

# AIRFRAME POWER WHEELCHAIR

MOB1107AH12

**vive**<sup>®</sup>  
MOBILITY



To see all FAQs in  
one place, visit  
[vivehealth.link/064](https://vivehealth.link/064)

[vivehealth.com](https://vivehealth.com)

# AIRFRAME POWER WHEELCHAIR

## INTRODUCTION

The Vive Mobility Airframe Power Wheelchair is a versatile, motorized wheelchair that can be easily folded for storage or transport. Please read and follow all instructions, warnings, and notes in this manual before attempting to operate your Power Wheelchair for the first time. If there is any information in this manual which you do not understand, or if you require additional assistance for assembly or operation, please contact your local, authorized provider.

Your Power Wheelchair consists of several components. The chair is foldable to allow for easy storage or transport. The operating system consists of a controller, battery well, two motors, a drive mechanism, and drive wheels.

## ASSEMBLING THE POWER CHAIR



For a video demonstration, check out [vhealth.link/ecd](https://vhealth.link/ecd)

1. Remove the wheelchair from the packing box and put it on the ground in an open area.

2. Push the chair frame apart, and press the two tubes on both sides of the seatbase down into the grooves on each side of the chair frame.



3. Pull up on the seatback handles and lock them into place.



Push in on the Tab to fold the seat-back back down.



4. Insert the Metal fitting on the joystick into the bracket fitted on the right armrest. Add twist screw to secure into place.

**NOTE:** Bracket can be switched to the left armrest if needed.



5. Secure the wire harness to the frame using the supplied hook and loop straps.



6. Connect the wire harness plug (not marked) and the two motor plugs (marked "left motor" and "right motor") from the controller with the correct plug inserts coming off the back under side of the chair.



7. Connect the Silver plug into the battery and secure using the locking screw cap that is attached.



8. Use the Red levers in the rear of the chair to put the chair from neutral to drive mode.

Pull the lever towards you to switch the chair to “neutral” which will disengage the brakes and allow you to push the chair for use as a transport chair or for easy transport without someone in the chair.

Push the lever away from you to lock the brakes and engage “drive mode” which allows the joystick to work for patient self use.

**NOTE:** If the chair is not in “drive mode” and you turn the joystick on, the joystick will give an error code letting you know that it is not in “drive mode”.



## OPERATING THE POWER CHAIR



For a video demonstration, check out [vhealth.link/lag](https://vhealth.link/lag)

### Charging the Batteries

**WARNING:** You must charge your wheelchair's batteries with the charger supplied by Vive. Do not use any other type of battery charger.

#### To charge the wheelchair batteries:

9. Be certain that the controller is turned off and the wheelchair brakes are applied.
10. Connect the 3-pin metal plug of the charger into the 3-hole charger socket on the controller.
11. Insert the plug of the charger into a wall electrical outlet.
12. The blue LED on the charger lights up, indicating that charging is in progress. The green LED on the charger lights when the batteries are fully charged.



**NOTE:** A full charge will take approximately 8-12 hours.

13. After charging is complete, unplug the charger from the wall outlet.
14. Remove the output-connector from the socket on the controller.
15. Place the charger, cables, and plugs together in the bag on the rear seatback.

**Please Note:** The Battery is a Lithium Battery. It is safe for air transporting under TSA guideline when the battery is left attached to the chair. One Spare Battery is also permitted only by carry on.

## Overload Protector

In the event of a motor overload, the overload protector will shut down power to the wheelchair in order to protect the motors and their electrical elements. Please call your dealer directly for maintenance following a motor overload.

## Safety Belt

For safety purposes, please fasten the safety belt whenever seated on the wheelchair.



## UNDERSTANDING THE POWER CHAIR CONTROLLER

The controller is a key component of the wheelchair. All electrical elements to operate the wheelchair are housed in the control panel. The controller consists of a joystick, battery gauge, an on/off button, a speed indicator, an accelerate button, a decelerate button, a horn button, and a charger socket.



