

USER'S MANUAL



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Sammons Preston-CPM Unit

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FOREWORD

Thank you for purchasing the Sammons Preston R-FLEX Continuous Passive Motion (CPM) unit.

This manual contains general safety, operating, maintenance and care instructions for the owners and operators of the CPM units.

At the time of publication the information contained herein was current and up to date. However, due to continual technological improvements and increased clinical knowledge in the field of CPM treatment, as well as Sammons Preston's policy of continual improvement, Sammons Preston reserves the right to make periodic changes and improvements to our equipment and documentation without any obligation on the part of Sammons Preston.

Read, understand and follow the information contained in this manual.

Stay current with the latest clinical developments in the field of CPM treatment and observe all applicable precautionary measures for treatment.

Keep informed on appropriate indications and contraindications for the use of CPM therapy.

Precautionary Instructions

The precautionary instructions found in this section and throughout this manual are indicated by specific symbols. Understand these symbols and their definitions before operating this equipment. The definition of these symbols are as follows:



=CAUTION- Text with a "CAUTION" indicator will explain possible safety infractions that could have the potential to cause minor to moderate injury or damage to equipment.



=WARNING- Text with a "WARNING" indicator will explain possible safety infractions that could potentially cause serious injury and equipment damage.



=DANGER- Text with a "DANGER" indicator will explain possible Safety infractions that are imminently hazardous situations that could result in death or serious injury.



=EXPLOSION HAZARD- Text with an "Explosion Hazard" indicator will explain possible safety infractions if this equipment is used in the presence of flammable anesthetics.

IMPORTANT SAFEGUARDS

When using electrical products, especially when children are present, basic safety precautions should always be followed, including the following:

DANGER: TO REDUCE THE RISK OF ELECTROCUTION:



Always unplug this product immediately after using. Do not use while bathing.

Do not place or store product where it can fall or be pulled into a tub or sink.

Do not place in or drop into water or other liquid.

Do not reach for a product that has fallen into water. Unplug immediately.

WARNING: TO REDUCE THE RISK OF BURNS, ELECTROCUTION, FIRE, OR INJURY:



Use indoors only.

A product should never be left unattended when plugged in.

Close supervision is necessary when this product is used by, on, or near children or invalids. Use this product only for its intended use as described in this manual. Do not use attachments not recommended by the manufacturer.

Never operate this product if it has a damaged cord or plug. If it is not working properly, has been dropped or damaged, or dropped into water, return it to a service center for examination and repair.

Keep the cord away from heated surfaces.

Never use while sleeping or drowsy.

Never drop or insert any object into any opening.

Do not use outdoors or operate where aerosol (spray) products are being used or where oxygen is being administered.

Connect this product to a properly grounded outlet only. See grounding instructions.



CAUTION: This equipment may cause electromagnetic or other interference between other devices. If this occurs, move the device away from the affected equipment.

Work in a range of motion as instructed by your healthcare practitioner.

If you experience increased pain, swelling, or any adverse reactions while using this product, immediately consult your health care practitioner.

Set up and use of this equipment should be in a low traffic location and away from children and pets.



WARNING: Make sure the hand control is accessible to the operator before starting this equipment. The STOP/ START button on the hand control is the only way of stopping the motion for disabled patients or children using the unit.

The physician defines the protocol and ensures that it is correctly implemented.

CAUTION: It is important to install and use this equipment in accordance with the instructions, to prevent harmful interference to other devices in the vicinity. If this equipment does cause harmful interference to other devices, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the other device(s).
- Increase the separation between the equipment.
- Connect this equipment into an outlet on a circuit different from that to which the other device(s) are connected
- Consult the manufacturer or field service technician for help.



EXPLOSION HAZARD

R-FLEX CPM NOT SUITABLE FOR USE IN THE PRESENCE OF A FLAMMABLE ANAESTHETIC MIXTURE WITH AIR, OXYGEN OR NITROUS OXIDE



R-FLEX CPM needs special precautions regarding EMC and needs to be installed and put into service according to the EMC information provided in this manual.

