

# **EX N' FLEX**

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## **EF-300**

*Instructions for Use*

**Leg Exerciser**



**Arm Exerciser**



**Model EF-300**  
**Leg/Arm Exerciser**

## *Understanding the Control Unit*

The Control Unit contains all of the electronics, switches and displays necessary to control the operation of the EXN' FLEX EF-300 Leg/Arm Exerciser. It is secured to the Exerciser with a coiled retractile cable.

**\* Plug the Power Cord into a 110/220 V.A.C. Wall outlet. PLEASE NOTE: Before attaching yourself or anyone to the machine, it is recommended that you read these instructions thoroughly and operate the Control Unit to familiarize yourself with the switching.\***

### *The Main Power Switch:*

The Main Power Switch is the black switch located on the right hand edge of the Control Box. When the switch is turned on the Control Unit will light up. The Power Light comes on, zeros appear in the large LED Display window and lights appear in the side windows by the Mode Switch, Speed Switch and the F/Off/Rswitch. (Forward, Off, Reverse).

### *The Pressure Switches:*

There are six different Pressure Switches on the Control Unit: On/Off, a direction switch(F/Off/R), Mode Switch, Speed Switch and two Timer adjustment arrows.

When the side mounted Main Power Switch is on, you can start the machine by selecting forward or reverse. You can stop the machine by pressing the F/Off/R switch once to move the switch to the centre/Off position or you can also turn it off by pressing the On/Off switch on the bottom left of the face of the Control Unit, near the Power Light. If you turn it off here you will resume movement in the same direction the machine was turning when it was stopped.

***Try this now:*** Turn on the Main Power Switch located on the right hand edge of Control Box. Press the F/Off/R Switch. The Foot Rests should begin to turn in Forward or Reverse depending on your selection. Leave the machine running then try the Speed Switch.

### *The Speed Switch:*

The Speed Switch contains three indicator lights: Hi, Med and Lo. To choose a speed, press the switch to change between Lo, Med and Hi.

Now turn the machine off by pressing the On/Off switch on the face of the Control Unit.

### *Understanding the Mode Switch:*

The Mode switch has four positions; **Timer**, **Biof** or Biofeedback, **Trip** and **Total**. A red indicator light shows the mode being used.

When the machine is first turned on the Mode Switch default position is **Biof**. The function of the Biofeedback display is explained further on.

### *The Timer Switch*

Press the Mode Switch once and it will change to "Time" mode. When in "Time" mode you can adjust/set the timer by pressing the up and down arrows. These switches are located just below the LED digital readout window. Increase the amount of time in 5 minute increments each time you press the "up" arrow. Decrease the amount of time by 1 minute, each time you press the "down" arrow. You can view the amount of time selected in the LED display window located above the arrows. When the machine is turned on the timer will begin counting down in seconds and once it reaches zero the machine will automatically shut off and the F/Off/R switch will have moved to the centre Off position.

**Note:** Once the timer is set you can switch between modes and the timer will still continue to count down.

### Odometer “Total” Switch:

While still in Time mode, press the Mode Switch 3 times and you will change the mode ( the red indicator light will move) to “Total” “Total” display acts as an odometer and logs the distance travelled. The total cannot be reset and continually accumulates (mileage/kilometers for leg units).

### Odometer “Trip” Switch:

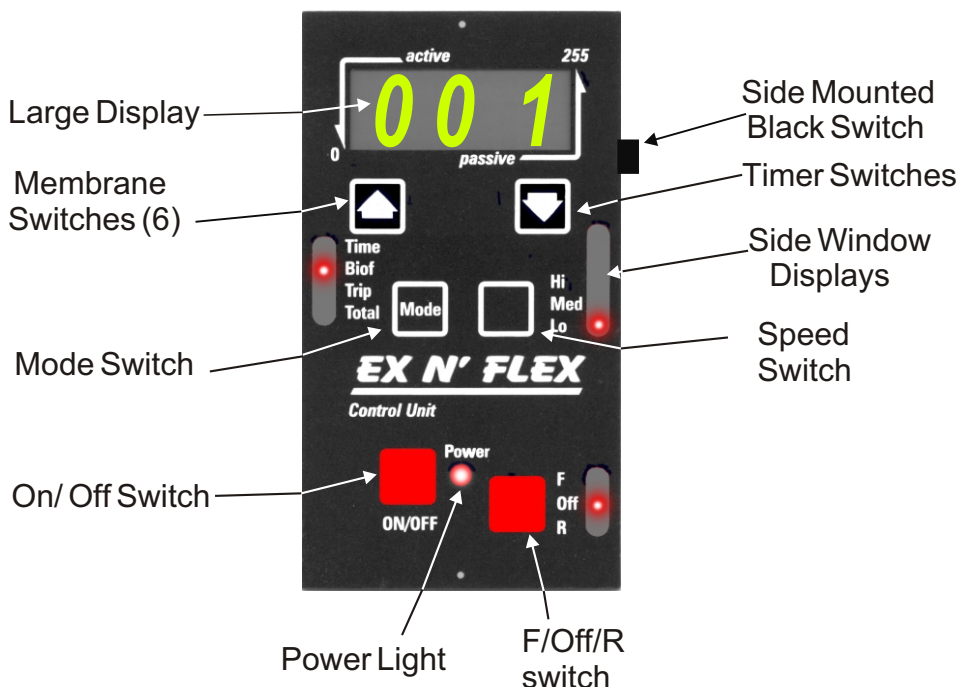
Press the Mode Switch again and the red light will change the mode to “Trip”. “Trip” mode logs in meters or yards in the U.S.A., the distance travelled for each session. Every Trip count, 1 revolution, equals 1 meter, 1000 M logged is equivalent to 1 Km. For U.S. Users, every Trip count, 1 revolution, equals 1.094 yards. **To save and add the accumulated revolutions from a session to the “Total” turn the machine off using the On/Off Switch on the face of the Control Unit** before turning off the main power switch on the side.

