

# **OWNERS MANUAL**

VOL1 - ISSUE1

# TABLE OF CONTENTS

## aXs Aquatic Lift System

Introduction
Product Overview
Component Description
Unpacking & Assembly Instructions
Operating the aXs
Emergency Operations
Deck Anchor Installation
Battery Charging
Accessories
Maintenance
Long Term Storage
Trouble Shooting
Warranty
Product Specifications
– Dimensions/Capacity
- Actuator
- Battery Information
- Range of Motion
– Materials and Finish
Parts List 20

### INTRODUCTION

The purpose of this document is to provide information relating to the operation, care and maintenance of the aXs Aquatic Lift System.

Our goal is to provide our customers with the most advanced and innovative designs that offer exceptional quality at affordable prices. We design and manufacture our products so that all individuals with disabilities and mobility impairments can have access and enjoy the recreational activity of their choice. We offer lifts for virtually any type of aquatic environment, including those under the mandates of ADAAG 2004.

Please feel free to contact us if you have any questions about our current product line or if there is anything we can do to help meet your accessibility needs.



aXs and aXs logo are registered trademarks of RehaMed International, LLC.





STANDARD aXs

# THE **aXs** -SEMI-PORTABLE AQUATIC LIFT SYSTEMS

### PRODUCT OVERVIEW

The aXs is specifically designed for both residential applications as well as hospitality and multi-unit facilities who are seeking a sensible solution for providing access to their swimming pools for users with disabilities.

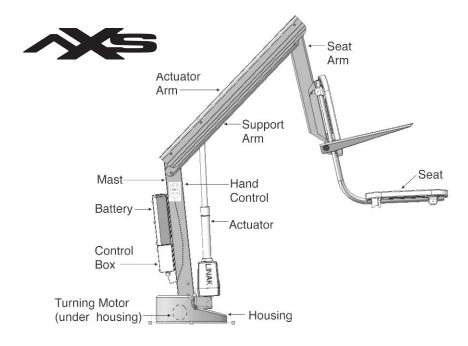
The aXs is easy to operate and maintain, is transportable, is reliable, and is priced to fit into any budget. In addition, the aXs features an attractive design which blends into any pool environment without projecting an institutional appearance.

Standing a mere 32 inches above the deck, the aXs provides 360° rotation to insure sufficient clear deck space for safe transfers on and off the lift. The aXs is intended to be used with simple pool gutter configurations having a deck to water distance of no more than six inches.

The aXs is fabricated using both aluminum extrusions and stainless steel. All surfaces are treated with a tough and attractive powder coated finish to protect against prolonged exposure to the elements. Custom colors are available. The housing is formed from ABS plastic with an acrylic cap to minimize discoloration due to exposure to the sun.

With a lifting capacity of 300 pounds, the Basic versions of the aXs meets all Americans with Disabilities Act Accessibility Guidelines (ADAAG), and features our exclusive seating system. This system, designed by people with disabilities for people with disabilities, is wider and deeper than most conventional seats, and has no edges to restrict transfers.

### PRODUCT COMPONENTS



STANDARD aXs

### **Component Description**

The following are the key components used in the aXs:

**Base Assembly:** The base assembly (not shown) connects the aXs to the pool deck and includes the turning elements of the lift. The insert portion of the base assembly is inserted into the deck anchor. The mast is attached to the base assembly using two nylon locking nuts.

**Mast:** The main vertical component of the lift, the mast is fabricated in stainless steel and treated with a durable powder coated finish.

**Actuator Arm:** Primary lifting arm of the lift. Fabricated from an aluminum extrusion, the actuator arm connects the mast to the seat arm and is raised by the attached actuator. The actuator arm is treated with a durable powder coated finish.

### **Component Description- continued**

**Support Arm:** Provides stability for the seat arm. Fabricated from an aluminum extrusion, the seat arm nests inside the actuator arm to provide a unified look and avoid pinch points. The support arm is treated with a durable powder coated finish

**Seat Arm:** Provides an attachment point for the seat assembly. Fabricated from an aluminum extrusion and treated with a durable powder coated finish.