Portable and mobile RF communications equipment can affect R-FLEX CPM.

The use of accessories, transducers, and cables other than those specified by the manufacturer, may result in increased emissions or decreased immunity of the CPM.

The CPM should not be used adjacent to or stacked with other equipment. If adjacent or stacked use is necessary, the CPM should be observed to verify normal operation in the configuration in which it will be used.



Use of accessories, transducers and cables other than those specified, such as transducers and cables sold by the manufacturer as replacement parts for internal components, may result in increased emissions or decreased immunity of the equipment or system.

Product Description

The purpose of the *R*-*FLEX CPM* unit is to provide continuous passive motion to the knee joint to increase circulation, range of motion and to prevent scarring in the joint. The *R*-*FLEX* is an anatomically aligned CPM which mirrors the path of the knee as it goes through its range of motion from full-or hyper-extension (-10°) to full flexion (120°) with speeds of 55 to 140 degrees per minute.

Indications, Clinical Benefits & Contraindications

Indications

- Knee replacement surgery
- Fractures (patellar, tibia plateau, femoral, etc.)
- Arthrolysis
- Hip surgery, including hip replacement, hip pinning, osteotomy, etc.
- Ligament repairs
- Arthroscopic surgery (meniscetomies, patellectomies, etc.)
- Burns, joints sepsis.

Clinical Benefits

- Breaks the cycle of trauma, inflammation and the loss of range of motion
- Prevents joint stiffness
- Speeds the recovery of post-operative range of motion
- Maintains the quality of the joint surface
- Reduces pains and edema
- Promotes joint cartilage healing
- Reduces hospitalization time
- Reduces the need for pain medication
- Provides immediate post-operative continuous passive motion
- Digital ROM readout on the patient hand control for positive reinforcement
- · Maintains desired positions for stretching and muscular rest

Contraindications

USE OF CPM THERAPY IN GENERAL SHOULD BE AVOIDED OR DISCONTINUED, AT LEAST TEMPORARILY, IF SIGNS OF HYPERTHERMIA, IRRITATION, SWELLING, BLEEDING, OR IN-CREASED OR PERSISTENT PAIN ARE OBSERVED. ACUTE INFLAMMATORY CONDITIONS, SUCH AS ACUTE ARTHRITIS, OR DESTRUCTIVE BONE OR JOINT DISEASES, SHOULD NOT BE TREATED WITH CPM. PRODUCT IS LATEX FREE.

PATIENTS WHO HAVE BONE CANCER, WARPED JOINT SURFACES, SPASTIC PARALYSES, UN-STABLE FRACTURES AND UNCONTROLLED INFECTION SHOULD NOT BE TREATED WITH CPM.

R-FLEX CPM UNIT IS NOT ADAPTED FOR PATIENTS WHO ARE TALLER THAN 6'7"(2m) OR SHORTER THAN 4'7"(1.40m).

Table 1. Physical and Electrical Specifications

| Size Setup for Use: Length 29.6" Width 14.2" Height 30.4" Weight: Without accessories 27.5 lbs With accessories 28.5 lbs Fully packaged 32.0 lbs Electrical Specifications: Input 110 VAC 60Hz 30W Fuse 2.5 A - 250V~ Enviromental Requirements: Temperature: Operating 14°F to 104°F (-10°C to 40°C) Transport & Storage -22°F to 140°F (-30°C to 60°C) Humidity: Operating Up to 80% Transport & Storage Up to 90%, non-condensing Atmospheric Pressure: 700 hPa to 1060 hPa Electromagnetic Compatibility: In accordance with IECB 1.1.2 Water Enclosure Protection: IPXO Safe Work Load: No more than 45 lbs Class I, Type B | | |
|---|-----------------------------------|----------------------------------|
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| Safe Work Load: No more than 45 lbs | Electromagnetic Compatibilit | y: In accordance with IECB 1.1.2 |
| | Water Enclosure Protection: | IPXO |
| Classification: Class I, Type B | Safe Work Load: | No more than 45 lbs |
| | Classification: | Class I, Type B |

Grounding Instructions:

This product should be grounded. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current. This product is equipped with a cord having a grounding wire with a grounding plug. The plug must be plugged into an outlet that is properly installed and grounded.

