Mobile Medical Station
(With AC Power Onboard)

User Manual

Rubbermaid®

Medical Solutions

Increasing the capacity to care.™

76-9M29-01 Rev 04/19/06

Rubbermaid®
Medical Solutions
Increasing the capacity to care.™

Introduction

Statement of Use

Rubbermaid Medical Solutions is dedicated to providing innovative quality products. Our goal is to increase the capacity to care by improving productivity, ergonomics and compliance, while enhancing your facility image.

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The carts are designed for safe use in general patient areas. These carts have no potential electromagnetic or other interference risks when operated according to guidelines covered in this instruction manual.

Tested to comply with:

- EN 60601-1:2001 (2nd Edition)– Medical Electrical Equipment, Part 1: General Requirements for Safety – Collateral Standard: Electromagnetic Compatibility – Requirements and Tests
- FCC PART 15, Subpart B, Class A – Unintentional Radiators
- CISPR 11:2004 / EN 55011:1998 +A1:1999 & A2:2002, Class A – Industrial, Scientific and Medical Equipment

This product is classified as a Class 1/ Internally powered device with no applied parts.

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Summary of Warnings


The power system is designed for power cart mounted equipment only. Do not connect equipment that is not mounted on the cart into the power system outlets. Do not connect cart mounted equipment directly into a power source that is not mounted to the cart.


The supplied spiral cord is rated for medical use. Connecting the cord to an outlet that is not medical grade (indicated with green dot) will not ensure grounding protection.


Spiral cord, power system and cart are for INDOOR use only. DO NOT OPERATE OUTDOORS.


Inspect spiral cord before each use. DO NOT USE CORD IF DAMAGED.


DO NOT plug more than the specified number of watts into spiral cart cord.


DO NOT run spiral cord through doorways or across walls or floors.


Fully insert spiral cord plug into outlet. DO NOT unplug by pulling on cord.


DO NOT remove, bend or modify any metal prongs or pins of spiral cart cord.


DO NOT use excessive force to make connections.


Keep spiral cord away from water. DO NOT PLUG CORD INTO OUTLET IF WET.


DO NOT OPERATE POWER SYSTEM IF WET.


Keep children away from spiral cord.


DO NOT ALLOW CORD TO OVERHEAT.


DO NOT drive, drag or place objects over spiral cord. Do not stand or walk on spiral cord.


Lock keyboard tray when moving over uneven surfaces or thresholds.

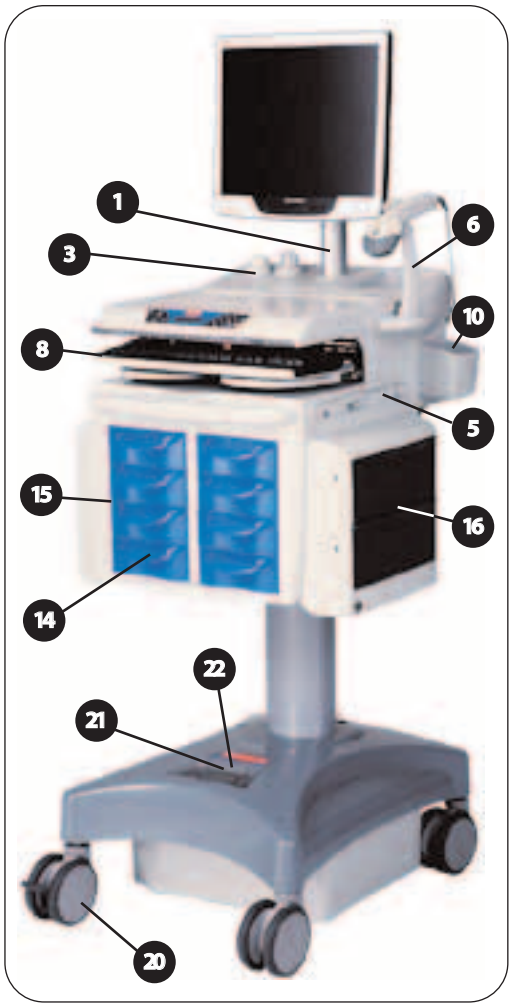

Breaking the seal on the battery to add water will damage the battery and could cause injury.-

