



Segway™ Human Transporter (HT)
> **Off-Board Charger Instructions**

These instructions describe the proper use of the Segway HT Off-Board Charger. Before using the Segway HT Off-Board Charger please read these instructions.

Kit Number: 173610001



Specifications

- input voltage: 100v-240v AC
- current: 1.4 A
- frequency: 50 Hz-60 Hz



WARNING

The Segway HT Off-Board Charger is designed solely for charging Segway HT battery packs. It should not be used to charge any other batteries or for any other purpose.

Improper use of the Segway HT Off-Board Charger and improper removal, handling and installation of Segway HT battery packs involves risk of injury from electric current and the toxic substances contained in the battery packs.

Inspect the Segway HT Off-Board Charger, Segway HT battery packs and power cord before each use. Do not use if damaged.

Do not modify the Segway HT Off-Board Charger, Segway HT battery packs or power cord.

To charge Segway HT battery packs using the Segway HT Off-Board Charger, you must first remove the battery packs from the Segway HT in accordance with instructions provided by Segway LLC. If you do not have those instructions, contact Segway Customer Operations at 866.4SEGWAY (866.473.4929).

Do not insert anything into the connector leads or battery pack terminals.

When plugging or unplugging the power cord, hold by the rubber portion of the plug. Do not touch the metal prongs.

Store and use the Off-Board Charger indoors and keep it dry.

> To Charge Segway HT Battery Packs with the Off-Board Charger

1. Make sure the ambient temperature is between 0°C (32°F) and 40°C (104°F)
2. Make sure the Off-Board Charger is not plugged in and that the on/off switch is in the off (0) position.
3. Plug the battery pack connector leads from the Off-Board Charger into the terminals of the two battery packs. (The connector leads are keyed to fit only one way.)
4. Plug the Off-Board Charger's power cord into the charger and into a grounded AC outlet (100v to 240v; 50Hz to 60Hz).
5. Move the on/off switch to the on position (-).
6. Check to make sure that the Charging Indicator lights pulse green.
7. Charge new battery packs for twelve (12) hours. To fully charge previously charged battery packs, charge until the Charging Process (described below) is complete. This should take no longer than eight hours.
8. When charging is complete, switch the power switch to the off position and unplug the Off-Board Charger before disconnecting the connector leads from the battery packs.

Charging Indicators

The Off-Board Charger has two Charging Indicator light emitting diode (LED) lights located on the top of the charger. These Charging Indicators show whether the battery packs are charging and at what rate.

Each Charging Indicator corresponds to one connector lead, left LED to left lead and right LED to right lead. The Charging Indicators provide independent information regarding the charging state of each battery pack. Any time the LED green light is on, the battery pack connected to that lead is receiving a pulse of current. Slow pulse rates indicate slow charging rates, faster pulse rates denote faster charging, and solid green indicates the maximum charge rate.

Charging Process

There are four stages in the charging process:

1. Immediately after the Charger is connected to both the battery packs and the AC power, and the switch is moved to the on position, the battery packs perform a test to determine if it is appropriate to charge at the maximum charge rate. While this test is occurring, the Charging Indicators pulse green every few seconds, indicating the battery packs are charging at a slow "trickle" rate.
2. After about two minutes (longer if the battery packs are very warm, cold, or completely discharged), the battery packs will begin charging at the fast rate, and the Charging Indicators glow solid green.
3. The battery packs' electronics will monitor the battery pack voltage and temperature to determine when it is full. At that time, the Charging Indicators will then begin pulsing green at a rapid rate. This rapid pulsing rate will continue for approximately three hours while the cell balancing process is completed. This process ensures both battery packs are charged evenly.
4. At the end of the cell balancing process, the green pulse rate will become slow again and will continue at the slow rate until the Charger is unplugged or switched off.

Charging Indicator	Battery State
Initial Slow Pulse	initial test to assess battery pack status and amount of charging needed
Solid LED	"fast" charge; when the majority of the charging takes place
Fast Pulse	cell balancing process, during which the cells are topped off equally
Slow Pulse	trickle charge to keep battery packs fully charged

Charging Failures

If a failure is detected during charging, all charging will stop. Depending on the nature of the failure, a solid red Charging Indicator LED will be displayed or the Charging Indicator will be off.

If either or both Charging Indicators are off or red, follow these directions:

1. If the Charging Indicators are off (no illumination), check to make sure that the power cord is properly plugged into AC power and that the Charger on/off switch is in the on position.
2. If the power cord is properly plugged into AC power and the Charger on/off switch is in the on position, but either or both of the Charging Indicators are still off or red, switch the on/off switch to the off position, unplug the power cord, check to make sure AC power is present at the source and remove and reconnect
3. If this does not resolve the problem, contact Segway Customer Operations at 866.4SEGWAY (866.473.4929) or visit our website at www.segway.com/support/.

Battery Pack Temperature Parameters

It is normal for the Charger or battery packs to become warm when charging. The battery packs will generally be significantly warmer than the air temperature due to heating that occurs as electricity is delivered.

If the battery pack temperature is below approximately 32°F (0°C) or above approximately 104°F (40°C), the battery pack will not fast charge. The Charging Indicator will continue to pulse slowly, indicating a slow or trickle charge, until the battery pack temperature stabilizes within the 32° to 104°F range (0° to 40°C). Once stabilized within this range, the fast charge will begin and the Charging Indicator will be solid green.

If the Charging Indicator lights remain blinking throughout the entire time that the battery packs are connected to the Charger, then the battery packs have only trickle charged the entire time. This will provide only a small amount of energy into the battery packs.

If you are concerned that the battery packs may be too cold or overheated

1. Check the Charging Indicators to make sure they show solid green, indicating fast charge.
2. If the Charging Indicators do not show solid green within 15 minutes after starting the charging process, move the Charger and battery packs to a location within the proper temperature range of the 32° to 104°F range (0° to 40°C).
3. After the battery packs are within the proper temperature range, reconnect the battery packs to the charger, plug in the Charger, and switch on the Charger.

If the Charging Indicators still do not show solid green within 15 minutes, contact Segway Customer Operations at 866.4SEGWAY (866.473.4929) or visit our website at www.segway.com/support/.

LIMITED WARRANTY The Segway HT Off-Board Charger is an accessory covered by the ninety (90) day limited warranty provided in the Segway™ Human Transporter Accessories Limited Warranty (copy delivered with the Off-Board Charger).



Questions?

If you have any problems or concerns, please contact Segway Customer Operations at 866.4SEGWAY (866.473.4929) or on our website at www.segway.com/support/contact_us.html. Thank you.

This product complies with the requirements of CSA Standard CAN/CSA-E60335-2-29-01: Safety of Household and Similar Electrical Appliances - Part 2: Particular Requirements for Battery Chargers



This product complies with the requirements of European Directives: 89/336/EEC, Directive of Electromagnetic Compatibility and 73/23/EEC, Low Voltage Directive.



FEDERAL COMMUNICATIONS COMMISSION
RADIO FREQUENCY INTERFERENCE STATEMENT

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1.) This device may not cause harmful interference, and
- 2.) This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications to the equipment, not expressly approved by the party responsible for compliance, could void the user authority to operate the equipment.

NOTICE

This class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations. ICES-003

Cet appareil numérique la classe B est conforme à la norme NMB-003 du Canada.