DANGER

Improper use of the grounding plug can result in a risk of electric shock. Check with a qualified electrician or serviceman if the grounding instructions are not completely understood, or if in doubt as to whether the product is properly grounded. This product is factory equipped with a specific power supply to permit connection to a proper electric circuit. Make sure that the product is connected to an outlet having the same configuration as the plug. No adaptor should be used with this product. Do not modify the plug provided—if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

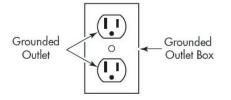




Table 2 Cable List

| Cable | Max Length (inch) |
|-------------------------------------|-------------------|
| Potentiometer Communication Cable | 80 |
| Hand Controller Communication Cable | 92 |
| Power Cord | 158 |
| USB Cable | 87 |

Table 3

| Gu | idance and | manufacturer's declaration - electromagnetic emissions |
|---|------------|--|
| The R-FLEX CPM is i CPM should assure that | | in the electromagnetic environment specified below. The customer or the user of the R-Flex ch an environment. |
| Emission test | Compliance | Electromagnetic enviroment - guidance |
| RF emissions CISPR 11 | Group 1 | The R-FLEX CPM 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 R-FLEX CPM is suitable for use in all establishments other than domestic and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes. |
| Harmonic emissions IEC 61000-3-2 | Class A | The R-FLEX CPM is suitable for use in all establishments other than domestic and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes. |
| Voltage fluctuations/ flicker emissions IEC 61000-3-3 | Complies | The R-FLEX CPM is suitable for use in all establishments other than domestic and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes. |
| | | e in all establishments other than domestic and those directly connected to the public hat supplies buildings used for domestic purposes. |

Table 4

Guidance and manufacturer's declaration - electromagnetic immunity

The R-FLEX CPM is intended for use in the electromagnetic environment specified below. The customer or the user of the R-Flex CPM 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 61000-4-2 | ±6 kv contact ±8 kv air | ±6 kv contact ±8 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 ±1 kv for input/output lines | ±2 kv for power supply lines ±1 kv for input/output lines | Mains power quality should be that of a typi- cal commercial or hospital enviorment |
| Surge IEC 61000-4-5 | ±1 kv differential mode ±2 kv common mode | ±1 kv differential mode ±2 kv common mode | Mains power quality should be that of a typi- cal commercial or hospital enviorment |

Table 4 continue

| Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11 | | | Mains power quality should be that of a typical commer- cial or hospital environment. If the user of the R-FLEX CPM requires continued operation during power mains interruptions, it is recommended that the R-FLEX CPM be powered from an uninterruptible power supply or a battery |
|--|-----------------------|-----------------------|--|
| Power frequency (50/60 Hz) magnetic field IEC 61000-4-8 | 3 A/m | 3 A/m | Power frequency magnetic fields should be at levels char- acteristic of a typical location in a typical commercial or hospital environment |
| NOTE U_T is the a.c. | mains voltage prior t | to application of the | test level. |

Table 5

Guidance and manufacturer's declaration - electromagnetic immunity

The R-FLEX CPM is intended for use in the electromagnetic environment specified below. The customer or the user of the R-Flex CPM should assure that it is used in such an environment.

