

MAVIC®

MEKTRONIC

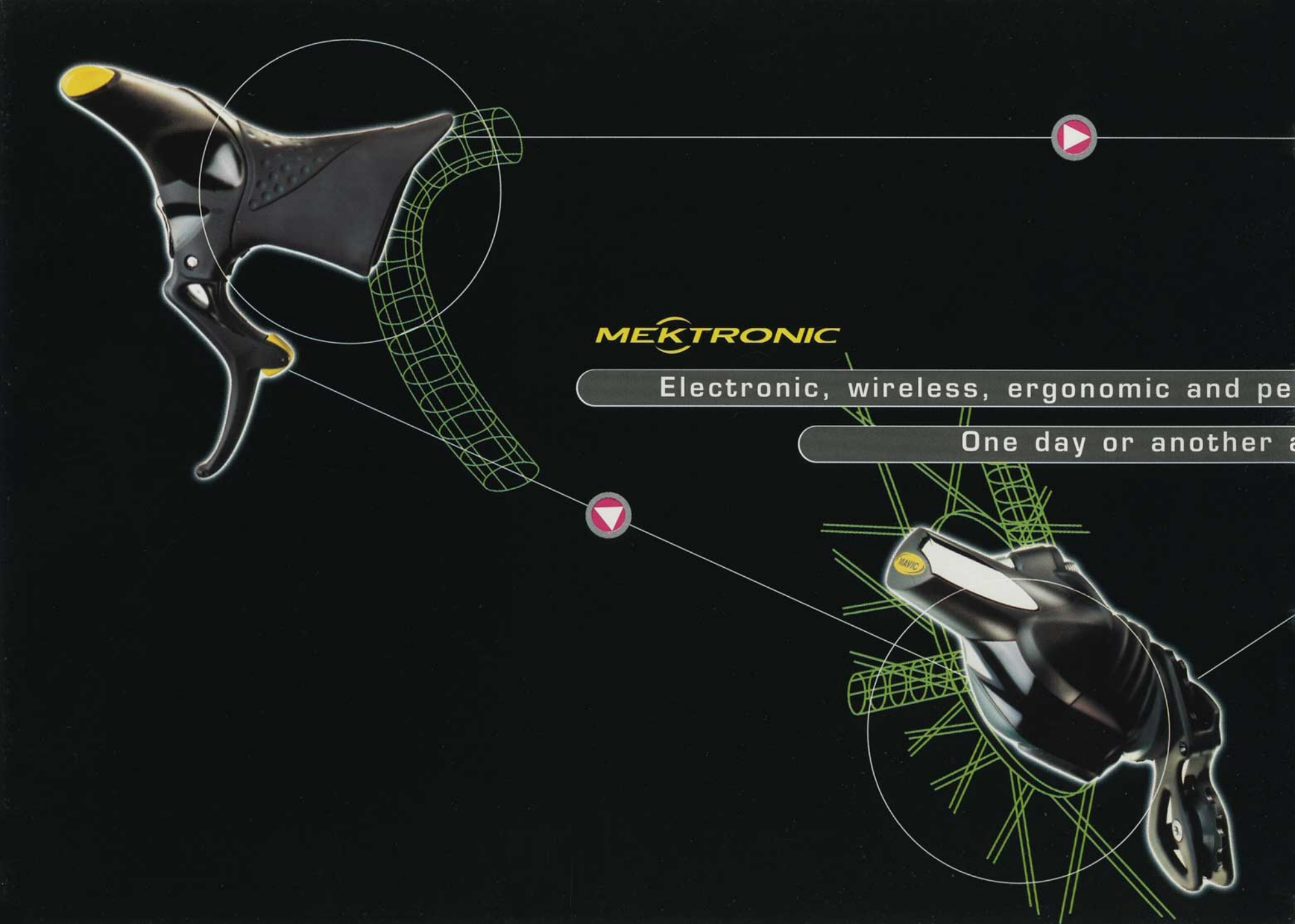
When will we see the derailleur of the future?

GB

It's already here!