### Biofeedback Switch:

Press the Mode Switch again, or if the machine is turned off, turn it on and the red light will be in default Biof position. “Biof “ or Biofeedback mode displays numbers on the digital display which fluctuate between 0 and 235. These numbers indicate the effort require to move passive legs.

The Biofeedback mode is used to measure the User’s resistance and/or assistance. **For example:** if a user has tone, stiffness, or spasticity in their legs, this would cause resistance and require the motor to work harder to turn their limbs. As the user becomes more relaxed and flexible the “Biof” numbers will decrease. This display enables someone with little or no feeling or voluntary movement in their limb(s) to see the movement is making a difference.

If the user is using the machine actively or applying some of their own strength and assisting/overriding the motor then the LED display will show a decrease in the “Biof” numbers. This shows the User/Caregiver that the User is assisting the machine and building strength. Refer to P.3 for istructions on using the machine actively.



**Control Unit**

## Instructions for Use

1. Sit in a wheelchair, lounge Chair or kitchen chair. Foot Rests on wheelchair must be swung away or removed to access the machine and place the machine a short distance in front

2. Pull the machine into the approximate position for use. Make sure that the User is centred on the machine and that the base of the machine is parallel to the frame and almost touching the wheelchair/chair.

3. Place Feet in foot Rests. Proper shoes are recommended.

4. Neoprene Straps with velcro attachment secure the feet in the foot rests. The short strap goes over the instep of the foot and fastens on velcro on side of the Foot Rest. The long strap goes over the ankle and down the back of the Foot Rest where it fastens on the velcro strip. (See Fig. 2)

5. When setting up without assistance, place one foot in the foot rest when it is at the bottom of its rotation cycle. Using the Controller, slowly bring this loaded Foot Rest to the top of the cycle and fasten Foot Strap. At this point place the other foot in the empty Foot Rest which is now at the bottom of its cycle. Bring slowly to top and fasten Foot Straps.

6. Neoprene Leg Restraining Straps may be used at this time if necessary. If both legs fall outward, the Strap is placed under the thighs and fastened over the top of the legs (Fig. 3a). If leg /legs fall inward, place strap under the leg, through the outside wheel of the wheelchair and fasten both ends together over the leg (Fig 3b).

7. Set Speed Switch on the Control Unit to desired speed (Lo, Med or Hi). It is recommended to initially start in Lo or med speed.

8. Set the Mode Switch to Biof, then press the F/Off/R Switch (lower right hand corner of the Controller) to start the Unit. The Foot Rests will start to rotate and numbers will appear on the Large Display. Refer to P.2 , the section on Biofeedback for information on the meaning of the numbers. Pages 1 and 2 contain all the information regarding the various switches on the controller. Read these pages thoroughly before starting the machine.

9. The odometer is running continuously when the machine is turned on and registering the distance travelled. If you wish to have a Trip reading at anytime during your exercise period, touch the Mode switch to Trip setting and numbers will register your Trip setting on the Large Display. Set Timer if desired, see P.1



