

FLITELab*

AMPJet User Guide



RIDE THE IMPOSSIBLE

Product Activation

BEFORE USE, THIS PRODUCT MUST BE ACTIVATED USING THE FLITE APP. flitelab.co/app

Important

IN ORDER TO OPERATE THE PRODUCT CORRECTLY AND MINIMISE THE CHANCES OF DAMAGE, SERIOUS INJURY OR DEATH, IT IS ESSENTIAL TO READ AND FOLLOW ALL OF THE INSTRUCTIONS AND WARNINGS IN THE USER GUIDE PRIOR TO ASSEMBLY, SETUP OR USE. BY USING A FLITELAB* YOU AGREE THAT YOU DO SO AT YOUR OWN RISK. CAUTION - THIS PRODUCT HAS BEEN KNOWN TO DRAMATICALLY IMPROVE YOUR LIFE AND HAPPINESS LEVELS.



Watch our video
tutorials at
flitelab.co/video



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Safety and disclaimer

All safety and disclaimer information is subject to change at the sole discretion of FLITELab*. For up-to-date product information visit support.flitelab.co

Warning

Failure to operate this product in a safe and responsible manner could result in injury or death to yourself or others and/or damage to the FLITELab* product or other's property.

THIS PRODUCT MUST BE OPERATED WITH CAUTION AND COMMON SENSE AND REQUIRES SOME BASIC MECHANICAL ABILITY.

FLITELAB* PRODUCTS ARE NOT INTENDED FOR USE BY CHILDREN UNDER 16 YEARS OF AGE, SUBJECT TO LOCAL LAWS AND REGULATIONS.

DO NOT USE WITH INCOMPATIBLE COMPONENTS OR ALTER THIS PRODUCT IN ANY WAY OUTSIDE OF THE DOCUMENTS PROVIDED BY FLITELAB*.

FLITELAB* PRODUCTS ARE NOT TOYS. EXERCISE CAUTION. ACT RESPONSIBLY WHILE OPERATING.

CONSIDER THE SAFETY OF YOUR ENVIRONMENT BEFORE OPERATING A FLITELAB* HYDROFOIL. DO NOT RIDE IN SHALLOW WATER (LESS THAN 1.5M IN DEPTH), ROCKY AREAS OR IN SEVERE WEATHER CONDITIONS.

IT MAY BE NECESSARY TO OBTAIN A LICENCE OR PERMIT TO USE A FLITELAB* IN CERTAIN STATES OR COUNTRIES.

Intended use

FLITELab* hydrofoils are for operation by one person only, who should be over the age of 16 (or as local laws apply). They are not designed for passengers or towing of objects or people. Please check your local regulations for age and legal requirements. We recommend adult supervision. Licence regulations vary from state to state and country to country. It is the responsibility of riders to be aware of and comply with regulations in their specific location.

FLITELab* hydrofoils must travel at a safe speed so that they can be stopped in time to avoid any danger which may suddenly arise. When judging a safe speed, you must consider a number of factors – visibility, other vessels, navigation hazards, wind, waves and currents, waterway width and the manoeuvrability of your vessel.

For your safety and that of others, please ensure that you obtain proper training or practice before operating FLITELab* products yourself.

This User Guide does not provide boating safety or seamanship advice. Please consult local laws and guidelines for boating safety.

If you have any questions about the operation or maintenance of FLITELab* products, please consult Flite technical support, or an Authorised Flite Dealer.

Propulsion system

The AMPJet propulsion system includes a powerful spinning jet.

KEEP FINGERS AWAY FROM THE AMPJET SPINNING IMPELLER. CONTACT WITH THE IMPELLER WILL CAUSE SERIOUS INJURY OR DEATH.

NEVER TOUCH IMPELLER IN OR OUTSIDE OF THE WATER.

NEVER HANDLE THE IMPELLER WHILE THE AMPCELL IS CONNECTED.

ALWAYS KEEP AMP BOARD A SAFE DISTANCE FROM OTHER WATER-CRAFT, SWIMMERS, SURFERS, DIVERS AND WILDLIFE.

NEVER OPERATE AMPJET IN SEAWEED OR CONTAMINATED WATER.

Keep Dry

THOROUGHLY DRY AMPCELL AND CARTRIDGE BEFORE AND AFTER EACH USE.

KEEP CARTRIDGE INTERNALS DRY AT ALL TIMES.



WARNING

Ensure End Cap is fitted before use.

Ensure locking bolt is tightened before use.

Thoroughly dry AMPCell, Cartridge and End Cap before and after each use.

