

**Operator's Manual** 

Congratulations on your purchase of a new N-III Super Pusher G36.

Your new Super Pusher G36 has been designed to attach to, and propel, your push cart. It is the first cart motorizing system that utilizes a user friendly, safe, touch control. The system is emissions free and ready to be used indoors or outdoors. The Super Pusher G36 will propel your cart in forward or reverse at speeds from slow to fast walking speed with no complicated buttons or switches. Press the touch pad in the location that achieves a speed as fast as you want to go and just guide the direction.

We're sure you will enjoy many years of maintenance free service, making your cart easy to handle.

# **N-III Super Pusher G36 GENERAL SAFETY RULES**

## Retain this document for your records for the life of the product.

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Read and understand all warnings and instructions prior to operating Super Pusher G36. Failure to follow instructions may lead to serious injury or property damage.

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The N-III Super Pusher G36 is designed to move heavy loads with ease and can seriously injure persons around the system if they are struck by powered carts. Do not operate the system with bystanders in front of, or behind, the cart. **Operator BEWARE** of the cart moving in reverse, carts moving in reverse can be dangerous to the operator.

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The Super Pusher G36 is an electrical system and can pose a shock hazard if all instructions are not followed.

**Note**: The throttle controls the speed of the cart, both forward and reverse, at variable speed, depending on where the user pushes the throttle touch pad. See the appropriate section for speed control instructions.

N-III will not be held liable for any injuries/damage resulting from failure to follow all warnings and instructions herein.



#### The Super Pusher G36 contains LITHIUM BATTERIES, read these instructions carefully before operating. The lithium chemical inside the batteries is lithium iron phosphate. Do not puncture the batteries. If the battery box is dropped, check the box for damage, open the lid and inspect the batteries for damage before operating. Contact your sales representative for assistance if needed.

If the batteries are punctured or damaged, contact local authorities for disposal or emergency procedures.

MSDS for these batteries is available upon request.

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Shipping lithium batteries is highly controlled by the government. Consult with your shipper before attempting to ship the battery box with lithium batteries inside.

These lithium batteries contain smart circuitry inside that will prevent the batteries from over discharge and charge, over current, shorts and will keep the cells within the battery from becoming unbalanced.

Lithium iron phosphate batteries are a type of lithium battery that are much safer than the typical consumer electronics lithium polymer (or cobalt) battery. They do not suffer from thermal runaway (spontaneous combustion). If the batteries get hot, allow them to cool down before operating, they also do not contain oxides when punctured, meaning they will not self-feed a fire.

If there are any questions pertaining to the batteries or their operation, contact your sales representative before use.

# **General Considerations**

- Only allow responsible persons, who have a thorough understanding of these instructions, to operate the cart equipped with the Super Pusher G36.
- Do not allow children or untrained individuals to use the Super Pusher G36.
- Never leave the Super Pusher G36 unattended with the power on and throttle control engaged, always turn off power when finished using the system or during an extended break from work.
  - Always disengage the throttle when stepping away from the cart for a short time.
- Do not operate the system with bystanders in front or behind the system.
- Operator should be prepared for a cart in reverse to come toward them when the reverse portion of the touch pad is touched. Always look down and behind before moving backwards.
- Do not operate this system under conditions where poor judgment may be a factor (i.e. tired, under the influence of alcohol or drugs, or medication influencing your ability to operate this type of equipment)
- Keep a firm grip on the handle during operation.
- Always move at a walking speed, never run. The Super Pusher G36 is equipped with a throttle control, slow speeds are achieved by pressing the touch pad closer to the red "STOP" zone.
- Never carry passengers.
- Never attempt to pull/push the cart in the opposite direction from which it's trying to move under its own power.
- Move at a slow speed around corners.
- Only operate the powered cart in a well lit area.
- Do not submerge battery box or expose to heavy moisture.
- Do not leave motor in standing water.
- Do not drive motor through more than 2 inches of standing water.
- Never attempt to unplug the motor or control cable with the Super Pusher G36 power switch in the "ON" position.
- Never attempt to remove the battery pack from its mounting rails while the motor or control cables are still connected to the battery box.

- The Super Pusher G36 is delivered in a factory approved condition. Any modifications after leaving N-III facilities (other than to attach mounting rails) will void all warranties and absolve N-III of responsibility of any complications arising from use of the system.
- Only use manufacturer-recommended replacement parts and accessories.
- When plugging in the motor, control, or power plug, inspect the respective connectors for corrosion or damage. If corrosion or damage is present, contact sales representative for repair/replacement options.