**Fig. 1**



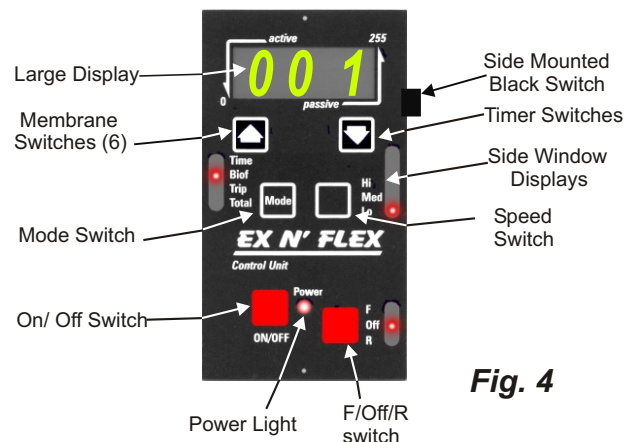
**Fig.2**



**Fig. 3a**



**Fig 3b**



**Fig. 4**

## **Control Unit**



10. Rotate one revolution to ensure that the unit is positioned correctly. With correct positioning there should be a slight bend in the knee when the foot is furthest away. This bend prevents the knee from hyperextending. If the machine is too close the back of the Foot Plates may touch the front of the chair or wheelchair; if this is the case, you are too close. Shut the machine off and adjust the machine accordingly. Once any adjustments have been made, you are ready to proceed with your exercise program.

11. Press F/Off/ R switch to restart Machine

12. Relax, sit back and let the machine rotate your legs. If higher speed is required, adjust Speed Control Switch. If Active Exercise is desired, refer to page 3 on Biofeedback display.

13. For best results time should be divided between Forward and Reverse motion. Reverse Motion is achieved by use of the F/Off/R switch.

14. **To Turn Off**, switch to Off on the F/Off/R switch then Red On/Off Switch. This will turn off all displays and store the data from Trip to Total on the touch pad. **It is necessary to turn off power Switch before turning off Side Mounted switch or the Trip Data from the current session will not be stored.**

15. Remove Foot Straps and unplug from wall.

16. To use as an Arm Exerciser the user must have sufficient strength to grip the Hand Grip or use the Hand Strap to secure the hand in place, (Fig.7a & 7b).

17. Lift machine onto a table. Turn the Foot rests over so that the flat undersurface is facing up. The Hand Grip is on this surface. The flat surface serves as an arm/shoulder support to prevent the shoulder sagging during exercise. The long Arm Strap can be folded back over the wrist/forearm area and secured to the velcro. If this strap or the Hand Strap is required, the User will need assistance to operate the machine. Once hands are in place turn on the machine. The Arms rotate in a circular motion (ergometer style) and you may use your own upper body strength to assist the machine.

18. Once the exercise session is complete, turn off the machine as in item 14 and remove any straps that may have been required.

**NB. The Crank Arm is provided with an Inner Hole to allow for a reduced amplitude. This is useful for people with short legs or extreme tone/spasm. This permits a smaller range of movement before working up to full amplitude/range of motion.**



Fig.5

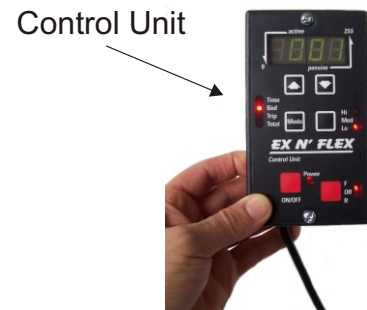


Fig.6



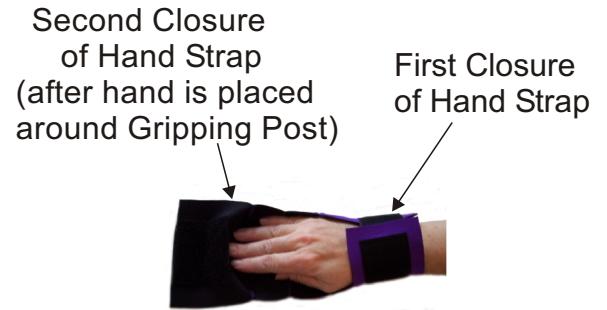
Fig.7a



Fig. 7b

### Attaching the Hand Strap

1. Attach the neoprene Hand Strap to the wrist of the affected arm and fasten around the wrist with velcro closures, (Fig. #1).

