

#### November 11, 2013

## SHIMANO ENTERS THE E-BIKE MARKET WITH STEPS

In 2014 SHIMANO will introduce a new groupset dedicated for E-bikes, called STEPS. STEPS will be a totally integrated E-bike groupset. From drive unit to battery, front gear set, cycle computer and chain.

STEPS is developed with the idea of system component design. Which means that every individual component works better when the other STEPS components are also integrated in the groupset. STEPS is a pedelec system which engages when a rider is pedaling and cuts out once 25km/h is reached. The STEPS drive unit has a compact design and with weight of 3.1 kg, it is one of the lightest drive units in the market. The compact and lightweight design improves rider control in all conditions and is easier to handle by a wider range of riders. Talking about range, STEPS has three types of power support modes; eco, normal and high. The preferred mode can be selected by an easy to operate switch. The eco mode has a range up to 120km. Normal mode 100km and the high mode 80km\*. The STEPS cycling computer gives feedback about the selected mode, battery life, riding speed, distance, etc.

The STEPS battery has a capacity of 418Wh and it takes four hours to completely charge the battery. There are two position types of batteries. A rear carrier type and a down tube type. The battery life is 1.000 cycles. After 1.000 cycles the battery still charges more than 250Wh.

STEPS has the possibility to integrate with SHIMANO's Di2 internal hub gears. This integration gives STEPS a number of valuable advantages. First the SHIMANO Di2 internal hub gears maintain shifting performance under high chain tension by reducing motor power while shifting. Besides the shifting performance also the total integration is an important feature. All individual components are designed to work as a flawless system. Another advantage is the possibility to connect STEPS to a PC via SHIMANO's E-tube\* project. E-tube gives quick and easy access to the STEPS system for simple installation and set-up options. For instance changing the function of the buttons on the switch, firmware updates and diagnostic analyses.

Special for the STEPS system, SHIMANO made a reinforced chain dedicated for E-bike usage. It is treated with SIL-TEC\* coating and for front single gear only.

SHIMANO's STEPS components are designed to be ridden all year round. STEPS can be used from 10 degrees Celsius below zero to 50 degrees Celsius.

For advice and service SHIMANO has a strong and proven European wide service network.

#### Pilot project with BIKE&CO and ZEG

From February to August 2014 SHIMANO will run a pilot project for STEPS with dealer associations BIKE&CO and ZEG in the German market. Both companies will develop E-bikes with the STEPS drive unit which will be sold at their German dealers. Besides the production bikes, both BIKE&CO and ZEG will organize bikes to try (supported by SHIMANO) at their selected dealers where consumers can try the new E-bikes with the STEPS drive unit.

# PRESS RELEASE



Frank Peiffer, managing director Shimano Europe:"The E-bike market is a new segment for SHIMANO. Our service to the OEM's, dealers and consumers is key at the introduction of our STEPS system. That is why we chose for a phased approach. The pilot project is a limited quantity in a limited sales channel with a direct service access. If there we gain experience and are convinced the product works, we expand it further to other players in Germany and the rest of Europe."

The initial delivery to OEM's is planned in August 2014.

### NOTES FOR EDITOR

\* These ranges are set by multiple tests at 23 km/h on flat roads. The actual range can be different depending on the speed, roads, weather conditions (wind), etc.

\* SIL-TEC is SHIMANO's low friction chain surface treatment. Superior to simple coating, SIL-TEC is an advanced plating process that improves system performance through the use of imbedded fluorine particles. SIL-TEC treated products run smoother and wear longer in all conditions.

\* E-tube transmits interactive signals and power supply to Di2 components by a 'plug and play' connection. SHIMANO's SM-PCE1 device connects a PC to the Di2 components for the set-up of the Di2 components, diagnostic analyses and firmware updates.

EMBARGO DATE	: For immediate release
SPECIFICATIONS	: See attachment (page 3)

## PRESS RELEASE



## SPECIFICATIONS

## Drive unit (DU-E6000) and front gear set (FC-E6000)

- Operating Temp : -10°C~+50°C
- Storage Temp : -20°C~+70°C
- Nominal Voltage : 36V
- Max Output : 500W
- Nominal Output : 250W (EPAC EN15194)
- Max Torque : 50Nm
- IP Rating :>IPX6
- Weight : < 3,100g (without Crank Arm , FC )</li>
- Front crank : 44T & 38T

#### Switch (SW-E6000)

- Switch for assist mode (High / Normal / ECO / Off)
- Switch for cycle computer contents

#### Cycle computer (SC-E6000)

- Operated by switch
- Easy to read
- Sensors : Torque / Cadence / Crank Position / Speed

#### Battery (BT-E6000)

- Capacity : 418Wh (36V, 11.6Ah)
- Charging time : 4hours
- 2 Battery positions : Rear carrier type & Down tube type
- Weight : 2,550g (Battery)
- : 420g (Holder)
- Temperature : 0°C~+40°C (Charging)
- :  $-10^{\circ}C \sim +50^{\circ}C$  (Operating)
- IP Rating :>IPX4
- Battery life : \*1000 cycles

\*After 1,000 cycles full charging still more than 250Wh=60% (Reference)

## Chain (CN-E6070/CN-E6090)

- Reinforced for E-bike use
- More efficient and silent, less maintenance by SHIMANO "SIL-TEC"
- Front single gear only