Keep Cartridge internals dry at all times.

AMPCell

AMPCell is a carefully engineered water resistant marine battery. If the AMPCell is damaged (for example during transportation or handling) the seals may become compromised. A damaged AMPCell that comes into contact with water may result in internal damage including corrosion which could result in a fire and/or explosion.

USE AMPCELL AT YOUR OWN RISK.

SIGNS OF A COMPROMISED AMPCELL

- SIGHT GLASS LABEL HAS TURNED RED, INDICATING WATER INGRESS
- LOOSE SCREWS
- CRACK IN HOUSING/CASE
- DEFORMATION
- UNUSUAL SMELL
- HIGH TEMPERATURE DURING CHARGING (60°C OR MORE)

CAREFULLY INSPECT AMPCELL BEFORE EACH USE.

IF AN AMPCELL CASING HAS VISIBLE DAMAGE AND THE AMPCELL FALLS INTO WATER, TAKE IT OUT IMMEDIATELY AND PUT IT IN A SAFE AND OPEN AREA. MAINTAIN A SAFE DISTANCE FROM AMPCELL UNTIL IT IS COMPLETELY DRY. DO NOT USE AMPCELL AGAIN AND DISPOSE OF AMPCELL PROPERLY.

AMPCELL MUST BE USED IN TEMPERATURES FROM 0°C TO 40°C. USE OF AMPCELL IN ENVIRONMENTS ABOVE 40°C MAY LEAD TO AN OVERHEATED BATTERY. USE OR CHARGING OF AMPCELL BELOW 0°C CAN LEAD TO PERMANENT AMPCELL DAMAGE.

ALWAYS KEEP AMPCELL DRY. IF AMPCELL HAS BEEN EXPOSED TO WATER, PLACE IN A COOL DRY PLACE.

DO NOT DROP OR STRIKE AMPCELL.

DO NOT PLACE HEAVY OBJECTS ON AMPCELL OR THE CHARGER.

DO NOT CHARGE OR USE A DAMAGED AMPCELL. IF YOUR AMPCELL IS COMPROMISED, CONTACT FLITELAB* OR AN AUTHORISED SERVICE PARTNER FOR FURTHER ASSISTANCE.

DO NOT USE AMPCELL IF IT WAS INVOLVED IN A SEVERE CRASH OR HEAVY IMPACT.

DO NOT USE A NON AMPCELL BATTERY. ANY DAMAGE CAUSED BY A NON-OFFICIAL BATTERY WILL NOT BE COVERED BY WARRANTY.

DO NOT DISASSEMBLE AMPCELL. DOING SO COULD CAUSE AN INJURY OR LEAD TO A WATER LEAK OR FIRE. TAMPERING WITH THE AMPCELL BATTERY WILL VOID THE WARRANTY.

DO NOT HEAT AMPCELL. KEEP AWAY FROM HEATING SOURCES AND OUT OF DIRECT SUNLIGHT.

DO NOT PUT AMPCELL IN A MICROWAVE OVEN, FREEZER OR IN A PRESSURISED CONTAINER.

DO NOT OPEN AMPJET END CAP UNDER ANY CIRCUMSTANCES WHILST IN WATER OR WITH WET HANDS.

IN CASE OF A FIRE WITH ANY AMPCELL OR FLITELAB* PRODUCT, EXTINGUISH WITH COLD WATER WITHOUT ADDITIVE.

FOR FURTHER INFORMATION ABOUT INCIDENT RESPONSE AND DISPOSAL, PLEASE REFER TO THE MATERIAL SAFETY DATA SHEET (MSDS).

DISPOSE OF THE AMPCELL IN SPECIFIC RECYCLING BOXES ONLY AFTER A COMPLETE DISCHARGE. DO NOT PLACE AMPCELL IN REGULAR TRASH CONTAINERS. STRICTLY FOLLOW YOUR LOCAL REGULATIONS REGARDING THE DISPOSAL AND RECYCLING OF BATTERIES.

DO NOT USE AMPCELL TO OPERATE ANY DEVICE OTHER THAN FLITELAB*.

Warranty

FLITELab* comes with a Limited Warranty which covers defects in materials or workmanship of the product and aligns to relevant consumer laws of the location of purchase. Further details about the FLITELab* Limited Warranty are set out in your Purchase Agreement.

For our Australian customers – our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. Please ensure that you complete the Warranty Registration/Details of Purchase in the Flite App.

Maintaining your FLITELab* AMP_Board

FLITELab* AMP_Board is much more than a foilboard. Similar to any other electric powered vehicle, it needs to be serviced regularly and maintained to ensure good working order and to prevent breakage.

