

ANTIGRAVITY BATTERIES

MICRO-START XP-20/XP-20-HD

USER MANUAL



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DANGER - WARNING!



PRIOR TO USE, READ AND UNDERSTAND THIS USER MANUAL & SAFETY INFORMATION. Failure to follow the instructions may result in ELECTRICAL SHOCK, EXPLOSION, or FIRE, which may result in SERIOUS INJURY, DEATH, or DAMAGE TO DEVICE or PROPERTY. Do not discard this information.

Welcome

THANK YOU

Thank you for purchasing the Antigravity Batteries MICRO-START XP-20. The XP-20 is an ultra compact Jump-Starter and Personal Power Supply. Just charge it and take Portable Power with you wherever you go, no electricity needed. It can jump-start your vehicles, and power or charge USB Devices and 12v Accessories. It comes as a complete kit with Carry Case. Please read and understand this User Guide before use.

For more information feel free to Contact us.

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antigravitybatteries.com
themicrostart.com
310 527 2330

Antigravity Batteries
15622 Broadway Center St.
Gardena CA
90248

GETTING STARTED

The XP-20 comes partially charged and should be fully charged prior to use. The XP-20 comes with a USB Type-C Charging Cable and Cig Lighter Car Charger. Connect the provided USB Cable and Charger, or use a USB output source such as a Computer, Powerstation or your Phone Charger. You will achieve faster charging using higher Amp USB Chargers which can quick charge the XP-20.

**The XP-20 is for jump-starting 12-volt starter batteries only and for charging electronics devices.
Please read this manual completely before use.**

BEFORE JUMP-STARTING ANY BATTERY

Verify that you have a 12-Volt vehicle system. The XP-20 is not suitable to jump-start any other voltage of batteries. Carefully read your Vehicle Owner's Manual on specific precautions and recommended methods for jump-starting your particular vehicle. Identify the Correct connection points for your particular vehicle. The Positive terminal is normally RED and marked by these symbols and letters (POS, P, +). The Negative terminal is typically BLACK and marked by (NEG, N, -). Often Manufacturers have a specific post, not on the battery, to attach one of the Polarities to, so review for this.

Safety Precautions



SAFETY PRECAUTIONS

READ AND UNDERSTAND ALL SAFETY INFORMATION BEFORE USING THIS PRODUCT. FAILURE TO FOLLOW THESE SAFETY INSTRUCTIONS MAY RESULT IN ELECTRICAL SHOCK, EXPLOSION, FIRE, WHICH MAY RESULT IN SERIOUS INJURY, DEATH OR PROPERTY DAMAGE.

1. Do not leave the product in, or expose product to extremely high temperatures such as on dashboards or other extremely hot areas above 110°F (43°C).
2. Do not use product for any use other than intended.
3. Do not use Jump-Start Port to power devices, it is ONLY for Jump-Starting.
4. Do not Jump-Start with less than 40% on Capacity Indicator. It may not start the vehicle.
5. Do not Jump-Start more than 5 seconds per attempt (overheating may occur).
6. Do not Jump-Start more than 3 attempts in a row without allowing to cool.
7. Do not start the vehicle continuously for more than 4 times within 10 minutes. If the engine fails to start successfully within 3s after the first start, stop cranking and wait at least 1 minute to start the vehicle again.
8. Do not leave the product connected to vehicle. Remove within 30 seconds of starting vehicle.
9. Do not clamp the Red and Black Clamps together.
10. Do not connect the Clamps to the battery reversely after pressing the "BYPASS" button.
11. Do not use the product to start a vehicle while charging the XP-20 itself.
12. Do not recharge this product immediately after starting the vehicle. Let it cool for 15 minutes first.
13. Only use the provided jumper clamps to start vehicle.
14. Do not charge frozen batteries. Only charge between ambient temperatures of 33-113°F (0-45°C).
15. Do not leave battery products unattended while charging.
16. Do not allow Children to play with this product. Not recommended for use by infirm persons.
17. Don't over-discharge the unit (don't let battery run out). Charge it regularly, preferably every 3 months if not in use.
18. Do not store in locations where the temperature may exceed 113°F (45°C).
19. Do not use as a replacement battery for vehicles, or as a battery charger for your vehicle's battery.
20. Do not allow the product to be immersed in water.
21. Do not expose the product to extreme heat or fire. Do not operate it in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.
22. Discontinue use of product if it swells or expands, or if any cable, clamp, or cord is damaged.
23. Under extreme conditions, the battery may leak. In this case do not handle product with bare hands. If there is skin contact, wash immediately with soap and water. If the liquid accidentally touches eyes, immediately rinse the eyes with water for at least 10 minutes and seek medical help.
24. The device contains a lithium battery. At the end of the product's service life, or if the device leaks liquid, dispose of the device according to local regulations. Do not modify or disassemble.

