

User Manual

Hummingbird

Mobile Computer Workstations



# Preface

## Important, Please Read Carefully

Thank you for your purchase with Amico.

This unit is designed for long lasting performance, providing the end user complies with assembly and maintenance procedures. This Instruction Manual is your guide to ensure that you get the best performance out of the equipment. Amico Accessories Inc. is not responsible for any damage as a result of (but not limited to) abuse and other problems that may be a direct or indirect result of failure to comply with the instructions provided in this manual.

## Glossary of Warning Symbols

The Meaning of Symbols appearing in this Guide, on the Workstation, or on the Battery System are shown on the chart below. These symbols alert you to safety conditions that demands your attention. You should take proper precaution and follow the instruction on the label and/or this guide to minimize the risk of injury or damaging the equipment.

Symbol	Signal Word	Level of Hazard
	<b>WARNING</b>	Indicates a potentially hazardous situation which, if not avoid, could result in death or serious injury.
	<b>CAUTION</b>	Indicates a potentially hazardous situation which, if not avoid, could result in moderate to serious injury.
	<b>NOTE</b>	Follow operating instructions.
	<b>INSTRUCTIONS</b>	Follow operating instructions.

## Medical Facility Responsibilities

Preventive maintenance checks must be performed regularly to maintain the quality and performance of this product. Any parts that may be broken, missing, worn, distorted, or contaminated in any way should not be used and all affected parts should be replaced immediately. Should the necessity of any repair be suspected; please contact your local distributor or call 877-264-2697.

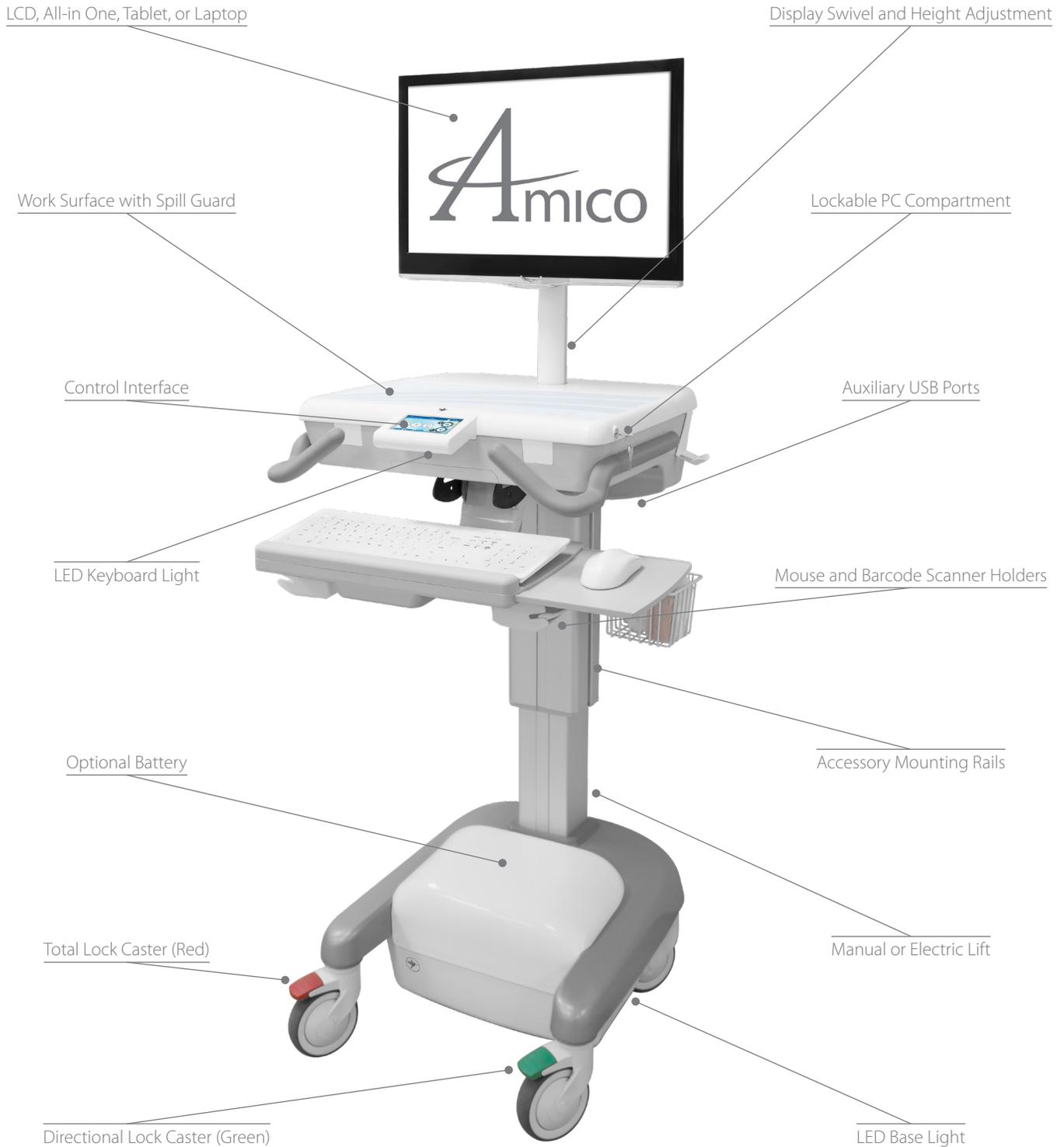
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# Section 1: Product Specifications



# Section 1: Product Specifications

## Features

	Cart Type			
	Powered for LCD	Powered for Laptop	Non-powered for LCD	Non-powered for Laptop
<b>Features</b>	<ul style="list-style-type: none"> <li>Input: 100 - 240 V, 50/60Hz, 6.5 A</li> <li>115 VAC, 1.8 A</li> <li>Output: 19.5 VDC, 10.0A</li> <li>12.0 VDC, 16.5 A</li> <li>200 W max load combined</li> </ul>	<ul style="list-style-type: none"> <li>Input: 100 - 240 V, 50/60 Hz, 6.5 A</li> <li>115 VAC, 1.8 A</li> <li>Output: 19.5 VDC, 10.0 A</li> <li>12.0 VDC, 16.5 A</li> <li>200 W max load combined</li> </ul>		
<b>Height Adjustability</b>	Manual/Automatic	Manual/Automatic	Manual	Manual
	 <b>NOTE:</b> For weight ranges, please see Table 1 below.			
<b>Enclosure</b>	Ultra-slim PCs up to 8" x 9" x 2.5" (203.2 x 228.6 x 63.5 mm)	Laptop enclosure with screen opening for laptops up to 17" (431.8 mm) wide.  <b>NOTE:</b> LAPTOP BODY MUST NOT PROTRUDE BEHIND THE HINGE OF THE LAPTOP SCREEN.	Ultra-slim PCs up to 8" x 9" x 2.5" (203.2 x 228.6 x 63.5 mm)	Laptop enclosure with screen opening for laptops up to 17" (431.8 mm) wide.  <b>NOTE:</b> LAPTOP BODY MUST NOT PROTRUDE BEHIND THE HINGE OF THE LAPTOP SCREEN.
<b>LCD Mounting</b> With interchangeable springs for varying monitor weights (Table 2 on next page).	Yes – with 180° swivel, 6.5" independent height adjustment & landscape to portrait orientation.	No	Yes – with 180° swivel, 6.5" independent height adjustment & landscape to portrait orientation.	No
	 <b>NOTE:</b> For weight ranges, please see Table 2 on the next page.			
<b>User Interface</b>	Standard/Advanced	Standard/Advanced	Light	Light
<b>Casters</b>	<ul style="list-style-type: none"> <li>1x Total locking</li> <li>1x Directional locking</li> <li>2x Swivel</li> </ul>	<ul style="list-style-type: none"> <li>1x Total locking</li> <li>1x Directional locking</li> <li>2x Swivel</li> </ul>	<ul style="list-style-type: none"> <li>1x Total locking</li> <li>1x Directional locking</li> <li>2x Swivel</li> </ul>	<ul style="list-style-type: none"> <li>1x Total locking</li> <li>1x Directional locking</li> <li>2x Swivel</li> </ul>
<b>Standard Battery Types</b>	<ul style="list-style-type: none"> <li>No battery</li> <li>1x LiFePO4</li> <li>2x LiFePO4</li> <li>3x LiFePO4</li> </ul>	<ul style="list-style-type: none"> <li>No battery</li> <li>1x LiFePO4</li> <li>2x LiFePO4</li> <li>3x LiFePO4</li> </ul>	No battery	No battery
<b>Keyboard Tray</b> (5 lbs. max)	Slide-out, or Ergonomic with tilt, pivot, slide, & height adjustment.	Slide-out, or Ergonomic with tilt, pivot, slide, & height adjustment.	Slide-out, or Ergonomic with tilt, pivot, slide, and height adjustment.	Slide-out, or Ergonomic with tilt, pivot, slide, & height adjustment.
<b>Lighting</b>	Work surface, keyboard tray, & base.	Keyboard tray & base.	Keyboard tray.	Keyboard tray.

**Table 1: Height Adjustability Weight Ranges**

Height Adjustability Type	Weight Range
Manual 70 N spring	0 - 9.9 lbs (0 - 4.49 kg)
Manual 120 N spring	10 - 19.9 lbs (4.54 - 9.03 kg)
Manual 165 N spring	20 - 29.9 lbs (9.07 - 13.6 kg)
Manual 210 N spring	30 - 39.9 lbs (13.61 - 18.14 kg)
Manual 255 N spring	40 - 49.9 lbs (18.15 - 22.68 kg)
Automatic	50 - 70 lbs (22.68 - 31.75 kg)

 **NOTE:** ALL CONFIGURATIONS COME WITH AN EASILY DETACHABLE POWER CORD WHICH CAN BE DISCONNECTED FROM THE CART IF NECESSARY. IF DETACHED, ENSURE CABLE IS FULLY PLUGGED IN BEFORE RESUMING USE.

Various optional storage solutions and additional workstation column mountable accessories are available (Amico approved accessories and are within footprint of cart only, with some exceptions. Refer to [www.amico.com](http://www.amico.com) for more information).

# Section 1: Product Specifications

**Table 2: LCD Mounting Weight Ranges**

LCD Spring	Weight Range
25 N	5.5 - 8 lbs (2.5 - 3.6 kg)
35 N	7.5 - 10 lbs (3.4 - 4.5 kg)
50 N*	13 - 15.5 lbs (5.8 - 7.0 kg)
60 N	15.5 - 18 lbs (7 - 8.1 kg)
75 N	18 - 22 lbs (8.1 - 19 kg)

 **NOTE:** RATINGS FOR HEIGHT ADJUSTMENT ARE INCLUSIVE OF MAX LOADING ON WORKTOP (e.g. 22 lbs FOR LCD + 10 lbs ON WORK SURFACE + 10 lbs IN **MAIN BIN** + 5 lbs ON KEYBOARD TRAY) AND THE LOAD ON THE COLUMN.

\*Use MON-LCD-HANDLE for displays between 10 - 13 lbs.

## Weight and Operational Conditions

The Hummingbird Mobile Workstation weighs 30 - 140 lbs, depending on configuration and accessories.

The recommended operation temperature is 25 °C (77 °F). The maximum operational temperature is from 10 °C (50 °F) - 29 °C (86 °F). The recommended humidity range for operation is 5 - 90% rH.

The recommended storage temperature is 25 °C (77 °F) to minimize battery capacity loss.

The maximum storage temperature is -20 °C (4 °F) - 50 °C (122 °F). The recommended humidity range for storage is 5 - 90% rH.

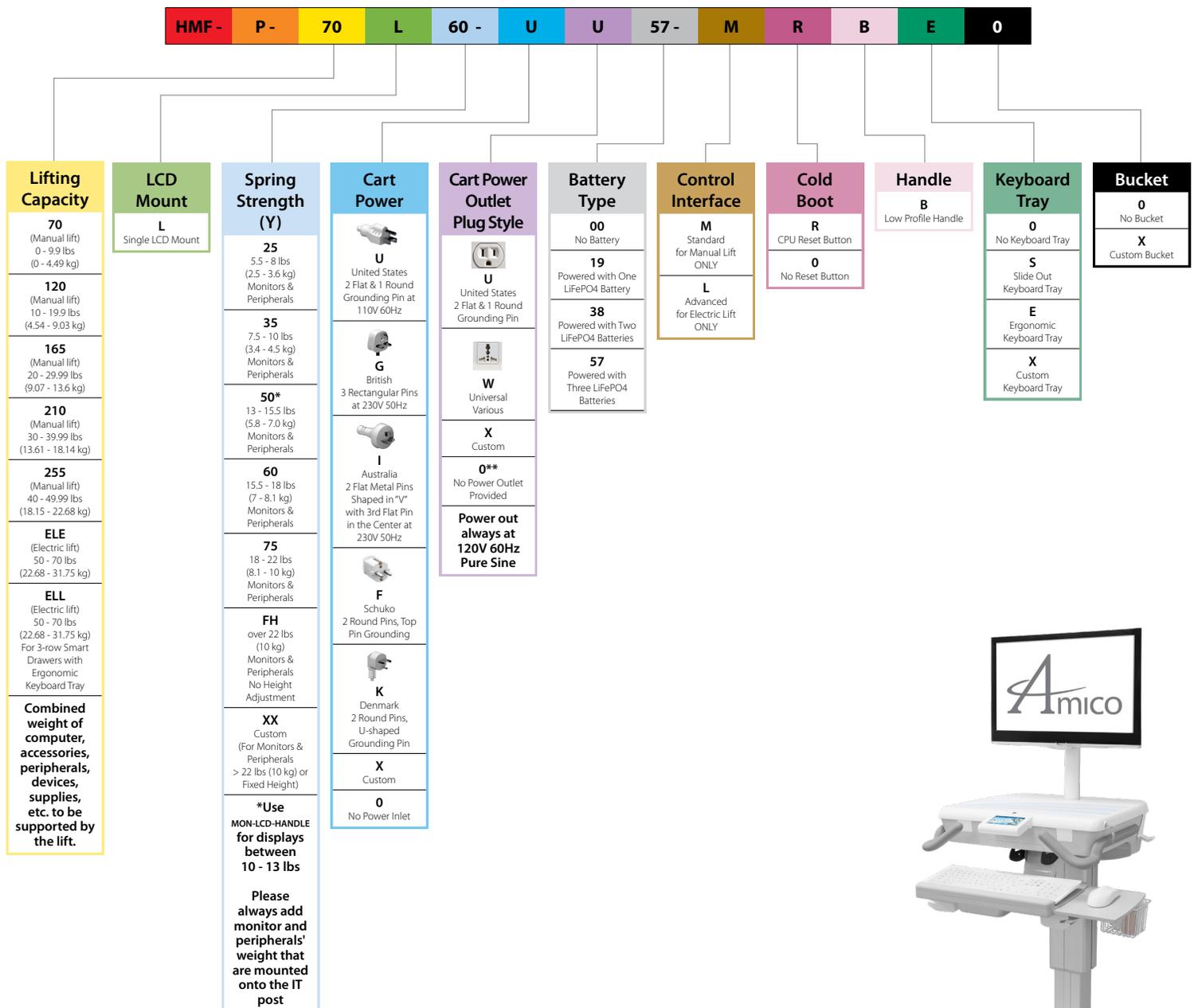
Atmospheric Pressure (kPa) is between 80 and 106 kPa (up to 2,000 m)

 **WARNING:** THE EMISSIONS CHARACTERISTICS OF THE HUMMINGBIRD MOBILE WORKSTATION MAKE IT SUITABLE FOR USE IN INDUSTRIAL AREAS AND HOSPITALS (CISPR 11 CLASS A). OPERATING THIS WORKSTATION IN RESIDENTIAL ENVIRONMENT IS LIKELY TO CAUSE HARMFUL INTERFERENCE IN WHICH CASE THE USER WILL BE REQUIRED TO CORRECT THE INTERFERENCE AT HIS OWN EXPENSE. CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY AMICO ACCESSORIES INC. COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