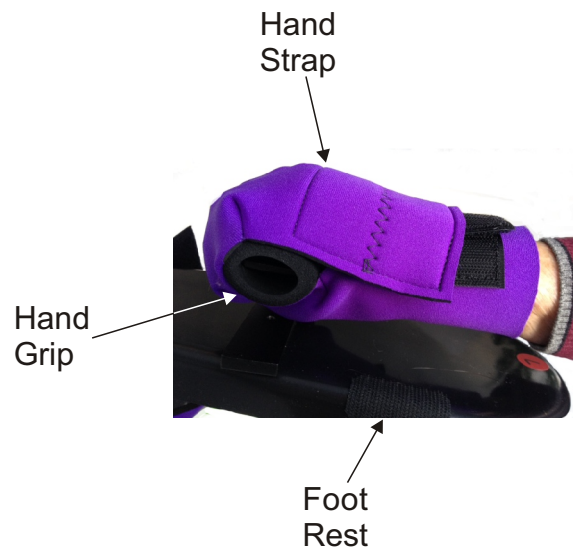


**Fig. #1**

2. Place the hand onto the Hand Grip. Work the fingers around the Grip. Pass the second closure of the Hand Strap under the Hand Grip, Fig #2. Pull over the Hand Grip and hand and continue pulling the strap and attach it to the exposed velcro on the wrist, Fig #3. The strap will prevent the hand, which may have little or no gripping power, from slipping off the Hand Grip during exercise. The affected hand may need some assistance in holding onto the Hand Grip while attaching the strap. If additional arm support is required, the leg straps may be brought from the other side and fastened over the arm and secured on the velcro on the Foot Rest. See P.4, Fig. 7a



**FIG. #2**



**Fig.#3**

### **How Long Should I Stay on the EX N' FLEX ?**

As with any exercise program, the best results are achieved with a gradual approach. (Resist the temptation to spend more than **five minutes** on the machine to start with). Slow speed is a good way to start. **In extreme cases**, only one or two revolutions may be achieved because of muscle/joint resistance or spasm. Sometimes by switching between Forward and Reverse and the speed switch set to High, it is possible to achieve several partial revolutions. With repeated sessions this should result in increased flexibility in the muscles and tendons to a point where full revolutions should be achieved. Any excessive resistance will show on the Biofeedback display as high numbers. As flexibility improves, the numbers shown on the Biofeedback will decrease. Once flexibility is regained and no discomfort is experienced the following day, the amount of time on the machine may be increased one minute per session to a maximum of 30 minutes per session. The time should be equally divided between Forward and Reverse. The EX N' FLEX may be used for more than one session per day. If discomfort is experienced as a result of unaccustomed exercise, discontinue use of the machine until discomfort subsides, then resume program.

\*\*\*\* To assure that the legs are not over extended, make sure that the machine is close enough that the User has a partial bend in the arm at all times during use.

#### **Note:**

When excessive resistance occurs the machine will stall and after 8 seconds. To restart machine, press F/Off/R Switch

## EF-300 Parts List

| <b>Part#</b> | <b>Item</b>  |
|--------------|--|
| 3000L/A      | Axel/ Main Bearing Assembly                          |
| 3001L/A      | Cover, Top   |
| 3002L/A      | Cover, Base Plate                                    |
| 3003L/A      | Bronze Bushings                                      |
| 3004L/A      | Cable Harness  |
| 3005L/A      | Chain  |
| 3006L/A      | Control Unit   |
| 3007L/A      | Crank Arm  |
| 3008L/A      | Decal EX N' FLEX                                     |
| 3009L/A      | Decal (Leg/Arm Exerciser)                            |
| 3010L/A      | Foot Plastic   |
| 3011L/A      | Foot Plate   |
| 3012L/A      | Foot Plate/ Hanger Bracket Ass'y(set) (no Crank Arm) |
| 3013L/A      | Foot Straps(Pair)                                    |
| 3014L/A      | Foot Straps-XL (Pair)                                |
|              |  |
|              |  |
|              |  |
|              |  |

| <b>Part #</b> | <b>Item</b>                |
|---------------|----------------------------|
| 3015L/A       | Handles                    |
| 3016L/A       | Hanger Brackets only       |
| 3017L/A       | Hanger Bracket Hand Grip   |
| 3018L/A       | Leg Strap 40"              |
| 3019L/A       | Leg Strap 48"              |
| 3020L/A       | Main Frame                 |
| 3021L/A       | Motor                      |
| 3022L/A       | Pontoon                    |
| 3023L/A       | Pontoon Plastic Foot       |
| 3024L/A       | Power Cord                 |
| 3025L/A       | Power Supply               |
| 3026L/A       | Rubber Feet (ea.)          |
| 3027L/A       | Shoulder Bolt (Foot Plate) |
|               |                            |
|               |                            |
|               |                            |
|               |                            |
|               |                            |
|               |                            |
|               |                            |

### ***One year limited Warranty***

This product is warranted to be free from defects in material and workmanship for a period of 1 year from the date of purchase or lease.

Important: This warranty does not cover damage resulting from an accident, misuse or abuse, lack of reasonable care, the affixing of unauthorized attachments, loss of parts or subjecting the device to other than specified voltage. (Read directions and instructions carefully).

If malfunction occurs, do not use the unit.

To ensure prompt service contact EX N' FLEX by phone or email. We will repair, replace the machine or send replacement parts (our option) at no charge to you.

If the warranty has expired or other terms are not met there will be a charge for any repairs, parts or shipment required.

### **Contact:**

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 Save this warranty for your records