY  
RELEASE



HOLLOWTECH  
II



INSTANT  
RELEASE



CENTER LOCK  
RELEASE



3 X 9-speed



## Super heavy duty

The design concept for SAINT is "Super Heavy Duty". The concept is achieved by equipping SAINT with an innovative mounting system that fixes the rear derailleur directly to the rear hub axle, super durable HOLLOWTECH II crankset and bottom bracket as well as powerful disc brakes. These components are sure to become the cyclists' guardian in the most challenging situations.

**RD-M801-SS/GS/SGS** Rear Derailleur

**RD-M806-SS/GS/SGS** Rear Derailleur

- Top normal design
- Capacity : SS 29T, GS 33T, SGS 45T
- Weight :  
SS 338g, GS 348g, SGS 374g (M801)  
SS 329g, GS 339g, SGS 365g (M806)

**SL-M800** RAPIDFIRE Plus Shifter

- Short stroke (right hand shifter)

**FC-M805**

HOLLOWTECH II Crankset for 57.5mm chain line

**FC-M800**

HOLLOWTECH II Crankset for 50.0mm chain line

- Weight : FC-M800-3 1194g (175mm)  
FC-M800-2 1168g (175mm)  
FC-M800-1 1100g (175mm, 38T)

**FD-M805/FD-M806**

Front Derailleur (for 57.5mm chain line)

- Wide link design
- Weight : FD-M805 172g, FD-M806 177g

**BL-M800** Brake Lever

- SAINT branded hydraulic disc brake levers

RD-M801-GS

**BR-M800** Disc Brake System (Mineral Oil)

**SM-RT80/RT80S** Disc Rotor

**SM-BH63** Brake Hose

- Mono-body design
- Oversized Center Lock
- SM-RT80 : 160mm, SM-RT80S : 203mm
- Weight :  
BR-M800 380g (F&R w/ adapter)  
SM-RT80 210g  
SM-RT80S 145g

**HB-M801** Front Hub

- Weight : 265g

**FH-M801**

Rear Freehub for 135mm O.L.D.

- Weight :  
465g (w/o axle), Axle 115g

**FH-M806**

Rear Freehub for 150mm O.L.D.

- Weight : 495g (w/o axle), Axle 155g



RAPIDFIRE  
Plus



MEGA  
DRIVE TRAIN

HOLLOWTECH  
II



# SAINT

3/2/1X9-speed



**FC-MX70** HOLLOWTECH II Crankset

**SM-CR80** Chaining

- Conceived for strength based on proven SAINT HOLLOWTECH II design
- Chaining options : 34/38/41/42/43/44/46T
- Reinforced pedal/crank interface (T-nut style steel threaded bushing)
- Optical Gear Display
- Crank arms length variations : 165mm, 170mm, 175mm, 180mm
- 9-speed HG chain compatible
- Chainline 44mm
- 68mm BB shell compatible

**BL-MX70** V-BRAKE Lever

- Right and Left hand levers available

- Proven performance of Shimano's Super Linear Response system
- 2-finger Deore-type lever / The preferred choice of top professionals

**BR-MX70** V-BRAKE

- Rear brake only
- Cold forged brake arm
- Cartridge shoe

**HB-MX70** Front Hub

**FH-MX70** Rear Freehub

- Super smooth angular contact bearings
- Durable, quicker engagement freehub based on new XTR
- 32H/36H

**CS-MX66** Sprocket

- Single sprocket : 14/15/16/18T



SHIMANO



SHIMANO  
**DXR**

Shimano DXR-bringing top-level design and engineering to BMX racing.

Designed to meet the demands of today's Olympic prospects. Ideal for use at the local race track.



## Components for cross country and trekking

DEORE LX has all upgraded functions of Shimano technology, including the Dual Control shift levers. The component system also features the HOLLOWTECH II drivetrain, Center Lock compatible rear freehub and front hub, and 2 piece mono-body style disc brake calipers.

### ST-M580/M585 Dual Control Levers

- **Dual Control Levers** / Allows lever operation from multiple hand positions.
- **Refined lever shape and mechanism** / New lever shape improves finger-lever interface. Compact shifting mechanism, slims down appearance.
- **Optical Gear Display**
- **ST-M580** : for V-BRAKE
- **ST-M585** : for hydraulic disc brake



SL-M580

### SL-M580 RAPIDFIRE Plus Shifter

- **2-way release for faster shifts during various riding conditions and situations**

#### 2-way release



### RD-M581-GS/SGS Top Normal Rear Derailleur

### RD-M580-GS/SGS Low Normal Rear Derailleur

- **Wide link design**
- **Rubber bumper on P-body** : Option / Reduces noise and adds durability
- **Capacity** : GS 33T, SGS 45T

### CS-M580 Cassette Sprocket

- **Lighter weight minimal design sprocket**
- **Gearing** : 11-34T, 11-32T

### FC-M582/M583-K NEW

HOLLOWTECH II Crankset

- **Lighter and stiffer**
- **Hyperdrive SG-X chainrings**
- **FC-M582** : 44T-32T-22T
- **FC-M583-K** : 44T-32T-22T, 48T-36T-26T chaincase compatible

### FD-M580A/M580-E/M581A

Front Derailleur

- **Wide link design**
- **Hyperdrive compatible**
- **Dual Pull** / Dual pull design allows it to be used with top or bottom cable routing.
- **Multi Clamp** / Multi-clamp band compatible with all frame dimensions. Adapters utilized for 28.6 and 31.8 and 34.9mm sizes.
- **Variations** :  
**FD-M580A-3** : TOP SWING FD (63-66")  
**FD-M580A-6** : TOP SWING FD (66-69")  
**FD-M580-E** : TOP SWING E-type FD (66-69")  
**FD-M581A-3** : Down Swing FD (63-66")  
**FD-M581A-6** : Down Swing FD (66-69")

### BR-M585 Disc Brake System

### SM-RT62 Disc Rotor

### SM-BH59 Hose

- **Hydraulic disc brake (mineral oil)**
- **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**

### BR-M580 V-BRAKE

- **Cartridge shoe**

### BL-M571 V-BRAKE Lever

- **Lever reach adjustment**

### BL-M585 Hydraulic Disc Brake Levers

- **Lever reach adjustment**



### HB/FH-M580 Hub set for V-BRAKE

### HB/FH-M585 Hub set for Disc Brake

- **Center Lock system compatible (M585)**
- **Cup & Cone bearing**
- **Smooth rolling**
- **Rubber cap available for Center Lock mount**
- **32H/36H**
- **Double contact sealing**
- **Improved sealing system** / Improved external seals, O-rings of front hub and internal grease sleeve help maintain and increase service life to keep the original performance over an extended time period.

