# **VFUSION**

#### Rechargeable Hearing Aid Battery Charger

#### Read This First

The VFusion Charger and VFusion Silver-Zinc (AgZn) Rechargeable Batteries provide an environmentally-friendly alternative to conventional zinc-air hearing device batteries. The VFusion system benefits include:

#### Ease of Use

- Integrated magnet retains batteries in battery drawer until you remove them
- Battery orientation (+/-) is not needed for successful charging
- Sliding battery drawer
- Push and pop to click the USB cover closed
- LEDs provide visual feedback on battery charging progress

#### Charging

- Typical charge time less than six hours
- Quick charging adds up to 30 percent of available capacity after one hour
- Cannot overcharge batteries
- VFusion Batteries do not experience a memory effect, so they can be recharged at any time

#### **Power Source Options**

- Standard USB plug allows you to use a computer or the USB Power Adaptor (included) to power your charger
- Optional USB Car Charger Adaptor available

#### **Package Contents**

- VFusion Charger
- USB Cable
- USB Power Adaptor\*

\*Note: You must "fold out" the prongs on the back side of the USB Power Adaptor before plugging into the wall.

#### **Safety Information**

Your VFusion Charger is capable of being powered by a variety of sources. If you use a power source other than that provided with your VFusion Charger, you must ensure that any source you use supplies levels of voltage and current that correspond to the label on the VFusion Charger.

The VFusion Charger is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning its use by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the VFusion Charger.

VFusion Batteries should be disposed of according to local, state and/or national regulations.

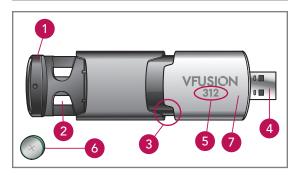
Prior to disposal, place a piece of tape over the smaller end of the battery to prevent accidental shorting of the battery to other batteries or to metal objects.

In the rare event that a battery is leaking, place the battery in a plastic bag prior to disposal, and wash your hands afterwards with soap and water.



Warning! Do not attempt to charge non-rechargeable button batteries in this charger; this includes both zinc-air and silver-oxide hearing device batteries.

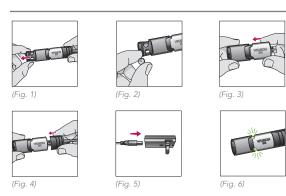
## VFusion Rechargeable Battery Charger Overview



- 1) Battery drawer
- 2) Battery compartment
- 3) LED indicator
- 4) USB plug
- 5) Battery size 312 or 13 identifier

- 6) VFusion Battery
- 7) USB protective cover

#### **Quick Start**



- 1) Pull battery drawer open (Figure 1).
- 2) Insert VFusion Battery into battery compartment. Magnet should "pull" the battery into place (Figure 2).
- 3) Battery must lay flat and not on its edge.

  Note: VFusion Charger automatically determines the battery polarity for proper charging.

- 4) Close battery drawer.
- 5) Slide USB protective cover back until it clicks into position, which exposes the USB plug (Figure 3).
- 6) Insert VFusion Charger into the female USB socket on the USB cable (Figure 4). Insert the USB cable into the Power Adaptor Socket (Figure 5). Ensure Power Adaptor is properly inserted into electrical wall socket.
  - OR -

Insert VFusion Charger directly into a computer USB socket.

7) The VFusion Charger LED indicator will first briefly flash amber. Verify the VFusion Charger LED indicator is slowly pulsing green for each battery inserted (Figure 6).

## VFusion Rechargeable Batteries (sold separately)

VFusion Batteries are encased in a green band to highlight their rechargeability and make them easier to differentiate from other battery chemistries. They come in battery size 13 (32mAH) or 312 (28mAH), which correspond to the battery needs of your hearing devices. Your hearing professional can provide the appropriate VFusion Charger and VFusion Batteries for use with your hearing devices. If a VFusion Battery runs out of power, an offthe-shelf non-chargeable zinc-air battery (of the same size) can also power your hearing devices.

# **Battery Charging**

VFusion Charger can charge either one or two VFusion Batteries at the same time. The batteries must be the same size (either 312 or 13) as listed on the VFusion Charger housing. To ensure optimum performance, charge VFusion batteries each night, so they will be ready in the morning to provide a full day of power for your hearing devices. VFusion Batteries do not have a memory effect, so they can be recharged at any time. In fact, it is best NOT to fully discharge the battery prior to recharging. Recharging the battery before it is fully drained will prolong its life.

When plugged into a powered USB socket, the VFusion Charger automatically begins charging VFusion batteries. When a VFusion Battery is fully charged, the VFusion Charger automatically stops charging the battery. It is not possible to overcharge a VFusion Battery. 13 Recharging VFusion Batteries at room temperature will optimize battery recharge time and improve battery longevity. If the VFusion Charger or VFusion Batteries are exposed to extremely hot or cold conditions (such as a parked vehicle), they may need to return to room temperature before successful charging can begin. The VFusion Charger automatically begins charging when temperature conditions are acceptable.

For a size 312 VFusion Battery, the charging time from a fully depleted state to full charge can be achieved in approximately six hours. The size 13 VFusion Battery takes slightly longer due to its additional capacity. If only a short amount of charging time is available, a quick charge (about one hour) can add up to 30 percent of the available capacity to the battery.

## **Battery Charging Status Indicators**

Visual status indicators are displayed when a VFusion Battery is placed into the VFusion Charger, the battery drawer is closed, and a power source is provided. Each battery charges independently from the other, so it is possible for each battery to be in a different charging state.

LED behavior	Status	Notes
Slow-pulsing green	Correctly charging VFusion Battery	Also applies to non- rechargeable batteries or other foreign objects of similar size until they are detected and given an error condition
Continuous green	Fully-charged VFusion Battery	Remains lit until drawer is opened or VFusion Charger is removed from power source

Cont.

LED behavior	Status	Notes
Fast-flashing red	Error condition	Remains lit until drawer is opened or VFusion Charger is removed from the power source. See Section on Troubleshooting Error Conditions.
No active LED	Nothing being charged	Battery drawer is not fully closed or battery compartment is empty or no power source is supplied.

## **Troubleshooting Error Conditions**

When the VFusion Charger identifies a possible error condition, it displays a flashing red light. Possible error conditions along with potential solutions to consider are:

Possible Conditions (Flashing red LED)	Solution
Non-rechargeable (such as zinc- air, silver-oxide or nickel-metal hydride) battery inserted into VFusion Charger	Remove non-rechargeable battery and replace with a VFusion Battery
Foreign object (non-battery) inserted into VFusion Charger	Remove foreign object and replace with a VFusion Battery
Environmental temperature exceeds 40 degrees C (104 F)	Charging automatically halted until temperature drops below 40 C
Environmental temperature is less than 0 degrees C (32 F)	Charging automatically halted until temperature increases above 0 C
Defective VFusion Battery	Replace defective VFusion Battery with new VFusion Battery
Fault condition detected in VFusion Charger	Return VFusion Charger to hearing care professional

#### Accessories

Contact your Hearing Professional to purchase optional accessories:

- USB Car Charger Adaptor
- Additional VFusion Rechargeable Batteries

## Required Information

CAN ICES-3B/NMB-3 B

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.

#### **Advisory Information**



Warning! This device charges small batteries that can be readily swallowed by children. Keep this device away from access by children. In the event a battery is swallowed, call the National Button Battery Ingestion Hotline at 202-625-3333.

Note: This device contains a small magnet (approximately 10 gauss at .5 inches). Patients wearing/using implanted or other medical devices should follow that device's User's Manual recommendations regarding household magnets.

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