In order to maintain your FLITELab* AMP_Board in optimal condition, a 1 yearly service of the AMPJet is recommended.

To find your nearest Service Partner, visit flitelab.co/locations

Board Repairs

If subjected to damage FLITELab* Boards can be repaired by your local surfboard repair specialist.

Shipping compliance

Shipping batteries can be illegal and dangerous if not done in accordance with dangerous goods shipping regulations. Always consult an appropriate specialist before shipping your AMPCell. Refer to the included MSDS regarding shipping your AMPCell by sea.

What makes up a FLITELab* AMP_Board

You will receive a board of the size and model that you choose.



FLITELab* AMP_S_Board



FLITELab* AMP_M_Board

LAUNCHPad

With the LAUNCHPad you will receive a LAUNCHPad Charger and USB-C Cable. Both these items will fit in the AMPJet travel case.



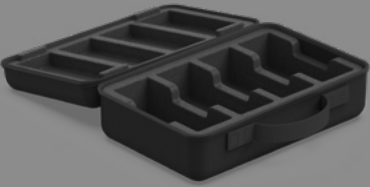
AMPCell

Up to 2 AMPCell will fit in the AMPJet travel case when the AMPCell Charger isn't present. Alternatively you can purchase the AMPCell travel case for up to 4 AMPCells.

NOTE: AMPCELLS MUST BE STORED DRY.



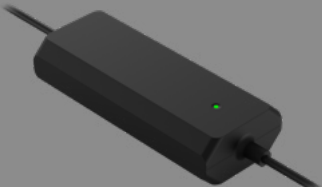
AMPCell



AMPCell travel case for up to 4 AMPCells (optional)

AMPCell Charger

You will receive an AMPCell charger plus a Plug and Cable that works for your region. The AMPCell Charger fits in the AMPJet Travel Case.



AMPCell Charger

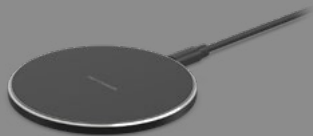
Getting started

Watch the FLITELab* video Guides in the Flite App. flitelab.co/app

In order to operate the product correctly, avoiding damage or serious injury, it is essential to read and follow all instructions and warnings in the User Guide prior to assembly, setup or use.

Charging LAUNCHPad

1. Remove LAUNCHPad charger and USB cable from the AMPJet travel case.
2. Remove LAUNCHPad from the AMPJet travel case.
3. Plug the USB cable into the wireless charger and into a USB power source.
4. Place the LAUNCHPad onto the wireless charger. After about 10 seconds the LAUNCHPad should turn on and show that it is charging. If the LAUNCHPad is completely depleted it can take 5 - 10 minutes to turn on.
5. You can charge the LAUNCHPad with most standard wireless chargers.



AMPCell charging procedure

DO NOT COVER THE CHARGER OR INTAKE DURING CHARGING. THE CHARGER SHOULD BE PLACED OUT OF THE REACH OF CHILDREN. CHARGE IN AN INDOOR AREA WITH GOOD VENTILATION AND HEAT DISSIPATION.

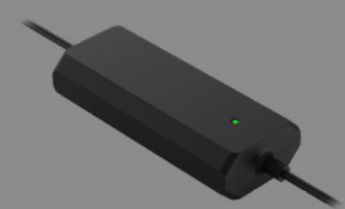
DO NOT CHARGE IF THE AMPCELL IS WET.

DO NOT CHARGE IN HUMID, HIGH TEMPERATURE CONDITIONS. DO NOT CHARGE NEAR FLAMMABLES OR EXPLOSIVES. DO NOT DISASSEMBLE THE CHARGER - THERE IS A DANGER OF HIGH VOLTAGE IN THE CHARGER CASE.

FLITELAB* DOES NOT BEAR ANY RESPONSIBILITY FOR INCORRECT USE OF THE CHARGER. USERS MUST OPERATE THE CHARGER ACCORDING TO THE USER GUIDE.

ALWAYS KEEP THE CHARGER OFF WHEN NOT CONNECTED TO AN AMPCELL.

AMPCell Charger



AMPCell Charger Indicator Guide

	Solid Green	On or Finished Charging
	Solid Red	Charging
	Flashing Red	Fault

Charging AMPCell

1. Remove AMPCell from its travel bag.
2. Place AMPCell in a cool dry location away from flammable or hot items. Safe charging temperatures are 0 – 40°C and optimal charging temperatures are 10 – 30°C.
3. Connect AMPCell charger plug to AMPCell by sliding the plug into the dovetail on the end of the AMPCell without the handle.
4. Connect the wall plug to your power point and turn on.
5. The charger will detect the connected AMPCell and display a green light, which will turn red after approximately 5 seconds to indicate charging has successfully begun.
6. The charger will automatically stop charging once the AMPCell is full and the charger light will turn green.
7. Turn off charger at the wall and remove the AMPCell.

