

Tekkeon

myPower™ ALL *plus*

EXTERNAL INSTRUMENT BATTERY

MP3450i/MP3450-10 User Guide



USER GUIDE

myPower™ ALL *plus*
EXTERNAL INSTRUMENT BATTERY

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Overview

myPower™ ALL Plus MP3450i is a rugged, high-capacity lithium polymer battery for use with instruments or industrial equipment. This universal battery provides instant power for devices that require between 5V and 19V, and is targeted to users who prefer a fixed voltage that will not be reset upon disconnection of the connected device.

myPower ALL MP3450i can be used alone, or with the optional extended battery (MP3450-10) to double the capacity. The extended battery with mounting brackets is sold separately.

Getting Started

Unpacking myPower ALL Plus

Your myPower ALL Plus package includes the following:

User guide (not shown)



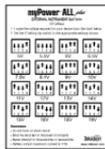
myPower ALL Plus
lithium polymer
rechargeable battery



Power adapter



Power output cord

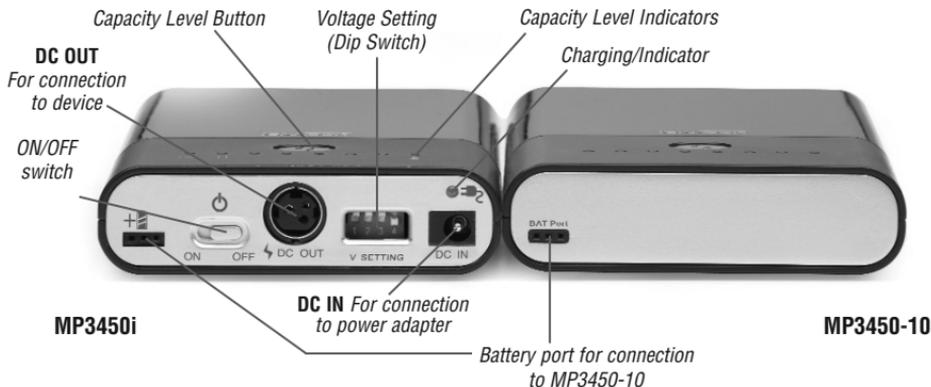


Voltage Selection
Card



Adapter tip kit with drawstring bag
(5 adapter tips)

Getting to Know myPower ALL Plus



Storing myPower ALL Plus

Lithium polymer batteries must be used consistently for maximum performance. Therefore, if you do not use the battery often, you should complete a charge cycle (discharge/recharge the battery) once a month.

myPower ALL Plus can be used in the environmental temperature range between -4 and 185°F (-20 and 85°C). While not in use, store myPower for iPhone in a dry area where the temperature is between -4° and 113°F (-20 and 45°C). Extreme temperatures can damage the battery, and the battery life will decrease with higher temperatures or a moist environment.

Charging myPower ALL Plus

To charge MP3450i, you can use either the included power adapter or a solar panel. The steps to charge with either of these devices are described in this section.

Charging with a Power Adapter

myPower ALL Plus will charge in four hours when completely empty. The green CHARGE indicator will turn on after the battery is 80% charged. Therefore, you should view the actual battery capacity before disconnecting the power adapter to stop charging. (Before using myPower ALL Plus for the first time, you must charge the device for four hours.)

1. Remove the output cord from the **DC OUT** jack, if connected.
2. Plug the power adapter into the **DC IN** jack on the end of myPower ALL Plus.
3. Plug the power adapter into a wall outlet. *The red CHARGE indicator will turn on to indicate the battery is charging and is less than 80% charged.*
4. When the green charge indicator turns on, press the Capacity Level Button to view the battery capacity. If the capacity does not indicate full (green LEDs on), continue to charge the battery until the battery capacity indicates full.
5. When the battery capacity indicates full, unplug the power adapter.

NOTE: *myPower ALL Plus will automatically shut down the power input when fully charged, so you can charge it overnight.*

Charging with a Solar Panel

You can charge myPower ALL Plus using a compatible solar panel. The solar panel can connect to the DC IN port, or the 3-Pin Input Port, depending upon the type of solar panel. The DC IN port is designed for use with a DC power adapter with constant current input. Charging myPower ALL Plus efficiently requires a minimum of 1A current output from the solar panel. In general, a 25W or higher solar panel should provide sufficient power to charge myPower ALL Plus.

The 3-Pin Input port is designed to allow charging by smaller solar panels (lower than 25W), and requires an optional Smart 3-Pin Adapter available from Tekkeon. To use the solar panel with this port, the solar panel must have a minimum open circuit voltage of 15V. However, there is no minimum output current requirement from the solar panel.

Using myPower ALL Plus

myPower ALL Plus can be used to power and/or charge any device that requires between 5 and 19V. With devices that require higher voltage levels, like notebook computers and portable DVD players, we recommend that you use myPower ALL Plus only to power the device. You will find that powering without charging your higher voltage device will maximize the battery life of myPower ALL Plus, thus letting you use your portable device even longer.