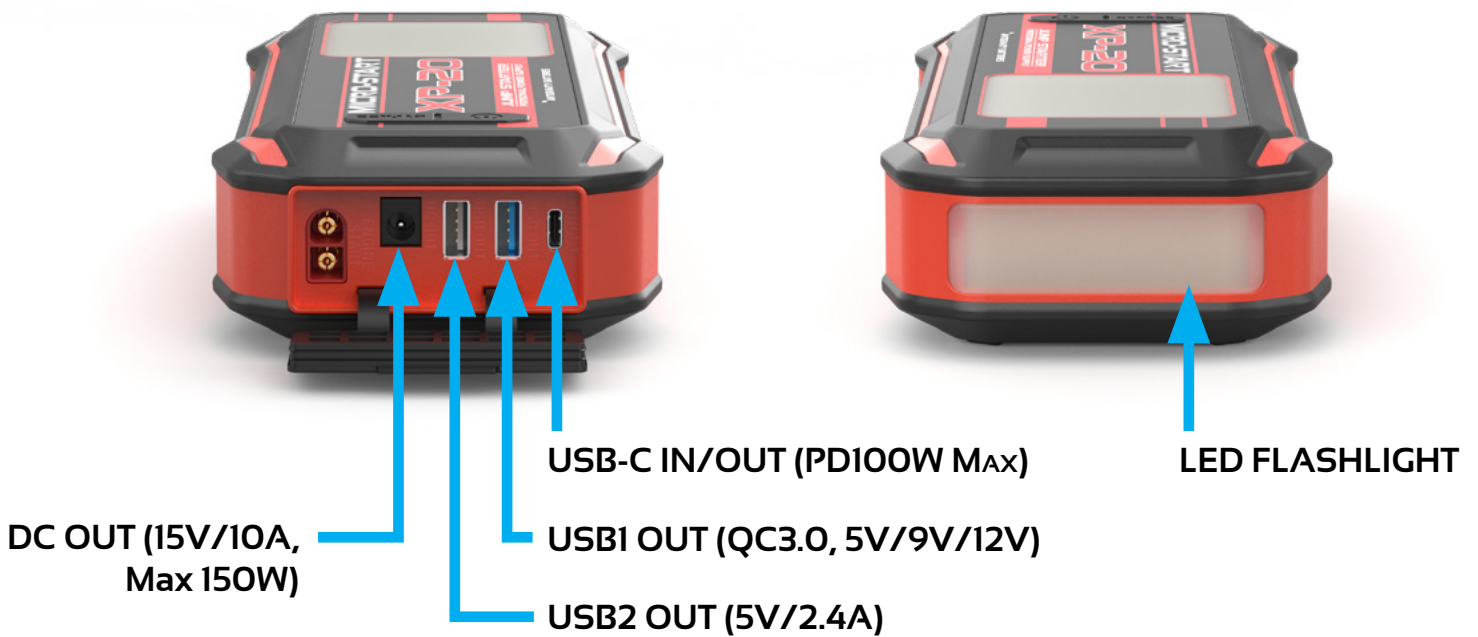
