Ride & Charge Busch & Müller Meinerzhagen, Germany

Distributed in the USA and Canada by:

Peter White Cycles 24 Hall Rd Hillsborough, NH 03244 603 478 0900 Phone 603 478 0902 Phax www.PeterWhiteCycles.com pjw@peterwhitecycles.com Email

Contents:

1 electrical switch "Trailermatic" black box. 1 rubber band for attachment 1 cable with integrated electronics for the connection of the Ride & Charge to the LED headlight IXON

Description:

The Ride & Charge system uses the electrical switch TRAILERMATIC, in order to charge the rechargeable NiMH batteries in the Ixon LED headlight and Ixon IQ LED headlight by a hub or tire driven 6 volt dynamo (with approx. 440 mA at 20 km/h). This charging procedure is controlled via special, integrated electronics in the cable. The Ride & Charge effectively charges the rechargeable NiMH batteries with a regularly running AC hub dynamo or sidewall dynamo such as the B&M Dymotec 6 and S6. You may not use a 12 volt dynamo. The headlight normally powered by the dynamo cannot be used during the charging procedure. Any hub dynamo from Wilfried Schmidt, Shimano, SRAM, modern Sturmey Archer, (not the old ones!) and Sanyo can be used with the Ride & Charge, or any six volt tire driven dynamo.

Do not use the Ride & Charge to charge any batteries other than AA NiMH type in the Ixon, even if you normally use other AA type batteries in the Ixon.

This is not a "Smart Charger". You should not charge the batteries for more than five hours of fast cycling. Take care not to overcharge the batteries. You're overcharging the batteries when they get hot to the touch.

Assembly:

Decide where on the fork blade you will be attaching the Ride & Charge. Cut the wires to the dynamo and to the dynamo headlight accordingly. Leave some extra length of wire for mistakes! Normally, you can simply cut the wiring from a new headlight and have plenty of wire available. All dynohubs noted above except the Schmidt use bare wire ends at the hub.

Connect the two leads from the dynamo to the connectors inside the Trailermatic box marked "Dynamo". These are the two connectors nearest the top when the Trailermatic is correctly oriented on the fork blade. You must push down on each button and insert the bare lead of each wire into the connector and then release the button to secure the wire.

Connect the two leads from the dynamo powered headlight to the two connectors on the Trailermatic box marked Fahrradrücklicht. These are between the two dynamo connectors and the plug for the Ixon marked "Anhangerrücklicht".

From top to bottom, the connectors are (1) positive from dynamo, (2) ground from dynamo, (3) positive to dynamo headlight, (4) ground to dynamo headlight. With the Schmidt SON hub dynamo, there is no distinction between positive and ground.

With no plug connected to the Trailermatic from the Ixon, the dynamo headlight should now function properly. Examine immediately after the assembly whether the headlight normally operated by the dynamo still works when connected to the dynamo.

Remove the Orange-Yellow protective plastic film to the TRAILERMATIC box and with the plug connection oriented downward press in slightly. The plug in the Trailermatic box must be at the bottom to prevent water collecting inside and shorting the electronics. Thoroughly clean the location on the fork before attaching the Trailermatic box. Hook the rubber band around the fork blade and the TRAILERMATIC to fully secure it to the fork. Install the rechargeable NiMH batteries in the IXON and connect the TRAILERMATIC and IXON with the enclosed cable. The current supply to the dynamo powered headlight is now interrupted, and the rechargeable NiMH batteries of the IXON are charged when the wheel is rolling. The indicator LED thereby shines green.

After approximately five hours of brisk travel the 4 rechargeable NiMH batteries (2100-mAh) should be fully charged. Disconnect the cable in order to avoid an overheating of the rechargeable NiMH batteries. The dynamo powered headlight can now be used again. One can charge the IXON's batteries while at the same time having the Ixon turned on, however the charging time is substantially extended.