The **On/Off-Button** controls power to the wheelchair. Don't use the On/Off-Button to stop the wheelchair unless some emergency occurs, as doing so may cause premature wear of the drive components.

The **Joystick** is mainly used to control the speed and direction of the wheelchair. The farther you push the joystick from its central position, the faster the wheelchair moves. Whenever you release the joystick, it will automatically go back to the central position and the brake will be automatically operative.

**WARNING!** If your wheelchair moves accidentally, immediately release the joystick so that the wheelchair will stop moving automatically.

The Horn is a safety feature that will create an audible warning sound if you press the button.

The Speed **Up/Down Buttons** control the speed of the wheelchair. After turning on the power, the speed light will indicate the speed setting. The maximum speed range showed by the number of light cells can be adjusted by users. Each time the Speed Up Button (or Speed Down Button) is pressed, the speed will increase (or decrease) a light cell.

The **Brake Lever** secures the wheelchair in place. To park the wheelchair, pull the brake lever back.



**NOTE:** When parked on a sloped surface, the brake lever must be pushed forward, otherwise the wheelchair will lose control and result in personal injury.

## SHUTDOWN PROCEDURE

When not in use, the wheelchair should be shut down according to the following instructions:

1. Turn off the power and unplug all wiring connections.
2. If cleaning is desired, use a clean, soft cloth to scrub, then dry the wheelchair frame.
3. Store the wheelchair at room temperature in a dry environment.

## ROUTINE CHECKS

The wheelchair should be inspected before use to assure it remains in optimal operative condition. Refer to the Routine Maintenance Checks table found in the Care and Maintenance section of this manual for detailed guidance.

## TROUBLESHOOTING

This wheelchair is equipped with a malfunction auto alarm. If the wheelchair experiences a failure, the LED lights on the controller will turn on and a buzzer will sound.

Please consult your authorized agent for service if any faults still occur after troubleshooting.

Alarm Code	Diagnoses	Solution
Beep 2+1	Communication Failure	Check the connection inside the joystick
Beep 2+2	Right Motor Failure	Check right motor and wire connection
Beep 2+3	Right Brake Error or Cable Connection Poor	Check if the brake lever is in place & if the brake is damage
Beep 2+4	Left Motor Failure	Check left motor and wire connection
Beep 2+5	Left Brake Error or Cable Connection Poor	Check if the brake lever is in place & if the brake is damage
Beep 2+6	Over Current	Check if the motor is locked or short circuit, or if the joystick is damaged
Beep 2+7	Joystick Lever Failure	Check connection inside the joystick
Beep 2+8	Joystick Failure	Check with supplier for repair
Beep 2+9	Battery Failure	Charge the battery, if the issue persists replace the battery

## SPECIFICATIONS

Max. Weight Capacity 225lbs  
 Seat Size 18.1 x 17.1 x 18.5 Inch  
 Obstacle Height Climbing: 6 degree  
 Maximum Speed 3.73 mph  
 Estimated Range 10 miles  
 Braking Distance at Flat Surface ≤59.1 Inch  
 Turning Radius ≤32 Inch  
 Motor Type 24V 180W

Battery DC 24V12AH Lithium  
 Brake Electronic Brakes  
 Front Tire 7 Inch  
 Rear Tire 12 Inch  
 wheelchair Size(Unfold)  
 39 x 24.4 x 36.6 Inch  
 Folding Size 31.5 x 11 x 29 Inch  
 Weight 39 lbs

## Specification sheet of test information

Standard Ref.	Disclosure information	Spec/Size
ISO7176-1	Min Static stability in the forward direction	26.8°
	Min Static stability in the rearward direction	19.8°
	Min Static stability in the rearward direction	15.1°
	Min Static stability, lateral orientation	22.2°
	Min Static stability with forward or rearward anti-tip devices	25.8°
	Min Static stability with forward or rearward anti-tip devices	N/A
	Min Static stability with forward or rearward anti-tip devices	Yes
ISO7176-2	Max Rearward dynamic stability	10°
	Max Rearward dynamic stability: Braking when traveling forward on horizontal or uphill	10°
	Max rearward dynamic stability: Braking when traveling backward	10°
	Max Rearward dynamic stability	25mm
	Max Rearward dynamic stability	25mm
	Max Rearward dynamic stability	50mm
	Max Forward dynamic stability	10°
	Max Forward dynamic stability: Traveling forward down a slope onto a horizontal surface	10°
	Max Forward dynamic stability: Traveling forward up a step transition at maximum speed	25mm
	Max Forward dynamic stability:	50mm