| Immunity test | IEC 60601 test level | Compliance level | Electromagnetic enviroment -guidance |
|-------------------------------|-----------------------------|------------------|---|
| | | | Portable and mobile RF communications equipment should be used no closer to any part of the R-FLEX CPM, including cables, than the recommended separa- tion distance calculated from the equation applicable to the frequency of the transmitter. |
| | | | Recommended Separation Distance |
| | | | $d = \left[\frac{3,5}{V_1}\right]\sqrt{P}$ |
| Conducted RF IEC 61000-4-6 | 3 Vrms 150 kHz to 80 MHz | 3 V | $d = \left[\frac{3.5}{E_1}\right]\sqrt{P} 80 \text{ MHz to } 800 \text{ MHz}$ |
| Radiated RF | 3 V/m | | $d = \left[\frac{7}{E_1}\right]\sqrt{P} 800 \text{ MHz to } 2.5 \text{ GHz}$ |
| IEC 61000-4-3 | 80 MHz to 2.5 GHz | 3V/m | where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacture and d is the recommended separation distance in metres (m) |
| | | | Field strengths from fixed RF transmitters as determined by an electromagnetic site survey ^a , should be less than the compliance level in each frequency range ^b . |
| | | | Interference may occur in the vicinity of equipment marked with the following symbol. |
| | | | (((-,))) |

Table 5 continue

NOTE 1 At 80 MHz and 800 MHz, the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

^a Field strengths from fixed transmitters, such as base station for radio (cellular/cordless) telephone and land mobile radios, amateur radio, AM and FM radio bradcast 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 R-FLEX CPM is used exceeds the applicable RF compliance level above, the R-FLEX CPM should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the R-FLEX CPM.

^b Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m

Table 6

Recommended separation distances between portable and mobile RF communications equipment and the R-FLEX CPM

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

| D. (. L | Separation distance according to frequency of transmitter m | | |
|--|--|--|--|
| Rated maximum output power of transmitter | 150 kHz to 80 MHz | 80 MHz to 800MHz | 800 MHz to 2.5GHz |
| W | $d = \left[\frac{3,5}{V_1}\right]\sqrt{P}$ | $d = \left[\frac{3,5}{E_1}\right]\sqrt{P}$ | $d = \left[\frac{7}{E_1}\right]\sqrt{P}$ |
| 0.01 | 0.12 | 0.12 | 0.23 |
| 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 1 At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

NOTE 2 These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

Table 7

| R- | FLEX CPM Accessories List | |
|-------------------------|---------------------------------------|-------------|
| Accessory/Cable | Manufacturer | Model |
| Power Cord | Xuan Hua Electric Manufacturing Co. | 10A250V |
| Potentiometer Cable | Ya Sheng Cable Factory | SP20260 |
| Hand Controller Cable | Ya Sheng Cable Factory | SP20350 |
| Steward snap-on ferrite | Steward, A Unit of Laird Technologies | 28A2026-0A2 |

WARNING

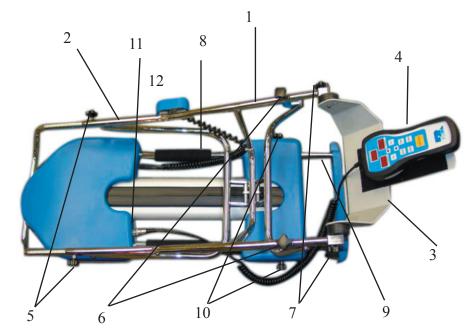
Use of the accessory or cable with R-FLEX CPM unit other than those specified may result in increased emissions or decreased immunity of the R-FLEX CPM.