AMPCCELL IS A POWERFUL BATTERY CONTAINING A SIGNIFICANT AMOUNT OF ENERGY. CHARGING A DAMAGED AMPCCELL CAN RESULT IN A FIRE OR EXPLOSION. ALWAYS INSPECT THE AMPCCELL BEFORE CHARGING. CHARGE THE AMPCCELL UNDER SUPERVISION, IN A SAFE LOCATION, AWAY FROM DIRECT SUNLIGHT, MOISTURE AND AWAY FROM FLAMMABLE OBJECTS AND SURFACES.

THE BATTERY MANAGEMENT SYSTEM (BMS) BALANCES AND OPTIMISES AMPCCELL DURING EACH CHARGE CYCLE.

IT IS RECOMMENDED TO DISCONNECT THE AMPCCELL AFTER A FULL CHARGING CYCLE.

AMPCell light	Light meaning	
	Red light flashes	Capacity 0% – 10%
	Red light on	Capacity 10% – 20%
	Green light on	Capacity is 20% – 35%
	Green light flashing	Capacity 20% – 35% + charging
	Two green lights on	Capacity 35% – 65%
	One on + one flashes	Capacity 35% – 65% + charging
	Three green lights on	Capacity 65% – 100%
	Two on + one flashes	Capacity 65% – 100% + charging

Setting up the AMPJet Cartridge

1. Make sure both AMPCells are clean, dry and charged. You can check the AMPCell charge by shaking them to light up the LEDs. Connect both AMPCells together by sliding the dovetails together until the AMPCells are level with each other, you should feel a click. If using one AMPCell, slide the AMPCell and AMPCell Spacer together. The AMPCell spacer will only connect on one end of the AMPCell to make sure the order is correct within the AMPJet.
2. Once you have the AMPCells or spacer connected, slide the end without the handle into the AMPJet cavity while keeping the cartridge relatively flat. DO NOT hold the cartridge vertically and drop the AMPCells in. This can damage the internals of the AMPJet.
3. Once the AMPCells are in give them a little push to make sure they are connected properly. You should hear two beeps from the cartridge. After about 5 seconds the second battery's LEDs will light up at the end of the cartridge.
4. Make sure the cartridge End Cap is dry and clean. Make sure there is no sand or debris and that there is no damage to the 3 lip seals.
5. Push the End Cap on until it clicks on both sides. Make sure you inspect the sides of the cartridge to see both clips within both slots and there is no gap between the End Cap and the Carbon tube.



WARNING

Ensure End Cap is fitted before use.

Ensure locking bolt is tightened before use.

Thoroughly dry AMPCell, Cartridge and End Cap before and after each use.

Keep Cartridge internals dry at all times.

Download Flite App and update

Before use, this product must be activated using the Flite App.
flitelab.co/app

Flite App is available to download in the Apple App Store™ and Google Play Store™. We recommend using Flite App to ensure your AMPJet and LAUNCHPad always have the latest software to deliver the best performance.

In addition to enhancing your experience on the water, Flite App connects you to a global community of FLITELab* riders. Share your sessions, compete and discover new places to ride.



Download the
Flite App on Apple
flitelab.co/app



Download the
Flite App on Google
flitelab.co/app

Connecting Flite App to AMPJet

1. Make sure the LAUNCHPad is off.
2. Ensure AMPJet has power.
3. Select 'AMPJet' from the 'Devices' menu.
4. You will now be able to see the software version of the AMPJet.
5. Once connected you can perform updates.

ENSURE LAUNCHPAD IS TURNED OFF AS THE APP CAN ONLY
CONNECT TO ONE DEVICE AT A TIME.

WHEN NEW SOFTWARE UPDATES ARE AVAILABLE YOU WILL SEE
AN ORANGE UPDATE ICON.

BEFORE YOU UPDATE SOFTWARE MAKE SURE THE PHONE,
AMPCELLS AND LAUNCHPAD HAVE AT LEAST 20% CHARGE.

KEEP THE PHONE CLOSE AND IN LINE OF SIGHT WITH AMPJET
WIFI/CELLULAR NETWORK. DON'T USE THE PHONE FOR
ANYTHING ELSE SUCH AS CALLS, TEXTS, OR OTHER APPS.