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MEKTRONIC
Electronic, wireless, ergonomic and pe
One day or another a
MAVIC



formant...

ll derailleurs will be made this way.

Much more than just a simple derrailleur, Mektronic from MAVIC is a wireless transmission control system based on WIN technology (Wireless Integrated Network).

It is comprised of

- an electronic derrailleur
- LCD computer
- Multi position touch sensitive button shifters
- Speed sensor
- Ergonomic brake lever assemblies

Mektronic will bring the benefits of veritably extraordinary due to the multiple shifters (three positions on the handle bars), its lightness plus the precise and rapid speed of shifting.

It enables positions on the bicycle particularly aerodynamic, new braking positions and incredible efficiency.

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Action...





ERGONOMIC LEVER
EXTENSIONS
=
AERODYNAMIC POSITION



2 INTEGRATED
SHIFTERS
=
PERFORMANCE AND
COMFORT





ERGONOMIC BRAKE
LEVERS
=
IMPROVED BRAKING

MAIN FEATURES

WEIGHT : 385g (a pair of levers).

AVAILABLE FUNCTIONS :

- 1 additional aerodynamic position.
- 2 positions for shifting gears (right lever).
- Chain ring continual friction shift (left lever).

High accessiblity to the brake levers due to the new shape.

Brake caliper release integrated into the brake levers.

Symmetric levers, coherent design.



QUESTIONS and ANSWERS

1. How reliable are the wire connections?

- The only wire is the link between the computer and the brake lever. There is a blocking system to avoid pulling on the soldered joints.

2. Weather proofing?

- The shifters and the wire exit paths are waterproof.
- All of the parts at risk are 240 H BS anti-corrosion treated (as is used in the automotive industry).
- Waterproofing of all housings is type IP67.

3. Battery Life.

An enormous amount of work was done on this subject:

- All electronic components have a low consumption.
- The solenöids can boast of an excellent balance between strength / electric power.
- There is an integrated automatic detection system for low batteries.

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Analysis ...





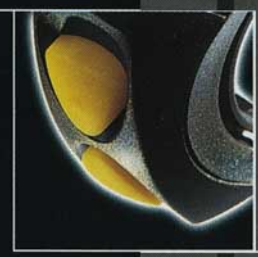
BIG SCREEN
=
EXCELLENT LEGIBILITY



WIRELESS TRANSMISSION
=
STABILITY OF ADJUSTMENT



"SPROCKET" MODE
=
SHOWING THE
ENGAGED GEAR.



EASILY ACCESSIBLE,
AUDIBLE,
TOUCH SENSITIVE
BUTTONS.

MAIN FEATURES

WEIGHT :

- 40 g (computer).
- 60 g (computer +mounting bracket).

AVAILABLE FUNCTIONS :

- Instantaneous, average and maximum speed.
- Engaged gear (sprocket mode).
- Surveillance and diagnosis of the condition of the batteries.
- Time.
- Time passed while riding.
- Distance ridden and total accumulated distance.

Optimized battery life:
3 years or 45 000 kms.



QUESTIONS and ANSWERS

4. How about the assembly?

- Setting up the product is hyper fast because of the wireless system.
- Lateral adjustment of the derailleur is a simple roller wheel system (MAVIC patent)
- The assembly of the electronic components is as for wireless computers and adapts to all forms of frames and handlebars.