NOMENCLATURE

Sammons Preston-CPM Unit

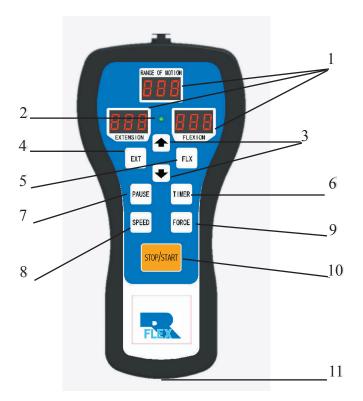
R-FLEX CPM Unit Components

- 1. Calf Support
- 2. Thigh Support
- 3. Foot Cradle
- 4. Hand Controller
- 5. Thigh Length Adjustment Knobs
- 6. Calf Length Adjustment Knobs
- 7. Foot Cradle Adjustment Knobs
- 8. Transport Handle
- 9. Bedmount Adjustment Device
- 10. Bedmount Adjustment Knobs
- 11. ON/OFF Switch and Fuses
- 12. Potentiometer Housing



R-FLEX CPM LED Display

- 1. LED Screen
- 2. Indicator Light
- 3. INCREASE/DECREASE Function Key
- 4. EXTENSION Setting Key
- 5. FLEXION Setting Key
- 6. TIMER Function Key
- 7. PAUSE Function Key
- 8. SPEED Function Key
- 9. FORCE Function Key
- 10. STOP/START Function Key
- 11. USB Communication Port



UNPACKING

Package Contents:

- 1 R-FLEX CPM Assembly
- 1 Foot Cradle Assembly
- 1 Bedmount Adjustment Device
- 1 Users Manual
- 1 Service Manual

Optional Accessories:

1 R-FLEX Managment Software and Drive Installation CD 1 USB Cable

Unpacking instructions:

- 1. Remove R-FLEX CPM assembly from the box
- 2. Slide the foot cradle out and place it in the upper right position
- 3. Ensure that all required components and parts are present. Refer to the previous page.
- 4. Check the CPM unit and container for damage. Report any substantial damage to the shipper.
- 5. Save packaging and preserve the integrity of the packaging in case the unit is ever returned for servicing.
- 6. Connect the hand controller to the CPM unit.

IMPORTANT:

Check that the electrical socket is in good condition and is suitable for the power supply cord. The plug may be connected to any standard socket with a grounded pin. Use the original cable supplied with the machine ONLY when connecting to the power supply. Ensure that the cable remain free around the device to prevent damage.



Power Cord Connection



Hand Controller Connection

SET UP INSTRUCTIONS

R-FLEX CPM Unit Set Up

- 1. Unpack and place the CPM unit where it is to be used
- 2. Attach the soft goods (pads) on the CPM unit. (*Pads need to be purchased separately*) Foot Pad slips over the Foot Plate, attach the straps onto the Calf and Thigh Supports.



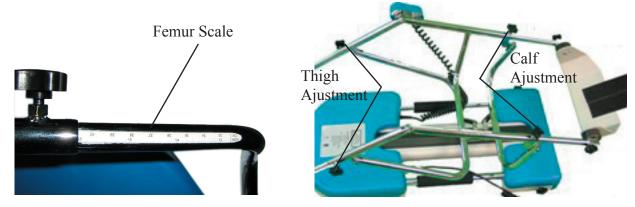


- 3. Plug the power cord into a 110/120V AC wall outlet close to the machine. Locate the power switch to 'OFF' position.
- 4. Automatically calibrate the R-FLEX CPM
 - a. Adjust the Thigh Support to the maximum reading on the Femur Scale which is 18".
 - b. Turn on the power and hold down *EXT* key and *FLX* key simultaneously. The code *SEL* and *CAL* will blink in the 'Extension' and 'Flexion' display windows on the hand controller.
 - c. Stop pressing the *EXT* and *FLX* keys. The unit is now automatically calibrated.
 - d. The R-Flex CPM unit should be observed traveling to full extension. The reading on the hand controller in the 'Range of Motion' display window should read ZERO when the calibration procedure is completed.
 - e. After the unit is calibrated, the hand controller can be set and operated as normal.

Sammons Preston-CPM Unit

SET UP INSTRUCTIONS

5. Measure the patient's involved leg in centimeters or inches from the hip joint to the midline of the knee joint, set the femur scale to this mesurement using thigh length adjustment knobs. Adjust the thigh support to the corresponding value on the scale.