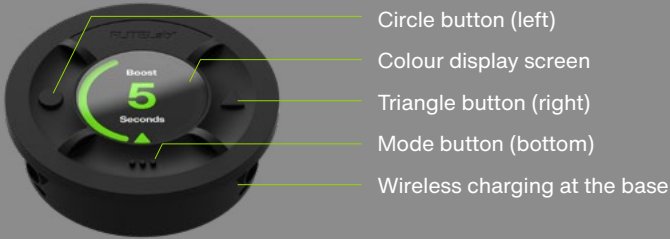


FLITELAB
support
support.flitelab.co

Installing AMPJet Cartridge into an AMP_Board

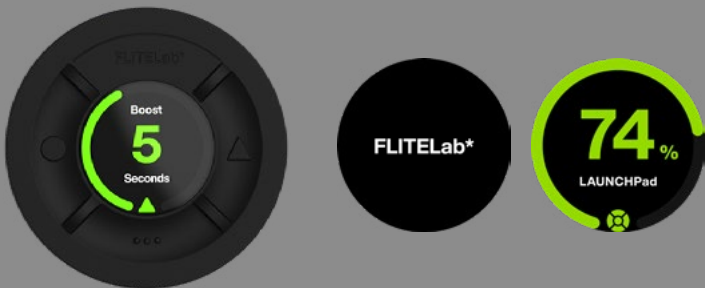
1. Once the board is setup with the foil, place the board nose down with the front wing on the ground so the board is sitting at a 45 degree angle.
2. Insert the LAUNCHPad into the nose of the board by aligning the FLITELab* logo at the 10 o'clock position. Twist it clockwise until you feel a secure click; this will require some force. Ensure the FLITELab* logo rotates into the 12 o'clock position to lock in.
3. Now carefully slide the cartridge into the rear of the board holding it at all times. DO NOT LET IT DROP IN as this can damage the locking pin or the stator cover.
4. Once the cartridge is seated, use a T30 T-Bar to tighten the locking pin until the rear of the jet sits flush with the board. There's no need to over-tighten, finger tight is sufficient. The locking bolt is spring-loaded and will not come loose.
5. Now turn on the LAUNCHPad by holding the triangle and the 3 dots for 5 seconds. The FLITELab* logo will appear followed by the LAUNCHPad SOC. Make sure the LAUNCHPad is at least 25% charged.
6. Once on the Home screen press the circle (Paddle Assist) to test the jet. It should briefly run and display motor test on the screen.
7. DOUBLE CHECK you have done up the locking pin on the cartridge before picking up the board. The last thing you want is the AMPJet to slide out and land on the ground as you will damage it.

LAUNCHPad overview



Turning on LAUNCHPad

1. Turn on LAUNCHPad by holding down the triangle button (right) and Mode button (bottom) together for 5 seconds.
2. After a 5 second press of both buttons, the FLITELab* logo will appear. You can let go of the buttons. After a few seconds it will show you the charge percentage of the LAUNCHPad for 5 seconds then the Home screen. You can advance to the Home screen early by pressing the Mode button.



Connecting Flite App to LAUNCHPad

1. Make sure the AMPJet is turned off.
2. Turn on LAUNCHPad by holding down the triangle button (right) AND Mode button (bottom) together for 5 seconds.
3. Ensure LAUNCHPad has power and is within range of the phone.
4. Select 'LAUNCHPad' from the 'Devices' list. When selected and connected, the current state of charge will be displayed.
5. You will now be able to see the software version of LAUNCHPad, perform any updates and change settings (e.g. kilometres, knots and miles per hour).

WHEN NEW SOFTWARE UPDATES ARE AVAILABLE, YOU'LL SEE AN ORANGE UPDATE ICON. WHEN UPDATING, DON'T USE THE PHONE FOR ANYTHING ELSE SUCH AS CALLS, TEXTS OR OTHER APPS.

LAUNCHPad pairing procedure

1. Ensure AMPJet is on.
2. Set the LAUNCHPad into pairing mode by holding the triangle button (right) for 7 seconds until the words 'Press mode to commence pairing' appear. Then press Mode button (bottom) to confirm. The words 'Searching Nearby' will appear.
3. Once paired successfully, the Home screen will appear and there will be a green ring around the edge of the screen (the boost meter).
4. After a small period of time the battery or batteries will show their charge.

Troubleshooting

If the LAUNCHPad doesn't pair, turn the AMPJet off by pulling the batteries out, wait 10 seconds turn the LAUNCHPad off then reinsert the batteries (make sure you hear the two beeps) turn the LAUNCHPad on, and repeated from Step 2. Also check that the Flite App isn't connected to the AMPJet or LAUNCHPad.