# SHIMANO DeoreLX

3X9-speed

Dual Control  
Lever

RAPIDFIRE  
Plus





FC-M601-2

# HONE

3/2×9-speed



# HONE is an affordably priced enduro/all-mountain group intended to “sharpen, improve and develop” your riding skills.

**SL-M580** RAPIDFIRE Plus Shifter

**BL-M585** Hydraulic Disc Brake Lever

See page 14

**RD-M601-GS/SGS**

Top Normal Rear Derailleur

- **Hub axle installation /**  
Direct axle mounting increases durability and preserves index shifting.
- **Adjustable bump stop /**  
Reduces noise and damage to frame and rear derailleur
- **Integrated skid plate design /**  
The smooth, reinforced rear derailleur lower surface moves the cable anchor to top to prevent damage and increase durability against impact
- **Top normal design**
- **Compatible with FH-M600**
- **Capacity :** GS 33T, SGS 45T

**FC-M600-3** HOLLOWTECH II Crankset

**FC-M601-2** HOLLOWTECH II Crankset

- **HOLLOWTECH II crankset /**  
Provides optimal balance of light weight and rigidity
- **FC-M600-3 :** 44-32-22T
- **FC-M601-2 :** 32-22T w/Bash Guard
- **Hyperdrive SG-X chainrings**
- **DUAL SIS compatible**
- **Steel BB axle and steel pedal bushing for durability**

**BR-M601** Hydraulic Disc Brake System

- **Opposed 2-piston /** Strong braking power with minimalist design
- **160, 180 and 203mm rotors available**
- **Easy and fast set-up /** Shimless caliper mounting and adjustment and Center Lock rotor mounting simplifies installation
- **Center Lock system**
- **Metal and resin pads are available**
- **Compatible with International and Post-type mounts**

**FD-M600/M600-E/M601** Front Derailleur

- **Features the innovative functions of XTR and XT**

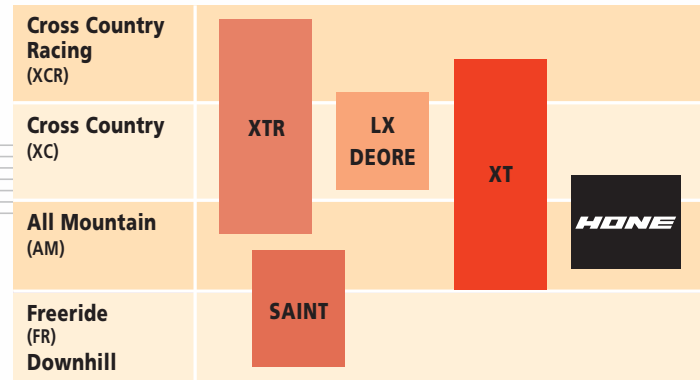
**HB-M600/FH-M600** Hub and Freehub

- **Cup & Cone bearing**
- **Center Lock system compatible**
- **New solid hub axle mount (FH-M600)**
- **Improved sealing system /** Improved external seals, O-rings of front hub and internal grease sleeve help maintain and increase service life to keep the original performance over an extended time period.

RD-M601-GS



## Positioning of HONE



(Not price range)

See page 6-7 for Classification of MTB riding types

\* HONE is developed for all mountain riding and is different from SAINT which is intended for extreme freeriding.

## High-performance components for serious cycling fun

DEORE is designed to appeal to a wide range of cycling fans by inheriting the key functions of DEORE XT and DEORE LX at a great value. DEORE design concept blends "Smart & Sharp" forms intended to complement bikes for trekking as well as MTB's.

### ST-M530/M535 Dual Control Lever

- **Dual Control Lever** / Allows lever operation from multiple hand positions.
- **Compact shifting mechanism**
- **Optical Gear Indicator**
- **SIS-SP41 outer casing**
- **ST-M530** : for V-BRAKE
- **ST-M535** : for hydraulic disc brake
- **Color options** : Black, silver

NEW

### RD-M531-SGS Top Normal Rear Derailleur

### RD-M530-SGS Low Normal Rear Derailleur

- **Wide link design** / Increases rigidity and service life
- **Capacity** : 45T
- **Color options** : Black, silver

### FD-M530/M531 Front Derailleur

- **Wide link design**
- **Hyperdrive compatible**
- **TOP SWING front derailleur (FD-M530)**
- **Dual Pull**
- **Multi Clamp**
- **Compatible with 44T and 48T top**
- **Total capacity** : 22T
- **Top-middle capacity (min)** : 12T
- **Variations** :
  - FD-M530-3** : TOP SWING FD (63-66")
  - FD-M530-6** : TOP SWING FD (66-69")
  - FD-M531-3** : Down Swing FD (63-66")
  - FD-M531-6** : Down Swing FD (66-69")

### FC-M532/M533-K Crankset

NEW

- **9-speed HG chain compatible**
- **2-piece construction**
- **Outboard bearing system**
- **FC-M532** : 44-32-22T, 48-36-26T
- **FC-M533-K** : 44-32-22T, 48-36-26T chaincase compatible
- **Color options** : Black, silver

### SL-M530 RAPIDFIRE Plus Shifter

NEW

- **2-way release for faster shifts during various riding conditions and situations**
- **SIS-SP41 outer casing**

### CS-HG50-9 9-speed Cassette Sprockets

- **Wide-range Mega-9 gearing**
- **HG HyperGlide sprocket design**

### BR-M535 Hydraulic Disc Brake

### SM-RT62 Disc Rotor

### SM-BH59 Brake Hose

- **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**

### BL-M535 Hydraulic Disc Brake Lever

- **Lever reach adjustment**

### BR-M530 V-BRAKE

- **Longer arms for better mud guard clearance (107mm)**
- **Color options** : Black, silver

### BL-M511 V-BRAKE Lever

- **Adjustment lever reach**
- **Color options** : Black, silver

### HB/FH-M530 Hub set for V-BRAKE

### HB/FH-M535 Hub set for Disc Brake

- **Center Lock system compatible (M535)**
- **Improved sealing system** / O-rings of front hub and internal grease sleeve of rear freehub
- **Cup & Cone bearing**
- **Smooth rolling**
- **Rubber cap available for Center Lock mount**
- **Color options** : Black, silver
- **32H/36H**



A DEORE low normal rear derailleur and Dual Control Lever are also available.