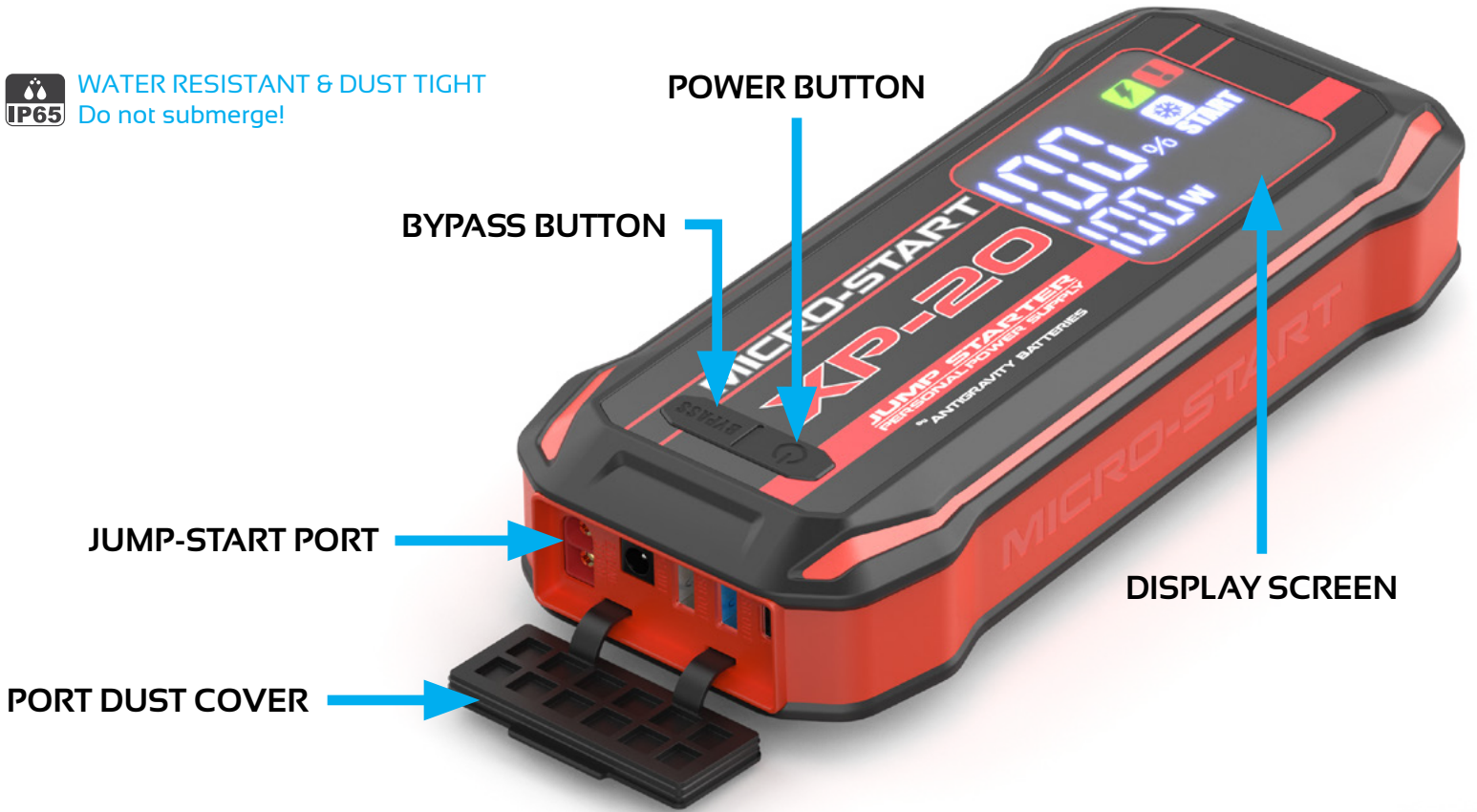