**Housing:** Two piece housing covers the turning components and gears. Fabricated from ABS plastic with an acrylic cap to minimize discoloration due to extended exposure to the sun and pool chemicals. The attractive finish of the housing is suceptible to scratching. When cleaning the housing, be sure to use a clean, soft, non-abrasive material.

**Actuator:** Provides the up and down lifting action.

**Turning Motor:** This 24v gear motor provides the turning action on Basic models.

**Control Box:** Forms the bottom of the control console; this unit controls the mechanical operations of the lift. Three cables connect to the bottom of the Control Box. The largest receptacle is the connection for the hand control. The receptacle next to the hand control connector is marked number 1 and is used to connect the Actuator cable. The next receptacle is marked number 2 and is used to connect the cable for the Turning Motor.

**Battery:** The removable Battery is located on top of the Control Box. Please carefully read the information on Battery charging and the warranty information relating to the Battery.

**Battery Charger:** The Charger connects to the charging slot on the bottom of the Battery where it connects to the Control Box. Please carefully read the information on Battery charging and the warranty information relating to the Battery.

**Hand Control:** The four button unit controls all lift movements for the Basic Model. The two button unit controls the up and down movements of the aXs MT (manual turning version). The arrows indicate the direction of movement. All Hand Controls are fully waterproof and meet IP67 standards.



**Seating System:** The seating system used with all RMT aquatic lifts is the product of years of feedback from our customers and information gathered from focus groups comprised of users of our lifts. Unlike many lift seats that are standard "lifeguard type" plastic shells, this is the first such system that is specifically designed for disabled swimmers.

The seat itself is both deeper and higher to provide both a more stable platform for sitting, as well as being able to accommodate swimmers with reduced trunk stability. The seat has been flattened considerably to eliminate any ridge that would hamper transferring. The sections of the seat have attachment points for the standard seat belt assembly as well as our optional Stability Vest. The molded plastic footrest is removable and will float upward to prevent damage if the chair is lowered too low impacting the deck.

The optional arm rests are robust and can be used for support when transferring on and off the seat. They can be flipped up and out of the way during a transfer.

### UNPACKING & ASSEMBLY INSTRUCTIONS

REFER TO THE DIAGRAM (page 5) FOR PARTS IDENTIFICATION.

# READ THESE INSTRUCTIONS IN THEIR ENTIRETY BEFORE BEGINNING INSTALLATION

Prior to opening the shipping pallet, carefully inspect the external condition of the shipping materials for any visible damage. It is important that any damage be noted on the Bill of Lading prior to signing for the delivery. Contact either RehaMed or your dealer immediately to notify us of any damage or missing parts.

The deck anchor should be installed following the installation instructions.

The aXs is shipped on a covered pallet. The lift is shipped almost totally assembled, so no tools are required for installation and set up. If possible, position the container as close to the deck anchor as possible to facilitate the process.

Follow these steps to unpack and set up the aXs:

- 1. Carefully remove the plastic covering from the pallet.
- 2. Carefully remove any wood bracing from the pallet.
- 3. Remove the lift from the pallet and place into the deck anchor.
- 4. Locate the accessory box and install the battery and hand control.
- 5. Rotate the lift so that the seat arm is positioned over the pool deck.
- 6. Attach the seat to the seat arm. Attach the foot rest to the seat.
- 7. The lift is now ready for use.

### OPERATING THE aXs

Follow these steps to operate the aXs:

- Rotate the seat to either side of the lift that is the most comfortable position for transfer. The lift rotates 360°, so position the lift well over the pool deck away from the edge of the pool.
- Adjust the height of the chair for a comfortable transfer.
- Transfer onto the seat and fasten the seat belt.
- Raise the seat so there is ample legroom for travel.
- Rotate the lift over the water and lower the seat into the water. The hand control is waterproof, so keep it attached to the seat while swimming.
- Enjoy your swim.
- Following your swim, move back onto the seat and fasten the seat belt.
- Raise the lift out of the water and rotate the seat over the pool deck.
- Adjust the height of the chair for a comfortable transfer.
- Transfer off the lift.