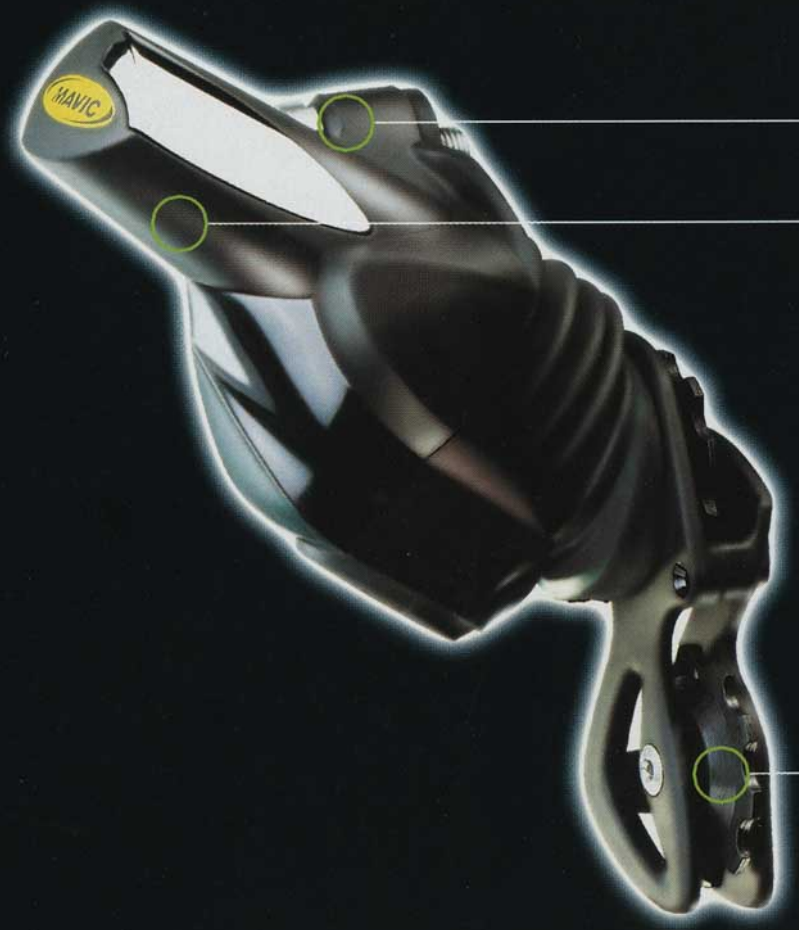
5. Maintenance?

Couldn't be simpler:

- Diagnostic aide (integrated into the product) and troubleshooting help (in the user guide or from the dealer).
- Dealer will be cliniced and have all the information.
- An electronic tester is being developed to further facilitate customer service.

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Reaction...





LATERAL ADJUSTMENT
ROLLER
=
EASY MOUNTING



WIRELESS TRANSMISSION
=
EASY MOUNTING
AND STABILITY OF
ADJUSTMENT



INDEXATION INTEGRATED
INTO THE DERAILLEUR
=
QUICK, ACCURATE GEAR
CHANGES

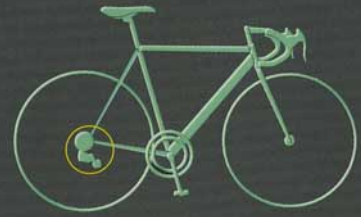
MAIN FEATURES

POIDS : 235 g.

AVAILABLE FUNCTIONS :

- Compatible 9 speed (HG spacing).
- Total capacity : 30 teeth.
- Maximum rear capacity : 28 teeth.
- Direct shift onto the small cog.
- Shift up 3 by 3.

Optimized battery life :
2 years or 30 000 kms.



QUESTIONS and ANSWERS

6. "Internal" interference ?

- The emmission distance is limited to 50 cms for the speed sensor and to 1m 20 cms for the derailleur. Pollution from the speed sensor is not possible especially given that the sensor is mounted at the top of the fork. Additionally this will prolong the battery life as an electronic system will automatically adjust the signal to the required distance of transmission. A fact which will naturally limit the risque of other systems receiving a signal.
- The signal, being digital, is coded and is unique to each system of computer, sensor and derailleur. It is randomly initialised at the moment of installation.
- The signal lasts only a few milliseconds thus the risk of a simultaneous emmision is almost nil.
- While the product is in operation the gearshift request is treated in priority over all other system activity, avoiding any conflict.

7. "External" interference" ?