OPERATING PRECAUTIONS

1. Make sure the PLUG for the CLAMPS is plugged and seated fully into the XP-20. This connection must be good or it could overheat the unit.
2. Make sure to check that all the battery connections are clean. Remove corrosion or dirt that prevents a solid connection of clamps to vehicle battery terminals.
3. Make sure clamps have a good "bite" on Battery Terminals for best transmission of power to vehicle.
4. Make sure the XP-20 has a minimum of 40% on the Capacity Indicator lit before Jump-Starting.
5. Make sure to remove the product from the vehicle battery within 30 seconds of Jump-Starting.
6. Remove Clamps from the XP-20 when not in use.

Product Overview

 WATER RESISTANT & DUST TIGHT
Do not submerge!



Kit Contents



CARRY CASE



XP-20 POWER SUPPLY



JUMPER CLAMPS



**USB-C TO USB-C
CABLE**



**USB-A TO USB-C
CABLE**



**SC100W
CAR CHARGER**



**CIG LIGHTER
CHARGER**

Specifications

XP-20 CAPACITY: 20,000mAh (74Wh)	XP-20-HD CAPACITY: 24,000mAh (88.8Wh)
XP-20 STARTING CURRENT: 800A (3s)	XP-20-HD STARTING CURRENT: 930A (3s)
XP-20 PEAK CURRENT: 4000A	XP-20-HD PEAK CURRENT: 4650A
PRODUCT DIMENSIONS (LWH): 9.4 x 4 x 1.9 inches (238*103*49mm)	
USB-C IN/OUT: PD100W Max (5V/3A, 9V/3A, 12V/3A, 15V/3A, 20V/5A); Backward Compatibility	
USB1 OUT: QC3.0 18W Max (5V/3A, 9V/2A, 12V/1.5A)	
USB2 OUT: 5V/2.4A	
DC OUT: 15V/10A (150W Max)	
STORAGE TEMP RANGE: -4°F to 113°F (-20°C to 45°C)	
OPERATION TEMP: -4°F to 140°F (-20°C to 60°C)	
CHARGING TEMP: 33°F to 113°F (0°C to 45°C)	
FULL CHARGING TIME: About 1 hour with provided charger	
CYCLE LIFE: >1000	

Product Use



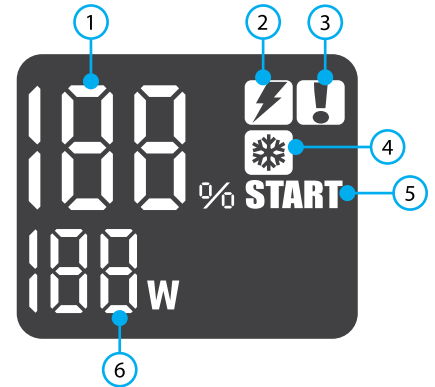
POWER ON/OFF

Press the Power Button for 1-2s to turn on the XP-20. It will automatically turn off when not powering anything. Press the Power Button for about 10s to force a shutdown of the XP-20.



DIGITAL DISPLAY SCREEN

- 1) Battery Power Percentage of charge/standby/discharge
- 2) Low Current Mode:
Support for devices that need light charging current (headphones, smart watches, etc). To turn on: Press POWER and BYPASS button simultaneously for 2-3s
- 3) "+" and "-" Poles of Battery Clamps Reversed
- 4) Battery Low Temperature Reminder
- 5) Ready to Start the Vehicle
- 6) Charge Power/Discharge Power in Watts



LED FLASHLIGHT OPERATION

- Power on the XP-20 by pressing Power Button for 1-2s, then press it again for 1-2s to turn on LED light.
- There are 3 modes of LED light (Normal, Strobe, SOS). You can cycle to the next LED pattern by tapping the Power Button again. After the last Flashlight pattern the unit will turn off the Flashlight.