# Disc Brake Performance

**M01/M03/M06** : Longer pad-life, good for anti-fade, good consistency either dry/wet. May cause noise while braking.

**M02/M04/M05/M07/M07S** : Same level performance as metal pad. Shorter pad-life than metal.

**M06Ti** : Longer pad-life, good for anti-fade, good consistency either dry/wet. May cause noise while braking. Titanium plate, light weight.

**M07Ti** : Longer pad-life on long descend. Titanium plate, light weight. **A01S/B01S** : Same performance of metal pad. Longer pad-life on long descends.

**M08** : Do not use M08 brake pads in combination with the BR-M515/BR-M515-LA brake systems. If M08 brake pads are used, the brake arm and caliper will touch before the pad wear indicator is noticed and a noise indicating that the pads need to be replaced is heard, and this will result in a gradual reduction in braking performance until ultimately the brakes stop working.

**C01** : Easy, controllable metal pad. Good for trekking use.

Model	XTR M975	SAINT M800	HONE M600	DEORE XT M775	DEORE LX M585	DEORE M535	M545	M415	M495	M485	M465	R505	NEXAVE C901
Application	competition/ all mountain	extreme freeride	all mountain	crosscountry / all mountain / trekking	cross country / trekking	cross country / trekking	sport / recreation	sport / recreation	sport / recreation	sport / recreation	sport / recreation	sport / recreation	utility & recreation
Caliper	opposed two-piston	opposed two-piston	opposed two-piston	opposed two-piston	opposed two-piston	opposed two-piston	single piston	single piston	single piston	opposed two-piston	single piston	single piston	opposed two-piston
Pad	M07Ti:resin option/ M06Ti:metal	M06:metal option/ M07S:resin	M06:metal option/ M07S:resin	A01S:resin option/ M06:metal	M07S:resin option/ M06:metal	M07S:resin option/ M06:metal	M06:metal	M08:resin	M08:resin	B01S:resin	M08:resin	M06:metal	C01:metal
Average Weight (g)	Caliper (front)	108	190 (metal) w/ adapter	198 (metal) w/ adapter	142 (resin)	183 w/ adapter	180 w/ adapter						161
	Rotor	135 (160mm)	210 (203mm)/ 145 (160mm)	149 RT62 (160mm)	151 RT78 (160mm)	149 RT62 (160mm)	149 RT62 (160mm)						168
	Hub (front)	145	265 HB-M801	201 HB-M600	170 HB-M775	201 HB-M585	200 HB-M535						230
	Lever (front)	221 ST-M975	248 ST-M800	252 ST-M600	256 ST-M775	252 ST-M585	260 ST-M535						126 BL-C901
	Total	609g	913g (203mm rotor)	800g	719g	785g	789g						685g

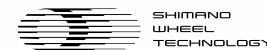
**Note:** • Always use genuine Shimano mineral oil with Shimano disc brakes.

• Hubset is not included with disc brake systems.

• Both international A-type and Post-Mount type are available.

• Brake pad number is on the backside of the pad.

# Mountain Bike Wheel Systems



## WH-M975/WH-M970

- **Balanced spoke pattern for increased lateral stiffness**
- **WH-M975** : Disc brakes compatible only  
**WH-M970** : Rim brakes compatible only
- **Light but tough Scandium alloy rims**
- **Tubeless & tube tire compatible allows for a wider choice of tires**
- **Quicker engagement 4-pawl freehub body engages faster than previous generations for a feeling of instant power transfer**
- **Top-notch, premium laser cut logo QR levers**
- **Center Lock rotor mounts to the hub quickly and effectively (WH-M975)**
- **Weight** : WH-M975 1525g pair  
WH-M970 1512g pair



## WH-M775/WH-M776/WH-M770 <sup>NEW</sup>

- **WH-M775/M776** : Disc brakes compatible only  
**WH-M770** : Rim brakes compatibility only
- **Ultra thin wall extrusion reinforced at spoke hole**
- **Center Lock rotor mounts to the hub quickly and effectively (M775/M776)**
- **Straight spokes and 2-cross lace for increased torsional rigidity and spoke life**
- **Quicker engagement 4-pawl freehub body engages faster than previous generations for a feeling of instant power transfer**
- **Center Lock rotor mount system (M775/M776)**
- **20mm thru-axle (M776)**
- **Weight** : WH-M775 1677g pair  
WH-M776 2043g pair  
WH-M770 1670g pair



## WH-M565/WH-M565-disc <sup>NEW</sup>

- **Versatile wheel engineered to endure the worst conditions**
- **WH-M565** : Both disc and rim brake compatible  
**WH-M565-disc** : Disc brakes compatible only
- **24 spokes front and rear**
- **Center Lock rotor mounts to the hub quickly and effectively**
- **Machined rim braking surface for smooth braking**
- **Weight** : WH-M565 2109g pair  
WH-M565-disc 2125g pair



WH-M565

## WH-M505/WH-M505-disc

- **Shimano quality replacement wheel set**
- **WH-M505** : Both disc and rim brake compatible  
**WH-M505-disc** : Disc brakes compatible only

- **Center Lock rotor mounts to the hub quickly and effectively**
- **Angular contact bearing assemblies and dependable Shimano freehub**
- **28 spokes front and rear**
- **Weight** : WH-M505 2088g pair  
WH-M505-disc 2164g pair