- The normal frequency range of radio, telephone and satellites is within the band of 150KHz - 20GHz. MEKTRONIC frequency is below 150KH where there are only some extremely specialised users.
- MAVIC has used cutting edge technology with an ASIC (Application Specific Integrated Circuit) which essentially filters all emissions using a different frequency to that of MEKTRONIC.
- This frequency was chosen only after extensive global research to determine the location of emmitters operating in this zone (which are principally military). Moreover, the frequency is above induced frequencies of high tension lines or trains and far removed from those of other wireless bicycle computers and heart rate monitors.
- Lastly, MEKTRONIC is homologated CE, it does not pollute and is very robust against all sorts of electronic aggression (ESD...).

MEKTRONIC

Product Range





DOWNTUBE COVER

FRONT DERAILLEUR CABLE ADJUSTMENT

SPEED SENSOR

MAGNET

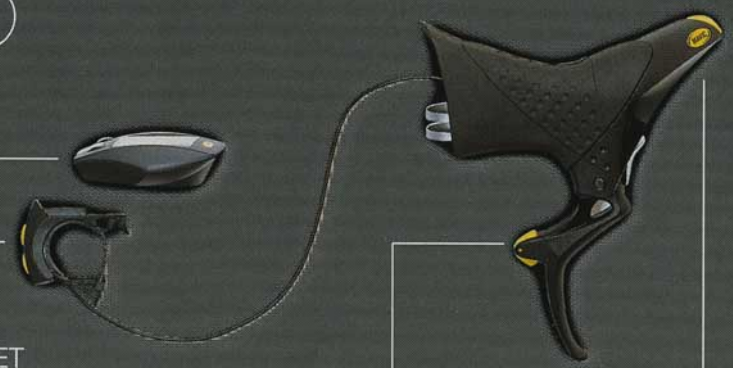
REAR ELECTRONIC DERRAILLEUR

LEFT LEVER ASSEMBLY



CHAIN RING SHIFTER

Derailleur-levers kit



COMPUTER

COMPUTER MOUNTING BRACKET WITH SHIFTER BUTTONS

SHIFTER BUTTONS

RIGHT LEVER ASSEMBLY



BRAKE AND FRONT DERAILLEUR CABLES



DOWNTUBE COVER

FRONT DERAILLEUR
CABLE ADJUSTMENT

SPEED SENSOR

MAGNET

REAR ELECTRONIC
DERRAILLEUR

LEFT LEVER ASSEMBLY

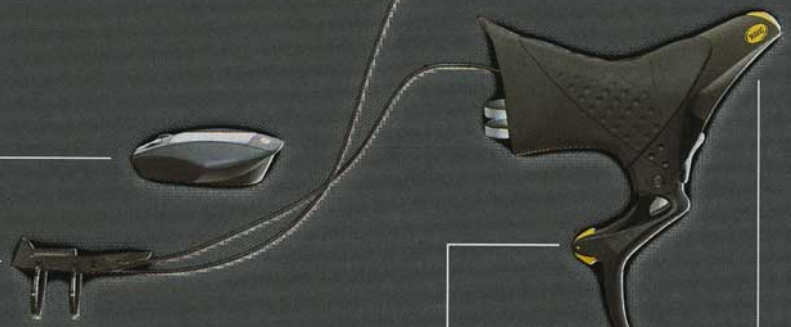


CHAIN RING
SHIFTER

Derailleur-levers kit Triathlon

SHIFTER BUTTONS
EXTENSION FOR TRI BARS

RIGHT LEVER ASSEMBLY



COMPUTER

COMPUTER MOUNTING
BRACKET FOR THE STEM

SHIFTER BUTTONS





BRAKE AND FRONT
DERAILLEUR CABLES

MEKTRONIC

Product Range

Derailleur Kit



REAR ELECTRONIC
DERRAILLEUR



DOWNTUBE COVER

FRONT DERAILLEUR
CABLE ADJUSTMENT

SPEED SENSOR

MAGNET

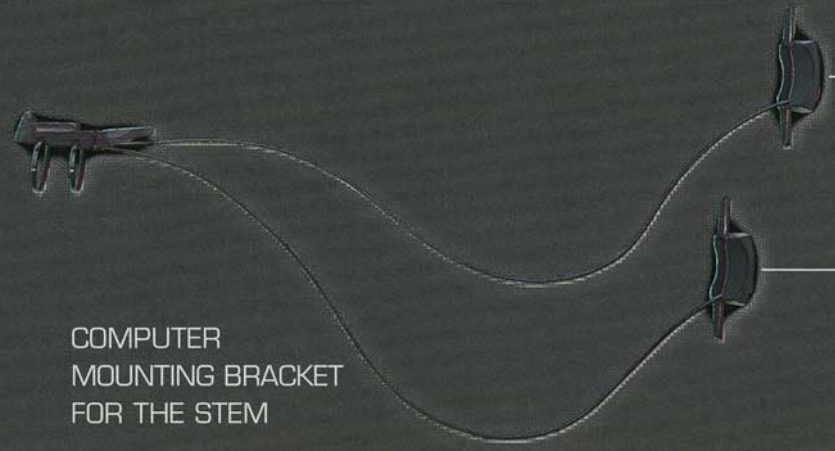


COMPUTER

SHIFTER BUTTONS
TO BE POSITIONED
BELOW THE
BRAKE LEVER

SUPPORT COMPUTER POUR
CINTRE + COMMANDE

Option Triathlon

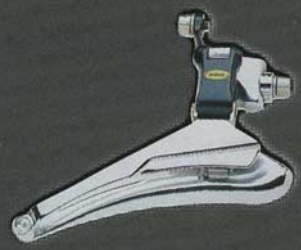


SHIFTER BUTTONS TO
BE POSITIONED ON THE
TRI BAR EXTENSIONS

SHIFTER BUTTONS TO
BE POSITIONED BELOW
THE BRAKE LEVER

COMPUTER
MOUNTING BRACKET
FOR THE STEM