# Section 1: Product Specifications

## Options Matrix

Powered for LCD

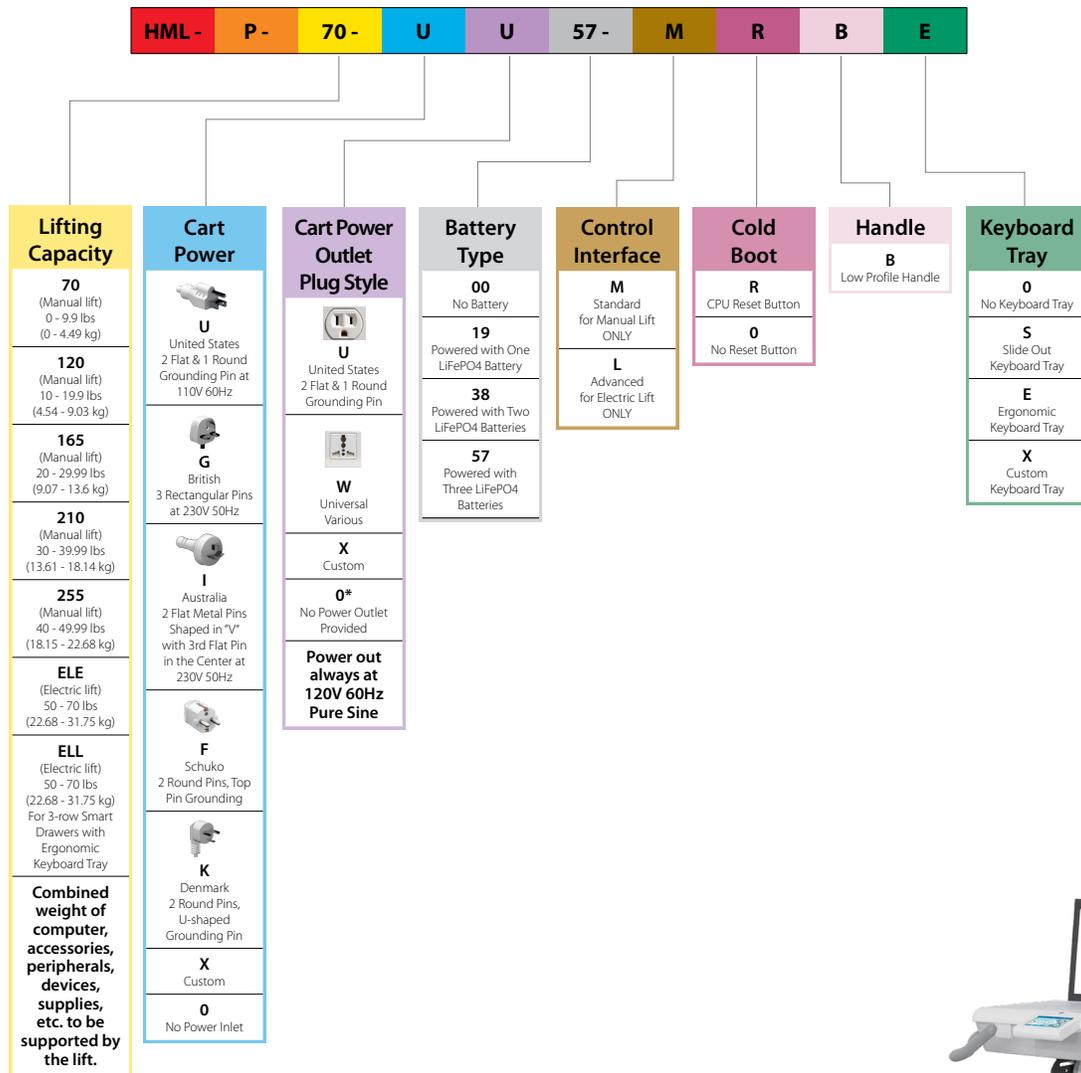


\*\* Customer-provided power outlet requires a type C14 coupler as per IEC 60320 standards to receive power from the Hummingbird.

# Section 1: Product Specifications

## Options Matrix

### Powered for Laptop

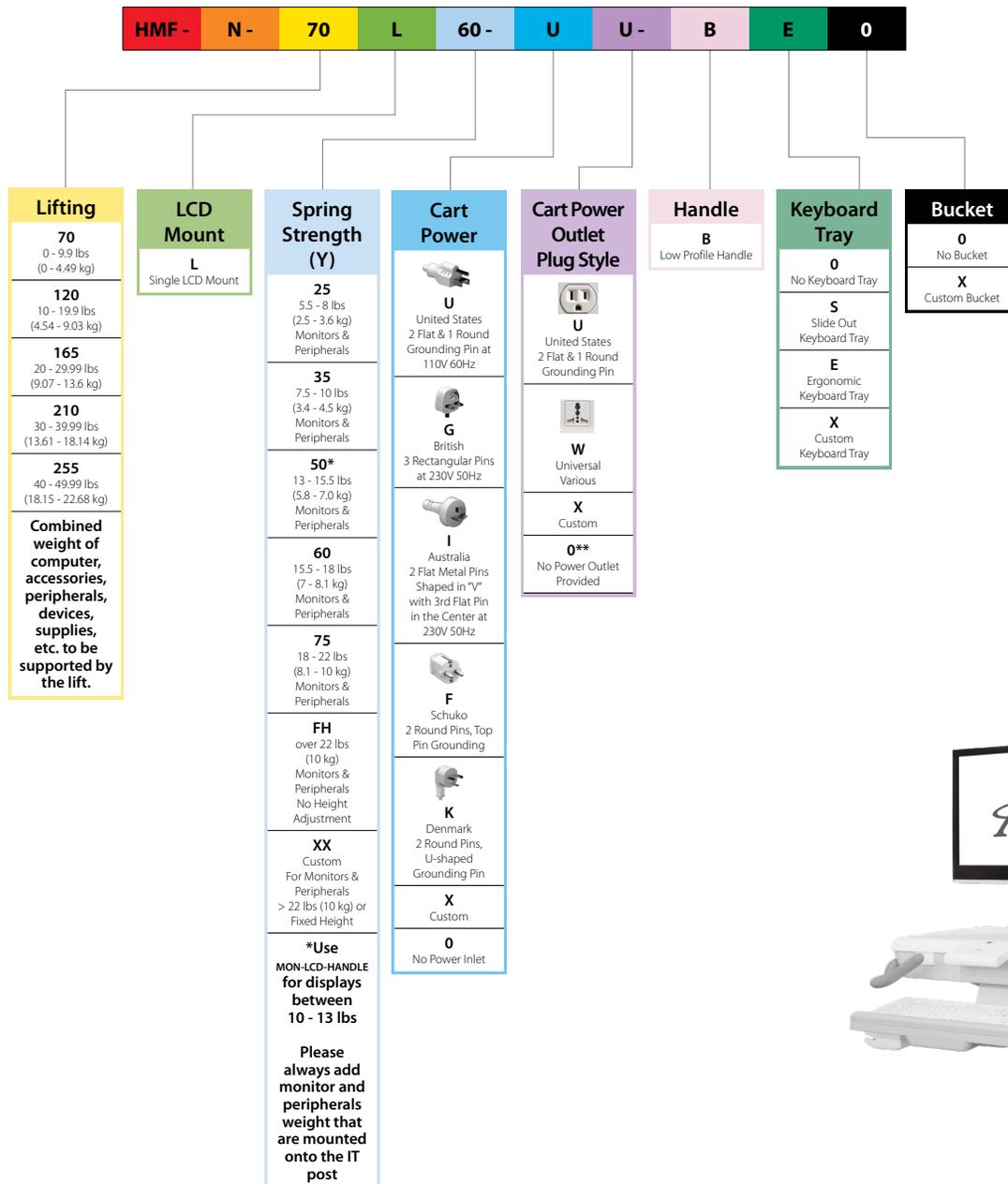


\* Customer-provided power outlet requires a type C14 coupler as per IEC 60320 standards to receive power from the Hummingbird.

# Section 1: Product Specifications

## Options Matrix

Non-powered for LCD

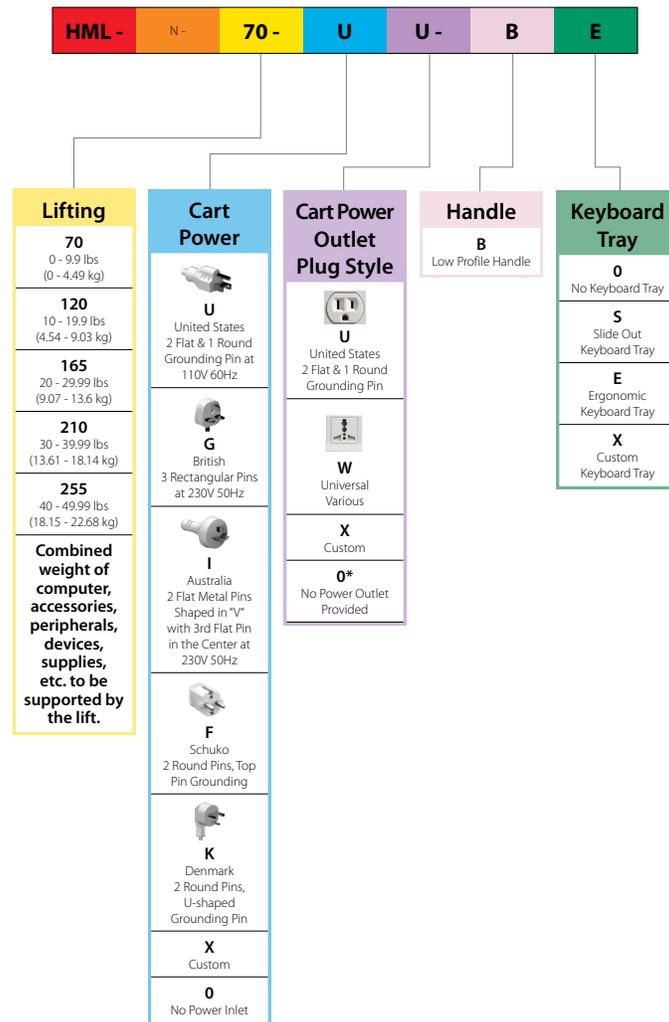


\*\* Customer-provided power outlet requires a type C14 coupler as per IEC 60320 standards to receive power from the Hummingbird.

# Section 1: Product Specifications

## Options Matrix

Non-powered for Laptop



\* Customer-provided power outlet requires a type C14 coupler as per IEC 60320 standards to receive power from the Hummingbird.

# Section 2: Installation Preparation

## Installation Tools

- #2 Phillips head screwdriver (LCD cart only)
- Ratchet
- ½" Socket (Same drive as ratchet)
- 5/32" Hex key (Ball head)
- ¼" Hex key

 **NOTE:** AMICO DOES NOT PROVIDE TOOLS NECESSARY FOR ASSEMBLY.

## Pre-installation Information (PLEASE READ CAREFULLY BEFORE STARTING)

 **WARNING:** LOADING THE PRODUCT OVER THE RATED RANGE CAN LEAD TO STRUCTURAL FAILURE AND/OR SERIOUS INJURY. PLEASE REFER TO WEIGHT RATING, LOCATED ON THE FIT ASSEMBLY AND ON PAGES 5, 6, 14, 19, 21, & 31-33 OF THIS MANUAL. WEIGHT RATINGS MAY VARY DEPENDING ON MODEL.

 **WARNING:** THE CART IS NOT DESIGNED TO SUPPORT BODY WEIGHT; DO NOT LEAN OR SIT ON THE CART.

 **WARNING:** THE COLUMN OF THE MANUALLY ADJUSTED HUMMINGBIRD MOBILE WORKSTATION CONTAINS A STRONG GAS SPRING USED FOR VERTICAL ADJUSTMENT OF THE WORK SURFACE. THE COLUMN SHOULD NEVER BE DISASSEMBLED BY NON-AMICO PERSONNEL. FAILURE TO FOLLOW THESE GUIDELINES COULD RESULT IN SERIOUS INJURY.

 **WARNING:** DO NOT LEAVE THE CART UNATTENDED ON INCLINES; TIPPING MAY OCCUR RESULTING IN INJURY.

 **WARNING:** DO NOT ATTEMPT TO CARRY THE CART UP/DOWN STAIRS OR OVER/AROUND OBSTACLES. FAILURE TO FOLLOW THESE GUIDELINES COULD RESULT IN SERIOUS INJURY.

 **WARNING:** DO NOT ALLOW BATTERY COMPARTMENT (AMICO POWER SYSTEM) TO COME IN CONTACT WITH LIQUIDS. DO NOT OPERATE THE POWER SYSTEM IF WET.

 **WARNING:** THE BATTERY COMPARTMENT SHOULD BE ACCESSED BY AMICO APPROVED SERVICE PERSONNEL ONLY. UNAUTHORIZED ACCESS COULD RESULT IN INJURY OR DAMAGE TO THE POWER SYSTEM.

 **WARNING:** RISK OF EXPLOSION IF THE BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO LOCAL REGULATIONS.

 **NOTE:** FOR MORE INFORMATION ON THE POWER SYSTEM, PLEASE REFER TO THE POWER SYSTEM OPERATION MANUAL AVAILABLE ON THE AMICO WEBSITE.

 **NOTE:** UNITS WITH BATTERIES COME PRE-CHARGED, HOWEVER THEY MUST FIRST BE INITIALIZED BY BRIEFLY PLUGGING INTO A POWER OUTLET.

 **NOTE:** UNITS WITH AUTOMATIC HEIGHT ADJUSTMENT MUST BE SET TO HOME POSITION AT INITIALIZATION. THIS WILL BE SHOWN BY THE FLASHING HEIGHT ADJUSTMENT ARROWS ON THE STANDARD USER INTERFACE OR BY A SYMBOL OF A HOUSE WITH A CROSS THROUGH IT (OR EQUIVALENT) ON THE ADVANCED INTERFACE. TO SET HOME POSITION, HOLD THE DOWN ARROW UNTIL THE CART STOPS LOWERING AND ONLY THE DOWN ARROW IS FLASHING (FOR STANDARD INTERFACE) OR THE HOUSE SYMBOL IS GONE (ADVANCED INTERFACE).

# Section 3: Software Initialization

## Installation and Adjustment Instructions

### Powered Cart with Advanced Interface (Automatic Height Adjustment)

#### 1. First Time Initializing

Plug cart into power outlet – Advanced Interface should turn on (may take up to 30 seconds). After initializing the cart, a **“NO HOME”** symbol (🚫) will appear in the top right hand corner of the Advanced interface. This means the user must set the cart’s **“HOME”** (lowest) position.

#### 2. Setting Home Position

1. Hold the **DOWN** arrow to lower the cart’s work surface until the **“COLLISION”** symbol (⚠️) appears.
2. Release the **DOWN** arrow and reverse direction to raise work surface to desired position.

#### 3. Setting Time and Date

1. Tap on **“GUEST”** in top left corner of interface (Figure 1).
2. Select **“ADMIN”** from drop down list and login using password: AMICO (Figure 2).
3. Tap on **“SETTINGS”** icon.
4. Select **“ADMIN SETUP”** (only available in the ADMIN profile).
5. Select **“SET CLOCK”**.
6. Using the **ARROW** icons set the time and date in the desired format (📘 **NOTE: DATE AND TIME FORMATS MUST FIRST BE SELECTED ON RIGHT OF INTERFACE**). TAP **“SAVE”** TO FINISH).

#### 4. Creating a User Profile

1. Tap on **“ADMIN”** in top left corner of interface and select **“LOGOUT”** when prompted.
2. Tap **“GUEST”** in top left corner of interface, and select **“NEW USER”**.
3. Enter desired user name, select **“NEXT”**.
4. Enter desired password, select **“NEXT”** (re-enter password and select **“NEXT”**).
5. Enter the user’s height. Select **“NEXT”** then **“OK”** when prompted.