Center Lock adapter for 6-bolt rotor (SM-RTAD10)  
29g/wheel



WH-M975



WH-M775



**OCTALINK**



**RAPIDFIRE  
Plus**

**EZ FIRE-Plus**



# SHIMANO **ALIVIO**

**3×8-speed**

## High performance, best value MTB components

**ST-M410** RAPIDFIRE Plus Shift/Brake Lever Set

**ST-M405** EZ FIRE Plus Shift/Brake Lever Set

**SL-M410** RAPIDFIRE Plus Shift Lever

- 8-speed shifting
- Wide Optical Gear Display
- Updated EZ FIRE Plus design (ST-M405)
- Alloy brake levers and triggers (ST-M405)
- Lever reach adjustment
- Color options : Black, silver (ST-M410)

**RD-M410-SGS** Rear Derailleur

- Compatible with 8/7-speed HG sprocket
- Advanced Light Action design
- 13-tooth pulleys
- Low-friction link pivot bushings
- SIS rear index shifting • Capacity : 43T
- Color options : Black, silver

**FD-M412** TOP SWING Front Derailleur



**FD-M410-E**

TOP SWING Front Derailleur (BB mount)

**FD-M413** Down Swing Front Derailleur



- 7/8-speed compatible
- Hyperdrive compatible
- Wide link design for great shifting performance
- Dual pull • Multi clamp
- Compatible with both 47.5/50 mm chainline (FD-M412/M413).
- Modified chain guide tail shape for more tire clearance (FD-M412/M413)
- Inner link position change for more mud guard clearance (FD-M413)

- Capacity : 20T
- Variations : FD-M412-3 (63-66")  
FD-M412-6 (66-69")  
FD-M410-E (66-69")  
FD-M413-3 (63-66")  
FD-M413-6 (66-69")

**CS-HG50-8I** 8-speed HG Cassette Sprockets

- HG sprockets / Compatible with HG/IG chains, HG sprockets deliver faster, quieter down-shifts and smoother up-shifts
- Gearings : 11-32T, 11-30T

**FC-M410-8** OCTALINK Crankset

**FC-M410** Crankset

**FC-M411** Crankset (chaincase compatible)

- 8-speed HG chain compatible
- Hyperdrive SG-X chainrings
- DUAL SIS compatible
- Chainguard type available
- Replaceable steel chainrings
- FC-M410/M410-8 : 42T-32T-22T  
FC-M411 : 42T-32T-22T, 48-38-28T
- Color options : Black, silver

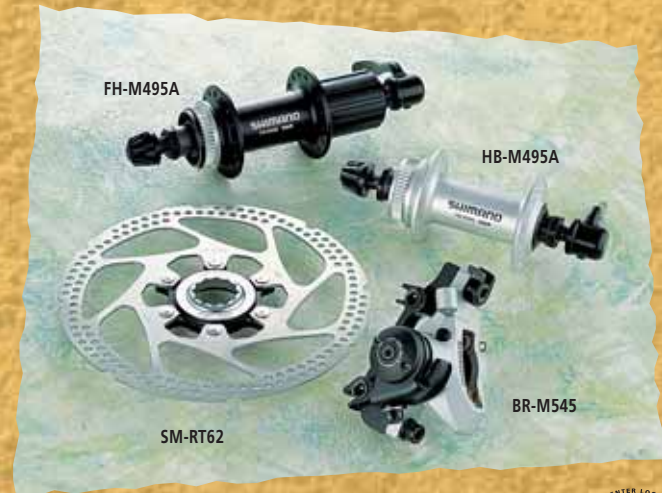
**BB-ES25** OCTALINK Bottom Bracket

**BB-UN26** Cartridge Bottom Bracket

- Smooth rotation

**BL-M420** V-BRAKE Lever

- Lever reach adjustment



**BR-M545** Mechanical Disc Brake

**SM-RT62** Center Lock Compatible Disc Rotor

- Excellent performance at an affordable price range
- Pad clearance adjustability from both sides
- Metal pad
- Easy set-up and adjustment
- Lightweight and high performance cable disc brake
- Compact caliper body design
- Strong stopping power with precision control
- V-BRAKE lever compatible

**HB/FH-M495A** Hub Set

- Center Lock system compatible
- Cup & Cone bearing
- High sealing performance and the internal grease sleeve for improved durability
- Color options : Black, silver

**HB/FH-M475** Hub Set

- Cup & Cone bearing
- Color options : Black, silver





## 8-speed components for real MTB performance

The new ALTUS component group has been redefined completely in order to meet the required functions and values in this price segment again.

### ST-EF60-8R/L

8-Speed EZ FIRE Plus Shift/Brake Lever Set

- Large Optical Gear Display compared to ST-EF50 (+30%)
- Right side cable adjusting barrel
- Color options : Black, silver

### ST-EF50-8R/L

8-Speed EZ FIRE Plus Shift/Brake Lever Set

- Optical Gear Display
- Lever reach adjustment

### RD-M310 Rear Derailleur

RD-M340 Rear Derailleur

- MegaPulley
- SMARTCAGE pulley plate
- Advanced Light Action design
- Wide link design increases durability and precise shifting (RD-M310).
- Low-friction link pivot bushings
- REAR SIS index shifting system
- Capacity : 43T
- Color options : Black, silver

### FC-M341-8/M311-8

OCTALINK Crankset

FC-M341/M311 Crankset 

- Hyperdrive compatible
- DUAL SIS compatible
- Sealed cartridge assembly
- Replaceable chainrings (M341-8/M341)
- FC-M341-8/M311-8 : 42-32-22T  
FC-M341/M311 : 42-32-22T, 48-38-28T

- Chainguard compatible
- Chainguard option available
- Color options : Black, silver

BB-ES25 OCTALINK Bottom Bracket

BB-UN26 Bottom Bracket

- Smooth rotation
- Oversized BB spindle (BB-ES25)

FD-M310 TOP SWING Front Derailleur 

FD-M311 Down Swing Front Derailleur 

- DUAL SIS front index shifting
- 47.5/50mm chainline compatible
- Wide link design for great shifting performance

- Inner link position change for more mudguard clearance (FD-M311)