To use myPower ALL Plus to power and/or charge your device, take these steps which are described in detail in the following sections.

- Select an adapter tip for your main device and connect the tip to the output cord.
- Connect the power output cord to myPower ALL Plus.
- Adjust the voltage level to match that of your device.
- Connect the adapter tip/output cord to your device.

Select/Connect the Adapter Tip

1. Select the adapter tip that fits securely into the power jack on your portable device.
2. Locate the polarity symbol on your device in the area around the power connector jack:



Center Positive



Center Negative



WARNING: myPower ALL Plus supports Center Positive polarity only. If your device has a Center Negative polarity, do not power the device with myPower ALL Plus; contact support@tektron.com for assistance.

3. Connect the adapter tip to the power output cord (but not the device).

If you are using a UA-xxx adapter (rather than PA-xxx), you must insert the L34 adapter between the adapter cord and UA-xxx adapter as shown.

Connect the Power Output Cord

1. Plug the large end of the power output cord into the **DC OUT** jack on the end of myPower ALL Plus.



Adjust the Voltage Level

1. Locate the voltage specification for your portable device. This can be found on the device power adapter label or device specification label which typically is found on the bottom of the unit.
(If available, use the voltage specification shown on the power adapter.)
2. Using the voltage chart on page 8, adjust the Voltage Setting (dip switch) to change the output voltage to that required by your device.

CAUTION: It is important to set the voltage **NO MORE** than one step higher than the voltage requirement for the portable device as an incorrect setting may prevent myPower ALL Plus from working with your device, or may harm your device in the rare instance that the device accepts the higher voltage. However, for all devices, adjusting the voltage **ONLY** one step higher than required will not harm the device.

3. To change the voltage, repeat step 2.

TIP: You can optimize the use of myPower ALL Plus with your notebook computer or portable DVD player by setting the voltage on myPower ALL Plus to less than the required voltage shown on the notebook computer power supply. This prevents myPower ALL Plus from charging the device, thus extending the amount of time you can use myPower ALL Plus to power your notebook computer.

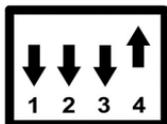
Most notebook computers have a battery voltage of 11.1V or 14.8V, allowing them to be powered with 12V or 14V. Therefore, it is recommended that you set the voltage to 12V first, and then test to see if it will power your notebook. If not, increase the voltage to the next voltage level, and retest. Repeat this process until you reach the voltage that will power your notebook.

Most portable DVD players require 9 or 12 volts. Set the voltage to 7.5V and test to see if myPower ALL Plus will power your device at this setting. If not, increase the voltage by one level and retest.

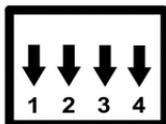


Sample Power
Adapter Label

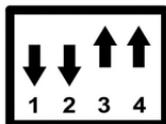
VOLTAGE CHART



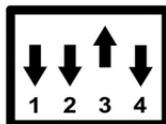
5V



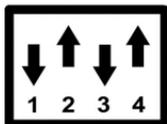
5.5V



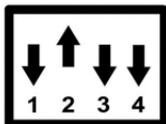
6V



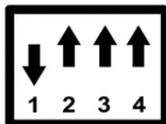
6.5V



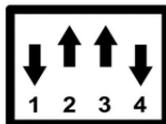
7.5V



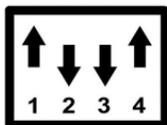
8.4V



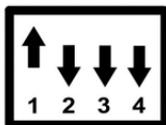
9V



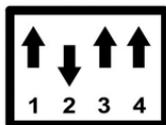
10V



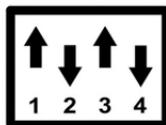
11V



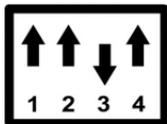
12V



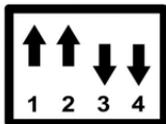
13V



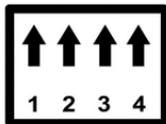
14V



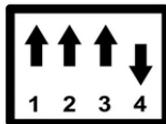
15V



16V



18V



19V

Connect the Portable Device

1. Connect the adapter tip into the power jack on the portable device.
2. Slide the ON/OFF switch to ON to turn on myPower ALL Plus.
3. Turn on the portable device and use it as you would normally. *While connected, myPower ALL Plus will power and charge your device. (As mentioned earlier, myPower ALL Plus will not charge a device if the voltage setting is lower than that required.)*

or

Leave the portable device turned off and myPower ALL Plus will charge the device battery.

4. When finished, slide the ON/OFF switch to OFF.

NOTE: *If your portable device displays a low voltage/low capacity or double-beep warning while myPower ALL Plus is connected, adjust the voltage setting to one level higher.*

TIP: *For most portable devices, myPower ALL Plus can be used to power the device even when the device battery is not installed.*

View myPower ALL Plus Battery Capacity

The capacity in myPower ALL Plus will decrease as the battery powers and/or charges your devices. The remaining capacity is displayed on the capacity indicator, which is accessed as described below. As the remaining capacity decreases, the lights will turn off in sequence from right to left. When the myPower ALL Plus battery capacity is low, only one green LED will be on. You should recharge myPower ALL Plus at this time. When myPower ALL Plus is completely out of battery, all lights will be off. At this point, you must charge myPower ALL Plus.