Capturing sessions

1. LAUNCHPad will automatically capture sessions to its onboard computer.
2. Connect to the Flite App and then tap 'Sync' to view and download any new sessions.
3. Selecting a ride from the 'Sessions' list opens the ride detail screen. Here, you can replay your ride at various speeds over an aerial map, view the number of waves caught, and review your ride stats.

LAUNCHPad Main Controller screens



Home Screen

Prone preset selected.
AMPCell 1 is 66%
AMPCell 2 is 66%



Home Screen not connected

This will show when not connected
to an AMPJet.



Boost Mode

Boost has 5 seconds left.



Paddle Assist Mode

Paddle Assist has 14 seconds left.



Realtime Wave display

Have currently been riding
a wave for
1:23 minutes
534 M
3 waves for the session.



Limp home mode

When batteries turn red you will no longer be able to boost but you can still use Paddle Assist.



Wave Screen

Longest wave in seconds.
Longest wave in meters.
Total number of waves.
Total distance ridden.



Boost Ring Green

When the boost ring around the edge is green you are operating in normal conditions.



Boost Ring Orange

An orange boost ring around the edge is a warning to indicate the system is heating up from excessive consecutive boosts.

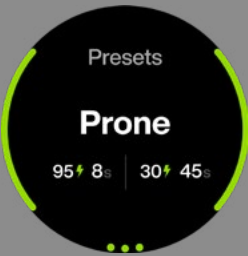


Boost Ring Blue

Jet Cool down mode. You have boosted too many times without letting the system rest. You will no longer be able to boost until the system cools back down (15 - 30 seconds).

LAUNCHPad Settings Controller screens

Press and hold the Mode button to enter and exit settings menu



Profile

You can scroll through the profiles using the triangle or circle.



Boost Thrust

Adjust this from 1 to 10. 1 being the least thrust and 10 being the most.



Boost Time

Amount of time the thrust runs for not including the acceleration. From 3 to 8 seconds.



Acceleration

This is the time it takes from no boost to maximum boost that is set. From 2 to 8 seconds.



Paddle Thrust

This is the amount of paddle Assist thrust for paddling back out. From 1 to 3.



Restore Defaults

This will restore the current profile back to its default settings.



Adjust Time

Offsets the time to the region you live in.



Regional regulations



Software version



Board tilt

The board is tilted and AMPJet is temporarily disabled.



Jet above water

Has detected the AMPJet is out of water, Paddle Assist or boost has been temporarily disabled.

FLITELab* AMP_Board on the water

If you have never foiled before we strongly recommend getting foiling lessons before going out with an AMP_Board.

For everyone else, learn to ride the AMP_Board in conditions you feel comfortable in and away from other people in the water.

Paddle Assist

Once in the water, press the circle to activate Paddle Assist. This feature helps reduce fatigue while paddling out and also aids with duck dives. It runs for 60 seconds and can be reactivated by pressing the button again. Press the button again at any time to stop it manually.

Paddle assist can also be used to catch waves if a full boost isn't needed.

The system will automatically stop the jet once you're foiling. Paddle Assist will also stop if you or the board rolls over during a duck dive or while attempting to catch a wave.

Boost

When you're ready to catch a wave, press the triangle button to activate Boost. Press it before the wave reaches you, allowing time for the jet to power up which depends on your acceleration setting.

It may take a session or two to nail the timing, but once you do, you'll find you can catch almost anything.

Boost will automatically stop if you or the board rolls over during a duck dive or while attempting to catch a wave.

While Boost is active, press the button again to cancel.

Pro Tips

You can press Boost while in Paddle Assist giving you the ability to paddle quickly into position then Boost onto the wave.

You can also use the boost to help you duck dive in bigger conditions.

Maintenance and storage

READ THROUGH THE ENTIRE STORAGE AND MAINTENANCE INSTRUCTIONS BEFORE STORING YOUR AMPJET.

1. It is essential that your FLITELab* product is serviced as per the 'Maintenance schedule' to retain its high level of performance, safety and reliability, including warranty, as mentioned previously.
2. The service intervals are in both hours of ride time or years, whichever comes first.
3. The service schedule and intervals assume you will use your FLITELab* in accordance with our guidelines.