- Modified chain guide tail shape for more tire clearance

- Variations : FD-M310-3 (63-66")  
FD-M310-6 (66-69")  
FD-M311-3 (63-66")  
FD-M311-6 (66-69")

FC-M191 Crankset 

- 8,7,6-speed
- Chaining combinations :  
42-34-24T, 48-38-28T
- Chainline : 47.5mm
- Chainguard option available
- Color options : Black, silver (Many color options)

FD-M190 TOP SWING Front Derailleur 

- 7, 8-speed compatible
- DUAL SIS front index shifting
- Compatible with 42-34-24T
- Dual Pull, Multi Clamp Band
- Designed for chainline 47.5/50mm

### CS-HG50-8I/HG40-8I/HG30-8I

8-speed HG Cassette Sprockets

- HG sprockets / Compatible with HG/IG chains, HG sprockets deliver faster, quieter down-shifts and smoother up-shifts
- Gearings : CS-HG50-8I 11-30T/11-32T  
CS-HG40-8I 11-30T/11-32T/11-34T  
CS-HG30-8I 11-30T/11-32T

BR-M421 V-BRAKE

- Longer arm for better clearance with mud guard
- POWER MODULATOR system (SM-PM40) for V-BRAKE with 4-finger lever
- Color options : Black, silver

FH-RM60-8 Rear Freehub (8-speed)

HB-RM60 Front Hub

- Wide bearing placement and reduced spoke offset strengthen the rear wheel.

\* 7-speed system is also available.

SHIMANO  
**Acera ALTUS**  
SHIMANO

3 X 8-speed



**CO-TALINK**

**CENTER LOCK**

**HYPERDRIVE**

**EZ FIRE-Plus**

**MEGARANGE**

# Non-Series Components

## Crankset for 9-speed

**FC-M542-L/S** Crankset **NEW**

**FC-M543-LK/SK** Crankset **NEW**

- 2-piece construction
- Hyperdrive SG-X chainrings
- DUAL SIS compatible
- Outboard bearing system
- Steel spindle
- Alloy outer, middle rings
- Chainline : 50mm
- Gearing : FC-M542 : 44-32-22T  
FC-M543-K : 44-32-22T, 48-36-26T chaincase compatible

**FC-M521-L/S** HOLLOWTECH Crankset **NEW**

**BB-ES25-AK** OCTALINK Bottom Bracket

- OCTALINK construction
- Hyperdrive SG-X chainrings
- DUAL SIS compatible
- Chainline : 50mm
- Gearing : 44-32-22T, 48-36-26T chaincase compatible
- Color options : Black, silver

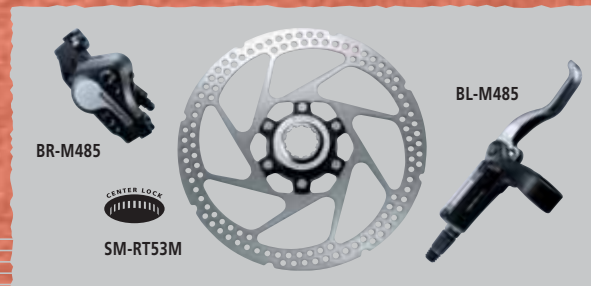
## Hydraulic Disc Brake System

**BR-M485** Hydraulic Disc Brake (Shimano logo) **NEW**

**BL-M485** Hydraulic Disc Brake Lever (Shimano logo) **NEW**

**SM-RT53** Center Lock Compatible Disc Rotor

- Strong stopping power with precision control
- Attractive price with high performance
- Resin pad only
- Lever reach adjustment
- Center Lock rotor mount







## 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

## ■ Dual Control Lever

The Dual Control Lever sets a standard for shifting ease and swiftness. It lets you shift gears up or down, regardless of your hand position on the handle bar. The secondary release lever provides another shifting option that is a great “transitional” feature as you become accustomed to Dual Control shifting and can be removed if desired for the ultimate “clean” set-up. Internally, shifting is executed by the tried and true high precision indexing system found in the M950 series XTR, featuring three sets of ball bearings that result in more precise shifts, a shorter lever stroke and decreased shifting effort.



XTR  
Dual Control Lever

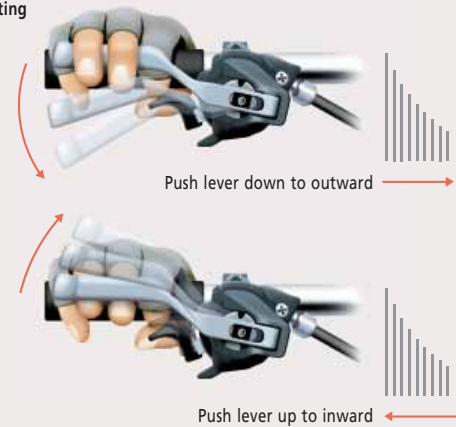
Secondary  
release lever



Braking



Shifting



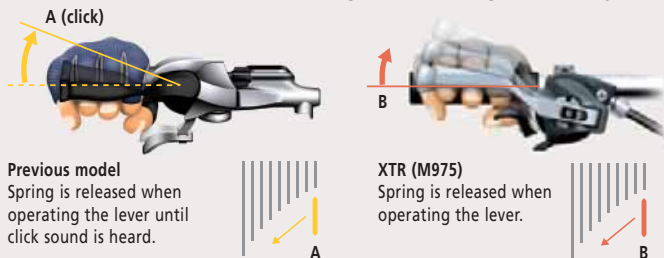
Push lever down to outward

Push lever up to inward

## Instant Release (XTR/DEORE XT)



Since the left and right Dual Control Lever operate in the same way with the low normal rear derailleurs, intuitive and accurate operation is possible. In addition, accurate inward shifting through one touch operation is realized since spring tension supports changing to a lower gear. There is no need to push the chain to the gear by force. Therefore noise is reduced and the gears have longer durability.