	Max Dynamic stability in lateral directions	10°
	Dynamic stability in lateral directions	0.74m
	Dynamic stability in lateral directions	50mm
ISO7176-3	Parking brake operating force, if it exceeds the value specified in Table 1.	Manual parking brakes: 34.6N Electro magnetic parking brakes: 23.2N
	Brake performance: Parking brakes - maximum slope uphill	Manual parking brakes: 7.3° Electro-magnetic parking brakes: >25.0°
	Maximum slope downhill	Manual parking brakes: 9.4° Electro-magnetic parking brakes: 15.4°
	Brake performance: Running brakes, normal operation	0.8m
	Brake performance: Running brakes, operation by reverse command	0.7m
	Brake performance: Running brakes, emergency operation	0.9m

ISO7176-4	Theoretical continuous driving distance range	9.3mi
ISO7176-5	The class A, B or C (for electrically powered wheelchair)	B
	The occupant mass group, I, II or III	II
	The effective seat width	470mm
	Full overall length	1000mm
	Overall width	620mm
	Stowage length	790mm
	Stowage width	360mm
	Stowage height	730mm
	Rising	48mm
	Total mass	20kg
	Mass of heaviest part	18kg
	Pivot width (for wheelchairs with full differential steering)	1300mm
	Turning diameter	1775mm
	Ground clearance	90mm
Required width of angled corridor	950mm	
Required doorway entry depth	1175mm	
Required corridor width for side opening	1075mm	
ISO7176-6	Maximum speed, forwards on horizontal plane	6.48km/h

ISO7176-7	Seat plane angle	9.2°
	Effective seat depth	400mm
	Seat width	425mm
	Effective seat width	470mm
	Seat surface height at front edge	470mm
	Backrest angle	18.1°
	Backrest height	485mm
	Backrest width	385mm
	Footrest-to-seat distance	420mm
	Footrest clearance	107mm
	Footrest length	138mm
	Footrest-leg-angle	104.3°
	Leg-to-seat-surface angle	119.5°
	Armrest-to-seat distance	280mm
	Front armrest-to-backrest distance	400mm
	Armrest length	225mm
	Armrest width	47mm
	Armrest angle	6.4°
	Distance between armrests	440mm
	Front location of armrest structure	390mm
	Propelling wheel diameter	295mm
	Horizontal location of axle	16mm
Vertical displacement of wheel axle	258mm	
Castor wheel diameter	178mm	

ISO7176-10	Obstacle climbing (Maximum obstacle height can be climbed and descended)	25mm
	Obstacle climbing (Maximum obstacle height can be climbed and descended)	110mm

The wheelchair conforms to the following standards:

- a) Requirements and test methods for static, impact and fatigue strengths (ISO 7176-8)
- b) Power and control systems for electric wheelchairs-requirements and test methods (ISO 7176-14)
- c) Climatic test in accordance with ISO 7176-9
- d) Requirements for resistance to ignition in accordance with ISO 7176-16

## CARE AND MAINTENANCE

If the batteries, joystick, motor/drive, charger, or other serviceable parts are in need of repair or replacement, please contact the dealer directly.