#### 5. Setting “Sit” Heights

📘 **NOTE: USER’S FOREARMS SHOULD BE PARALLEL TO GROUND (90° BEND AT ELBOWS) FOR ERGONOMIC USE.**

1. To input sit and stand positions, select **“SETTINGS”** and then **“USER SETUP”** (Figure 3).
2. Adjust the height using the **UP/DOWN** arrows. When height is at desired sit position, select **“SAVE”** next to respective position icons.

#### 6. Setting “Stand” Heights

1. To input sit and stand positions, select **“SETTINGS”** and then **“USER SETUP”** (Figure 3).
2. Adjust the height using the **UP/DOWN** arrows. When height is at desired stand position, select **“SAVE”** next to respective position icons.
3. Tap **“OK”** twice to return to the main menu.

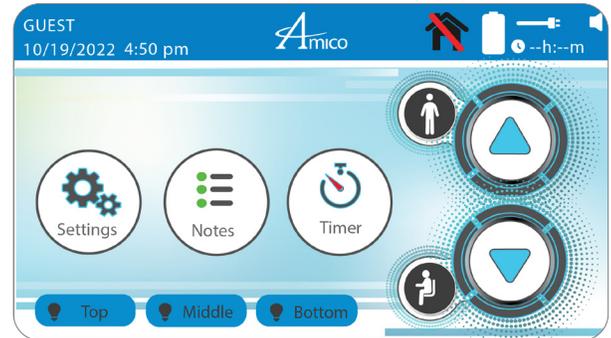


Figure 1

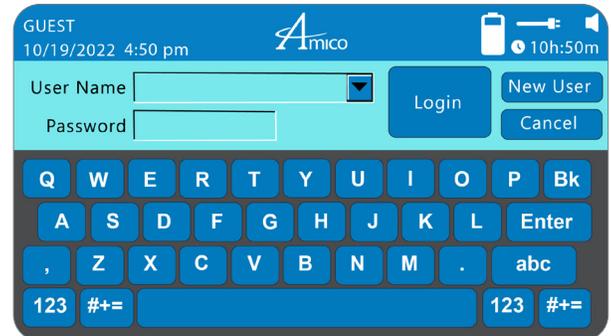


Figure 2

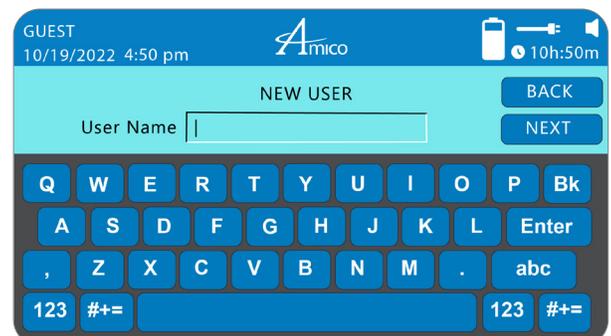


Figure 3

# Section 3: Software Initialization

## Installation and Adjustment Instructions

### Powered Cart with Advanced Interface (Manual Height Adjustment)

**i NOTE:** INSPECT CART INTEGRITY PRIOR TO BEGINNING SETUP.

#### 1. First Time Initializing

Plug cart into power outlet – Advanced interface should turn on (may take up to 30 seconds).

#### 2. Setting Time and Date

1. Tap on **"GUEST"** in top left corner of interface.
2. Select **"ADMIN"** from drop down list and login using password: AMICO (**Figure 4**).
3. Tap on **"SETTINGS"** icon.
4. Select **"ADMIN SETUP"** (only available in the **ADMIN** profile).
5. Select **"SET CLOCK"**.

Using the arrow icons set the time and date in the desired format

**i NOTE:** DATE AND TIME FORMATS MUST FIRST BE SELECTED ON RIGHT OF INTERFACE). Tap **"SAVE"** to finish.

#### 3. Creating a User Profile

1. Tap on **"ADMIN"** in top left corner of interface and select **"LOGOUT"** when prompted.
2. Tap **"GUEST"** in top left corner of interface, and select **"NEW USER"**.
3. Enter desired user name, select **"NEXT"** (**Figure 5**).
4. Enter desired password, select **"NEXT"** (re-enter password and select **"NEXT"**).

#### 4. Height Adjustment

1. Pull lever and adjust to desired height (**Figure 6**).

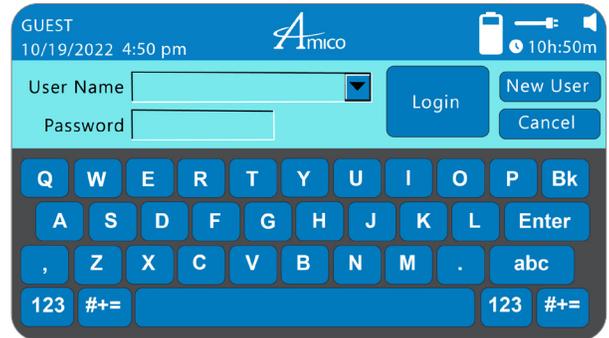


Figure 4



Figure 5

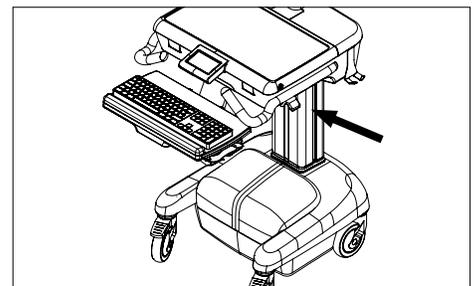


Figure 6

# Section 4: Mounting Platform

The Hummingbird Mobile Workstation is intended for use on flat surfaces (carpet, tile, wood, laminate) in an indoor environment and on inclines of up to 10°.

The Hummingbird Mobile Workstation includes a **DIRECTIONAL LOCKING CASTER (GREEN)** to aid in movement and maneuvering corners, and a **TOTAL LOCKING CASTER (RED)** to prevent movement as well as 2x handles for steering.

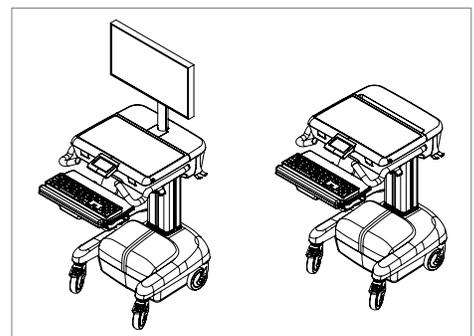


Figure 7

# Section 5: Device Installation

## Mounting a Monitor: VESA 75/100 (LCD Carts Only)

**WARNING:** ENSURE THAT THE **VESA PLATE** IS AT THE TOPMOST POSITION BEFORE MOUNTING OR REMOVING DEVICES FROM THE **FIT POST**.

**NOTE:** 4x **M4 SCREWS** ARE PROVIDED FOR MOUNTING THE **MONITOR** TO THE **VESA HEAD**. DIFFERENT **SCREWS** MAY BE REQUIRED IF THE HOLE DEPTH IN THE **MONITOR** DOES NOT MATCH THE **SCREW** SIZE. STANDOFFS MAY BE NEEDED DEPENDING ON THE **MONITOR'S** HOLE PATTERN.

**NOTE:** ALLOW 90° ROTATION IN BOTH DIRECTIONS FOR EXCESS CABLING.

1. Determine the mounting configuration on the **MONITOR** – **VESA 75** (75 mm x 75 mm M4 thread) or **VESA 100** (100 mm x 100 mm M4 thread).
2. **VESA 100 Configuration**  
Partially thread 2x **M4 SCREWS** into top 2x **MOUNTING HOLES** in the back of the **MONITOR**. The **MONITOR** can then be hung on the **VESA PLATE** through the 2x **MOUNTING SLOTS** at the top. Insert 2x more **SCREWS** through the **VESA 100 MOUNTING HOLES** at the bottom and tighten all **SCREWS** (Figure 8).
3. **VESA 75 Configuration**  
Rotate the **VESA PLATE** so that the 2x **MOUNTING SLOTS** for the **VESA 75** configuration are located at the top of the **PLATE**. Partially thread 2x **M4 SCREWS** into top 2x **MOUNTING HOLES** in the back of the **MONITOR**. The **MONITOR** can then be hung on the **VESA PLATE** through the 2x **MOUNTING SLOTS** at the top. Insert 2x more **SCREWS** through the **VESA 75 MOUNTING HOLES** at the bottom and tighten all **SCREWS**.
4. When removing the **MONITOR**, ensure that the **MONITOR** is at the topmost position (applicable only when **FIT POST** contains a gas spring for vertical adjustability). Remove the 2x bottom **SCREWS** from the **VESA PLATE**, and loosen the top 2x **SCREWS**. Carefully lift the **MONITOR** off the **VESA PLATE**.

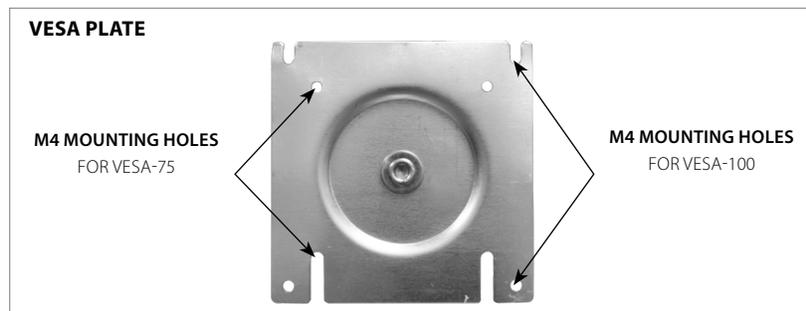


Figure 8

## Mounting a Keyboard and Mouse

1. Remove the backing on 3x, or half of given, **DUAL LOCKING COINS** and adhere to bottom of keyboard, spaced evenly apart (Figure 9).
2. Remove the backing on the remaining **DUAL LOCKING COINS** and attach them to those on the bottom of the keyboard (Figure 10).
3. Carefully position the keyboard on the keyboard tray and firmly press down while supporting the keyboard tray from the bottom (Figure 11).
4. Place the mouse into the mouse holder (Figure 12).
5. Secure the mouse and keyboard cords to the back of the keyboard tray (Figure 13).
6. Route the cords through the bottom of the **MAIN BIN** (Figure 14). Ensure that there is enough slack in the cords for full adjustability of the keyboard tray into the processor port (outer most position).

**WARNING:** DO NOT OVERLOAD OR LEAN ON THE KEYBOARD TRAY (MAX LOAD = 10 lbs).

# Section 5: Device Installation

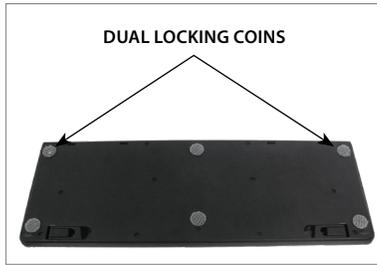


Figure 9



Figure 10



Figure 11



Figure 12



Figure 13



Figure 14

## Mounting a Computer (LCD Carts Only)

1. To open the Work Surface, insert the key (provided by Amico) into the lock on the Work Surface and turn counter-clockwise (CCW) to unlock the Work Surface.
2. Lift the Work Surface upwards to access the interior of the **MAIN BIN** (Figure 15).
3. Place the computer (not provided) carefully inside the **MAIN BIN** and plug the power cord into the supplied power bar (see page 5 for size restrictions).
4. Plug all USB cables into the computer.

**i** **NOTE:** A USB HUB (NOT PROVIDED) MAY BE REQUIRED.

5. To close, lower the Work Surface until it is resting on the **MAIN BIN** and turn the key clockwise (CW) to lock.

**!** **WARNING:** ENSURE THAT THE KEY IS TURNED COUNTER-CLOCKWISE BEFORE ATTEMPTING TO CLOSE THE WORK SURFACE. FAILURE TO DO SO COULD LEAD TO DAMAGE TO THE WORK SURFACE AND/OR THE LOCKING MECHANISM.

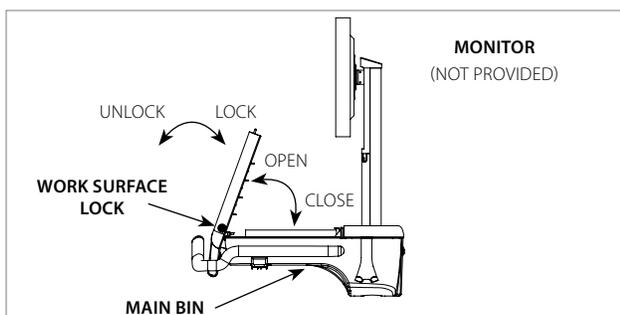


Figure 15

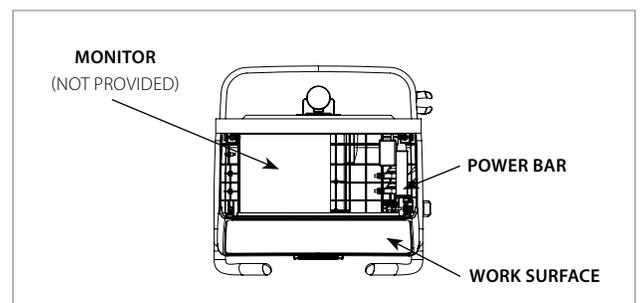


Figure 16

# Section 5: Device Installation

## Mounting a Laptop (Laptop Carts Only)

1. To open the **WORK SURFACE**, insert the key (provided by Amico) into lock on **WORK SURFACE** and turn counter-clockwise (CCW) to unlock the **WORK SURFACE** (Figure 17).
2. Lift the **WORK SURFACE** upwards to access the interior of the **MAIN BIN**.
3. Place a laptop (not provided) carefully inside the **MAIN BIN** and plug the power cord into the supplied power bar. Adjust the height and fit with the supplied bumpers as needed (see page 5 for size restrictions).
4. Plug all USB cables into the laptop.

**i** **NOTE:** A USB HUB (NOT PROVIDED) MAY BE REQUIRED.

5. To close, lower the **WORK SURFACE** until it is resting on the **MAIN BIN** and turn the key clockwise (CW) to lock.

**i** **NOTE:** WITH THE SPRING-LOADED BUMPER ON THE INSIDE OF THE **WORK SURFACE**, IT MAY BE NECESSARY TO PRESS DOWN ON THE **WORK SURFACE** WHILE LOCKING.

**!** **WARNING:** ENSURE THE KEY IS TURNED COUNTER-CLOCKWISE BEFORE ATTEMPTING TO CLOSE THE **WORK SURFACE**. FAILURE TO DO SO COULD LEAD TO DAMAGE TO THE **WORK SURFACE** AND/OR LOCKING MECHANISM.

**i** **NOTE:** REFER TO THE LAPTOP BUMPER INSTALLATION MANUAL FOR MORE DETAILED INSTRUCTIONS.

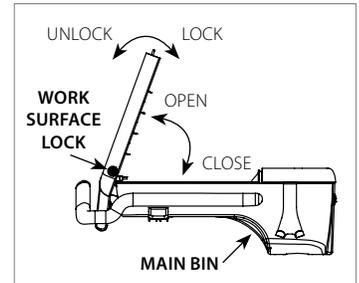


Figure 17



Figure 18



Figure 19

## Cable Connection for BirdsEye Application

**i** **NOTE:** THE FOLLOWING INSTRUCTIONS ARE FOR **WINDOWS USERS ONLY**.

**i** **NOTE:** ZERO/THIN CLIENT USERS SHALL FOLLOW THE IOT HARDWARE KIT INSTALLATION MANUAL FOR CONNECTION TO THE BIRDSEYE APPLICATION.

If using the BirdsEye application, BirdsEye requires communication with the hardware on the cart via USB. This section describes the required USB port on the computer (this USB cable can be found by opening the worktop and locating the cable labeled "Battery System") (Figure 21).

If the cart has an advanced interface installed, an A-Male to Mini-B USB cable is also required to form a connection between the advanced interface and the CPU (Figure 22).

The cable must be connected via the USB Mini-B port found underneath the advanced interface. To access this port, unlock and open the worktop and locate the port as shown in (Figure 23).



