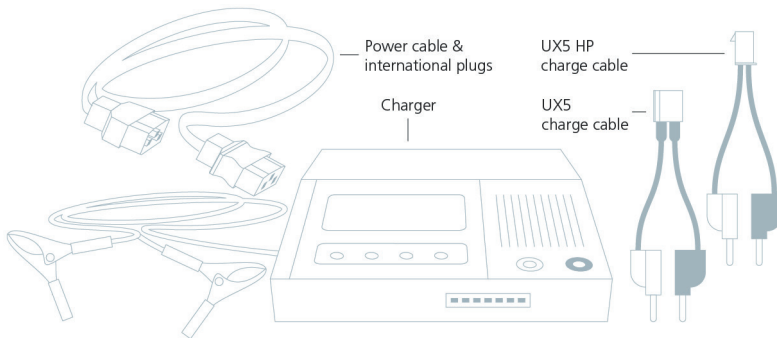


TRIMBLE UX5 & UX5 HP QUICK START GUIDE

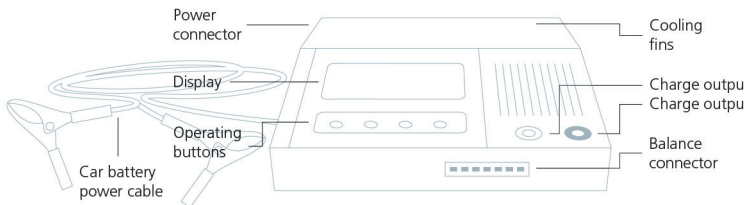
Charging the LiPo Battery

Carefully read this guide to familiarize yourself with charging and storing batteries for the Trimble® UX5 or UX5 HP aerial imaging rover using the Graupner Ultramat 14 Plus battery charger.

What's in the box?



Charger overview



WARNING – Never leave the charger unattended during use. Failure to observe and operate the charger properly can cause damage to the charger, battery, personal property and/or cause serious injury.

Connecting the charger



WARNING: Lithium polymer batteries are volatile. Failure to read and follow these instructions may result in fire, personal injury, and damage to property if charged or used incorrectly.

To prevent injury or damage:

- Use only the charger specified to charge the battery.
- Use the charger to charge only UX5 or UX5 HP batteries.
- Always check that the settings on the charger are correct before charging the battery. Incorrect charger settings may result in damage to the battery, severe burning and fire hazards.
- Always remove the battery from the rover body for charging or storing.

1. If the battery is fitted in the rover, remove the battery from the rover body.
2. Connect the Graupner Ultramat 14 plus charger to one of the following:
 - 11–15 V DC (vehicle battery)
 - 100–240 V AC (power supply)

The charger powers on and displays the charge parameters.

3. Make sure the charger settings are correct. Depending on the type of battery you will connect, the parameters should be:

UX5 battery	UX5 HP battery
LiPo manual	LiPo manual
C:5.0A 6000mAh	C:5.0A 6600mAh

Press the **Prog/Mode** key to check the voltage per cell. When:

- Charging the battery for a flight, the voltage should be 4.20V/C
- Preparing the battery for storage, the voltage should be 3.90V/C

Press the **Prog/Mode** key to return to the main screen. If the settings shown are not correct, change them using the steps below.

To change the charge program:

- a. Press and hold the **Prog/Mode** key for two seconds to navigate through the charge modes. Repeat this action until the charger screen shows “LiPo/LiIo/LiFe manual”.
- b. Press the **Prog/Mode** key and then press the **DEC** or **INC** key until the type is set to “LiPo”.
- c. Press the **Prog/Mode** key to return to the main screen.

To change the voltage per cell:

- a. Press the **Prog/Mode** key and then press the **Enter/Start** key to select the voltage per cell setting. The entry “X.XXV/C” blinks. Press the **DEC** or **INC** key to change the value until it is set to “4.20V/C” for charging or “3.90V/C” for storing.
- b. Press the **Prog/Mode** key to return to the main screen.