Front Derailleur



- TYPE OF ATTACHMENT : BRAZED OR COLLAR
- DOUBLE CHAIN RING COMPTABILITY
- STRONG AND ROBUST

Battery



Magnet



Indexation Compatibility Table

Existing Indexation System	HG 9V	HG 8V	Mavic CC9	ED 9V	ED 8V
Existing indexation	HG 9V	HG 9V	Mavic CC9	Marchisio ED 9V	Marchisio ED 8V
Spacers	N/A	N/A	Kit A*	Kit B*	Kit C*

* MEKTRONIC spacer kit to come.
NB : MEKTRONIC is compatible in original form with HG 9 speed

MEKTRONIC

Ergonomy

Mektronic : never have we gone so far insearch of real ergonomy.

Mektronic offers unbelievable ease of access to gear shifting in all possible hand positions. Thus it allows the cyclist to stay concentrated on the task ahead; to rapidly and safely shift gear without a change of position on the handlebars.

The brake levers themselves are also very accessible from all positions on the lever assemblies. In innovating as much with the shape of the levers as with the shifting system itself, Mektronic has an ergonomy which guarantees the cyclist comfort, safety and performance never before achieved.



Position 1

On the top of the handlebars, the computer with its integrated shifters allow direct access with no hand position change.





Position 4 and 5

The shifter integrated into the right lever extension gives several different possiblities for hand placement.



Position 2

The shifter integrated into the right lever is accessible from the lower part of the handlebars. - Perfect for sprints.



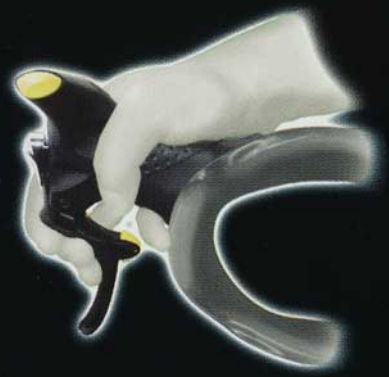
Position 3

The shifter integrated into the right lever is also direcly accessible from above.



Position 6

The levers are specially shaped to inhibit any slipping of the fingers while braking.



Position 7

The angle of the upper part of the lever fits perfectly to the natural position of the fingers - for greater pulling power and thus better braking.



Position 8

On the left lever assembly, a lever for the chain ring shift is neatly integrated for operation with the thumb. This friction shift permits continual adjustment of the front derailleur.

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