Figure 20



Figure 21



Figure 22



Figure 23  
Advance Board USB connection



# Section 6: Adjustments

## Light Interface (Non-powered Carts Only)

The **LIGHTING INDICATOR/SWITCH** (capacitive touch) is used to turn the keyboard light on and off and will be illuminated when the light is on. Touch the **LIGHTING INDICATOR/SWITCH** once to turn the light on and once again to turn it off.

- i** **NOTE:** THE LIGHT INTERFACE MUST BE PLUGGED INTO A POWERED USB OUTLET ON A COMPUTER (OR EQUIVALENT) TO FUNCTION.
- i** **NOTE:** THE POWER CORD IS EASILY DETACHABLE AND CAN BE DISCONNECTED FROM THE CART IF NECESSARY. IF DETACHED, ENSURE THE CABLE IS FULLY PLUGGED IN BEFORE RESUMING USE.

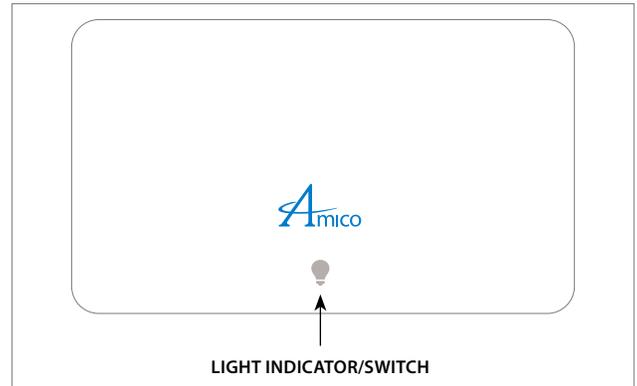


Figure 24

## Standard Interface (Powered Manual Carts Only)

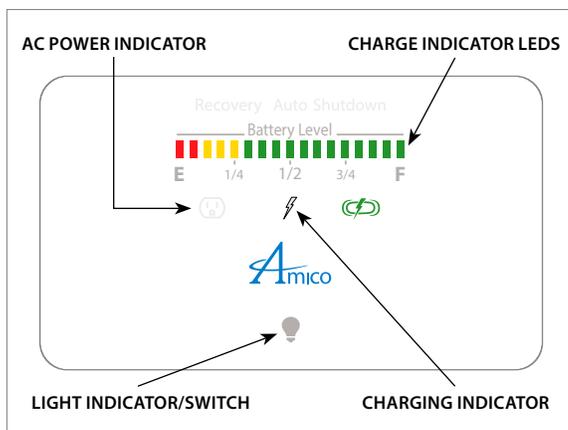


Figure 25

The Standard Interface has multiple purposes: it can control the lighting on the cart as well as indicate the battery charge level, plug connection state, and charging state.

The **CHARGE INDICATOR LEDS** show the approximate charge level of the Hummingbird Mobile Workstation's batteries. If the indicator approaches 'E' signifying empty, connect the Hummingbird Mobile Workstation to a power outlet using the supplied plug.

When plugged into AC power, the **AC POWER INDICATOR** will illuminate. If the unit is charging the charge indicator will also illuminate. When the unit has completed charging, the charge symbol will turn off, however the plug indicator will remain on until the unit is unplugged.

- i** **NOTE:** IT IS NOT RECOMMENDED TO LEAVE THE UNIT PLUGGED IN FOR LONG PERIODS OF TIME AFTER CHARGING IS COMPLETED.
- i** **NOTE:** IT IS RECOMMENDED THAT THE BATTERIES ARE STORED IN FULL, OR CLOSE TO FULL STATE, FOR OPTIMUM LONGEVITY OF THE BATTERIES.

The auto shutdown indicator is illuminated when the system has very low battery power. If this indicator is illuminated, immediately save any open documents and plug the unit into an AC wall outlet.

The recovery LED illuminates if the batteries have been over discharged. The system will enter a slow charge state (when plugged into wall outlet). This process may take 24 hours or more.

The recovery LED will flash if the system is overheating. If this occurs, shut down all devices connected to the Hummingbird and allow the system to cool for 2 hours before resuming use.

**WARNING:** IF RECOVERY LED FLASHES ON A SYSTEM USING AN SLA BATTERY (AND/OR ROTTEN EGG ODOR IS DETECTED), IMMEDIATELY DISCONNECT POWER (IF CHARGING) AND VENTILATE/EVACUATE THE AREA. IT IS THE MEDICAL FACILITY'S RESPONSIBILITY TO TRAIN ANY PERSONNEL USING THE HUMMINGBIRD TO ACT ACCORDINGLY IN SUCH SITUATIONS. CONTACT AMICO FOR SERVICING. (**i** **NOTE:** THIS ERROR IS UNCOMMON AND IS UNLIKELY TO OCCUR).

- i** **NOTE:** THE POWER CORD IS EASILY DETACHABLE AND CAN BE DISCONNECTED FROM THE CART IF NECESSARY. IF DETACHED, ENSURE THE CABLE IS FULLY PLUGGED IN BEFORE RESUMING USE.

The **LIGHTING INDICATOR/SWITCH** (capacitive touch) is used to turn the lights on the Hummingbird Mobile Workstation on/off and will be illuminated when the lights are on.

To adjust the brightness of the Hummingbird lights, hold the **LIGHTING SWITCH** until the brightness begins to cycle. Release the switch when desired brightness is achieved.

# Section 6: Adjustments

## Advanced Interface/Advanced Interface with Automatic Height Control

The Advanced Interface with automatic height control's basic functions and adjustments are the same as those for the Standard Interface with automatic height control. For more details, please refer to the previous section.

1. To create a new profile, tap on "**NAME**" in top left corner (guest or equivalent) and tap "**NEW USER**".

**i NOTE:** IF LOGGED INTO THE ADMIN ACCOUNT (PASSWORD: AMICO), YOU MUST FIRST LOG OUT BY TAPPING ON "**ADMIN**" AND SELECTING "**LOG OUT**".

**i NOTE:** A WARNING ICON (⚠️) WILL APPEAR IF THERE IS A COLLISION DETECTED. REMOVE OBSTRUCTION AND REVERSE DIRECTION TO EXIT COLLISION DETECTION MODE.

2. Fill out the fields and tap "**NEXT**" when completed. To finish, re-enter your user name and password and tap "**LOG IN**".

3. To access the settings menu (Figure 27), tap on the "**SETTINGS**" icon from the main menu (Figure 26).

4. The settings menu allows the user to set the date and time, adjust light level, display brightness and volume by either sliding the slider (by finger or stylus) or by tapping at different points along each respective line.

**i NOTE:** TIME AND DATE MAY BE CHANGED ONLY BY ADMIN USERS. LOG IN TO THE ADMIN ACCOUNT AND ACCESS THIS OPTION FROM THE SETTINGS MENU.

**i NOTE:** LIGHT BUTTON MUST BE PRESSED BEFORE ADJUSTMENT.

5. The settings menu also has presets for light/screen brightness and volume (night and mute). When the volume is muted, a small red "X" will appear over the speaker icon (top right corner Figure 26, Figure 27 and Figure 28).

6. To return to main menu (Figure 26), tap "**OK**".

7. Tapping the timer icon will display the timer menu shown in Figure 28. To start the timer, tap "**START/STOP**". TAP "**START/STOP**" again to stop the timer.

8. To reset the timer, tap "**RESET**".

9. To return to main menu, tap "**OK**".

**i NOTE:** "**RECOVERY MODE**" IS SHOWN BY A YELLOW **CHARGE PROGRESS INDICATOR** WITH AN "**R**" IN THE CENTER (FIGURE 29).

**i NOTE:** A TEMPERATURE WARNING WILL BE SHOWN BY A **THERMOMETER** ICON APPEARING NEXT TO THE **CHARGE PROGRESS INDICATOR**.

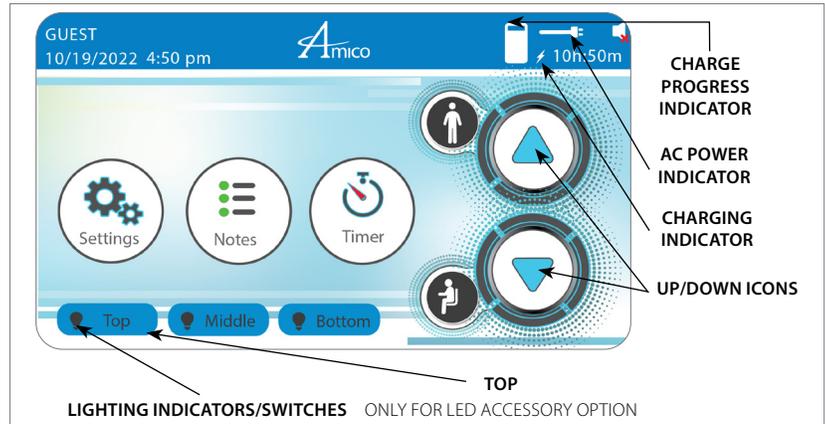


Figure 26

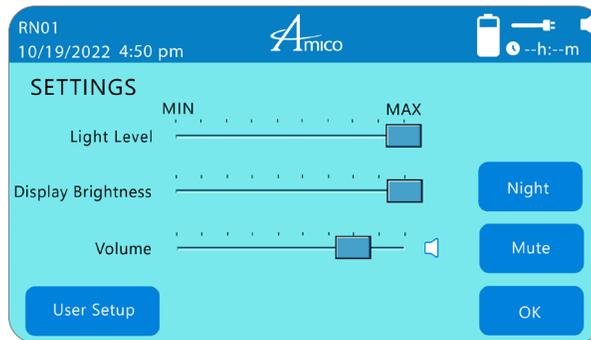


Figure 27



Figure 28



Figure 29

# Section 6: Adjustments

## Manual Height Adjustment

- ⚠ WARNING:** ADJUST HEIGHT WITH CAUTION IF CART HAS NO LOAD, AS GAS SPRING MAY MOVE UPWARDS SUDDENLY WHEN LEVER IS RELEASED. DO NOT ADJUST HEIGHT WHILE CART IS IN MOTION.
- ℹ NOTE:** AT IDEAL OPERATING HEIGHT, THE OPERATOR'S FOREARMS SHOULD BE PARALLEL TO THE FLOOR WHEN USING THE KEYBOARD/MOUSE (90° BEND AT ELBOWS).
- ⚠ WARNING:** KEEP LOAD WITHIN SPECIFIED RANGE AS NOTED BELOW. FAILURE TO DO SO COULD RESULT IN DAMAGE AND/OR INJURY.

1. Lift the **HEIGHT ADJUSTMENT LEVER** to activate the vertical adjustment mechanism.
2. Grasp the sides of the **WORK SURFACE** and push down while holding the **HEIGHT ADJUSTMENT LEVER** to lower the **WORK SURFACE**.
3. Grasp the sides of the **WORK SURFACE** and pull upwards while holding the **HEIGHT ADJUSTMENT LEVER** to raise the **WORK SURFACE**.

Gas Spring (N)	Weight Range (lbs)
70	0 - 9.9 (0 - 4.49 kg)
120	10 - 19.9 (4.54 - 9.03 kg)
165	20 - 29.9 (9.07 - 13.6 kg)
210	30 - 39.9 (13.61 - 18.14 kg)
255	40 - 49.9 (18.15 - 22.68 kg)

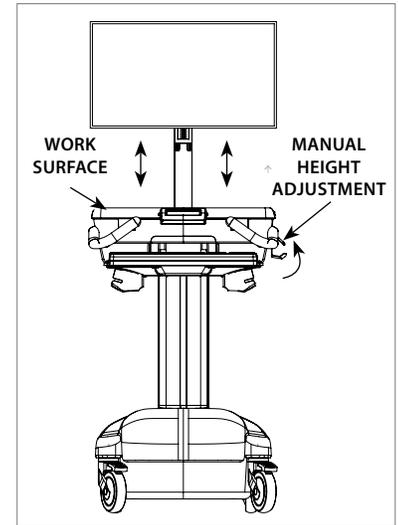


Figure 30

## Automatic Height Adjustment Standard Interface

Initialize the cart by briefly plugging it into a power outlet. **AC POWER INDICATOR** (shown previously) should illuminate (may take up to 30 seconds).

- ℹ NOTE:** AFTER INITIALIZING THE CART, THE **UP/DOWN TOUCH BUTTONS** WILL BEGIN TO FLASH, INDICATING THAT THE USER MUST SET THE CART'S HOME (LOWEST) POSITION.

1. To set the home position, hold the **DOWN TOUCH BUTTON** to lower the cart's **WORK SURFACE** until only the down arrow is flashing (this indicates the cart is in "collision" and cannot continue to move downward).
2. Release the **DOWN TOUCH BUTTON** and reverse direction to raise **WORK SURFACE** to desired position.
3. To adjust position, hold the **UP TOUCH BUTTON** to move up or the **DOWN TOUCH BUTTON** to move down.

- ℹ NOTE:** AT IDEAL OPERATING HEIGHT, THE OPERATOR'S FOREARMS SHOULD BE PARALLEL TO THE FLOOR WHEN USING THE KEYBOARD/MOUSE (90° BEND AT ELBOWS).

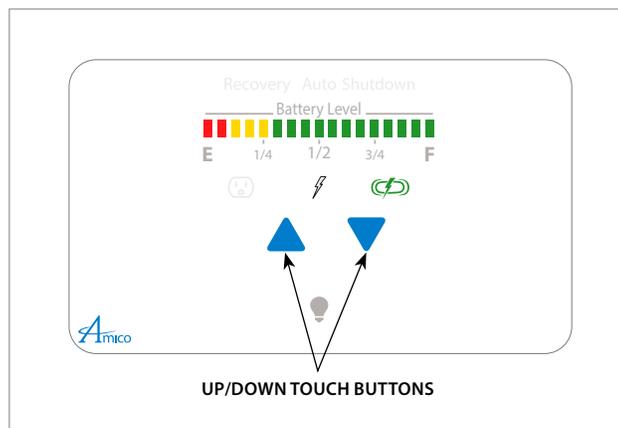


Figure 31 - Standard Interface

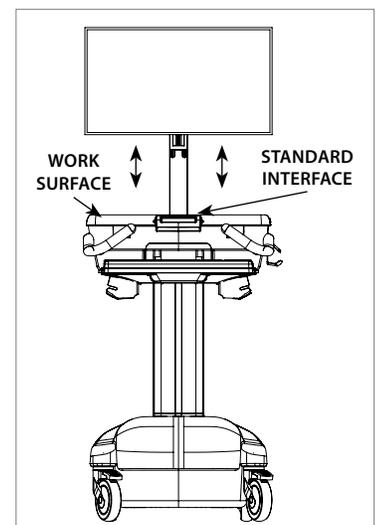


Figure 32

# Section 6: Adjustments

## Automatic Height Adjustment Advanced Interface

1. Initialize the cart by briefly plugging it into a power outlet. Advanced Interface should illuminate (it may take up to 30 seconds).

**i** **NOTE:** AFTER INITIALIZING THE CART, A **NO HOME** SYMBOL (🚫) WILL APPEAR IN THE TOP RIGHT HAND CORNER OF THE ADVANCED INTERFACE, INDICATING THAT THE USER MUST SET THE CART'S HOME (LOWEST) POSITION.

2. Hold the **DOWN TOUCH** icon to lower the cart's **WORK SURFACE** until the **COLLISION** symbol (⚠️) appears.
3. Release the **DOWN TOUCH** icon and reverse the direction, by holding the **UP TOUCH** icon, to raise the **WORK SURFACE** to the desired position.

Users are able to save sit and stand positions into a user profile.

4. To create or edit a user profile, tap on **"SETTINGS"** from main menu (Figure 33) and then tap **"USER SETUP"** (Figure 34).

5. Enter user name.

**i** **NOTE:** ONCE THE HEIGHT HAS BEEN ENTERED, SITTING AND STANDING POSITIONS WILL AUTOMATICALLY BE SET BASED ON HEIGHT. TRY THESE SETTINGS FIRST BEFORE SETTING NEW ONES.