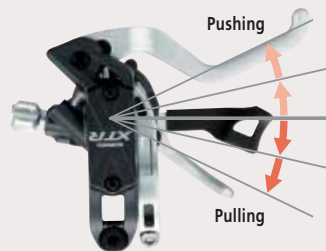
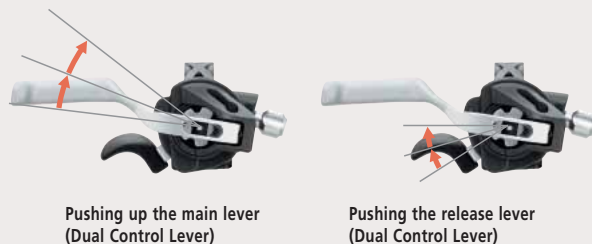
## 2-Way Release (XTR/DEORE XT/DEORE LX/DEORE)

The release lever a RAPIDFIRE Plus shifter is commonly called trigger because it is operated like a pistol, by pulling toward the grip. The release lever of new RAPIDFIRE Plus shifters from LX to XTR can be operated in this same manner but adds the ability to activate a release shift by pushing with the thumb. 2-way release matches your riding style and encourages you to learn others. See here how 2-way release is demonstrated in conjunction with Multi-Release.

## Multi-Release (DCL : XTR/DEORE XT, RAPIDFIRE : XTR)



Previous shifting systems shifted faster in one direction than the other. Choosing top normal or low normal always meant sacrificing shifting speed in one direction. Now with Multi-Release you can release shift two gears in one stroke. The result - the fastest possible shifting in both directions regarding of rear derailleur choice.



2-way and Multi-release shifting allows for the changing of two gears with one stroke by pulling or pushing (XTR).

# Best Shifting Performance

## ■ RAPIDFIRE Plus shift lever

(Recommended in combination with a top normal rear derailleur)

Mountain bikers have used RAPIDFIRE Plus since 1985. RAPIDFIRE Plus is still a winning choice from a wide range of riders from XC racers to freeriders. RAPIDFIRE Plus is suited to urgent shifting, giving riders with top normal rear derailleurs the ability to downshift three gears in one stroke. RAPIDFIRE Plus shifters from DEORE LX to XTR all feature 2-way release, which means release shifts by pull of the index finger or push of the thumb. With XTR you also get Instant Release and Multi-Release.



SL-M970  
RAPIDFIRE Plus shift levers



RD-M971  
Top Normal  
Rear Derailleur

## ■ Wide link front and rear derailleur

The wide pivot link design boosts strength and rigidity. Flex is suppressed, creating sharp, precise shifts that are faster and smoother, even from low to high gears, off the saddle.



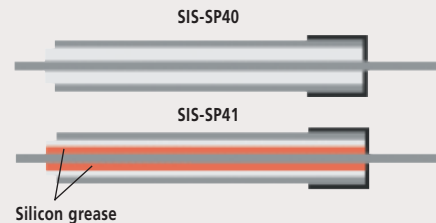
FD-M771



RD-M772

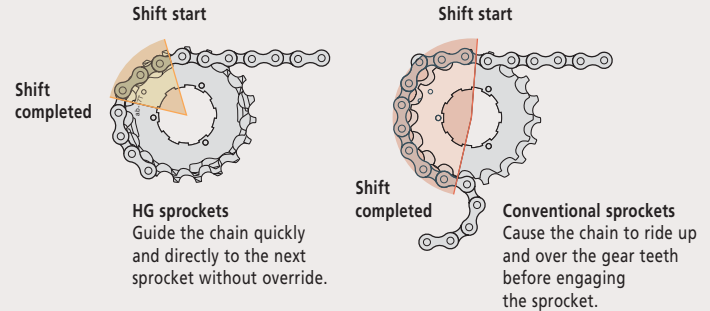
## ■ SIS-SP41

The SIS-SP41, being pre-lubricated with the special silicon grease inside of the outer casing, decreases the resistance inside the outer cable significantly (about 10% in comparison with the previous model) and achieves an intuitive, quick and precise shifting performance.



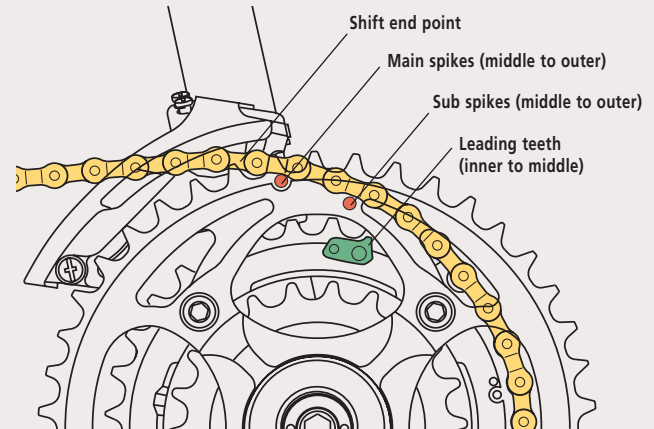
## ■ HG sprockets

Special designed HYPERGLIDE sprockets incorporate specifically positioned shift ramps and tooth profiles for improved chain control during shifting. Fast and responsive indexed shifting is the result.



## ■ Hyperdrive front drive system

With Hyperglide, Shimano pioneered the use of a variety of gear profiles and shift ramps to improve shifting performance. Front drivetrain components are engineered as a system, working together towards a single goal: Provide quiet, easy and trouble free shifting. The leading teeth, the spike pins of the SG-X chainrings, the super rigid Wide-link front derailleur and the special profiles of the HYPERGLIDE chain links are combined to create a smooth, quiet and precise shifting system, even under load.





# Best Shifting Performance

## SHIMANO SHADOW RD (XTR, DEORE XT)

New mechanism rear derailleur, SHIMANO SHADOW is intended for more aggressive riding. Its super low profile design carries many benefits. Because of its low profile and single tension construction, the derailleur doesn't hit the chain stay in rough riding conditions. The result is smooth and silent performance.