- 6. Position the CPM unit so that the hip pivot is 1.5" to 2" from the patient's rear end. The knee axis should align with the axis of the knee pivot.
- 7. Adjust the calf support by moving the foot cradle so that it meets the sole of the foot. To adjust the calf support, loosen the adjustment knobs and slide the foot cradle to the proper length. Secure by tightening the two adjustment knobs.
- 8. *R-FLEX* CPM Unit has a unique feature with its bedmount adjustment device. It is used to prevent migration of the unit during operation. To adjust the device, loosen the two bedmount knobs and extend the device until it is firm against a solid barrier, such as a foot board. Secure the two knobs to lock the position.



Note: Do not use this as a carry handle or lifting point.

SET UP FOR PEDIATRICS OR SHORT LEGS Sammons Preston-CPM Unit

- 1. Loosen *Calf Adjustment Knobs* and remove the *Foot Cradle*. DO NOT REMOVE THIGH ADJUST-MENT KNOBS.
- 2. Loosen both *Foot Cradle Adjustment Knobs* and rotate both *Foot Tubes* 180 degrees so that the *Foot Cradle* is in the location shown in the photo below.



3. Slide the *Foot Cradle* back into the CPM unit. Secure by tightening the *Calf Adjustment Knobs*, adjust the *Foot Cradle* angle, and tighten the *Foot Cradle Adjustment Knobs*.



HAND-CONTROLLER OPERATION

Before Starting the Machine

Follow the hand-controller operation instructions to set flexion, extension, speed, pause duration, and force. Run the CPM unit for a full range cycle to ensure the patient's involved leg is aligned correctly. The machine should now be fitted to begin the rehabilitation. If the knee joint does not mirror the movement of the machine joint, adjust the calf or thigh adjustment knobs to keep the knee in the proper alignment.

R-FLEX CPM Unit Technical Parameter

| Parameter | Value Range |
|--------------------------|---|
| Treatment Mode | Normal |
| Extension Limit | $-10 \sim 120$ Degrees |
| Flexion Limit | $-10 \sim 120$ Degrees |
| Extension Pause Duration | 0 ~ 999 Seconds |
| Flexion Pause Duration | 0 ~ 999 Seconds |
| Timer | 0 ~ 999 Minutes |
| Speed | $1 \sim 9 (55^{\circ} \sim 140^{\circ}/\text{min})$ |
| Force | 1~9 |
| | |

Hand-Controller Operation Instruction

1. Turn on the power switch located at the base of the machine.

- 2. Default parameters are preset after the CPM unit is turned on.
- 3. Press STOP/START key to initiate the CPM unit.
- 4. To change the parameter setting, follow the instructions below.



Indicator Light

START/STOP the unit

Press **START/STOP** key once to start the unit and press it again to stop the unit. Green indicator light shows 'on' status, and comes off when the unit is stopped.

Display/Change Extension Range

Press **EXT** key to display extension value, the value will blink in the 'Extension' display window. Press / to reset the extension limit the new value will blink and be locked in 5 seconds. Full range is from -10° to 120°.



HAND-CONTROLLER OPERATION



Display/Change Flexion Range

Press *FLX* key to display flexion value, the value will blink in the 'Flexion' display window. Press / to reset the extension limit, the new value will blink and be locked in 5 seconds. Full range is from -10° to 120°.

Display/Change Speed Value

Press **SPEED** key to display speed value, the value will blink in the 'Range of Motion' display window. Press / to reset the speed, the new value will blink and be locked in 5 seconds. Or press the **SPEED** key again to validate the setting.





Display/Change Force Range

Press **FORCE** key to display force value, the value will blink in the 'Range of Motion' display window. Press / to reset the force, the new value will blink and be locked in 5 seconds. Or press **FORCE** key again to validate setting.