### ROUTINE MAINTENANCE CHECKS

Items	Always	Weekly	Monthly	Semi-Annually
Each part			X	
Turning, Driving, Preset and Disassembly		X		
Brakes	X			
Wiring Harness and Cables		X		
Charging of Batteries	X			
Mobility of the Front Wheels		X		
Pneumatic Case of the Rear Wheels		X		

Tire Wear			X	
Tire Damage	X			
Wear of the Push-Handle, Seatback, and Seatbase	X			
Motors				X
Controller		X		
Cleanliness	X			

### CLEANING INSTRUCTIONS:

1. May use a lightly dampened rag with wipe clean any dust or debris.
2. Always wipe dry with a cloth if device takes on any moisture.
3. Always make sure any fabric cleaners wiped dry and safe to use on surfaces of prolonged sitting.

### WARNINGS AND PRECAUTIONS

- Make sure that the controller has been reliably installed and the joystick is in a vertical position.
- Sit firmly, fasten the safety belt and lean against the backrest with head raised during operation.
- After turning on the power, check the speed indicator to ensure a proper setting. It is advised to set the speed at the lowest setting at start-up, and gradually increase to the desired level.
- If the wheelchair moves in an unexpected direction, release the joystick immediately.

- Device is only intended for Adult Use ONLY
- Wheelchair is not to be used under wet or extremely humid conditions. It is not recommended to use these devices near salt water areas for prolonged periods of time as corrosion can occur.
- Do not operate the wheelchair if it is behaving abnormally or erratically.
- Do not operate the wheelchair with depleted batteries.
- Wheelchair has pinch points when opening and closing and operating the hand brakes. Be careful when fitting your hands into tight areas and moving or shifting moving pieces on your chair.
- This wheelchair is not intended to be used as a seat in a motor vehicle. Never use it for this purpose.

Please Note that any serious incident that has occurred in relation to the device should be reported to Vive Health LLC and Also The Food and Drug Administration's (FDA). If you think you or someone in your family has experienced a serious reaction to a medical product, you are encouraged to take the reporting form to your doctor. Your health care provider can provide clinical information based on your medical record that can help FDA evaluate your report.

However, we understand that for a variety of reasons, you may not wish to have the form filled out by your healthcare provider, or your health care provider may choose not to complete the form. Your health care provider is NOT required to report to the FDA.

In these situations, you may complete the Online Reporting Form yourself.

You will receive an acknowledgement from FDA when your report is received. Reports are reviewed by FDA staff. You will be personally contacted only if we need additional information.

Submitting Adverse Event Reports to FDA

Use one of the methods below to submit voluntary adverse event reports to the FDA:

[www.accessdata.fda.gov/scripts/medwatch/index.cfm?action=reporting.home](http://www.accessdata.fda.gov/scripts/medwatch/index.cfm?action=reporting.home)

Consumer Reporting Form FDA 3500B. Follow the instructions on the form to either fax or mail it in for submission. For help filling out the form, see MedWatchLearn. [www.fda.gov/downloads/aboutFDA/reportsmanuals](http://www.fda.gov/downloads/aboutFDA/reportsmanuals)

**WARNING:** Keep feet within the footplates at all times when seated in wheelchair.

**WARNING:** Do not extend arms out of the armrests during operation.

**WARNING:** Ensure the wheelchair brake is applied before operation and before exiting the chair.

## HAZARDS

Do not use the wheelchair under the following circumstances:

1. In instances prohibited by this user's manual. For instance, use above maximum allowed incline, too high of barriers, highways, motor vehicle lanes, etc.
2. On slippery, sloped, or other unstable terrain.
3. If any componentry is in need of repair.

### Ramps and Slopes:

- Please note this Wheelchair is only suitable for ramps and slopes up to 6 degrees.
- When stopped on any kind of slope, always engage your brake for extra safety.
- Never attempt to reach for any items or attempt to get up from your wheelchair on a slope.

### Transferring Instructions:

1. Always make sure feet are clear from any obstructions and never stand on or use foot rests for balance.
2. Use necessary devices to aid in lifting a patient and never do any lifting or supporting outside of your means.
3. Always make sure brakes are engaged and that you are on a flat surface when transferring from a wheelchair.
4. Wheelchair should be turned off prior to entering or exiting the wheelchair.