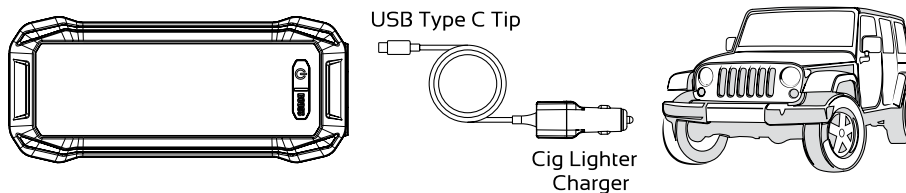


CHARGING THE XP-20 (USB-C IN)

The XP-20 can be charged with the included Car Charger or a quickcharge Wall Charger (not included). The 100W max input can only be achieved with the SC100W car charger (included) or a PD100W USB-C wall charger (not included). When the XP-20 is fully charged, remove the charger. Do not leave charging over 24 Hours.

- 1) Connect one end of the provided USB-C cable to the USB-C port on the XP-20.
- 2) Connect the other USB-C tip to the provided SC100W Car Charger.
- 3) Plug the Car Charger into the Cigarette Charging Port of your Car or Powerstation.

NEVER LEAVE ANY ELECTRONIC DEVICES UNATTENDED DURING CHARGING.





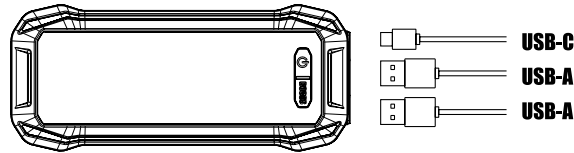
CHARGING USB DEVICES (USB-C & USB-A OUT)

The XP-20 charges a variety of USB Devices. It has one USB-C and two USB-A ports (the blue one is Quick Charge, the other has standard 2.4Amp charge rate). Two cables are included but you can also use other cables you may have.

- 1) Plug the provided USB Cable (or any standard one) into corresponding USB Output Port on XP-20.
- 2) Plug the other end of the cable into the device you are charging.
- 3) Press the Power Button on the XP-20 to begin charging your device.

DISCONNECT YOUR DEVICE WHEN CHARGED.

NOTE: The number of times devices can be charged varies depending on the size of device's battery. Tablets and Laptops have larger batteries and will use more of the unit's energy.

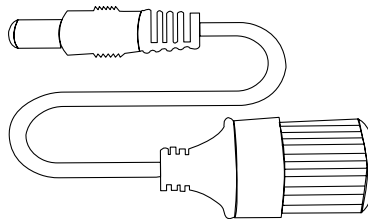


CHARGING 12V ACCESSORIES (15V OUT: 12-16.8V, 150W Max)

The XP-20 has a 15V/10A DC Output Port that can charge many other devices such as your 12V accessories normally powered by a cigarette lighter socket. Antigravity Batteries has included this DC to Female Cigarette Lighter Port Adapter.

- 1) Plug the provided Antigravity DC to Cig Lighter Adapter into the 15v Output Port on the XP-20.
- 2) Plug the Male Cig Lighter Plug of your Device into the Antigravity Cig Lighter Adapter.
- 3) Press the Power Button on the XP-20 to begin charging your device.

DISCONNECT YOUR DEVICE WHEN CHARGED.





JUMP-STARTING A VEHICLE

Caution should always be used when Jump Starting. READ ALL SAFETY INSTRUCTIONS.

- 1) Make sure all the Vehicle's Lights, Radios, Air Conditioning and Accessories are turned off.
- 2) Confirm you are connecting to a 12-Volt Battery System.
- 3) Connect the Clamps to the Vehicle Battery: Red Clamp to Positive (+) Terminal of Battery, Black Clamp to Negative (-) Terminal. Or best, to the specific Jump Start Posts stated by your Vehicle's Owners Manual.
- 4) Connect the Clamps tip to the XP-20 Jump-Start Port, making sure it's fully seated.
- 5) Power on the XP-20. Check it has at least 40% Capacity so you have good power for the Jump-Start.
 - A) If the Display Screen shows a solid "START" Icon, the Clamps are connected correctly. See Step 5.
 - B) If the "START" Icon is BLINKING, and/or there is BEEPING, or the "!" Icon is ON, there is a PROBLEM with the connection of the XP-20 to your Vehicle's Battery. Please Carefully review the Troubleshooting Section on Page 8 and correct your connection as described.

