



Ullmann Power-Station V4 Installation and Usage Instruction

The Power-Station is especially designed for use with hub dynamos. The primary goal was to develop a highly efficient USB converter with low energy losses. During recent years, the Power-Station V4 has been extensively tested in real life situations and in different climates. During that time the innovative design and construction have proven their absolute proficiency for daily use.

The Power-Station V4 is designed to supply USB-powered devices such as: mobile phones, MP3-players, GPS-navigation devices and battery chargers (e.g. Pixo C-USB or USB Powerbank). The actual use and performance of any device such as these in combination with the Power-Station V4 depends on the device's individual USB-charging and operating characteristics.

The Power-Station V4 supplies power according to the USB Battery Charging Specification. In other words, it supplies a voltage up to 5V DC. The actual cycling speed in order to provide 5V output, depends on the individual characteristics of your mobile device, your hub dynamo and your wheel size. Please check with your device's manufacturer for compatibility and requirements.

Wiring: The Power-Station V4 is supplied with a twin-core wire cable with a barrel plug at one end; a 30cm USB cable with a USB A connector at one end and a USB micro-B at the other; 2 spade connectors and 3 lengths of heat shrink tubing.



- slide one piece of shrink tube over both wires and one piece over each wire (see pictures).

- fit the spade connectors, using a crimp tool or pliers to secure both the insulation and the cables. The first pair of claws must grip the insulation (in case of doubt, solder as well).



- slide the shrink tubes down over each connector to cover the junction between the connector and the cable.

- heat the heat shrink with a cool flame or a hot air gun to shrink it into place.

- apply some grease to the spade connectors, so you can push them onto the hub dynamo contacts more easily.



Pass the cable along the inside of the fork blade to the hub dynamo and plug it in (it doesn't matter which one connects to which terminal). Fasten the cable with zip ties or duct tape at the fork in such a way that the connectors can be easily detached before removing the wheel. The provided or pre-installed spade connectors fit the Schmidt's Original Nabendynamo (SON), but the Power-Station V4 can be used with other hub dynamos as well. The piggy-back spade connectors enable easy connection and operation of the Power-Station and/or the bicycle headlight. Please be aware that if the Power-Station and a light system are used at the same time, both light and the Power-Station's output performance will decrease based on the limitation of the hub dynamo. Thus we recommend to use either/or.

The wire end with the barrel plug should be guided to the cockpit (e.g. the routing can be along the brake hose towards the front brake lever or parallel to the bicycle headlight if it is also mounted on the handlebar). There you can hide the Power-Station V4 in your handlebar bag or locate it next to the bracket of your mobile device.

You must unplug the Power-Station V4 from the hub dynamo by removing the barrel plug from the Power-Station V4, if the accu of the consumer is fully recharged or the Power-Station V4 is not needed anymore to supply the electrical device with energy!

Attention: If the barrel plug is not unplugged as described, the case of the Power-Station V4 will get soft and it might be possible that the electrical circuit can get damaged.

To supply a device during the ride with electricity, you must connect the barrel plug on one side of the Power-Station V4 and on the other side you plug in the USB-cable towards the device. Please keep the length of the USB-cord as short as possible.

Depending on the conditions of use, the barrel plug and/or USB socket might show some slight corrosion over time. This rust film can be easily removed by using a Q-tip with some alcohol.



Powering devices without built in batteries

In general, the Power-Station V4 can power devices without built in batteries. When starting cycling, the output voltage of the Power-Station V4 slowly increases with the riding speed. Therefore, the connected device will not operate before the necessary minimum voltage is reached. This can be remedied by a cache battery as offered by different manufacturers.

Powering and charging devices with built in batteries

a. If the device automatically switches to the external power source upon connecting the Power-Station V4, the built in battery is neither used nor charged. If the battery needs to be charged, then you must use a battery charger like e.g. the Pixo C-USB.

b. If the connected device's built in battery is charged simultaneously and unavoidably upon connecting the Power-Station V4, caution must be exercised so that the battery is not overcharged. Many devices feature an automatic charging deactivation that prevents overcharging. If such a deactivation is not present and if the device shows the charge status, the battery must be disconnected from the Power-Station V4 immediately as soon as it is fully charged. If such a deactivation is not present and if the device does not show the charge status, a warming battery is a sign of the onset of overcharging.



Attention:

Warranty time is 12 months from the day of purchase and valid for the original owner. We vouch solely for a faultless functioning of the Power-Station V4. Exempt from liability is any damage to connected devices of all kinds. It cannot be guaranteed that the Power-Station is able to power all connectable devices. For example, some mobile devices cannot be charged while riding due to fluctuating voltages. Other devices have to be switched back manually to be powered by the Power-Station V4 after stopping. Both types of devices can be powered using a suitable cache battery. For battery powered devices that do not accept external power sources and can neither be powered nor charged by the Power-Station V4 or a cache battery, batteries can be removed and charged by the Power-Station V4 using an external charging device (e.g. Pixo C-USB). Please contact the device's manufacturer for information regarding powering and charging!

Never dispose of electronic parts with your domestic waste but discard as hazardous waste!
Technical modifications reserved.