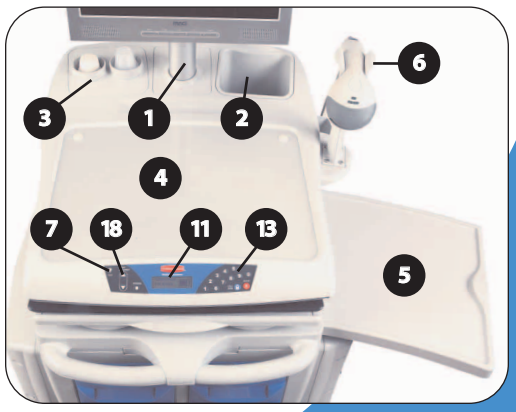

EQUIPMENT not suitable for use in the presence of a FLAMMABLE ANESTHETIC MIXTURE WITH AIR or WITH OXYGEN OR NITROUS OXIDE.

Overview

Mobile Medication Station Feature Overview

1. **Monitor Stand:** VESA®; Monitor Interface 75 mm & 100 mm; 360 degrees swivel; cables routed through monitor post
2. **Waste Receptacle:** Removable, easy to clean with 0.60 gal (2.25 liters) capacity for disposal of non-regulated waste such as packaging; bags available
3. **Medication Cups:** A spring loaded sleeve holding up to 25 cups; 25 cc plastic cups and paper soufflé cups can be used
4. **Top Work Surface:** Large work surface with clear plastic cover for visible access to code/reference sheets; recessed for spill containment; includes pen/instrument slot
5. **Bi-direction Work Surface:** Secondary work surface slides out to left/right
6. **Scanner Holder:** Securely holds multiple scanner styles and enables presentation scanning
7. **Keyboard Light:** Illuminates keyboard and medication drawers
8. **Keyboard Tray with Mouse Pads:** Fits standard full-size keyboards; left/right mouse pads; mouse storage behind keyboard; height adjustable from 29" to 44" above ground
9. **Spiral Cord/Cord Clip:** *(Not Shown)* 10' spiral cord stored at work surface level
10. **Small Accessory Bin:** External storage for small items such as PDAs, hand sanitizer bottles
11. **Keypad with LCD Display:** Display indicates Cart ID, drawer lock status and battery life; backlit when keys are pressed; controls keyless entry, keyboard light, and height adjustment
12. **Control Boards & Software:** *(Not Shown)* Control boards underneath keypad and behind medication drawers control electronic functions of cart; USB interface connects software
13. **Electronic Keyless Entry System:** PIN Code Access (4-digit, 0-9 digits, programmable) with audit tracking; automatically locks with programmable timer (1-99 minutes); supports 128 access codes; warning when drawers are left open and cart is locked; codes/audit tracking can be managed centrally over wireless networks
14. **Medication Drawers:** 2/5/8 drawers configurations available; removable and interchangeable with other carts and transfer cart system; accepts 4" x 1" labels; dividers included
15. **Medication Drawer Security Plates:** Security plates in between drawers deter unauthorized access to adjacent drawers; can be added/removed to change drawer configuration
16. **Locking Accessory Bin (Optional):** Provides secure storage for regulated medical/surgical supplies such as syringes and solutions; opens when main PIN code is entered for medication drawers; dividers included
17. **CPU Storage:** *(Not Shown)* Small form factor PC/Thin Clients securely stores behind keyboard tray; larger form factor storage in metal housing at rear of cart
18. **Height Adjustment:** 15" electronic height adjustment for use seated or standing
19. **Large Accessory Bin:** *(Not Shown)* Provides storage for larger items such as IV bags, charts, reference books, general supplies, clipboards, vital sign accessories; easily removable for infection control
20. **Casters:** High-grade dual wheel 5" medical grade; 1-locking
21. **AC Power System:** Sealed lead acid/a glass matte technology; UL 60601-1 certified; 34/55 amp batteries available; 10 amp/hour 3 stage charger; over/under voltage controls; automatic transfer switch dual output system; 3 plug outlet strip; battery indicator on front of work surface
22. **Power System Controls/Information Control Panel:** *(Not Shown)* Includes a power switch, breaker switch and LCD display of power system information such as battery life, voltage, and number of charge cycles left
23. **Emergency Stop:** *(Not Shown)* The cart is equipped with an emergency stop button located on the monitor arm or beside the medication cup to disable the powered lift mechanism
24. **Drawer Sensors:** *(Not Shown)* Optical sensors detect if a medication drawer is left open once the keyless entry system has been locked





Note: monitor, keyboard, mouse and scanner are not included.