## EMI Compliance Table (Table 1)

Table 1 - Emission

Phenomenon	Compliance	Electromagnetic environment
RF emissions	CISPR 11 Group 1, Class B	Home healthcare environment
Harmonic distortion	IEC 61000-3-2 Class A	Home healthcare environment
Voltage fluctuations and flicker	IEC 61000-3-3 Compliance	Home healthcare environment

## EMS Compliance Table (Table 2-5)

Table 2 - Enclosure Port

Phenomenon	Compliance	Electromagnetic environment
Electrostatic Discharge	IEC 61000-4-2	±8 kV contact ±2kV, ±4kV, ±8kV, ±15kV air
Radiated RF EM field	IEC 61000-4-3	20V/m 26MHz-2.5GHz 80% AM at 1kHz  10V/m 80MHz-2.7GHz 80% AM at 1kHz
Proximity fields from RF wireless communications equipment	IEC 61000-4-3	Refer to table 3
Rated power frequency magnetic fields	IEC 61000-4-8	30A/m 50Hz or 60Hz

**Table 3 – Proximity fields from RF wireless communications equipment**

Test frequency (MHz)	Band (MHz)	Immunity test levels
		Home healthcare environment
385	380-390	Pulse modulation 18Hz, 27V/m
450	430-470	FM, $\pm 5$ kHz deviation, 1kHz sine, 28V/m
710	704-787	Pulse modulation 217Hz, 9V/m
745		
780		
810	800-960	Pulse modulation 18Hz, 28V/m
870		
930		
1720	1700-1990	Pulse modulation 217Hz, 28V/m
1845		
1970		
2450	2400-2570	Pulse modulation 217Hz, 28V/m
5240	5100-5800	Pulse modulation 217Hz, 9V/m
5500		
5785		

Table 4 – Input a.c. power Port

Phenomenon	Basic EMC standard	Immunity test levels
		Home healthcare environment
Electrical fast transients/ burst	IEC 61000-4-4	±2 kV 100kHz repetition frequency
Surges Line-to-line	IEC 61000-4-5	±0.5 kV, ±1 kV
Conducted disturbances induced by RF fields	IEC 61000-4-6	3V, 0.15MHz-80MHz 6V in ISM bands and amateur radio bands between 0.15MHz and 80MHz 80%AM at 1kHz
Voltage dips	IEC 61000-4-11	0% UT; 0.5 cycle At 0°, 45°, 90°, 135°, 180°, 225°, 270° and 315°
		0% UT; 1 cycle and 70% UT; 25/30 cycles Single phase: at 0°
Voltage interruptions	IEC 61000-4-11	0% UT; 250/300 cycles UT=rated input voltage

Table 5 – Signal input/output parts Port

Phenomenon	Basic EMC standard	Immunity test levels
		Home healthcare environment
Electrostatic Discharge	IEC 61000-4-2	±8 kV contact ±2kV, ±4kV, ±8kV, ±15kV air

## ELECTROMAGNETIC INTERFERENCE

**WARNING:** Electronic equipment can be affected by Electromagnetic Interference (EMI). Such interference may originate from radio stations, TV stations, mobile phones or other radio transmitters. If the wheelchair has abnormal operation due to electromagnetic interference, shut down the power and consult the wheelchair dealer. The company does not take any legal responsibility for loss caused by failure to comply with this condition.

Please see Vive Website for Warranty Details

Please Call Vive Health for any needed spare parts, repairs or servicing recommendations. Note there is no additional servicing manual. Please contact Vive for information on recommended servicing facilities.

### NOTES

---

---

---

---

---

---

---





## HAVE MORE QUESTIONS?

Check out our list of Frequently Asked Questions at [vhealth.link/o64](https://vhealth.link/o64) for helpful answers.



And if that doesn't answer your question, our customer service team would love to help! Feel free to connect with them by phone, e-mail, or chat on our website

[sales@aracent.com](mailto:sales@aracent.com)  
1-888-550-7750  
[www.aracent.com](http://www.aracent.com)