Start the Vehicle, leave it running. Once the vehicle starts, disconnect the Clamps and XP-20 within 30 seconds of starting. DO NOT LEAVE ATTACHED.



USING THE BYPASS BUTTON



WARNING: READ THIS!

As part of the XP-20's built-in safety protection system the XP-20 will not Jump-Start Vehicle Batteries that are extremely over-discharged. In this circumstance you will need to press the BYPASS button on the XP-20. Note that pressing the BYPASS button bypasses the Safety and Protection Features to the Jump Starter Clamps, such as the Reverse Polarity Protection, and Reverse Charge Protection. Once the BYPASS button is pressed the Jumper Clamps are "LIVE" with energy, so it is imperative to have the correct Polarity Connection to the battery; or damage to the vehicle, the XP-20 or other personal property could result. Use Caution before activating the BYPASS button!

- 1) First, attempt to start the vehicle as normal, as described above. If the "START" Icon on the XP-20 is Flashing and Beeping, then the vehicle's battery voltage is considered too low, so you must press the "BYPASS" button to allow the XP-20 to jump-start the vehicle.
- 2) Press the BYPASS button for 2-3 seconds, then when the "START" Icon is solid and no longer flashing or beeping, start the vehicle within 30 seconds.
- 3) REMOVE the XP-20 from the Vehicle within 30 seconds of starting the vehicle.

Troubleshooting

Error Message	Cause	Solution
! + Beeping	Reverse polarity connection	Correct the connection between Jumper Clamps and Battery Terminals
START (blinks) + Beeping	Vehicle battery is completely dead	Press "BYPASS" for 2-3s, when the "START" icon is solid then start vehicle within 30s
"1" + Beeping	Jump Starter temperature is too low or high	Restore the temperature of jump starter to between 32°F -113°F
"2" + Beeping	Over-current protection	Pause starting your vehicle, wait 30s and try again
"3" + Beeping	Too many starts within 10 minutes	Stop jump-starting your vehicle, safe mode will disappear after 10 minutes
"4" + Beeping	Internal circuit abnormality	Stop using and contact support at Antigravity Batteries
❄	Internal battery temperature is lower than 30°F	Outputs can work normally. No input: Raise to 32°F before charging!

If the problem persists, stop using the jump-starter. Contact us via phone, email, or livechat.
 310-527-2330 | info@antigravitybatteries.com | antigravitybatteries.com

Frequently Asked Questions

- WHAT IS THE OPERATING TEMP? CAN I KEEP THE XP-20 IN THE CAR?**
 This is a lithium polymer battery; its operating temp is -4 to 140°F (-20-60°C). If the ambient temperature is higher than 140°F (60°C), the internal construction of the battery cells may be damaged, it may swell and become unsafe. So don't store the device in a vehicle parked in hot weather for long periods of time.
- HOW DO I JUMP-START A VEHICLE WITH THE XP-20?**
 Please refer to the instructions "Jump Starting a Vehicle" on page 7.
- HOW DO I KNOW IF I CONNECTED TO THE VEHICLE CORRECTLY?**
 With the battery clamps connected to the vehicle battery, if the START (Solid) appears on the screen, it means the clamps are connected correctly. If an ! appears on the screen, it's connected reversely. Correct and continue.