6. Tap **"OK"** when finished.

**i** **NOTE:** TO CHANGE SAVED POSITIONS, TAP ON **"UPDATE PROFILE"** FROM THE USER SETUP MENU. IF THERE ARE MULTIPLE USERS SAVED, SELECT THE PROFILE BY TAPPING ON USER NAME AND SELECTING FROM A DROP DOWN LIST.

When height is at desired sit/stand position, select **"SAVE"** next to respective position icons. Tap **"OK"** twice to return to main menu.

**i** **NOTE:** AT IDEAL OPERATING HEIGHT, THE OPERATOR'S FOREARMS SHOULD BE PARALLEL TO THE FLOOR WHEN USING THE KEYBOARD/MOUSE (90° BEND AT ELBOWS).

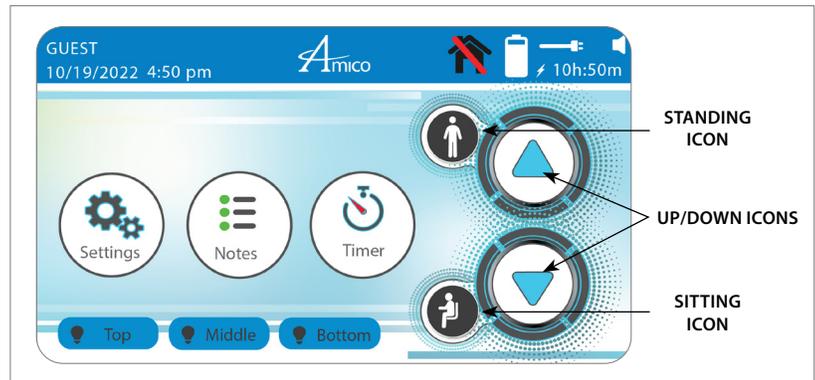


Figure 33

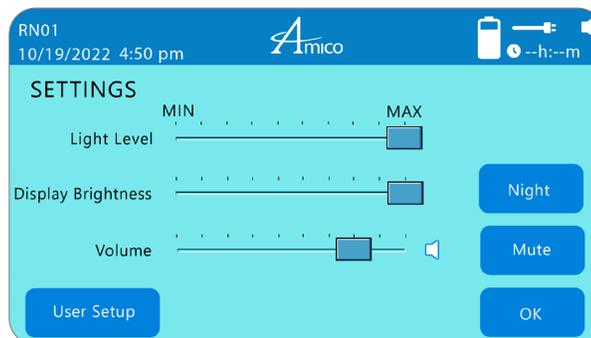


Figure 34



Figure 35

## Monitor Adjustments (LCD Carts Only)

**i** **NOTE:** TILT IS LIMITED BY THE **MONITOR** SIZE. ACTUAL TILT RANGE MAY VARY.

**!** **WARNING:** BE SURE TO SUPPORT THE **MONITOR** IF ADJUSTING THE TILT ANGLE WITH THE **MONITOR** MOUNTED.

**!** **WARNING:** AFTER THE **MONITOR** IS INSTALLED, TIGHTEN THE **LARGE** AND **SMALL TILT ADJUSTMENT SCREWS** TO THE TIGHTEST POSITION POSSIBLE WITH THE WEIGHT OF THE **MONITOR** ATTACHED. ALTERNATE BETWEEN TIGHTENING THE **LARGE** AND **SMALL SCREWS** UNTIL APPROPRIATE TENSION IS REACHED.

# Section 6: Adjustments

1. The LCD **MONITOR** (not included) can swivel up to 180°, tilt up and down by + / - 15°, and can be adjusted from portrait to landscape orientation.
2. For swivel adjustment, hold the **MONITOR** and turn left or right until in the desired position.
3. For **MONITOR** orientation, hold the **MONITOR** and rotate 90°.
4. To adjust **MONITOR** height, hold **MONITOR** and slide up or down until desired height is reached.
5. Adjusting tilt tension: tighten or loosen the **TENSION SCREW** on the mounting bracket.

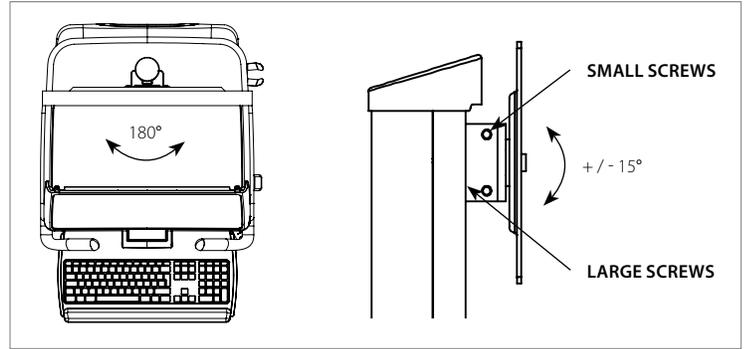


Figure 36

**i** **NOTE:** YOU MAY NEED TO REMOVE THE CAP AND COVER ON THE FIT POST.

## Work Surface

6. To open the **WORK SURFACE**, insert the key (provided by Amico) into the lock on the **WORK SURFACE** and turn counter-clockwise (CCW) to unlock the **WORK SURFACE**.
7. Lift the **WORK SURFACE** upwards to access the interior of the **MAIN BIN**.
8. To close, lower the **WORK SURFACE** until it is resting on the **MAIN BIN** and turn the key clockwise (CW) to lock.

**i** **NOTE:** MAXIMUM RECOMMENDED LOAD IN THE **MAIN BIN** IS 10 LBS.

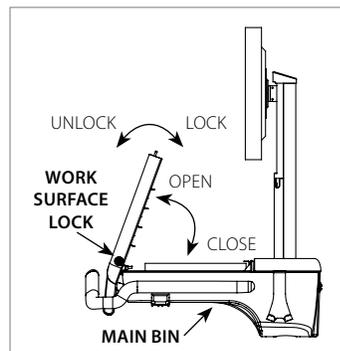


Figure 37

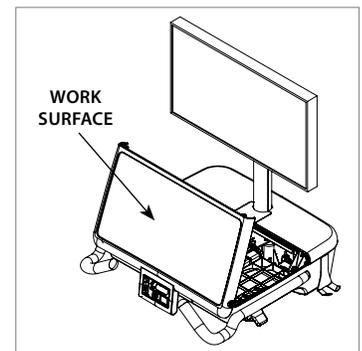


Figure 38

**!** **WARNING:** ENSURE THE KEY IS TURNED COUNTER-CLOCKWISE AND THAT THERE ARE NO OBJECTS INTERFERING WITH THE **WORK SURFACE** BEFORE ATTEMPTING TO CLOSE/LOCK. FAILURE TO DO SO COULD LEAD TO DAMAGE OF THE **WORK SURFACE** AND/OR LOCKING MECHANISM.

**!** **WARNING:** THE **WORK SURFACE** IS MEANT FOR LIGHT DUTY USE ONLY, SUCH AS USE AS A WRITING SURFACE AND FOR RESTING LIGHT OBJECTS UP TO MAXIMUM 10 LBS. IMPROPER USE CAN RESULT IN DAMAGE TO THE **WORK SURFACE**.



Figure 39

## Standard Keyboard Tray

1. The standard keyboard tray slides in and out of the cart as shown in Figure 40.



Figure 40

# Section 6: Adjustments

## Lockable Casters and Transport Position

The Hummingbird Mobile Workstation includes a **DIRECTIONAL LOCKING CASTER (GREEN)** to aid in movement in straight lines, and a **TOTAL LOCKING CASTER (RED)** to prevent movement.

1. To lock the **CASTERS**, step on the **LOCKING LEVER** (on each **CASTER**) such that it clicks in the down position.

To unlock the **CASTERS**, lift the **LOCKING LEVER UP** (on each **CASTER**) or push the back end of the caster down.

2. To steer the cart, unlock the **TOTAL LOCKING CASTER (RED)** and grasp the 2 handles firmly while pushing the cart.

**WARNING:** THE HUMMINGBIRD CART MUST BE IN **TRANSPORT POSITION** (FULLY LOWERED, WITH KEYBOARD TRAY PUSHED IN, **MONITOR** ROTATED 90° [LCD CARTS ONLY] AND POWER CORD SECURED AS SHOWN TO THE RIGHT) WHILE BEING MOVED. MOVING OUTSIDE OF TRANSPORT POSITION MAY RESULT IN DAMAGE AND/OR INJURY.

**WARNING:** WHILE IT IS ADVISED TO PUSH THE CART WHEN MOVING, IT IS RECOMMENDED TO PULL THE CART WHEN TRAVELING OVER A THRESHOLD. PUSHING THE CART OVER A THRESHOLD MAY RESULT IN OVERBALANCING OF THE CART AND SUBSEQUENT DAMAGE OR INJURY.

3. The **DIRECTIONAL LOCKING CASTER (GREEN)** must be straight in order to lock. It is recommended for turning when there is sufficient space.

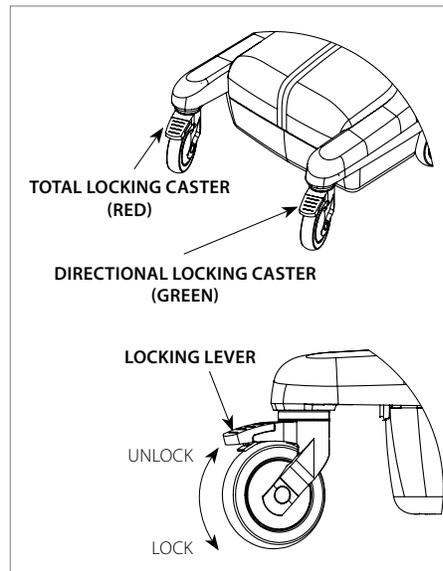


Figure 41  
Locking/Unlocking



Figure 42  
Transport Position

## Spring Adjustment (LCD Carts Only)

**WARNING:** THE **SWIVEL-POST** INTERIOR CONTAINS SHARP EDGES. WEAR PROTECTIVE EQUIPMENT WHEN PERFORMING THE FOLLOWING TASKS.

**NOTE:** REFER TO PAGE 6 FOR SPRING WEIGHT RANGES.

**WARNING:** ENSURE THAT THE **MONITOR** IS REMOVED AND THE **VESA PLATE** IS AT THE TOP POSITION PRIOR TO BEGINNING.

1. The **GAS SPRING** in the **SWIVEL-POST** can be replaced if the **MONITOR** weight changes, in order to maintain the appropriate counterbalancing.
2. Remove the **CAP** on the top of the **SWIVEL-POST** to reveal the 2x **SCREWS**. Use a Philips head screwdriver (#2) to remove the 2x **SCREWS** (Figure 43). Remove the **SWIVEL-POST COVER**.
3. Remove the **TOP PLATE** and slide out the **VESA PLATE** to reveal the **GAS SPRING** underneath. Replace the **GAS SPRING** with the new **GAS SPRING**. Ensure that there is a **HEX NUT** on the thin side of the replacement **SPRING** and the **NUT** is facing up (Figure 44).
4. Replace the **VESA PLATE**, re-attach the **TOP PLATE** with the **SCREWS** and replace the **TOP CAP** and the **SWIVEL-POST COVER**.

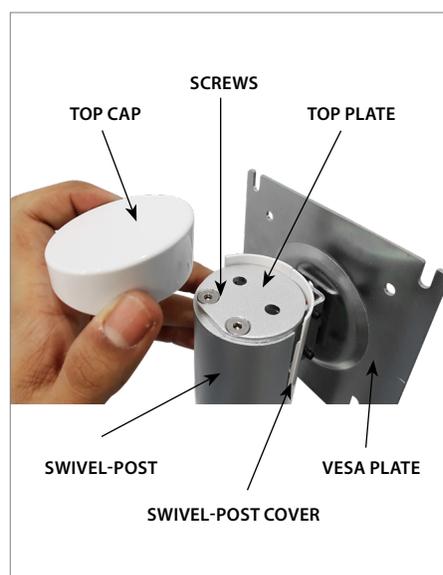


Figure 43

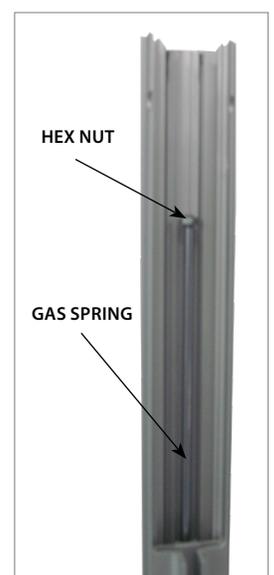


Figure 44

# Section 6: Adjustments

## Resetting the Cart (Reset Button)

The **RESET BUTTON** is found underneath the cart's **WORK SURFACE** and allows the user to turn workstation power outlets **ON/OFF** even when a computer is enclosed inside the cart (where access to the computer power button is restricted).

**i NOTE:** IT IS RECOMMENDED THAT AN IT TECHNICIAN OR SPECIALIST ENSURES THAT THE "**POWER ON AC**" BIOS FEATURE IS AVAILABLE AND IS SET TO "**POWER ON**" ON DESIGNATED COMPUTER HARDWARE.

1. Disconnect from power.
  2. Perform a shutdown on PC (Windows > Start > Shut Down).
  3. Once computer is off, press and hold the "**RESET**" button for 1 second. AC power will be cut off.
  4. To fully reset cart, press and hold "**RESET**" button for 9 seconds until cart shuts down (deep sleep mode). To wake cart up, reconnect to power.
  5. To turn computer back on, press and hold the "**RESET**" button for 1 second.
- For long term storage, press and hold the "**RESET**" button for 9 seconds to put the cart into deep sleep mode.
  - For SLA battery carts, the carts must be fully charged **every 6 months** to preserve the battery. The cart can then be put back into deep sleep mode for storage or transport until next scheduled charge.

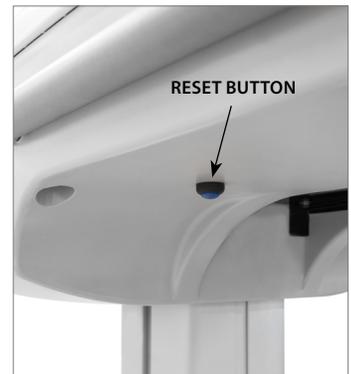


Figure 45

## Resetting the Advanced Interface

If the cart is equipped with an **ADVANCED INTERFACE RESET** switch, press it once to activate the switch and reset the **ADVANCED INTERFACE**.

If the cart is not equipped with a **RESET SWITCH**, briefly disconnect the **ADVANCED INTERFACE CABLE** from inside of the **MAIN BIN**, then reconnect to force an **ADVANCED INTERFACE** reset.

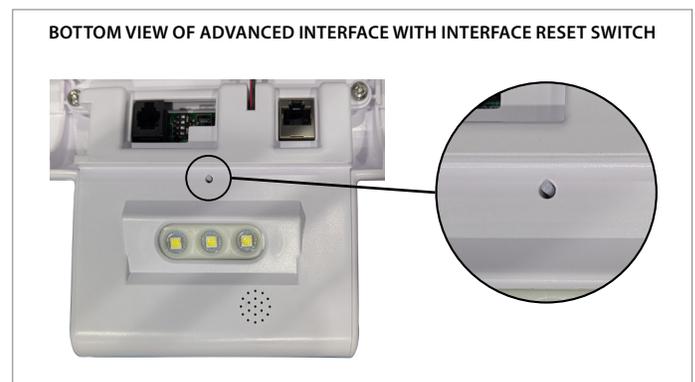


Figure 46

## Resetting the Cart (No Reset Button)

**i NOTE:** THIS PROCEDURE WILL RESET THE CART'S INTERFACE. THE INTERFACE CAN BE RESET FOLLOWING INSTRUCTIONS IN THE **SOFTWARE INITIALIZATION** SECTION OF THIS MANUAL.

1. Open **BATTERY COMPARTMENT** by lifting the cover.
2. Disconnect yellow **BATTERY CONNECTOR**.
3. Disconnect unit from power.
4. Wait 10 seconds and reconnect yellow **BATTERY CONNECTOR**.
5. Reconnect unit to power.