Power System

Feature Overview

The base of the cart is integrated with a power system that includes a battery, charger, Information Control Panel (ICP), and spiral cord.

The carts are designed for use in general patient areas. These carts have no potential electromagnetic or other interference issues when operated according to guidelines covered in this instruction manual.

Power System Feature Overview

Spiral Cord:

A spiral cord with a medical grade outlet is required to recharge the power system. The cord should only be plugged into a medical grade power outlet. The spiral cord should be hung from the hook provided on the cart when the unit is not plugged in. Please review warnings on Page 1.

Battery:

- Avoid losing power to your equipment. Battery damage may result if battery remains in a discharged state, even for short periods of time.
- Warranty is automatically **void** when *fully charged* battery is left in an unused state for more than three (3) consecutive months. Warranty is automatically **void** when *fully discharged* battery is left in an unused state for more than three (3) consecutive days.
- **Charge battery whenever possible** by plugging the power cord into a medical grade wall outlet. Doing so will maximize the life of the battery.
- **Fully charge battery at least once each month.**
- Plugging in the power cord for short periods of time does not affect the battery's ability to take a full charge and prolongs battery life.
- If the unit is not going to be used for an extended period of time, the unit should be fully charged and stored with the charger still plugged into the medical grade outlet.
- The power system is designed to allow full charging of the power system while the cart and computer equipment is in use.

Battery Status on Keypad: The LCD display on the keypad provides a graphical indication of the battery charge level represented by six bars.

Information Control Panel (ICP): The LCD display located on the front panel on the base of the cart displays more detailed power system information including amount of energy left, time left, number of cycles left, and battery voltage. The ICP should only be accessed by facility technicians.

Power System

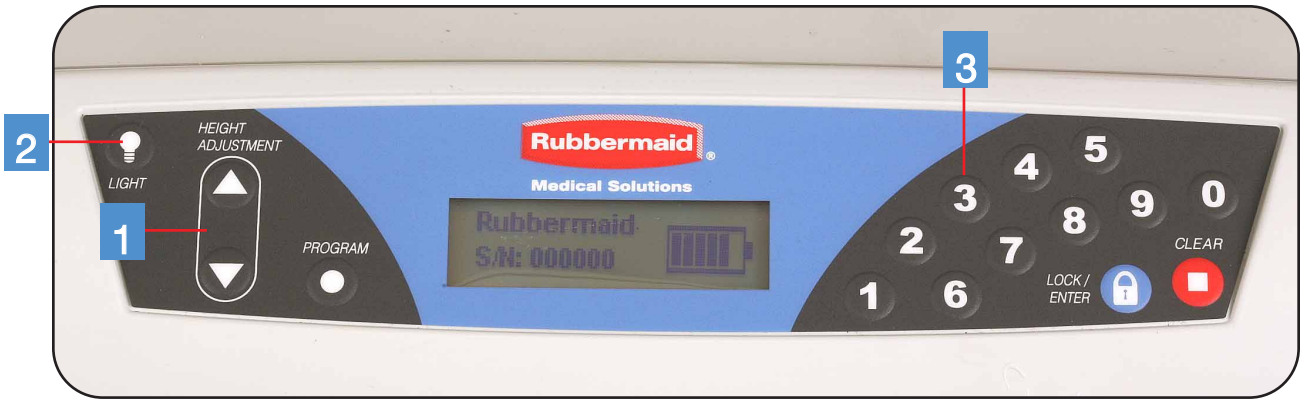
Feature Overview (continued)

The five "primary" power system readings that can be viewed in the ICP display window are: current (A), consumed amp hours (Ah), time-to-go (h), battery voltage (V), and state of charge (%).Data is viewable in the information control panel display window by pressing the arrow keys.

