

# OCTOROLL® PORTABLE MOTOR UNIT

Congratulations for acquiring this superb motor unit, thus upgrading your equipment to the finest and most unique system available. Please read these instructions carefully.

**DESCRIPTION:** see Figures.

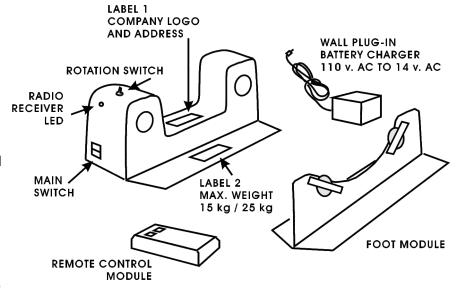
Main switch: turn the unit on by pressing the upper part (yellow LED lights up); turn the unit off by pressing the lower red part, when you are finished, or in case of an emergency. The radio and motors are then shut off, but the battery continues to charge.

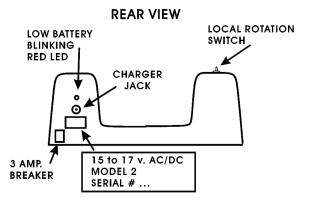
The radio receiver LED lights up momentarily when the unit is turned on. It remains off in standby mode and lights up again when receiving. Radio reception

is intentionally limited to approximately 8 meters. Should reception weaken, rotate antenna or transmitter slightly.

The **local rotation switch** lies on top of the first motor. It is a "deadman" type: when released, rotation stops immediately. Do not force the strong internal brake applied automatically and immediately when rotation ceases. Starts and stops are instantaneous. While activating this switch, the remote control module becomes inoperative.

The **motor wheels** have rubber bands that must be kept clean by washing with water. Two spare bands are supplied. An hexagonal key is also supplied: when tightening the set screws, use Loctite® BREAKER 222 threadlocker.





The foot module has free spinning wheels. It is placed to the right (motor module to the left).

Maximum weight is 15 kg (35 lbs.) with the regular board, and 25 Kg. (55 lbs.) with the wide board. Do not drop a board loaded with a baby onto the wheels, as this may bend the shafts. First place the board on the four wheels, and then immobilize the baby to the board.

The **remote control module** (radio transmitter) operates on a standard 9 v. alkaline battery (supplied). A rechargeable ni-cad battery is not recommended. The two rotation buttons are recessed to prevent accidental **OCTOSTOP® HOLDS AN ESTABLISHMENT LICENCE FROM HEALTH CANADA** 







## OCTOROLL® PORTABLE MOTOR UNIT

activation. When the battery power falls below 7 v., a buzzer in the motor module sounds, indicating that the battery needs to be changed. **Do not press both control buttons simultaneously:** although this is harmless, the buzzer in the motor module will sound. As an additional safety feature, the remote control module will not

operate when the rotation switch of the OCTOROLL® is activated, confirming a priority to local staff.

The wall plug-in battery charger is designed for a standard 110 v.a.c. North American sockets. An adapter is available for 220 v.a.c. Never plug the charger into a D.C. socket. Output is 15-17 v.a.c. When charger's output plug is inserted into the unit's jack, the battery is being safely "float" charged continuously, which is necessary when the unit is not in use. Thus the battery will remain fully charged thanks to the internal battery control. As indicated on the label, only current of 15 to 17 v. a.c. or d.c. must be used for charging. There is no connection to the metal frame (hence the frame need not be grounded).