Display/Change Pause of Extension Limit Press **PAUSE** and **EXT** key to display the pause of extension limit, the value will blink in the 'Extension' display window. Press / to reset the pause of extension limit, the new value will blink and be locked in 5 seconds.



HAND-CONTROLLER OPERATION

Sammons Preston-CPM Unit



Display/Change Pause of Flexion Limit

Press **PAUSE** and **FLX** key to display the pause of flexion limit, the value will blink in the 'Flexion' display window. Press / to reset the pause of flexion limit, the new value will blink and be locked in 5 seconds.

Display/Change Timer Press **TIMER** key to display timer, the value will blink in the 'Range of Motion' display window. Press / to change the timer setting, the new value will blink and be locked in 5 seconds.



| RANZE OF NOTION |
|---------------------------|
| |
| SPEED FORCE STUP/START |
| |

Display Count Down of Timer

Press **TIMER** key twice to display count down of timer. Press TIMER key one time to display the time set, press TIMER key a second time and the time remaining will be displayed in 'Range of Motion' display window.

CLEANING AND MAINTENANCE

Cleaning Procedure

- 1. Turn the CPM power switch to Off and unplug the power cord from the socket.
- 2. Dampen a soft cotton cloth with water or a mild cleaning agent and gently wipe the body of CPM unit. Do NOT put too much liquid on the cloth where it might drip though the plastic cover and into the machine.
- 3. Let the CPM unit air dry and plug it back in use.

Maintenance

- 1. Using a 5/32 inch allen wrench, disassemble the 8 joints of the CPM bars and inspect the brass bushing inside each joint.
- 2. Replace any bushings that appear to be excessively worn.
- 3. Lubricate all joints lightly with lubricating oil. (Any class of oil can be used)
- 4. Using a 5/32 inch allen wrench, remove the top cover of each ball bearing set at the ends of the threaded screw. Perform a visual inspection and replace if necessary. Apply grease to the ball bearings.
- 5. With the bearing cover still removed, inspect the rubber track seal on each side of the threaded screw guide. Replace if necessary.
- 6. Inspect the threaded screw and apply new grease for lubrication.
- 7. Perform a visual inspection of the coupling between the gearbox and the threaded screw. Ensure that set screws in each coupling hub are still tight. Replace the coupling rubber piece if excessive wear is present.
- 8 Inspect all adjustment knobs and replace if necessary.

Sammons Preston-CPM Unit

WARRANTY

Sammons Preston warrants that the R-FLEX CPM units are free of defects in material and workmanship. This warranty shall remain in effect for 1 year or 2000 operation hours from the date of original consumer purchase.

If the R-FLEX CPM unit fails to function during the warranty due to a defect in material or workmanship, Sammons Preston will repair or replace the product without charge.

Sammons Preston is the only organization able to assess the application of the warranty to its CPM units.

This Warranty Does Not Cover:

Replacement parts or labor furnished by anyone other than Sammons Preston, the selling dealer or a Sammons Preston certified service technician.

Defects or damage caused by labor furnished by someone other than Sammons Preston, the selling dealer or a Sammons Preston certified service technician.

Any malfunction or failure in the R-FLEX CPM unit caused by misuse, including, but not limited to, the failure to provide reasonable and required maintenance or any use that is inconsistent with the user's manual.

Sammons Preston Shall Not be Liable in Any Event For Incidental or Consequential Damages

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

To obtain service from Sammons Preston or selling dealer under this warranty:

1. A written claim must be made within the warranty period to Sammons Preston or the selling dealer. The written claim should be sent to:

Sammons Preston 1000 Remington Blvd., Ste 210 Bolingbrook, IL 60440

2. The product must be returned to Sammons Preston or the selling dealer by the owner.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state. Sammons Preston does not authorize any person or representative to create additional obligations or liabilities in connection with the sale of the R-FLEX CPM.

Any representation or agreement not contained in the warranty shall be void and of no effect.