For long term storage, follow previous instructions without reconnecting unit to power (steps 1 - 4).

# Section 6: Adjustments

## Opening the Battery Compartment

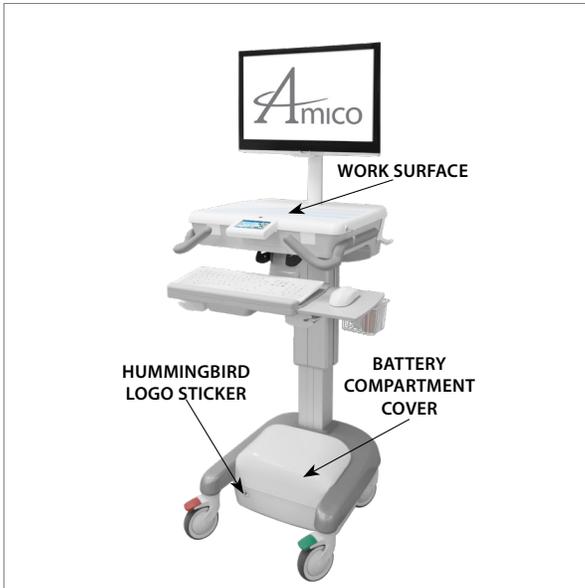


Figure 47



Figure 48



Figure 49



Figure 50

1. The **WORK SURFACE**/Lockable PC Compartment ships with an envelope (Figure 48) that contains a yellow envelope. Within the yellow envelope, you will find a magnetic **BATTERY COMPARTMENT KEY**.
2. Use the **BATTERY COMPARTMENT KEY** to unlock the **BATTERY COMPARTMENT** by placing it on the **HUMMINGBIRD LOGO STICKER** on the left side of the front of the **BATTERY COMPARTMENT** (see **HUMMINGBIRD LOGO STICKER** [Figure 49]). Magnetic force will hold the key in place and keep the **BATTERY COMPARTMENT** unlocked while it remains there.
3. With the **BATTERY COMPARTMENT KEY** in place, lift the **BATTERY COMPARTMENT COVER** by pressing up on the front lip of the **COVER**, just above the **HUMMINGBIRD LOGO STICKER** (Figure 49).
4. You can now completely remove the **COVER**.
5. When restoring the **BATTERY COMPARTMENT COVER**, place the rear of the **COVER** in first, then press the front down.
6. The **COVER** will automatically lock when it is in place and the **BATTERY COMPARTMENT KEY** is removed.

## Charging and Discharging the Battery

1. Discharge the cart completely. You may connect additional load (i.e. computer, laptop, **MONITOR**) to speed up the discharge process.
2. When the discharge process is completed, double check to make sure that all screens and lights are off and unresponsive.
3. Recharge the cart for 12 hours or until it is full.
4. Repeat **STEPS 1 - 3** for one more time is required.

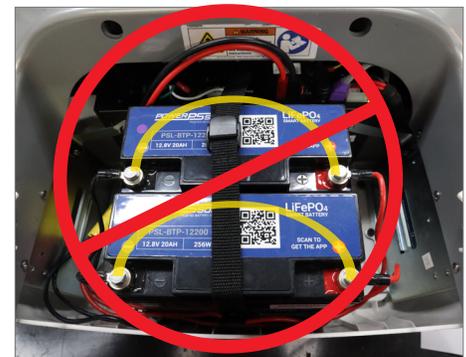


Figure 51

# Section 6: Adjustments

## To Disconnect the Battery

**WARNING:** THE FOLLOWING STEPS MUST BE PERFORMED BY AUTHORIZED PERSONNEL.

**NOTE:** USE CAUTION WHEN USING STEELS TOOLS. DO NOT CONNECT "POSITIVE +" AND "NEGATIVE -" BATTERY TERMINALS. THIS WILL SHORT THE BATTERY AND CAUSE DAMAGE TO THE UNIT.

1. Disconnect the cart's cord from power outlet.
2. Turn unit off if it has a **RESET BUTTON** (see **Resetting the Cart [Reset Button]** section), or open the **BATTERY COMPARTMENT** and disconnect the battery cable.
3. Ensure the unit is powered down by checking the HES (Figure 52). The **POWER LIGHT** should not be illuminated as Figure 52 depicts.
4. Disconnect the **POSITIVE TERMINAL** of one battery (Figure 52).
5. Wait for 2 - 3 minutes, and put the HMW back together by reversing directives (steps 4 - 1).

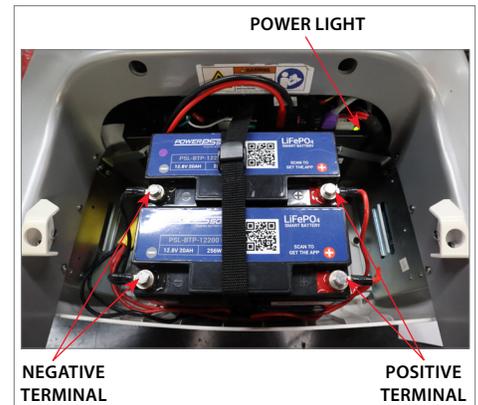


Figure 52

## Advanced Interface Control – User Settings

### Workstation Serial and Software Version Number

Tap on Amico logo on top center of screen (Figure 53 left) to see the workstation serial number and firmware version number (Figure 53 right).

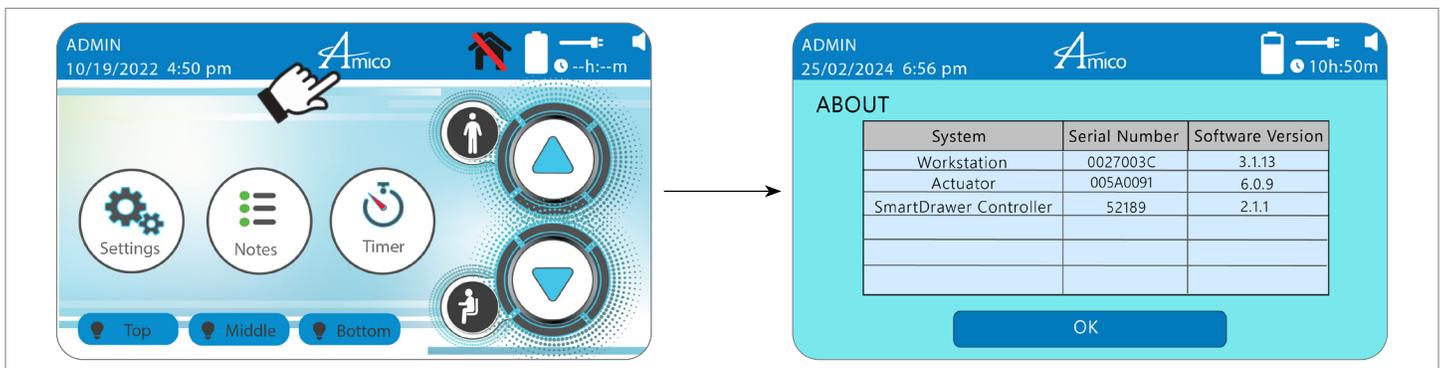


Figure 53

# Section 6: Adjustments

## Admin Settings

### 1. Log in as Admin

1. Tap on **"GUEST"** in top left corner of interface (Figure 54 left).
2. Select **"ADMIN"** from the **"USER NAME"** drop down list, enter password (AMICO) as shown, tap on **"LOGIN"** (Figure 55 right).

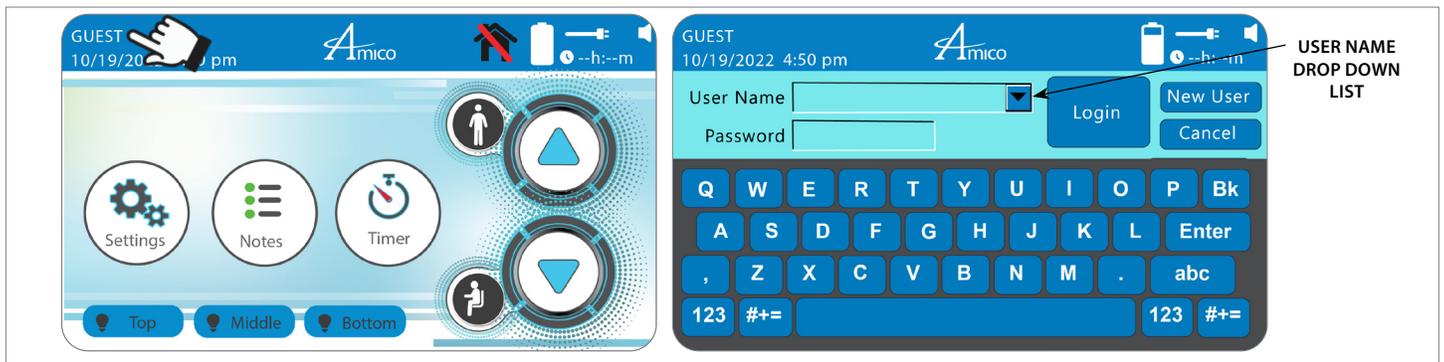


Figure 54

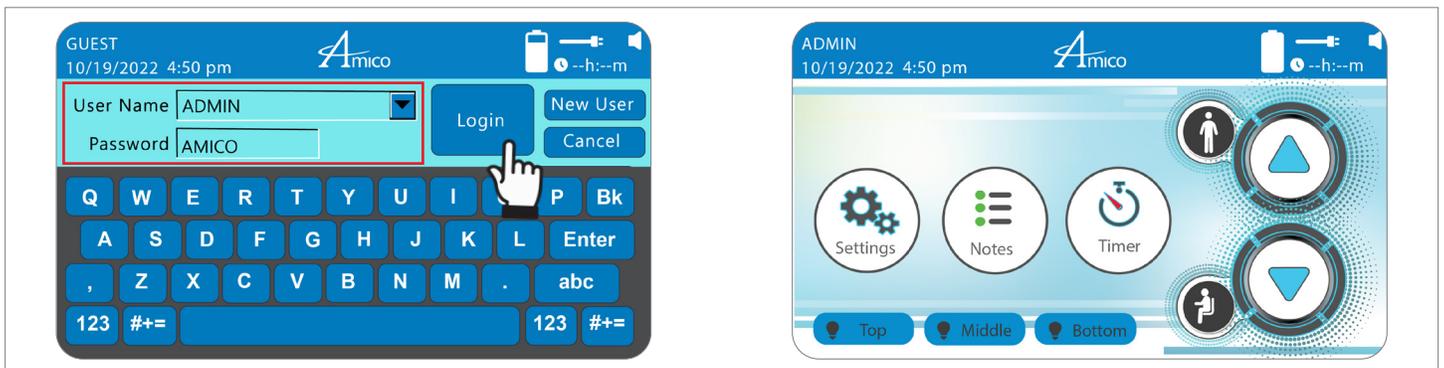


Figure 55

### 2. Adjust Light and Volume

1. Tap on **"SETTINGS"** (Figure 56).
2. Select slider to adjust **LIGHT LEVEL**, **DISPLAY BRIGHTNESS**, or **VOLUME** (Figure 56 right).
3. Selecting **"NIGHT/DAY"** button can switch back and forth between **NIGHT** and **DAY** display brightness.

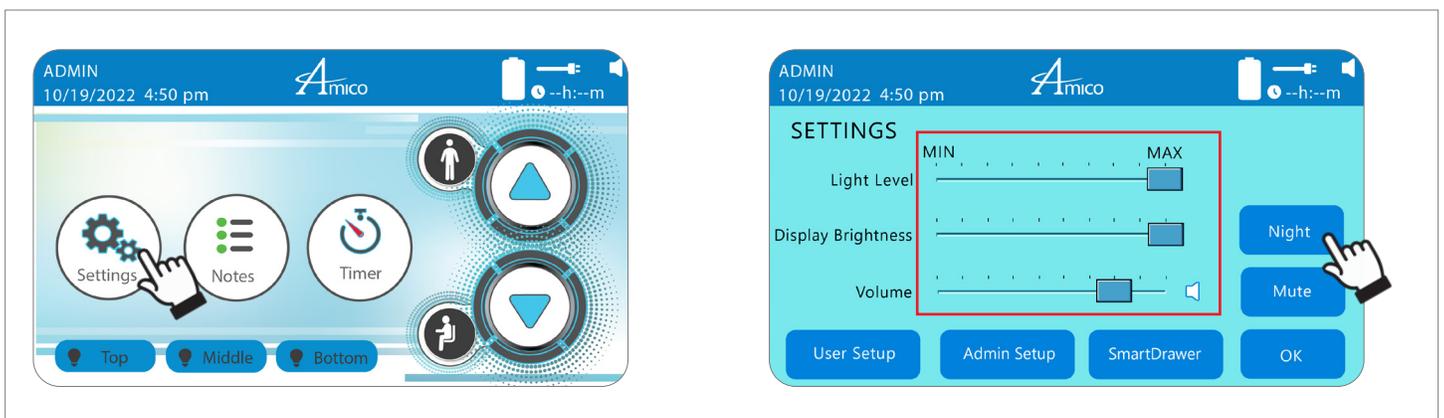


Figure 56

# Section 6: Adjustments

## 3. Admin Setup

Tap on **“ADMIN SETUP”** (Figure 57) to access the configuration options for administrator (Figure 60). Tap **“SAVE”** after adjusting.

**i NOTE:** SMARTDRAWER BUTTON (FIGURE 57) IS ONLY APPLICABLE TO CARTS THAT COME WITH SMARTDRAWERS. IF THE CART COMES WITH SMARTDRAWERS, REFER TO THE HUMMINGBIRD MOBILE COMPUTER WORKSTATION SMARTDRAWER USER MANUAL.

<https://docs.amico.com/amico-aa-mobile-computer-workstation-hummingbird-smartdrawers-manual.pdf>

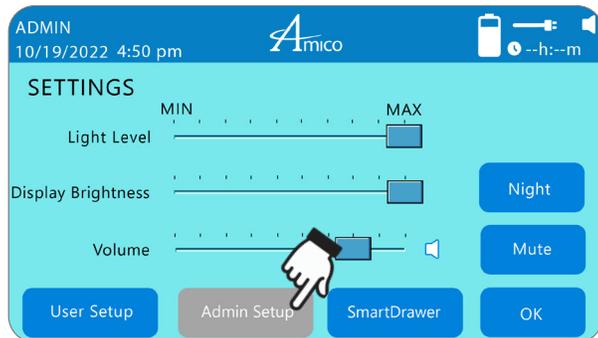


Figure 57

- Allow to log in using RFID if available.
- i NOTE:** THE **LOGIN USING RFID** FEATURE IS APPLICABLE TO HUMMINGBIRD POWERED CARTS (USING ADVANCED BOARD FIRMWARE 3.1.13 OR HIGHER) WITH RFIDEAS RFID READERS DIRECTLY CONNECTED TO A COMPUTER ON WHICH THE AMICO BIRDSEYE WINDOWS CLIENT SOFTWARE VERSION 2.0.3.11 AND UP IS INSTALLED.
- Allow user login without password.
- Allow new users.
- Automatically logout users after a specific period of time.
- Select unit preference (Metric or Imperial).



Figure 58

# Section 6: Adjustments

## 4. Admin Setup - System

Tap on "**SYSTEM**" (Figure 59) to access the system setting options for administrator (Figure 60). Tab "**OK**" to return to the previous screen after adjusting.



Figure 59



Figure 61

- Individual control to light at the various location of the cart.
- Control mute buzzer.
- Default to restore Home Position when powered up.
- Move the **MOTION SENSITIVITY** slider to adjust the sensitivity. Hummingbird workstation detects and warns user with a warning message (Figure 61) when the Hummingbird Cart is moving while still plugged in.



Figure 60

# Section 6: Adjustments

## 5. Admin Setup – Manage Users

1. Tap on **“USERS”** (Figure 62) to access the **MANAGE USERS** screen.
2. Tap on an existing user name to select a user and then tap **“RESET PASSWORD”** to reset user login password, or **“DELETE USER”** to remove an existing user (Figure 63).