To change the charge current:

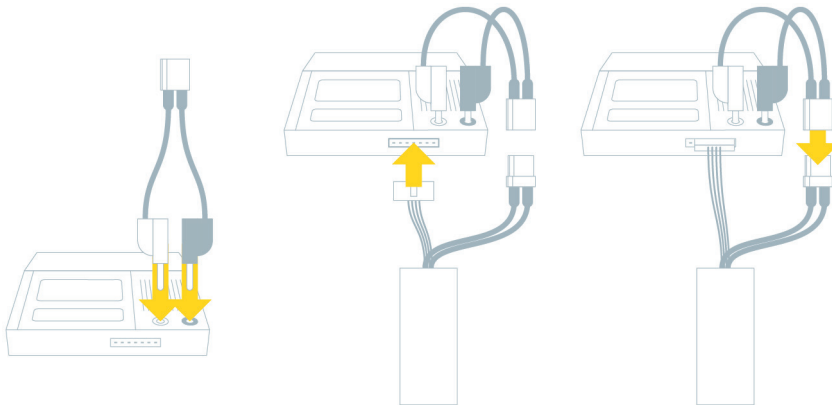
Press the **Enter/Start** key to select the charge current setting. The entry “C:x.xA” blinks. Press the **DEC** or **INC** key to change the value until it shows “C:5.0A”.

To change the battery capacity:

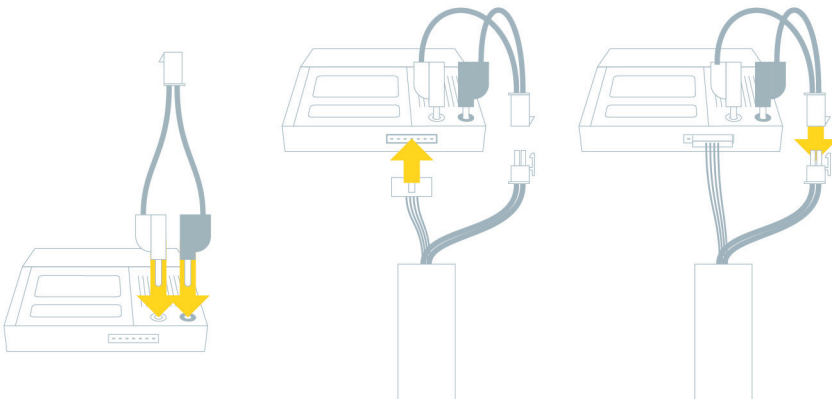
Press the **Enter/Start** key to select the battery capacity setting. The entry “xxxxmAh” blinks. Press the **DEC** or **INC** key to change the value until it shows:

- 6000mAh for the UX5 battery
 - 6600mAh for the UX5 HP battery
4. Connect the battery to the charger:
- a. Connect the charge cable to the charger.
Note – The charge cable to use depends on the rover battery type. Make sure you select the correct charge cable for the battery.
 - b. Connect the balance connector of the battery to the charger. Align the connector to the right of the socket.
 - c. Connect the charge cable of the charger to the charge connector on the battery.

Connecting the **UX5** battery to the charger, using the UX5 charge cable:



Connecting the **UX5 HP** battery to the charger, using the UX5 HP charge cable:



Charging the battery

On the charger, press and hold the **Enter/Start** key for two seconds. The battery starts charging.

To interrupt the charging process, press the **Enter/Start** key. The charger returns to the main screen and displays the charge program. To resume charging, press the **Enter/Start** key for two seconds.

When the battery is fully charged, the charger produces an audible signal and stops charging automatically. The charger displays "END".

At typical room temperature it takes approximately 2 hours to charge a fully depleted battery. Charging time depends on remaining battery life and ambient temperature.

Preparing the battery for storage



WARNING: LiPo batteries should never be stored at full charge for more than a few hours.

Note – The charger can only charge a battery; it cannot discharge a battery.

On the charger, press and hold the **Enter/Start** key for two seconds. The battery starts charging to the voltage level for safe and healthy storage.

Safe storage tips:

- Store the batteries in a cool, dry area (below 30 °C/86 °F) that is subject to little temperature change. Elevated temperatures can result in reduced battery service life.
- Do not place batteries near heating equipment, nor expose to direct sunlight for long periods.
- Do not store batteries above 60 °C (140 °F) or below -20 °C (-4 °F). Battery exposure to temperatures in excess of 130 °C (266 °F) will result in the battery venting flammable liquid and gases.
- Batteries should be separated from other materials and stored in a noncombustible, well ventilated, sprinkler-protected structure with sufficient clearance between walls and battery stacks.

Disconnecting the battery

1. On the charger, press the **Enter/Start** key to put the charger in standby mode.
2. Disconnect the charge cable of the charger from the charge connector on the battery.
3. Disconnect the balance connector of the battery from the charger.