# As with any type of powered system, common sense should be exercised during operation.

# **N-III Super Pusher G36 System Specifications**







Α	Battery Box
В	Motor Bracket
С	Throttle Assembly
D	Throttle Control Cable (Std CAT5)
Ε	Touch Pad Throttle Control
F	Power Switch
G	Battery Level Indicator
Н	Charge Level Indicator
J	Motor Connecting Jack (female)
К	Throttle Control Jack (female)
L	IEC Power Plug
М	Motor Connecting Jack (male)
Ν	8" Hub Motor
Р	Throttle Cutout Switch
R	Standard IEC Power Plug
S	30A Fast Burn Fuse
Т	Battery Box Locking Screw Locations

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# **Technical Specifications / Temperature Requirements:**

Total System weight: Approximately 25 lbs (depending on options)

Motor: 36V 8" Hub Motor

Charging: 110V @ approx. 1.5A

Temperatures: Charge: **32°F - 90°F** Operation Temperature: **-4°F - 110°F** 

Max Cart weight: 1000 (depending on floor surface\*)

\*high pile carpet, or other soft surfaces, and angled floors will reduce weight capacity.

Cables: The throttle connection between the battery box and throttle box is a standard CAT 5 network cable. The charge cable is a standard IEC power cable, used typically to plug in desktop computers. Both cables can be purchased from many online sources or local electronics stores.

## **Safety Features:**

Your Super PusherG36 is equipped with several safety features.

- Discreet throttle cut-out switch, located on the back of the throttle box
- Battery over draw and over charge protection
- Battery over current protection
- No open terminals
- Externally accessible fuse prevents catastrophic overload (30Amp fast burn fuse)
- User friendly, intuitive touch control
- Intelligent lithium iron phosphate batteries

## **Indicating Lights and Their Meaning:**

#### Battery Level Indicator LED (G, Located on the throttle box):

Solid - Batteries full to 50% Slow Blink - Batteries between 50% and 30% Fast Blink - Batteries between 30% and 0%

Cart will shut down prior to full battery drain to prevent damage to the batteries.

#### Charge Level Indicator (H):

Blinking Red - Battery level very low Solid Red - Battery will charge very fast up to 80% battery capacity Blinking Green - Slow charge from 80% to 100% Solid Green - Battery is full, charge will keep battery topped off.

The transition from Solid Red to Blinking Green will exhibit a blinking red light first, and migrate to a blinking green light. This is normal should only last a short time before the light changes fully to Blinking Green before changing to a Solid Green.

#### Instructions:



Note: Before the first use or charge, locate the fuse on the box and ensure the fuse is installed, if not, locate the fuse and fuse cap and insert into the fuse slot on the front of the battery box. Screw in using a coin or screw driver to lock the fuse into position.

Your Super PusherG36 needs to be charged to full before first use, it will not arrive fully charged. For the initial charge, charge 6 to 8 hours to ensure all batteries are properly balanced before first use.

#### Preparing to turn on and use your Super Pusher G36:

- 1) Plug in Motor Connecting Jack (Item M to Item J)
- 2) Plug in Throttle Control Jack (Item D to Item K on both battery box and throttle box)

#### To turn on and use your Super Pusher G36:

- 3) Ensure battery pack is seated into the J-slots.
- 4) Turn on system using power switch (Item F)
- 5) Move the throttle, if the cart moves, continue using cart as normal, if not press switch P Note: Light G should be green, and either solid, blinking slowly, or blinking quickly.

#### To turn off your Super Pusher G36:

1) Turn off power switch F, light G should go out

#### **Charging your Super Pusher G36**

IMPORTANT: Lithium batteries do not need to be charged every night and do not contain a usage/charge memory. Feel free to use them until the system stops moving. However, this may not be optimal because the system cannot be used until it is charged. The system has a failsafe built in, before the batteries over discharge the system will turn off. Item G will indicate battery level.

Charging can be accomplished on or off the cart if the battery box has not been secured to the mounting rails. For off cart charging ensure cart is turned off before disconnecting the Throttle Control Jack (Item D from Item K) and Motor Connecting Jack (Item J from Item M) then remove the battery pack from the cart.

On or off the cart, perform the following to charge:

- 1) Ensure the power switch (Item F) is in the off position, LED (Item G) will be off.
- 2) Plug in standard power cord with IEC connection on one end to a standard 110V wall outlet.
- 3) Watch for LED (Item H) illuminate.
- 4) When desired charge level is reached, unplug power cord. If needed, remount the battery box and ensure all connectors are plugged in before turning on the system.

🗥 Do not charge the cart in ambient temperatures higher than 85°F (29°C).

#### **Normal Operation:**

- 1) Ensure system is charged and battery pack is installed with throttle and motor plugged in, in accordance with the above procedures.
- 2) Ensure system is powered up, LED (Item G will be illuminated)
- 3) Press any portion of the touch pad speed control zone to initiate movement of the cart (Item E) CONTINUED BELOW



- a. Start with finger (or thumb) in the center "STOP" zone. Slowly move finger up or down to achieve desired direction and speed. Moving finger (or thumb) further from the center "STOP" zone will increase speed in either forward or reverse, as depicted by the graphics on the throttle box. Once comfortable with operation, it is possible to place finger directly at the location of the desired speed. Cart will slowly accelerate to desired speed.
- b. Placing finger on the "STOP" zone will not activate the system.
- c. User does not need to start with finger on the "STOP" zone and can just touch the location for the desired speed, move finger up and down to get desired speed.
- 4) LIFT FINGER TO STOP, or move finger back to the "STOP" zone.