4 THE XP-20 ISN'T STARTING A VEHICLE WITH A VERY DEAD BATTERY?

If a vehicle's battery is below 4v the XP-20's protections system will prevent the use of Jump Starting. In this case you will have to MAKE CERTAIN the Polarity Connection of the Clamps on the Vehicle's Battery is Correct (Red Clamps to POSITIVE, Black Clamp to NEGATIVE of the Vehicle's Battery). Then you can press the BYPASS Button on the XP-20 and attempt to Start the Vehicle. Please Note: Pressing the BYPASS button eliminates the Safety Features of the XP-20 and makes the Clamps alive with Energy. So it is imperative to make sure the Polarity Connections are correct or damage to your car and XP-20 will occur (see Pg 7).

5 WHAT SHOULD I DO IF THE XP-20 CAN'T CHARGE UP?

Charge it with a USB-C cable and wall charger for a full overnight period. Then try charging with another known good cable. If that doesn't work, contact us.

6 WHAT SHOULD I DO IF THE XP-20 CAN'T CHARGE OTHER DEVICES?

Try to charge the device with another charging cable. If it works then the charging cable we provided is defective and we will provide you a new one; or if it still did not work please contact us (see Warranty).

7 HOW DO I TURN IT OFF?

The XP-20 will turn off automatically after 30s when it's not used. Or you can press the POWER button for about 10s to force shutdown. Disconnect Clamps when not in use.

8 CAN THE XP-20 CHARGE OTHER DEVICES WHILE IT'S BEING CHARGED?

Yes.

9 CAN IT CHARGE OTHER DEVICES WHILE STARTING A VEHICLE?

No.

10 HOW OFTEN DOES IT NEED TO BE RECHARGED?

It is best to recharge the XP-20 when it reaches 50% remaining Capacity, so you always have a full charge and are ready for Jump Start emergencies. If the XP-20 is in storage in your Car or Vehicle, please check every 2-3 months and recharge fully as needed to keep ready for Jump Starting and charging your devices.

II WHY DOES IT SHUT OFF IN 30S WHEN CHARGING OTHER DEVICES?

There is minimum load current limitation (200mA) so the XP-20 may shut off automatically if charging a device that needs a light charging current, such as earbuds, smart watches, etc. When you face this problem, please use Low Current Mode. See Pg 5 for how to put XP-20 in Low Current Mode.

Limited Warranty



WARRANTY PERIOD

Antigravity Batteries LLC (ANTIGRAVITY) warrants that its products (the “Product”) will be free from defects in material and workmanship for a period of 18 months from the date of purchase (the “Warranty Period”). Visit our website for full Warranty terms and to Register your MICRO-START XP-20. The Warranty is not Transferable. The Warranty is made to the original purchaser from ANTIGRAVITY BATTERIES and “Authorized Resellers” and does NOT extend to any other persons or entities. The warranty is NOT assignable; a Warranty Claim is the obligation of the original purchaser. For Warranty details, visit:

<https://antigravitybatteries.com/warranty/>

WARRANTY ELIGIBILITY

- The Product must be purchased from an Authorized Dealer.
- The Product must be registered within 30 days of purchase.

PLEASE REGISTER WITHIN 30 DAYS.

<https://antigravitybatteries.com/warranty/registration/>



YOUR WARRANTY INCLUDES

● Lifetime Support

Contact us via phone, email or livechat for product support after your purchase.

● 30 Days Money Back Guarantee

You can return the product within the first 30 days for a full refund.

● 18 Months Replacement

If found to be defective due to manufacturing issues within 18 months we will repair/replace the unit.

Customer Service



18 Months Limited Warranty Service



Lifetime Technical Support



info@antigravitybatteries.com



<https://antigravitybatteries.com/help-center/>



310-527-2330
Mon-Fri PST 7:30am-4pm



Live Chat with Our Techs



antigravitybatteries

FOLLOW US

Attention

Be sure to follow all Safety Precautions and Operating Precautions found in the beginning of this manual.



Do Not Submerge In Water



Do Not Disassemble



Do Not Drop



Avoid Extreme Temperatures



Do Not Place Near or Into Fire



Overcharge/discharge Protection



Fuse Protection



Reverse Polarity Protection



WARNING: Cancer and Reproductive Harm -
www.P65Warnings.ca.gov