Low Voltage Alarm

If the voltage falls to a low level, an audible alarm will sound warning that there are about 15 minutes of run time remaining. At the end of this time, the attached electronic equipment will shut down and the battery must be recharged. Once the power cord is plugged in, the attached equipment can operate.

Keypad Functions



The keypad controls several of the cart's electronic functions and provides messages regarding the cart's operation.

Keyless Entry 3

Each cart can be programmed with up to 128 4-digit PIN codes. These codes unlock the drawers located on the front of the cart as well as side locking side bins (optional). To unlock the system, enter a valid 4 digit numeric code and the message "DRAWERS UNLOCKED" will appear on the LCD display. If an invalid code is entered, the message, "ERROR INVALID CODE" will appear. The unit will automatically relock the drawers after a preset time set by hospital administration. A LOCK button is provided on the keypad so that the user may lock the drawers *before* the automatic relock occurs. If any drawer is not fully pushed in, it will not lock and the message "DRAWER AJAR" will appear. Once all drawers are fully pushed in and locked, this message will go away. Drawers are designed so that they may be removed from the unit. The unit will still lockdown the remaining drawers if any of the drawers are removed. Drawers may be reinserted into a locked unit without unlocking the unit. Once fully inserted, the already locked and newly inserted drawers will all be locked. The keyless entry system will only work when the battery on the unit is charged to an operating state.

A redundant hard lock will override the keyless entry system and allow manual use of the cart in the event that access is required in a low voltage state. The hard lock is a rotary latch on the rear of the cart and has three positions. An override key is provided with cart.

Keypad Functions

Position 1 is the unlocked position.This position unlocks the drawers.The key cannot be removed in position 1.

Position 2 is the normal operating position.This position enables the keyless entry system.The key may also be removed in position 2.

Position 3 is the locked position. Here the drawers are fully locked and the keyless entry system will not function. The key may be removed in position 3.

Height Adjustment

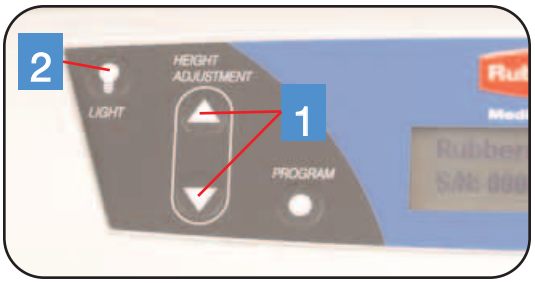
To accommodate persons of all varying heights as well as seated and standing positions, the cart at the keyboard height can be adjusted from 29.25" to 43.75".This adjustment can be achieved by a powered lift mechanism contained within the column of the cart. A cart that has a monitor and PC can accommodate an additional 50 lbs. of weight.

Emergency Stop Instructions

The cart is equipped with an emergency stop switch (e-stop)to disable the powered lift mechanism. Depressing the e-stop will disable the power to the lift. All other cart functions remain operational. Pull up on the e-stop switch to enable the powered lift mechanism again.

Raising or Lowering Cart 1

To raise or lower the upper portion of the cart, press and hold down the



arrows on the user interface until it reaches your desired height. The lift mechanism will automatically stop when it reaches its minimum or maximum height.
Do not sit, lean or place any heavy objects on the top work surface.

Lift Overload Protection

The height adjustment is equipped with an overload protection mechanism. If during the operation of the height adjustment, the lift is overloaded or becomes blocked by an obstruction, the lift will stop and the LCD screen will display "Lift Overloaded." Remove the load or clear the obstruction to continue operation. The lift will automatically reset after 3 seconds.

Keyboard Light 2

A keyboard light is provided for use when the cart is in dimly lit areas.To operate, press the light bulb icon on the keypad. The light can be manually turned off by pressing the button again. It will automatically turn off after a predetermined time that can be set using the control board software.