The **low battery red blinking LED** is normally off, and cannot light up when the motors are running. It starts blinking when battery drops to about 50% of its charge, then the battery will recover and the light will go off again. The OCTOROLL® may still be used repeatedly and safely while the discharge/recover cycle lengthens. When the blinking cycle reaches 3 to 8 minutes (or sooner), the battery must then be charged, to prevent deep discharge; this will prolong battery life significantly (up to approximately 800 to 1,000 charging cycles). **The unit is designed to be operable during charging.** 

The **battery** is a standard high quality 12 v., 2.2 Ah., sealed lead/acid type (17.5 cm L  $\times$  5.9 cm H  $\times$  3.3 cm W). Never deeply discharge the battery, as this would markedly reduce its capacity. With aging, the operating periods become shorter because of the normally diminishing capacity. To replace the battery, unscrew the 4 peripheral screws underneath the unit, pull the cover upward, and connect a new battery of the same size and specifications.

The **breaker (3 Amps)** will trip if an internal short circuit occurs, or if an overload is applied to the motors. To reactivate, press the upper part of the breaker. Repeated occurrences require servicing by a technician. An electrical diagram is supplied inside the casing.

#### RADIO FREQUENCY (RF) INTERFERENCE

All wireless RF units on the market in Canada and the U.S. abide by the Department of Transport FCC rules Part 15. This means users accept that the units may be subject to interference. The OCTOROLL® is in this category, implying that incoming and outgoing radio interference is acceptable and accepted by the user. In our experience, this unit is rather resistant to incoming interference. Should incoming interference occur, it would be readily detectable by erratic and spontaneous rotation (but perfectly safe): the unit may then immediately be switched off, the board (with the immobilized baby) can instantly be removed and the examination be continued without delay using manual positioning.

OCTOSTOP® HOLDS AN ESTABLISHMENT LICENCE FROM HEALTH CANADA







### IMPORTANT RADIO-FREQUENCY (RF) TESTS TO BE DONE BEFORE USE

(some hospitals require the authorisation of the bio-medical department)

**NEARBY SYSTEMS SUSCEPTIBLE TO RF INTERFERENCE:** garage door radio openers; radio monitoring systems such as for heart (rhythm, EKG), respiration (rhythm, apnoea); automatic defibrillators, automatic injectors, etc.; check in emergency rooms, operating rooms, intensive care units (cardiac, surgical etc.); wireless and cellular radio-telephones; security, surveillance and many warning devices; possibly radar and some airplane systems. Pace makers should not be susceptible, but care must be exercised. Infrared surveillance and television remote controls are not susceptible.

**INCOMING INTERFERENCE:** the OCTOROLL® is quite immune to this interference. Nevertheless, while operating such above mentioned systems, the unit (with power turned on) must not turn. If interference is observed, see "changing the safety codes" below.

**OUTGOING INTERFERENCE FROM REMOTE CONTROL:** once the DEDICATED ROOM for the OCTOROLL® is selected, make sure the remote con trol module is not operated outside that room. Activate the remote control by alternately depressing the red and grey buttons (the red LED must light up), while an assistant checks for proper operation of susceptible systems mentioned above, even as far as 250 meters. If interference is observed, see "changing the safety codes" below.

**Changing the safety codes:** if necessary because of interference, open the plastic covers of both remote control module (transmitter) and motor unit (receiver), and change codes on red boxes by moving some of the 8 switches in the same direction. Check that the two sets are exactly alike, that the OCTO*ROLL*® responds properly and that any interference has disappeared. In case of doubts or problems, consult a biomedical engineer and notify us.

Please consult the educational brochure: "THE OCTOSTOP® SYSTEM FOR PEDIATRIC IMMOBILIZATION" by Dr. Jean A. Vézina M.D. It contains many useful suggestions and warnings.

#### **IMPORTANT WARNINGS**

- 1- The octagons are intentionally opened to let feet and hands through, but do not allow them near the wheels, specially the motor ones, as this may cause injury.
- 2- Someone nearby must attend the baby at all times.
- 3- Not to be used in a Magnetic Resonance environment.
- 4- Must be used only by qualified personnel, according to appropriate procedures, and under direct supervision and responsibility of a physician. OCTOSTOP® INC. and its personnel do not assume any liability regarding the use, indications, consequences or any situations directly or indirectly related to its products.