### **EMERGENCY OPERATIONS**

Although the electronic system used on the aXs is the same technology used on thousands of lifting products throughout the world, there is always the unlikely event that the product will not operate properly when needed. To anticipate any mechanical failure, the following safeguards are engineered into the aXs:

**Lifting failure:** In the event of a lifting failure, there is an emergency capacitor built into the control box to provide enough power to lift the seat out of the water. Use a blunt object, like the cap of a ball point pen, to press the appropriate up or down emergency button located above the LCD Display on the control box.

**Turning failure:** If the lift will not turn electronically, you can remove the housing and pull out the spring pin located next to the turning motor. This will disengage the gears and allow the lift to be turned manually.

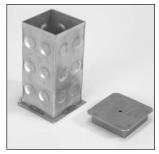
#### DECK ANCHOR INSTALLATION

The optimal mounting distance for the deck anchor is between 12 and 18 inches from the edge of the pool. The aXs is designed to be used with simple pool edge designs without protruding gutters. Please call RehaMed International with any questions concerning deck anchor placement or if the aXs will work in your installation.

#### Concrete Pool Decks

The deck anchor should be totally encapsulated in concrete. Make sure that there are no air pockets or empty space around the anchor.

Follow these suggestions to make sure your anchor is installed properly:



Deck Anchor

- Determine the proper location to install the anchor.
- Use a core drill to drill a hole, between 5 and 6 inches in diameter, into the concrete deck. Be sure the hole is at least 7 inches deep. This will likely be deeper than the deck is thick, but the depth is important to insure that the anchor is completely encapsulated in cement.
- Clean all debris from the hole.
- Place the anchor into the hole. Be sure that the anchor is plumb and the top of the anchor is flush with the surface of the deck.
- Fill the cavity with anchoring cement. Be careful to keep the cement out of the sleeve.
- Allow the cement to cure according to the manufacturer's instructions.

#### Wooden Decks

The aXs can also be used with a wooden pool deck, however this type of installation will require a special anchor. Since this anchor will need to be fabricated to match the design of the deck, the design and installation will likely be different for each deck.

Please contact RehaMed International and we can work with you to gather the necessary information for fabricating this custom anchor.

### BATTERY CHARGING

The rechargeable battery should be connected to the charger when the lift is not in use. A fully charged battery will last approximately 30 lifting cycles, depending on the weight of the user. The battery has no memory, so it is not necessary to discharge the battery prior to charging. In fact, allowing the battery to fully discharge could cause damage and shorten the life of the battery.



The battery is fully charged when shipped, but should be checked by looking at the LCD display on the control box prior to use.

### **ACCESSORIES**

The following accessories are included with each aXs lift:

- Seat Belt Assembly
- · Console Cover
- Foot Rest

The following optional accessories may be purchased for use with your aXs lift:

- **Arm Rest Kit:** Powder coated, stainless steel arm rests provide security and a stable surface for transferring.
- Total Cover: Made of weather resistant polyester
- Stability Vest: Five point restraint for individuals who need a higher degree
  of stability.
- Seat Pad: Waterproof seat pad designed to enhance comfort and minimize potential skin damage that could occur during transfer.
- Caddie for aXs: Highly recommended for all aXs models. Designed to lift unit out from anchor socket and roll to storage or other location if desired.



#### MAINTENANCE

Minimal maintenance will prolong the life of your aXs lift.

All electronic components should be kept clean and dry. The control box and battery should be protected from exposure to water. A waterproof console cover is provided with each aXs to cover these components and protect them from sudden rain showers or dousing with pool water. If the lift is used outdoors, a full cover is available and should be used.

The following table details suggested maintenance guidelines:

Maintenance Performed	Daily	Weekly	Monthly
Rinse seat with fresh water and dry entire lift	1		
Charge the Battery	/		
Wipe control box and battery connection with a clean dry rag	1		
Examine lift for any damage	/		
Test for normal operation	1		
Spray gear assembly with corrosion inhibitor		1	
Clean all connections with Scotch-Brite pad			1
Clean all metallic surfaces with cleaner wax to maintain the finish of the lift			1
Make sure all connections are secure			1
Clean housing with soapy water and a soft clean cloth. Do not use any kind of solvent on the housing.			