A WARNING Cart motor is powerful, operator must be careful when traveling in reverse to prevent being struck by moving cart. Look behind and down to ensure no tripping hazards or obstacles are present. Move cart slowly when operating in reverse to help prevent tripping and injury.

- 5) When cart is unattended for short periods, press discreet throttle cut out switch (Item P) to prevent unauthorized activation from bystanders. To continue operation, press throttle cutout switch (Item P) again to resume operation.
- 6) After daily use is complete, or during an extended break, turn off the battery pack using the switch on the battery box (Item F).
- 7) WARNING If the cart becomes stuck during operation (over loading, too steep of a hill, etc) discontinue use of the power system. Free the cart before continued use.
- 8) A WARNING The throttle is designed to allow the operator to select a speed that is comfortable for walking. Do not select max speed then release when the cart moves too fast, then select max speed again, and so on. Select the speed desired for a comfortable walk. If the pace is too slow, roll finger (or thumb) up to move faster in small increments. If the speed is too fast, either release and select a slower speed, or roll finger (or thumb) down to reduce speed.

**Operational Limits:** A Failing to adhere to these limits could cause serious damage to the Super Pusher G36.

- 1) The Super Pusher G36 is rated for 1000 pounds on flat concrete floors. Hills, carpets, soft floors and uneven surfaces will decrease the max weight.
  - a. Because of the wide range of flooring and ramp angles, Manufacturer cannot specify weight limits for each type of flooring.
- 2) Do not use the motor to move over bumps, such as a raised threshold, or hills from a stop.
  - a. Climb a small hill or bumps (raised threshold) only from a moving start.
- 3) If a bump or hill stalls the cart, operator may need to push the cart to assist the motor.
  - a. This will be especially important for heavily weighted carts.

#### **Manually Pushing:**

If the cart becomes difficult to push manually, disconnect the motor from the Battery Box.

## Warranty

N-III, Incorporated (N-III) warrants to the original retail purchaser that this N-III product is free from defect in material and workmanship and agrees to repair or replace, at N-III's discretion, any defective product free of charge within 365 days of purchase.

This warranty extends to the original purchaser only and commences on the date of shipment from the N-III facility.

Any part of the N-III product manufactured or supplied by N-III and found in the reasonable judgment of N-III to be defective in material or workmanship will be repaired or replaced by N-III without charge for parts and labor.

The N-III product including any defective part must be returned to N-III within the warranty period. Contact N-III prior to shipping any parts. Shipping lithium batteries improperly may result in extensive fines by the government. The expense of delivering the N-III product to N-III for warranty work and the expense of returning it back to the owner after repair or replacement will be paid by the owner. N-III's responsibility in respect to claims is limited to making the required repairs or replacements and no claim of breach of warranty shall be cause for cancellation or rescission of the contract of sale of this N-III product.

This warranty does not cover the N-III Super Pusher G36 that has been subject to misuse, neglect, negligence, or accident, or that has been operated in any way contrary to the instructions in the manual. This warranty does not apply to any damage to the N-III Super Pusher G36 that has been altered or modified. The warranty does not extend to repairs made necessary by normal wear or by the use of parts or accessories which are either incompatible with the N-III Super Pusher G36 or adversely affects its operation, performance or durability or installations other than that which it was originally sold.

This warranty does not cover standard wear items (batteries or wheel tread for example) or cosmetic wear.

N-III reserves the right to change or improve the design of any N-III product without assuming any obligation to modify any product previously manufactured.

ALL IMPLIED WARRANTIES ARE LIMITED IN DURATION TO THE STATED WARRANTY PERIOD. N-III'S OBLIGATION UNDER THIS WARRANTY IS STRICTLY AND EXCLUSIVELY LIMITED TO THE REPAIR OR REPLACEMENT OF DEFECTIVE PARTS AND N-III DOES NOT ASSUME OR AUTHORIZE ANYONE TO ASSUME FOR THEM ANY OTHER OBLIGATION. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. N-III ASSUMES NO RESPONSIBILITY FOR INCIDENTAL, CONSEQUENTIAL OR OTHER DAMAGES INCLUDING, BUT NOT LIMITED TO EXPENSE OF RETURNING THE N-III PRODUCT TO N-III AND EXPENSE OF DELIVERING IT BACK TO THE OWNER, N-III FIELD AGENT'S TRAVEL TIME, TELEPHONE OR OTHER COMMUNICATION CHARGES, RENTAL OF A LIKE PRODUCT DURING THE TIME WARRANTY SERVICE IS BEING PERFORMED, TRAVEL, LOSS OR DAMAGE TO PROPERTY LOSS OF REVENUE, LOSS OF USE OF THE PRODUCT, LOSS OF TIME, OR INCONVENIENCE, SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY OR MAY NOT APPLY TO YOU.

To request service please contact your original sales representative.