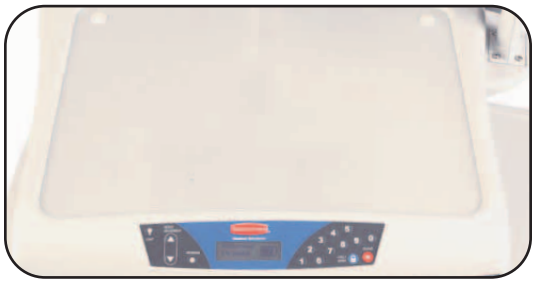
Work Surfaces

Battery Level Contrast

The contrast level on the LCD screen can be optimized for improved visibility. The contrast can be increased by pressing the PROGRAM and UP buttons on the keypad at the same time repeatedly until the screen reaches a desired contrast level. To decrease the contrast, press the PROGRAM and DOWN button at the same time.

Top Work Surface

A large work surface has been incorporated into the cart. A clear cover is attached to protect reference materials. This cover can be removed for cleaning by using a Phillips screwdriver (not provided). Do not sit, lean, or place any heavy objects on the work surface.

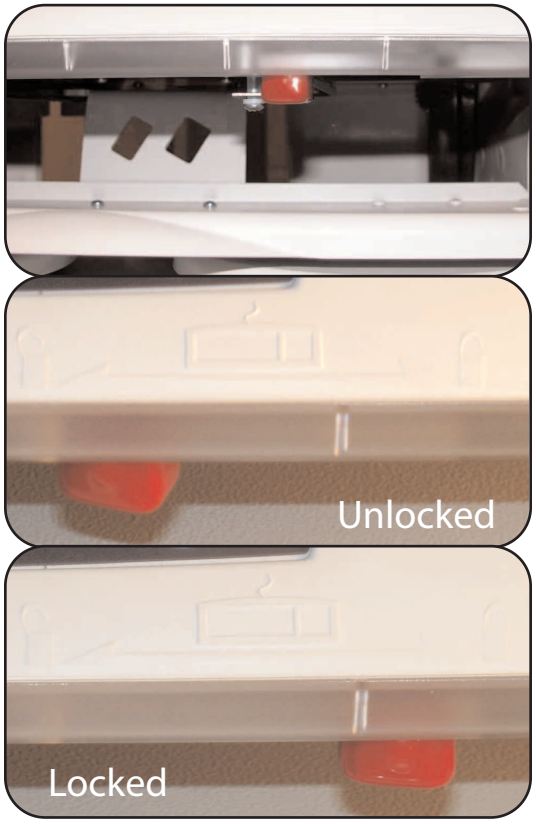


Bi-Directional Work Surface

A bi-directional work surface facilitates a wide range of tasks. To move the bi-directional work surface, grab the handle on the desired side of the cart and pull firmly. The bi-directional work surface will hold firmly in place when fully extended.

Keyboard and Mouse Tray

The keyboard tray has a locking feature to prevent the tray from sliding out when the cart is moving over uneven surfaces or thresholds.To lock the keyboard, push tray in and slide locking handle to the locked position.



Mouse Pads

Left and right mousepads are provided and are located underneath the keyboard.They can be extended when the keyboard is in any position.

Mouse Storage

A mouse storage area is located behind the keyboard tray.

Keyboard Light

A keyboard light is provided for use when the cart is in dimly lit areas.To operate, press the light bulb icon on the keypad.The light can be manually turned off by pressing the button again. It will automatically turn off after a predetermined time that can be set using the control board software.

Cleaning

CAUTION: Because of the close proximity of electrical power and equipment, flammable cleaners should never be used on the cart!

NOTE:
When cleaning the cart, wipe all cleaners off of surface with a damp cloth and thoroughly dry the cart. Never cover the cart or its components in liquid or allow liquids to flow into the cart. Never use steel wool or any other abrasive material as these could damage the surface finish.
Before using any cleaner on the cart, first test on a small area to ensure that the cart surface is not harmed. These guidelines cannot guarantee to control infection. The hospital's infection control administrator/ epidemiologist should be consulted for cleaning procedures and processes.

Cleaning Recommendations:

Clean the paint and plastic cart components with any diluted, nonabrasive solutions. Some suggested cleaners are quaternary ammonia compounds, ammonia enzyme cleaner, bleach and alcohol solutions. Remove pen and permanent dry erase marker stains with a soft cloth and 91% isopropyl alcohol.

Remove iodine stains with a soft cloth and any common cleaner.