### LONG-TERM STORAGE

The following steps should be taken to prepare the aXs for long term storage:

- · Rinse seat with fresh water and dry entire lift
- · Spray gear assembly with corrosion inhibitor
- Keep battery connected to charger in a dry area
- Cover unit and store in a dry location

#### TROUBLE SHOOTING

### Be sure the battery is fully charged before troubleshooting.

#### Unit does not rotate

Does unit raise or lower?

Yes.

- 1. Check connection to Control Box. Be sure plug is pushed in all the way.
- 2. Check hand control connection to Control Unit for damaged pins.
- 3. Check connections on terminal block located on frame for loose wires.
- 4. Check connection cable for damage.
- 5. Reverse the motor cables as follows: Locate the area on the control box where the cables are attached. Remove the actuator cable from receptacle #1 and replace it with the 24v motor cable from receptacle #2. Activate the up and down buttons on the hand control. If the unit rotates, the problem is likely the hand control. If the unit does not rotate, the problem is likely the 24v motor.

#### No.

- 1. Check battery charge level.
- 2. Check battery connection.
- 3. Use another fully charged battery. If unit continues to not function, replace the control unit.

#### Unit does not Raise or Lower

Does unit rotate?

Yes.

- 1. Check connection to Control Box. Be sure plug is pushed in all the way.
- 2. Check hand control connection to Control Unit for damaged pins.
- 3. Check connection cable for damage.
- 4. Locate Emergency Buttons on top of Control Unit. Activate these buttons using a ball point pen. If unit operates properly, the problem is likely the hand control. If unit does not operate properly, the problem is likely the actuator.

#### No.

- 1. Check battery charge level.
- 2. Check battery connection.
- 3. Use another fully charged battery. If unit continues to not function, replace the control unit.

### WARRANTY INFORMATION

All RMT Aquatic Lifting Systems have a Lifetime Warranty on the frame, excluding the powder coated paint finish, which may become scratched with normal use. All electronic and motor components, with the exception of batteries, have a full two-year warranty. Within the warranty period, we will repair or replace any part found to be defective upon our examination, but will not pay shipping costs or other expenses. To obtain warranty service, call or write to us at the address provided. This warranty is an exclusive remedy and we are not responsible for any consequential or incidental damages or injury to person or property. This warranty shall not apply to any product which has been subject to misuse, negligence, or accident, or has been damaged in shipment, or misapplied, or which have been modified or repaired by an unauthorized person. This warranty only applies to products owned by persons purchasing directly from the manufacturer or from our approved dealers or distributors.

### **Warranty Procedures**

To initiate a warranty claim, contact our customer service department. Once the nature of the problem has been determined the following procedure will be followed:

### Within the first 90 days following delivery of the Product

- 1. A Return Goods Authorization (RMA) will be issued for the return of the defective component. This RGA number should be clearly displayed on the outside of the package containing the returned part.
- 2. RMT will pay all freight charges for any component that fails within the first 90 days.
- The defective component will be inspected by our technical staff to determine if the product can be repaired. If the component cannot be repaired it will be replaced with a new component.

#### After 90 days

- 1. A Return Goods Authorization (RMA) will be issued for the return of the defective component. This RGA number should be clearly displayed on the outside of the package containing the returned part.
- 2. The customer is responsible for all freight costs after 90 days.
- 3. The defective component will be inspected by our technical staff to determine if the product can be repaired. If the component cannot be repaired it will be replaced with a remanufactured component.

#### Batteries

Batteries have a normal lifespan of between 2-3 years, depending on their use and care. Batteries should be left on the charger when not in use and should never allowed to fully discharge. Allowing the battery to fully discharge can damage the battery.

The battery has contacts located on the bottom of the battery housing. The battery should never be placed on a conductive surface that would cause a short. If this occurs, it is likely that the fuse located inside the housing would break. This fuse can be replaced and should be changed prior to submitting a warranty claim.