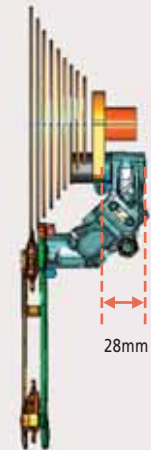
<Low profile design>

Conventional

Shadow RD

Conventional

Shadow RD



28mm



16mm

Low gear position

-12mm



45mm



33mm

Top gear position

-12mm

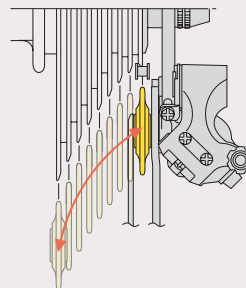


RD-M972-SGS



## ■ Double Servo-Panta Mechanism

Shimano's Double Servo-Panta Mechanism enables the rear derailleur to move in an optimum path. The guide pulley tracks the cogs closely while moving front to back, optimizing each shift. Perfect tracking contributes to the most accurate SIS shifting.



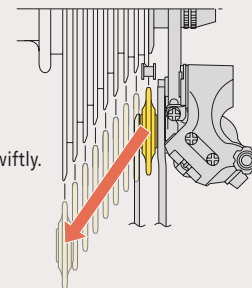
Keeps rear derailleur guide pulley an optimum distance from each sprocket.

## ■ Top Normal Derailleur System

(Recommended in combination with the RAPIDFIRE Plus Shift Lever)

Top normal rear derailleurs are traditionally sprung derailleurs. RAPIDFIRE Plus users tend to prefer the increased reaction time of top normal rear derailleurs because they downshift more gears faster. Riders who prioritize the need to react quickly further appreciate the ability to make inward shifts with the thumb, the strongest of all fingers.

**Quick shifting :**  
Inward shifting with thumb.  
Shifting can be completed swiftly.

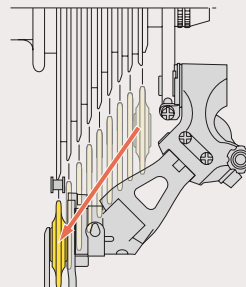


## ■ Low Normal Derailleur System

(Recommended in combination with the Dual Control Lever)

With the advent of the low normal rear derailleur, Shimano has taken downshifting to a new level by using spring force to execute shifts to a lower gear. Inward shifting is further enhanced by the ability pre-select gears, or activate shifts without pedaling. Pre-selecting gears gives you a unique advantage by allowing you to anticipate a shift before it happens.

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



## Best Shifting Performance

### Optical Gear Display

The Optical Gear Display tells you which gear position is selected while riding your bike. You can see how many gears you can select either on low side or top side, which makes shifting control easier.



SL-M770

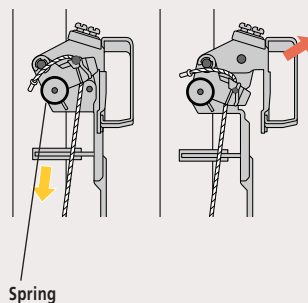
### DUAL SIS front and rear index shifting

The SIS Rear Index Shifting System, which has been noted for its accurate, precise and smooth shifting system, was adopted to the front. The front with the index system makes shifting operation easier and more comfortable.

### TOP SWING front derailleur

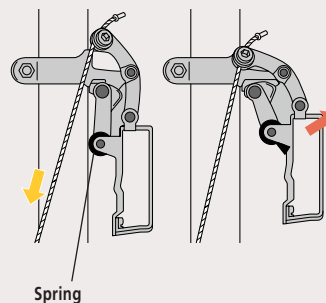
Because the moving pivot section is set at a higher position and combined with a shorter link, the rigidity is higher while quick and light shifting is possible.

TOP SWING front derailleur



Spring

Down swing front derailleur



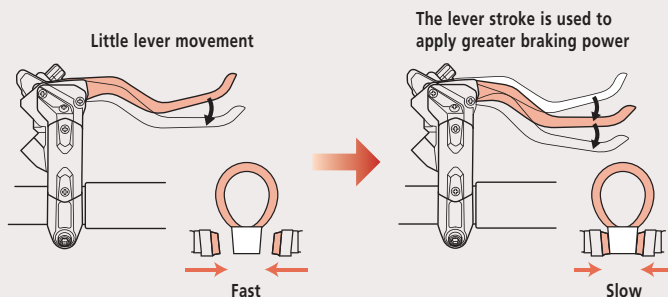
Spring

### Advanced Light Action rear derailleur

Low-friction link pivots and the use of a low-tension extension spring significantly lower the effort needed to shift the derailleur regardless of gear position.

## ■ SERVO WAVE Action for Disc Brake (DEORE XT)

When you pull a SERVO WAVE brake lever, initial pad travel is fast, so little lever movement is needed to bring the pads into contact with the rotor. The power multiplication factor then increases rapidly at the pad-to-rim contact so more of the lever stroke is used to apply greater braking power with improved control.



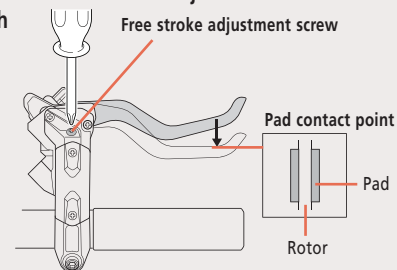
## ■ Reach Adjust of Dual Control Lever/Brake Lever

(XTR/SAINT/DEORE XT/HONE/DEORE LX/DEORE)

Both brake levers and DCL are equipped with a reach adjust mechanism. The distance from handlebar grip to lever can be adjusted to suit any hand size, type of riding and individual rider preferences.

## ■ Free Stroke Adjustment (DEORE XT)

Brake control feeling varies delicately with riders. DEORE XT adopted Servo Wave Action to provide quicker engagement and 20% more stopping power along with Free Stroke Adjustment mechanism. This mechanism gives a much better braking response to meet rider's need. Custom setting through the reach adjust and Free Stroke Adjustment allows for the best possible brake feel for a variety of riders.





## Best Pedaling Performance

### 2-piece Crankset Construction (DEORE)

Our 2-piece crankset construction with the integrated bottom bracket. Weight is reduced. Rigidity and power transfer are radically increased. In addition, outboard bearings provide more effective load distribution, while increasing rigidity and stability.



### HOLLOWTECH crank arm and OCTALINK BB mount

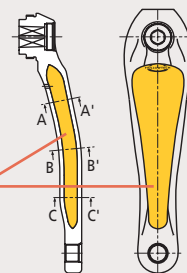
Hollow-forged crank arm reduces weight without sacrificing strength and rigidity. Splined OCTALINK axle interface increases rigidity. Hollow chrome-moly bottom bracket spindle is 22mm in diameter, provides extreme rigidity with light weight.