Periodic checks

1. Ensure that you view our 'Care and Maintenance video' flitelab.co/video before first using your FLITELab* product.
2. Ensure that after each session, you visually inspect all elements of your FLITELab* product including board, AMPJet, AMPCell and LAUNCHPad for any damage or water ingress.
3. Ensure that you perform the 6 month AMPCell checklist located on the Support Page on the website.
4. Ensure all connections are clean, free from corrosion and damage after each use.
5. Every 30 - 50 sessions re-coat the terminals on the AMPCell with Battery grease (Molykote 4).

Maintenance schedule intervals

The hours / years intervals shown in the maintenance schedule of the Flite App.

Please visit support.flitelab.co for any queries or questions.

AMPJet

Post ride

Remove the AMPJet from the board by unscrewing the locking screw with the T30 T-Bar. If you unscrew until you hear a soft click then give it a half turn more you can then carefully remove the cartridge from the board making sure not to drop it.

Once removed its good to rotate the cartridge in a few directions with the jet end facing down at about 45 to let most the water drain out.

Then make sure the End Cap and AMPJet cartridge is thoroughly dried off before removing the End Cap. Also make sure your hands are dry. When removing the End Cap hold the cartridge with the End Cap horizontal or lower at about 10 degrees. This stops any water trapped in the End Cap from going back into the cartridge. Once the End Cap is removed then wipe any water drops away from the inside of the cartridge and remove the batteries by folding down the handle and pulling them out enough to then hold them by their casing. Once the batteries are out inspect both and connectors on the batteries to make sure they are completely dry. Inspect the inside of the cartridge and make sure it's dry.

IF THERE IS ANY WATER INSIDE CAREFULLY INSPECT THE END CAP FOR ANY DAMAGE. ALSO INSPECT THE END OF THE CARTRIDGE FOR ANY SCRATCHES. IF UNSURE CONTACT YOUR NEAREST FLITELAB* SUPPORT CENTRE.

Now that the batteries are removed place the End Cap back on and place in the bag. When you get back home rinse the Jet end of the cartridge with fresh water. A bucket of fresh water is a great way of giving it a good clean by dunking it in for 10 seconds removing and letting all the water drain out and repeating a couple of times.

Once rinsed, completely dry off cartridge, remove End Cap and completely dry, plus dry inside of case from any water. Then once everything is dry return the cartridge and separated End Cap to their respective places in the case and store in cool dry place.

LAUNCHPad

Post ride

Remove LAUNCHPad by using both hands on 3 - 4 of the tabs. It takes some force and is designed this way so it never comes out while riding. Once removed make sure there is no sand left behind in the cup of the board. Rinse the LAUNCHPad with fresh water and dry. Store in a cool dry place and charge if it's below 40%.

DO NOT charge while wet.

AMPCell

Post ride

Wipe AMPCell down with a clean dry cloth.

AMPCell is waterproof but it should remain dry where possible.

DO NOT submerge or shower.

Avoid placing AMPCell on the sand, which can make its way into the Connectors and scratch surfaces.

DO NOT charge the AMPCell immediately after use. The AMPCell temperature may be too high. Allow 30 minutes between riding and charging to allow for cooling.

DO NOT clean the AMPCell or charger with denatured alcohol or other flammable solvents.

IF THE CARTRIDGE HAS LEAKED AND / OR THE AMPCELL HAS BEEN SUBMERGED IN WATER, INSPECT FOR WATER INGRESS USING THE SIGHT GLASS LOCATED ON THE SIDE OF THE AMPCELL. STAND THE AMPCELL ON ITS SIDE WITH THE SIGHT GLASS FACING DOWN FOR ONE MINUTE. INSIDE THE SIGHT GLASS IS A COLOUR CHANGING LABEL WHICH WILL TURN RED IF WATER IS PRESENT. INSPECT THE SIGHT GLASS AND CONFIRM THAT WATER IS NOT PRESENT BEFORE CHARGING AND USING AN AMPCELL THAT HAS BEEN IMMersed IN WATER.

IF THE CONTACTS HAVE GOT WET CLEAN THEM WITH CONTACT CLEANER AND REAPPLY BATTERY GREASE TO THE CONTACTS ON BOTH SIDES OF THE BATTERY.

IF AN AMPCELL HAS BEEN DROPPED OR DAMAGED, CONTACT FLITELAB* IMMEDIATELY AND DO NOT USE THE AMPCELL.

Regular maintenance

Examine the charger regularly for damage to the cord, plug, enclosure or other parts.

Examine the pins on the AMPCell for any corrosion or damage.

Every 20 to 30 rides clean pins both ends with contact cleaner and a small brush (toothbrush) and reapply the battery grease (Molykote 4).

Storage

Keep AMPCell stored out of the reach of children and pets.