Figure 62



Figure 63

## 6. Setting the Clock

1. Tap on **“SET CLOCK”** (Figure 64) to set the clock. Using the **ARROW** icons, set the time and date in the desired format.

**NOTE:** DATE AND TIME FORMATS MUST FIRST BE SELECTED ON RIGHT OF INTERFACE.

2. Tap **“SAVE”** to finish (Figure 65).

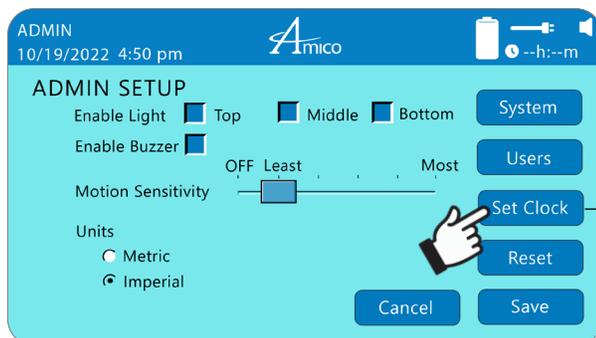


Figure 64

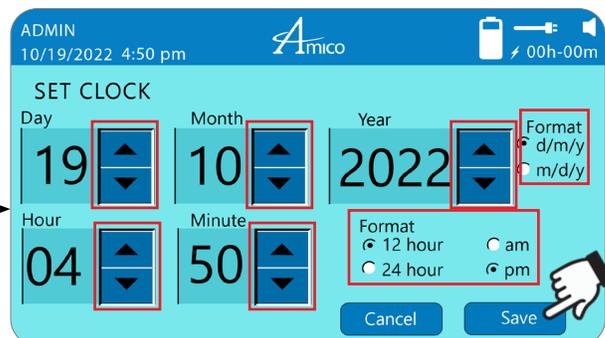


Figure 65

# Section 6: Adjustments

## 7. Reset Options

1. Tap on “**RESET**” (Figure 66). In the **RESET OPTIONS** screen you will be able to reset the actuator, reset the SmartDrawer, erase all users and notes, and perform a factory reset (Figure 67).

**i** **NOTE:** FOR RESET SMARTDRAWER, REFER TO THE HUMMINGBIRD MOBILE COMPUTER WORKSTATION SMARTDRAWER USER MANUAL. <https://docs.amico.com/amico-aa-mobile-computer-workstation-hummingbird-smartdrawers-manual.pdf>

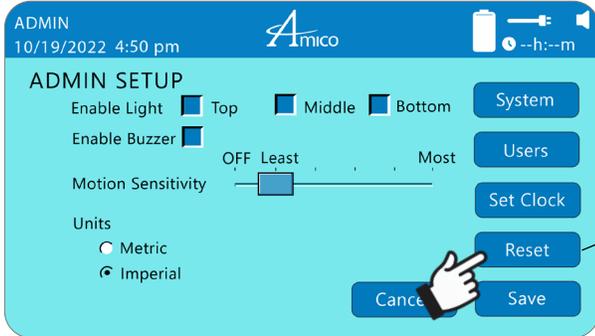


Figure 66

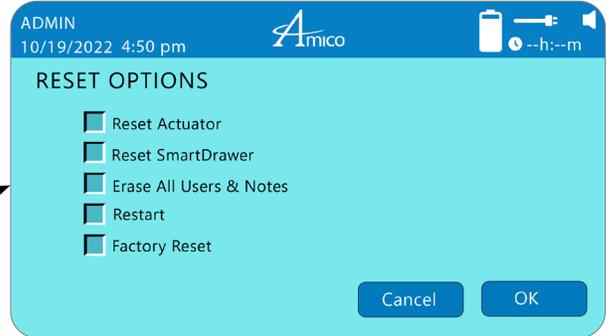


Figure 67

# Section 7: Cable Management

## FIT Cable Management (LCD Cart Only)

**! WARNING:** DO NOT BUNCH CABLES TOGETHER ON ONE **CABLE GUIDE-CHANNEL**. USE SEPARATE **CHANNELS** FOR EACH CABLE.

There are 2x **FIT CABLE GUIDE-CHANNELS** in the **SWIVEL-POST** (shown to the right), which is covered by the **SWIVEL-POST CABLE COVER**.

Remove the **SWIVEL-POST CABLE COVER** and place the cables carefully into the guide channels.

Push-fit the **SWIVEL-POST CABLE COVER** so that the cables pass through the hole on the top and the 2x holes on the bottom (or equivalent) of the **SWIVEL-POST CABLE COVER**.

Ensure there is enough slack in the cables to allow for normal **MONITOR** adjustment.

With the **WORK SURFACE** open, slide out the **FIT** access door and route the cables from the **SWIVEL-POST** into the **MAIN BIN** (and into the computer).

Slide the **FIT ACCESS DOOR** back in before attempting to close the **WORK SURFACE**.

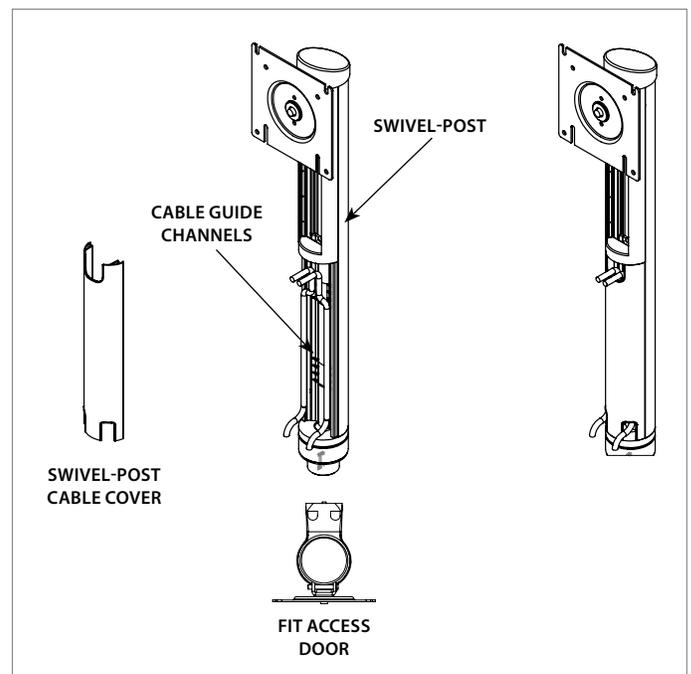


Figure 68

# Section 8: Troubleshooting, Preventative Maintenance, Storage, & Cleaning

## Troubleshooting

Symptom	Possible Cause	Solution
Too easy or too difficult to tilt the monitor up and down (LCD carts only).	<ul style="list-style-type: none"> <li>Excessively loosened or tightened hardware.</li> <li>Weight of the monitor is not compatible with the FIT Post spring.</li> </ul>	<ul style="list-style-type: none"> <li>Please see Monitor Adjustments section of this manual (<b>page 20</b>).</li> <li>Use an FIT Post spring with a compatible weight rating (<b>page 6</b>).</li> </ul>
Too easy or too difficult to utilize the portrait landscape feature (LCD carts only).  The monitor head is not secure; it is wobbling or loose when using the portrait landscape adjustment (LCD carts only).	<ul style="list-style-type: none"> <li>Damaged hardware.</li> <li>Damaged head.</li> </ul>	<ul style="list-style-type: none"> <li>Please contact Amico Accessories.</li> <li>The monitor head needs to be replaced, please contact Amico Accessories.</li> </ul>
Oil is leaking from the gas spring (in LCD swivel-post), light yellow in color.	<ul style="list-style-type: none"> <li>Damaged gas spring.</li> </ul>	<ul style="list-style-type: none"> <li>The gas spring needs to be replaced, please contact Amico Accessories (service team only).</li> </ul>
Manual Hummingbird height adjustment is too difficult to lift/lower.	<ul style="list-style-type: none"> <li>Cart not loaded appropriately.</li> </ul>	<ul style="list-style-type: none"> <li>Load cart to appropriate weight range (<b>pages 5, 6, 14, 19, 21, &amp; 31-33</b>).</li> </ul>
	<ul style="list-style-type: none"> <li>Damaged column gas spring.</li> </ul>	<ul style="list-style-type: none"> <li>The gas spring needs to be replaced, please contact Amico Accessories.</li> </ul>
	<ul style="list-style-type: none"> <li>Height adjustment lever or cable is damaged.</li> </ul>	<ul style="list-style-type: none"> <li>The lever mechanism needs to be repaired/replaced, please contact Amico Accessories.</li> </ul>
Power system is not charging. 	<ul style="list-style-type: none"> <li>Loose connection.</li> </ul>	<ul style="list-style-type: none"> <li>Check connection to wall outlet/base is fully engaged (service tech only).</li> <li>If the connection is not loose, disconnect the power cord from the wall. Open the battery compartment (Amico approved service technicians only) and disconnect the batteries. Reconnect the batteries and plug the AC power cord back into the wall. Refer to Resetting the Cart section.</li> </ul>
	<ul style="list-style-type: none"> <li>System is over discharged.</li> </ul>	<ul style="list-style-type: none"> <li>Check the interface for illuminated Recovery symbol  (<b>pages 17-18</b>). If illuminated, allow the system to charge for up to 24 hours.</li> </ul>
	<ul style="list-style-type: none"> <li>System is damaged.</li> </ul>	<ul style="list-style-type: none"> <li>System is damaged, discontinue use of powered functions and contact Amico Accessories.</li> <li>Restart cart (refer to Resetting the Cart section).</li> </ul>
Battery draining quickly.	<ul style="list-style-type: none"> <li>Aged battery.</li> </ul>	<ul style="list-style-type: none"> <li>Battery may need replacement. Please contract Amico Accessories.</li> </ul>
Motion warning too frequent/triggered too easily.	<ul style="list-style-type: none"> <li>Motion sensor is too sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Adjust and lower motion sensitivity (<b>page 28</b>).</li> </ul>
Advanced Interface is blank.	<ul style="list-style-type: none"> <li>Loose/disconnected cable.</li> </ul>	<ul style="list-style-type: none"> <li>Open the Work Surface (<b>page 21</b>) and check connection to the interface.</li> </ul>
	<ul style="list-style-type: none"> <li>Cart's batteries are drained.</li> </ul>	<ul style="list-style-type: none"> <li>Plug in the cart to charge the batteries.</li> </ul>
	<ul style="list-style-type: none"> <li>Interface is frozen.</li> </ul>	<ul style="list-style-type: none"> <li>If the cart is equipped with a reset switch, activate switch to reset system. If the cart is not equipped with a reset switch, briefly disconnect the interface cable from inside of the main bin, then reconnect to force an interface reset.</li> </ul>
Advanced Interface is not responding to touch input.	<ul style="list-style-type: none"> <li>Interface is frozen.</li> </ul>	<ul style="list-style-type: none"> <li>Reset Advanced Interface (<b>page 23</b>).</li> </ul>

# Section 8: Troubleshooting, Preventative Maintenance, Storage, & Cleaning

Automatic height adjustment is not working.	<ul style="list-style-type: none"> <li>• Cart has not yet been initialized.</li> </ul>	<ul style="list-style-type: none"> <li>• Initialize the cart (<b>pages 9 - 12, 19</b>).</li> </ul>
	<ul style="list-style-type: none"> <li>• Batteries have no charge.</li> </ul>	<ul style="list-style-type: none"> <li>• Charge the batteries by plugging it into a nearby outlet.</li> </ul>
	<ul style="list-style-type: none"> <li>• Cart is already in the lowest/highest position.</li> </ul>	<ul style="list-style-type: none"> <li>• If the cart is already in the highest or lowest position, it cannot be further elevated or lowered (respectively). Reverse the direction of the height adjustment.</li> </ul>
	<ul style="list-style-type: none"> <li>• Connection to the interface is loose/disconnected.</li> </ul>	<ul style="list-style-type: none"> <li>• Open the work surface (<b>page 21</b>) and check the connection to the interface.</li> </ul>
Both arrow keys flashing (Standard interface). Home icon crossed out (Advanced interface).	<ul style="list-style-type: none"> <li>• Loss of/no home position set.</li> <li>• Home position has been lost.</li> </ul>	<ul style="list-style-type: none"> <li>• Hold the down arrow until the cart reaches bottom (if cart is unable to move upwards only).</li> </ul>
Single arrow key (up or down) flashing (Standard Interface only). Warning icon appears (Advanced Interface only).	<ul style="list-style-type: none"> <li>• Collision detected.</li> </ul>	<ul style="list-style-type: none"> <li>• Clear any obstacles preventing height adjustment. Adjust the cart slightly in the opposite direction than desired, then resume use in desired direction.</li> </ul>
Difficulty steering the cart.	<ul style="list-style-type: none"> <li>• Casters are sticky/covered in debris.</li> <li>• Casters are locked.</li> </ul>	<ul style="list-style-type: none"> <li>• Unlock the casters.</li> <li>• Clean the caster.</li> </ul>
	<ul style="list-style-type: none"> <li>• Casters are damaged.</li> </ul>	<ul style="list-style-type: none"> <li>• Contact Amico Accessories for a replacement.</li> </ul>
Difficulty closing the work surface.	<ul style="list-style-type: none"> <li>• Devices/objects in the main bin are too large.</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure objects in the main bin are within the specified size range.</li> </ul>
	<ul style="list-style-type: none"> <li>• Lock is engaged.</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure the lock is disengaged (turned counter-clockwise) prior to closing the work surface.</li> </ul>
	<ul style="list-style-type: none"> <li>• FIT access door is open.</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure the FIT access door is closed and not interfering with the work surface.</li> </ul>
RFID device is not responding.	<ul style="list-style-type: none"> <li>• USB cable has been disconnected or is loose. Communication between device and PC is lost.</li> </ul>	<ul style="list-style-type: none"> <li>• Unplug and plug back the RFID device USB cable from PC side.</li> </ul>

If the above solutions do not solve your symptoms or you are in need of parts/hardware, please contact Amico Accessories, 1-877-264-2697.

# Section 8: Troubleshooting, Preventative Maintenance, Storage, & Cleaning

## Preventative Maintenance

 **WARNING:** HUMMINGBIRD WORKSTATIONS REQUIRE PERIODIC INSPECTION AND MAINTENANCE TO PERFORM OPTIMALLY AND ACHIEVE MAXIMUM OPERATION LIFE.

 **WARNING:** THE INTERVALS SHOWN ARE RECOMMENDED. MAINTENANCE SCHEDULES SHOULD BE MORE FREQUENT FOR HIGHER USE AREAS.

Please be sure to thoroughly check the areas illustrated below.

Area	Maintenance	Period (Month)
VESA 75/100 Adapter (FIT units only).	Check if the VESA Plate and monitor are securely attached. Ensure the 4x screws on the mounting plate(s) are fastened to the tightest possible position.	3
	Visually inspect for any signs of grinding and gapping.	1
FIT Post (Swivel post).	Inspect bolt, washers, and contacting surfaces for grinding and wearing. Ensure bolt is tightened (using 5/32" ball end Hex key).	1
Casters.	Inspect casters for debris, chipping, and ensure that all casters are making contact with the floor.	1
	Ensure the locking mechanisms on directionally locking and total locking casters are functioning correctly (test by pressing down with foot and attempting to move the cart).	3
Manual Height Adjustable Column.	Check if the height adjustment is smooth.	3
Power system (through computer interface – powered units only).	Open enclosure, visually inspect for dust build-up and connector discoloration. Please contact Amico Accessories for parts replacement. Run system diagnostics, refer to the Power System manual available on the Amico website.	3
Handles.	Ensure that the handle bolts are tight, if loose, then tighten using a 1/2" socket (and ratchet) and a 1/4" Hex key (the Hex key is underneath the main bin and the socket is inside the main bin compartment).	3
General.	Clean any dust build-up on the cart (e.g., the work surface, main bin, base). Vacuum the dust out of the main bin, battery compartment, and from around the wheel wells. Ensure that all of the vents are clear of obstructions and debris.	1
Battery.	Ensure that battery screws are fully tightened and secured.	3

# Section 8: Troubleshooting, Preventative Maintenance, Storage, & Cleaning

## Maintenance and Safety

 **WARNING:** RISK OF ELECTRICAL DISCHARGE.

- Do not remove or replace the batteries while workstation is located in an oxygen rich or hazardous environment, arcing may occur and cause combustion.