8-spline interface

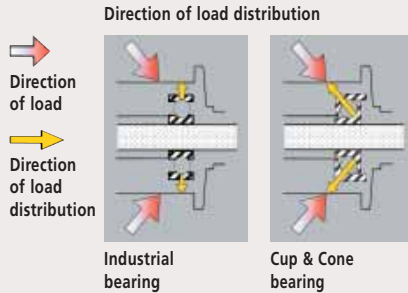


Hollow section



## ■ Cup & Cone bearing hubs

Cup & Cone bearings offer greater strength than sealed cartridge industrial bearings due their ability to displace lateral and vertical loads more effectively for super smooth rotation and longer durability. Cup & Cone bearings also allow easier maintenance, adjustability and serviceability.

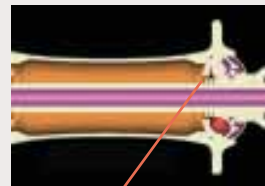
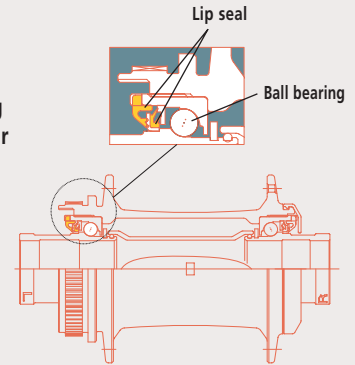


## ■ Internal grease sealing

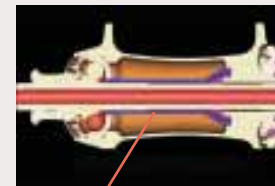
New DEORE XT, DEORE LX, HONE and DEORE freehubs feature internal o-rings and grease sleeve that help maintain grease levels and increase service life.

## ■ Labyrinth and contact sealing

Specifically designed seals inside the hub shutout mud, dust, dirt and moisture and protects the bearing mechanisms, realizing low maintenance as well as longer service life. This maintains the original performance for a longer period of time under unfavorable environmental conditions.



O-ring



Internal grease sleeve

# Best Braking Performance

## ■ Disc brake Linear Response Braking

One of the most important things that a disc brake needs for severe off-road conditions is a highly modulated feeling of control. The brake must be able to provide a balance of speed control as well as strong stopping power when quick deceleration or stops are needed. Our engineer's development and effort is in creating and improving modulation control. This is the strongest point of all Shimano disc brakes.

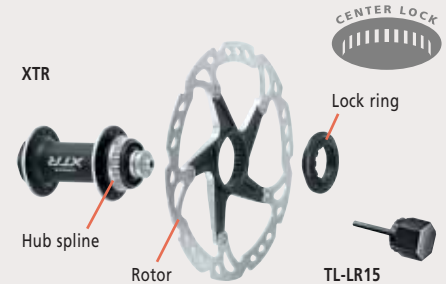
Disc brakes for XTR, SAINT and XT provide the benefits of disc brakes at a weight that will be embraced by all MTB enthusiasts. The opposed dual piston caliper is a forged one-piece "mono-body" design that eliminates the need for caliper assembly bolts. In addition to reduced weight, the caliper is more rigid. The rotor mounts to the hub quickly through a spline and lock ring mechanism. This feature is sure to be popular with riders, when packing and traveling with their bikes and with mechanics that won't be dealing with stripped-out or broken mounting bolts. Brake pad options include a fade resistant, longer wear metallic compound or a low noise, smooth feeling resin compound.

## ■ Center Lock system

The Center Lock system makes an easy rotor installation possible with spline mount and a lock ring. The lock ring mounting system reduces the total hours of work by shortening the amount of time of both installation and de-installation. In addition, the secure fixing by the spline mount enhances precision and rigidity while improving braking efficiency.



XTR  
XC Competition / All Mountain



# Braking Performance for All Types of Cycling — Shimano's Braking System Concept



V-BRAKE



Hydraulic disc brake



POWER MODULATOR  
unit (SM-PM40) and  
V-BRAKE



Roller brake with  
POWER MODULATOR  
system

## Select the appropriate braking system for your intended use and skill level

Shimano offers several Braking Systems to suit your intended use and skill level. Shimano recommends that you consult your bicycle retailer or dealer in the selection of an appropriate Shimano Braking System. It is important for your cycling enjoyment and safety that you select a Shimano Braking System suited for your skill level and intended use. Shimano has worked to achieve the highest level of braking performance to provide you with the appropriate braking system suited for a variety of cycling uses, from road and MTB racing to casual recreational riding. The braking performance may vary according to rider's weight and hand size.

## Shimano's development of braking systems

Shimano has developed its braking systems targeted to the skill level of experienced road and MTB racers which provide a strong and responsive braking force. At the same time, Shimano offers a braking system more suited for less experienced riders and general cycling enjoyment which features ease in application for recreational use. It is important to consult your bicycle dealer which Shimano Braking System is appropriate for your intended use.

## Sport braking system for experienced cyclists

Shimano has developed a linear response braking system which provides the experienced cyclist with a stronger braking force. This feature can be found in the braking systems for MTB, Shimano M SYSTEM, as adopted in the Shimano V-BRAKE, which features a stronger braking force. This linear response disc brake system is incorporated into Shimano's hydraulic disc brake which features a strong, yet controlled and stable braking force.

## Shimano's easy-to-use brake system for less experienced and recreational riders

For beginning cyclists, less experienced and recreational riders, Shimano offers an Easy-to-Use braking system, incorporating a POWER MODULATOR into its front brakes. This system features the easy to use four-finger brake lever and V-BRAKE, Cable Disc Brake and Roller Brake. The POWER MODULATOR offers an easy and comfortable brake control by moderating excessive lever input force.

## Different brake performances appropriate for different biking

Consult with your local bicycle dealer in the selection of a Shimano Braking System appropriate for your intended use and bicycle skill level. Safe operation of your bicycle is the operator's responsibility, which includes the appropriate strength and capabilities of your braking system.



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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.