DO NOT store the AMPCell near heat sources such as a furnace or heater.

DO NOT leave the AMPCell inside of a vehicle on hot days.

The ideal storage temperature is 10°C – 25°C.

DO NOT store the AMPCell whilst charging. Disconnect the charger when not in use.

DO NOT store the AMPCell fully charged or discharged for a longer period of time.

For long or short term storage a charge state of 50% (1 LED ON indicates 25 – 35% charge) is optimal. Only fully charge the AMPCell when planning a ride. We recommend that you discharge the AMPCell during your final session of the season and charge back up to the above state.

Troubleshooting

Issue

Troubleshooting guide

AMPJet doesn't start (chime)

Check the AMPCells have been inserted the correct way. Check the AMPCells have charge in them. Remove wait 20 seconds and re-insert.

LAUNCHPad doesn't pair with AMPJet

Make sure AMPJet is on by checking that the battery lights are on inside the cartridge. Make sure the Flite App is disconnected from the AMPJet. Refer to page 18 for pairing procedure.

AMPJet wont move once locking bolt is all the way undone

If your board is nose down turn locking bolt until you hear a soft click, then turn one more half turn and try and remove.

LAUNCHPad unpairs

Re-pair LAUNCHPad.
See pairing instructions on page 18.

AMPCell charger won't connect

Disconnect and reconnect.
Contact FLITELab* Customer Support.
support.flitelab.co

LAUNCHPad won't turn on

Ensure LAUNCHPad is fully charged.
See LAUNCHPad charging instructions on page 11.

LAUNCHPad feels loose

Check that there is an o-ring still in the board cup. If there isn't or it's damaged, replace before using otherwise you run the risk of your LAUNCHPad falling out.

Issue

Troubleshooting guide

LAUNCHPad
feels overly tight

The LAUNCHPad is meant to be very tight. Check that there is no sand on the o-ring or the cup. Also make sure the LAUNCHPad is clean.

Water in the
AMPJet cartridge

Tip the water out before removing the batteries but be careful to not let the batteries drop out. Remove the batteries and thoroughly dry them before pulling them apart. Rinse the inside of the cartridge as soon as possible with half a cup of fresh water then leave it with the jet end raised to drain and dry.

DO NOT USE THE CARTRIDGE UNTIL IT'S COMPLETELY DRY.

Wipe the AMPCells with a clean damp cloth and thoroughly dry. Reapply a small amount of Battery grease (Molykote 4) to the terminals with a cotton tip.

Carefully inspect the End Cap for any sand damage and replace if damaged. Inspect the inside of the end of the cartridge for any big scratches. If there is, contact FLITELab* Customer Support. support.flitelab.co

Water in
AMPCell

AMPCell has an indicator for water damage. If water has penetrated the casing, regularly check the circular water indicator on the end of your AMPCell. If the sticker has turned red, this means water has penetrated the housing.

If water has penetrated the AMPCell, please set AMPCell aside in a cool dry place. DO NOT attempt to use, or charge, an AMPCell that has been waterlogged. CONTACT FLITELab* IMMEDIATELY.

Unable to pair
LAUNCHPads
to multiple boards

Do not attempt to pair multiple LAUNCHPads to multiple AMPJets simultaneously. Always pair one at a time.

AMPCell

Size	218mm x 305mm x 80mm (8 1/2" x 12" x 3")
Capacity	2.8Ah / 142Wh
Weight	1kg / 2.2lbs
Protection	IP67
Max charge voltage	58.8V
Min voltage	42V
Nominal voltage	50.4V
Rated continuous discharge current	35A
Rated charge current	3A
Rated cycles >80% capacity	400 Cycles / 2 years
Temperature discharge limits	0 – 70°C 32 – 158°F
Temperature charge limits	0 – 50°C 32 – 122°F
Communication	Bluetooth Low Energy
BMS critical functions	Balancing, Over-temperature (Charge / Discharge) Over-current, short-circuit protection, reverse polarity and over & under voltage.
Other safety	3 levels of fusing adds redundancy if BMS failure occurs. Conformal / resin coatings used on PCB's. Phase Changing Material between cells and sight glass and Humidity sensor to check for leaks.
Shipping and transport	AMPCell (batteries) are considered dangerous goods and must not be shipped without working with a dangerous goods shipping specialist. Shipping batteries marked as normal goods without informing the shipping party is illegal and dangerous. The Material Safety Data Sheet (MSDS) is required for shipping the batteries.

**Congratulations on becoming
a FLITELab* owner.**

Now it's time to get out there and
Ride the Impossible.

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