 **CAUTION:** TO AVOID RISK OF ELECTRICAL SHOCK WHEN REPLACING BATTERY.

- Only Amico-specified batteries may be used in Hummingbird Mobile Workstation. Contact Amico for more details.
- Do not dispose Lithium battery in the trash.
- Recycle battery according to local regulations.

 **WARNING:** TO AVOID RISK OF ELECTRIC SHOCK, DO NOT EXPOSE ELECTRICAL COMPONENTS TO WATER, CLEANING SOLUTIONS, OR OTHER POTENTIALLY CORROSIVE LIQUIDS OR SUBSTANCES.

 **WARNING:** DO NOT IMMERSE WORKSTATION OR COMPONENTS IN LIQUID OR ALLOW LIQUIDS TO FLOW INTO THE WORKSTATION.

 **WARNING:** ADJUSTMENT, SERVICE, REPLACEMENT – DO NOT ATTEMPT TO ADJUST, SERVICE, OR REPLACE ANY PART OF THE HUMMINGBIRD MOBILE WORKSTATION UNLESS DIRECTED TO DO SO THROUGH AMICO-APPROVED DOCUMENTATION (I.E. INSTALLATION INSTRUCTIONS). ONLY AMICO ACCESSORIES INC., OR AN AMICO-CERTIFIED ENTITY MAY ADJUST, SERVICE, OR REPLACE HUMMINGBIRD MOBILE WORKSTATION COMPONENTS. IF ANY COMPONENTS ON THE WORKSTATION ARE MISSING OR DAMAGED, THE WORKSTATION MUST NOT BE USED. CONTACT AMICO CUSTOMER CARE IMMEDIATELY TO REQUEST A REPLACEMENT PART.

 **WARNING:** THIS WORKSTATION IS NOT INTENDED FOR USE IN A FLAMMABLE, ANESTHETIC MIXTURE, OR OXYGEN RICH ENVIRONMENT.

 **WARNING:** USE OF ACCESSORIES, TRANSDUCER, AND CABLES, OTHER THAN THOSE SPECIFIED OR PROVIDED BY AMICO, COULD RESULT IN INCREASED ELECTROMAGNETIC EMISSIONS OR DECREASED ELECTROMAGNETIC IMMUNITY OF THE EQUIPMENT AND RESULT IN IMPROPER OPERATION.

 **WARNING:** PORTABLE RF COMMUNICATIONS EQUIPMENT (INCLUDING PERIPHERALS SUCH AS ANTENNA CABLES AND EXTERNAL ANTENNAS) SHOULD BE USED NO CLOSER THAN 12" (30 cm) TO ANY PART OF THE HUMMINGBIRD MOBILE WORKSTATION, INCLUDING CABLES SPECIFIED BY AMICO. OTHERWISE, DEGRADATION OF THE PERFORMANCE OF THIS EQUIPMENT COULD RESULT.

 **NOTE:** NO NON-OBVIOUS EFFECTS IN NORMAL USE.

# Section 8: Troubleshooting, Preventative Maintenance, Storage, & Cleaning

## Amico Electromagnetic Guidance and Manufacturer's Declaration

Guidance and Manufacturer's Declaration – Electromagnetic Emissions		
The Hummingbird Mobile Workstation is intended for use in the electromagnetic environment specified below. The customer or the user of the Powered Computer Cart should assure that it is used in such an environment.		
Emission Test	Compliance	Electromagnetic Environment - Guidance
RF emissions CISPR 11	Group 1	The Hummingbird Mobile Workstation uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class A	The Hummingbird Mobile Workstation is suitable for use in all establishments other than domestic, and may be used in domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes, provided the following warnings is heeded.
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations/ flicker emissions IEC 61000-3-3	Complies	 <b>WARNING:</b> THIS EQUIPMENT/SYSTEM IS INTENDED FOR USE BY HEALTHCARE PROFESSIONALS ONLY. THIS EQUIPMENT/SYSTEM MAY CAUSE RADIO INTERFERENCE OR MAY DISRUPT THE OPERATION OF NEARBY EQUIPMENT. IT MAY BE NECESSARY TO TAKE MITIGATION MEASURES, SUCH AS RE-ORIENTING OR RELOCATING THE HUMMINGBIRD MOBILE WORKSTATION OR SHIELDING THE LOCATION.

Guidance and Manufacturer's Declaration – Electromagnetic Immunity			
The Hummingbird Mobile Workstation is intended for use in the electromagnetic environment specified below. The customer or the user of the Powered Computer Cart should assure that it is used in such an environment.			
Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment Guidance
Electrostatic discharge (ESD) IEC 6100-4-2	± 8 kV Contact ± 15 kV Air	± 8 kV Contact ± 15 kV Air	Floors should be wood, concrete, or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient/ burst IEC 61000-4-4	± 2 kV for power supply lines	± 2 kV for power supply lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	± 0.5 kV, ± 1 kV line to line & ± 0.5 kV, ± 1 kV, ± 2 kV line to ground	± 0.5 kV, ± 1 kV line to line & ± 0.5 kV, ± 1 kV, ± 2 kV line to ground	Mains power quality should be that of a typical commercial or hospital environment.
Voltage dips, short interruptions, and voltage variations on power supply input lines IEC 61000-4-11	0% $U_T$ (100% dip in $U_T$ ) for 0.5 cycle 0% $U_T$ (100% dip in $U_T$ ) for 1 cycle 70% $U_T$ (100% dip in $U_T$ ) for 30 cycles 0% $U_T$ (100% dip in $U_T$ ) for 5 seconds	0% $U_T$ (100% dip in $U_T$ ) for 0.5 cycle 0% $U_T$ (100% dip in $U_T$ ) for 1 cycle 70% $U_T$ (100% dip in $U_T$ ) for 30 cycles 0% $U_T$ (100% dip in $U_T$ ) for 5 seconds	Mains power quality should be that of a typical commercial or hospital environment. If the user of the Hummingbird Mobile Workstation requires continued operation during power mains interruptions, it is recommended that the Hummingbird Mobile Workstation be powered from an uninterruptible power supply or a battery.
Power frequency magnetic field (50/60 Hz) IEC 61000-4-8	30 A/m	30 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.

 **NOTE:**  $U_T$  IS THE A.C. MAINS VOLTAGE PRIOR TO APPLICATION OF THE TEST LEVEL.

# Section 8: Troubleshooting, Preventative Maintenance, Storage, & Cleaning

The Hummingbird Mobile Workstation is intended for use in the electromagnetic environment specified below. The customer or the user of the Hummingbird Mobile Workstation should assure that it is used in such an environment.

Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment Guidance
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	3 Vrms 150 kHz to 80 MHz	Portable and mobile RF communications equipment should be used no closer to any part of the Hummingbird Mobile Workstation including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance: $d = 1.2 \sqrt{P}$ $d = 1.2 \sqrt{P}$ 80 MHz to 800 MHz $d = 2.3 \sqrt{P}$ 800 MHz to 2.7 GHz Where $P$ is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and $d$ is the recommended separation distance in meters (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey <sup>a</sup> should be less than the compliance level in each frequency range <sup>b</sup> .
Conducted RF IEC 61000-4-3	6 Vrms ISM bands inside 150 kHz to 80 MHz	6 Vrms ISM bands inside 150 kHz to 80 MHz	
	3 V/m 80 MHz to 2.7 GHz RF communication equipment inside 80 MHz to 6 GHz	3 V/m 80 MHz to 2.7 GHz RF communication equipment inside 80 MHz to 6 GHz	

**NOTE:** AT 80 MHz AND 800 MHz, THE HIGHER FREQUENCY RANGE APPLIES.

**NOTE:** THESE GUIDELINES MAY NOT APPLY IN ALL SITUATIONS. ELECTROMAGNETIC PROPAGATION IS AFFECTED BY ABSORPTION AND REFLECTION FROM STRUCTURES, OBJECTS AND PEOPLE.

- Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and tv broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the Hummingbird Mobile Workstation is used exceeds the applicable RF compliance level above, the Hummingbird Mobile Workstation should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the Hummingbird Mobile Workstation.
- Over the frequency range 150 KHz to 80 MHz, field strengths should be less than 3 v/m.

## Recommended Separation Distances Between Portable and Mobile RF Communications Equipment and the Hummingbird Mobile Workstation

The Hummingbird Mobile Workstation is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the Hummingbird Mobile Workstation can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the Hummingbird Mobile Workstation as recommended below, according to the maximum output power of the communications equipment.

Rated Maximum Output Power of Transmitter (W)	Separation Distance According to Frequency of Transmitter (m)		
	150 kHz to 80 MHz $d = 1.2 \sqrt{P}$	80 MHz to 800 MHz $d = 1.2 \sqrt{P}$	800 MHz to 2.7 GHz $d = 2.3 \sqrt{P}$
0.01	0.12	0.12	0.24
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance  $d$  in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where  $P$  is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

**NOTE:** AT 80 MHz AND 800 MHz, THE SEPARATION DISTANCE FOR THE HIGHER FREQUENCY RANGE APPLIES.

**NOTE:** THESE GUIDELINES MAY NOT APPLY IN ALL SITUATIONS. ELECTROMAGNETIC PROPAGATION IS AFFECTED BY ABSORPTION AND REFLECTION FROM STRUCTURES, OBJECTS AND PEOPLE.

# Section 8: Troubleshooting, Preventative Maintenance, Storage, & Cleaning

## Product Storage Guidelines

Hummingbird Carts with lithium batteries can be kept “pre-initialized” in original packaging for up to one (1) year from the production date.

To put an initialized Hummingbird Cart into long term storage:

1. Fully charge the Hummingbird Cart battery.
2. Adjust the Hummingbird Cart to lowest position (optional).
3. Disconnect the Hummingbird Cart from power.
4. Disconnect the yellow **BATTERY CONNECTOR** inside the Hummingbird Cart enclosure.
5. Ensure the Hummingbird Cart is fully powered down then reconnect the yellow **BATTERY CONNECTOR**. The Hummingbird Cart is now ready to be stored.
6. The recommended storage temperature is 25 °C (77 °F) to minimize battery capacity loss. The maximum range of storage temperature is -20 °C (4 °F) - 50 °C (122 °F). The recommended humidity range for storage is 5 - 90% rH.

## Cleaning

 **WARNING:** THE CLEANING CHEMICALS AND METHODS BELOW ARE NOT MEANT FOR CONTROLLING ANY INFECTIONS. IT SHALL BE THE RESPONSIBILITY OF THE HOSPITAL OR THE HOSPITAL'S INFECTION CONTROL OFFICER TO SANITIZE THE EQUIPMENT.

 **WARNING:** PLEASE DO NOT SPRAY ANY CHEMICAL DIRECTLY ONTO THE HUMMINGBIRD. APPLY ONTO A SOFT CLOTH AND WIPE CLEAN TO PREVENT CHEMICALS GETTING INTO THE INTERNAL COMPONENTS OF THE HUMMINGBIRD.

 **WARNING:** TO PREVENT DAMAGE TO THE INTERFACE, ENSURE THAT CLEANING AGENTS DO NOT ENTER THE GAP BETWEEN THE INTERFACE AND THE COVER. LIQUIDS CAN COMPROMISE THE FUNCTIONALITY OF THE INTERFACE AND LEAD TO POTENTIAL DAMAGE. USE ONLY A DRY OR SLIGHTLY DAMP CLOTH FOR CLEANING, AND KEEP ALL CLEANING AGENTS AWAY FROM ANY OPENINGS AROUND THE INTERFACE.

 **WARNING:** TO PREVENT DAMAGE TO THE INTERFACE, ENSURE THAT CLEANING AGENTS DO NOT ENTER THE GAP BETWEEN THE INTERFACE AND THE COVER. LIQUIDS CAN COMPROMISE THE FUNCTIONALITY OF THE INTERFACE AND LEAD TO POTENTIAL DAMAGE. USE ONLY A DRY OR SLIGHTLY DAMP CLOTH FOR CLEANING, AND KEEP ALL CLEANING AGENTS AWAY FROM ANY OPENINGS AROUND THE INTERFACE.

The Mounting Assembly may be cleaned with most mild, non-abrasive solutions commonly used in the hospital environment (e.g., diluted bleach, ammonia, or alcohol solutions). The Surface Finish will be permanently damaged by strong chemical and solvent such as acetone and trichloroethylene. Steel wool or other abrasive material should never be used. Damage caused by the use of unapproved substances or processes will not be warranted. It is recommended that you test any cleaning solution on a small area of the Hummingbird that is not visible to verify compatibility. Never submerge the Hummingbird and do not allow liquids to enter it. Wipe any cleaning agents off the Hummingbird immediately using a water-dampened cloth. Dry the Hummingbird thoroughly after.



Figure 69

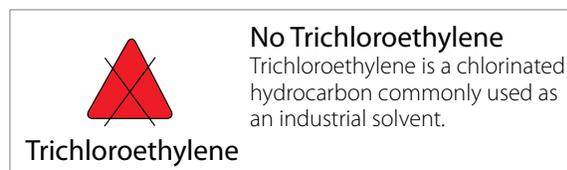


Figure 70

# Section 9: Amico Warranty Policy

Amico Accessories Inc. warrants all mounting accessories and electrical systems to be free from defects in material and workmanship for a period of twelve (12) months from the date of shipment. Within this period Amico Accessories Inc. will repair or replace any part which is proven to be defective.

Amico Accessories Inc. will warrant its mechanical materials to be free from defect for an additional period of four [4] years, (five [5] years from the date of shipment), and electrical materials to be free from defect for an additional period of two (2) years (three [3] years from the date of shipment), except for SLA or any Hot Swap battery which is not manufactured by Amico Accessories Inc. Within this period, Amico Accessories Inc. will replace any part at no charge, which is proven to be defective. Shipping and Installation costs after the first twelve (12) months will be borne by the customer.

This warranty is valid only when the product has been properly installed according to Amico Accessories Inc. specifications, used in a normal manner and serviced according to factory recommendations. It does not cover products that are not manufactured by Amico Accessories Inc. It does not cover failures due to damage which occurs in shipments or failures which resulted from accidents, misuse, abuse, neglect, mishandling, alteration, misapplication or damage that may be attributable to acts of God.

Amico Accessories Inc. shall not be liable for incidental or consequential damages resulting from use of equipment.

All claims for warranty must first be approved by Amico Accessories Inc. A valid Return Goods Authorization (RGA) number must be obtained from Amico Accessories Inc. prior to commencement of any service work. Warranty work, which has not been pre-authorized by Amico Accessories Inc., will not be reimbursed.

## **AMICO ACCESSORIES INC. DOES NOT HONOR VERBAL STATEMENTS CONCERNING THE WARRANTY.**

The distributor and/or dealer are not sanctioned to create verbal warranties about the product described in this agreement. Any statements will not be honored or be made part of the agreement of sale. This document is the final complete and exclusive terms of the agreement.

## **THIS WARRANTY IS INCLUSIVE AND REPLACES ALL OTHER WARRANTIES.**

Amico Accessories Inc. shall not, under any circumstances be liable for incidental or consequential damages including, but not limited to, profit, loss of sales or injuries to person(s) or property. Correction of noncompliance as noted above will result in completion of all liabilities of Amico Accessories Inc., whether based on agreement, neglect or changed materials, designs or specifications without notice.

All claims for warranty must first be approved by Amico Accessories Inc. Service Department: [accessories@amico.com](mailto:accessories@amico.com) or 1.877.264.2697. A valid Return Goods Authorization number must be obtained from Amico Accessories Inc. prior to commencement of any warranty claim.

# Notes

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