All batteries are inspected prior to shipment, and, as such, should be free from any manufacturing defect. That being said, the following is the warranty policy for batteries:

- 1. If the battery fails during the first 90 days following purchase, it will be replaced using the same guidelines for any warranty part.
- 2. If the battery fails during the first year following purchase, a new battery will be provided at a charge of 50% of the prevailing cost of a new battery.
- 3. The warranty policy on batteries expires after one year following purchase.

### What if I can't wait for the defective component to be inspected?

If the customer desires that a replacement component be sent out immediately, the following procedures will be followed:

- 1. Once the problem component has been identified, a remanufactured component will be sent to the customer immediately.
- 2. The customer will be invoiced for the cost of a remanufactured componen generally 75% of the full price.
- 3. A Return Goods Authorization (RGA) will be issued for the return of the defective component. This RGA number should be clearly displayed on the outside of the package containing the returned part. The customer can use the same box that was used to ship the remanufactured component.
- 4. The customer will promptly return the defective component.
- After inspection by our technical staff, if the defective component is covered under the terms of the warranty, a credit will be issued to cancel out the invoice issued for the component.
- 6. If the component is not covered under warranty, the invoice is payable by the customer.
- 7. RMT will pay all freight charges for components less than 90 days old. After 90 days, the customer pays all freight charges.

All returns will be processed promptly in our factory.

### **SPECIFICATIONS**

### aXs Aquatic Lift System.

### 1. Dimensions/Capacity

Mast Height32" (81 cm)Height-Arm Raised56.5" (143.5 cm)Overall Length-extended68.75" (174.6 cm)Storage Length-w/o chair47" (119 cm)Unit Weight-inc. chair81 lbs (36.7 KG)Unit Weight-w/o chair68 lbs (30.8 KG)

Power 24v DC

Battery Life 30 cycles (approx.) Lifting Capacity 300 lbs (136 KG)

#### 2. Actuator

Type Linak LA34 Mechanical Actuator

Maximum Thrust 1680 Lbs Voltage 24v DC Maximum Amp Draw 9

Maximum Speed 0.59 in/sec

### 3. Battery

Type Linak BAJ1
Power 24v DC

Composition Gel Lead Acid

### 4. Range of Motion Information

Vertical Travel 46 inches
Rotation Continuous
Widest Arc-inc. chair 61" (155 cm)
Narrowest Arc-inc. chair 51" (129.5 cm)

### 5. Materials and Finish Information

Mast Powder Coated Stainless Steel

Lifting Arms Powder Coated Aluminum Extrusion Housing ABS Plastic Core with Acrylic Cap

Seat Cushions Blow Molded Plastic

Seat Frame Powder Coated Stainless Steel

### PARTS LIST

Part Number	Description
AX1000	LA34 Actuator
100-1000	Control Box-Standard
AX1150	Control Box-Wireless
100-2000	Battery
100-3500	Battery Charger
AX1400	Hand Control-4 Channel
AX1420	Hand Control-2 Channel
AX1450	Hand Control_Wireless
AX1430	Hand Control Hanger
120-1100	24v Motor
120-1800	Motor Cord w/ O ring
100-3100	Battery Bracket
AX2000	Mast
AX2110	Top Extrusion
AX2200	Bottom Extrusion
AX2300	Seat Arm
AX2400	Seat Frame
AX2450	Seat Back/Bottom
AX3000	Large Gear
120-1600	Small Gear
AX8011	Spring Release
AX4000	Housing Back
AX4050	Housing Front
AX8009	Battery Console Cover
AX8010	Seat Belt Assembly
AX6000	Long Bushings
AX6100	Short Bushings
AX8000	Sidewalk Bolt
AX8004	Threaded Shaft-Long
AX8005	Threaded Shaft-Short
AX8008	U Speed Nut
AX8001	Lip Seal
300-6200	Deck Anchor
AX3501	Hub/Spindle Assembly
AX2320	Arm rest
AX9001	Stability Best
AX9000	Total Cover
AX2500	Spine Board Attachment