1. Press the Capacity Level button to view the capacity as shown in the Capacity Indicator table.

CAPACITY INDICATOR

INDICATOR	PERCENTAGE
1st	1-10%
2nd	10-25%
3rd	25-40%
4th	40-55%
5th	55-70%
6th	70-85%
7th	85-100%

Obtaining Adapters

Five adapter tips that fit most DC adapter jacks on a variety of portable devices are included with myPower ALL Plus. If none of these tips fits snugly into your portable device power jack, please go to our web site at www.tektron.com/mpadapters to determine which adapter tip you need for your device. You can obtain most adapters through the web site, or by contacting Tektron by phone at 888-787-5888 or 1-714-832-1266. If available through Tektron, the adapter will be sent to you for a nominal fee.

Using the Extended Battery (MP3450-10)

You can double the capacity of myPower ALL Plus by adding the extra battery unit MP3450-10. When MP3450-10 is added to MP3450/MP3450i, the battery capacity shown on the indicators includes the capacity available with MP3450-10.

Adding the Extended Battery

1. Place MP3450i on top of MP3450-10 with both flat silver ends facing the same direction.
2. Connect the bracket with the 3-pin plugs inside to the silver ends of the devices.
The 3-pin plugs will mate with the battery port on each of the devices, and the controls on the end of MP3450i will show through the bracket opening.
3. Connect the second bracket on the opposite end of the devices to hold the units together securely.
4. Use MP3450i as you would normally.



Charging the Extended Battery

1. With MP3450-10 connected, charge MP3450i as described earlier. Both batteries will be charged at the same time (in parallel).

Troubleshooting

If myPower ALL Plus does not power the portable device or charge the device battery, take these steps:

1. Verify that the current consumption of the portable device is not more than 4.0 Amp. If the device consumes more than the maximum provided by myPower ALL Plus, the device will shut down when turned on and cannot be powered and/or charged by myPower ALL Plus.
2. Verify that the device does not require more than 19V. If the device requires more, MP3450i will not be able to charge the device. However, in most but not all cases, MP3450i will be able to power the device.
3. View the remaining battery capacity. If it is below 25%, recharge myPower ALL Plus.
4. Check that the output cord is connected to both myPower ALL Plus and the portable device, and that the adapter tip fits snugly into the power jack on your portable device. If not, try another adapter.
5. Verify that the polarity of the device power jack is Center Positive. If the polarity is Center Negative, please contact support@tekkeon.com for assistance.
6. Check that the output voltage for your portable device matches or is just below the output voltage set on myPower ALL Plus. If the output voltage is not correct, change the voltage as required.
7. Verify that a battery is installed in the portable device as some devices will not function without a battery installed.
8. Verify if your device is designed with charging circuitry that limits the input voltage. If so, myPower ALL Plus may not be able to power or charge the device. (For example, if a device is designed to accept only a very narrow input voltage, then select the voltage that is as close as possible to that required for your device. Otherwise myPower ALL Plus may not be able to power or charge the device.)



Limited Warranty

The product enclosed herein is warranted to be free of operational defects for a period of one year from the date of purchase. In the event of a defect in operation during the warranty period Tekkeon, Inc. will replace the defective product when the owner returns all product contents. The limited warranty will be considered void if the unit is tampered with, subject to misuse, negligence or accidental damage, has been improperly serviced, or if the security seal is removed. This warranty is limited to replacement only and shall not cover any other damages. Any product returned to Tekkeon, Inc. with no fault found will be returned to the owner at the owner's expense.

To obtain warranty coverage, please complete and submit the enclosed registration card.

Disclaimer of Warranties

Any user of this product does so at the user's own risk. To the maximum extent permitted by applicable law, Tekkeon, Inc. and its suppliers provide the hardware and any support services related thereto "as is" and with all faults; and hereby disclaim all warranties and conditions, whether express, implied or statutory, including, but not limited to implied warranties of merchantability, fitness for a particular purpose, non-infringement, lack of negligence or correspondence to description, except for those warranties specifically and expressly provided in the Limited Warranty.

With respect to the use of this product, in no event shall the company be liable for any loss of profit or any other commercial damage, including but not limited to special, incidental, consequential and other damages.

Customer Support

Customer support for myPower ALL Plus is available at:

Tekkeon, Inc.

c/o myPower ALL Plus

3002 Dow Avenue, #134

Tustin, CA 92780

888-787-5888 / 714-832-1266

Tekkeon, Inc. must issue a Return Merchandise Authorization (RMA) number for all exchanges or refunds.

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Rev A

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Cut loose. Stay loose.