

# *EasyTravel*

## *Feather DRAFT*



## User's Manual

Original instructions



CE



Dear User,

Tzora Active Systems Ltd. thanks you for choosing the ***EasyTravel Lite*** scooter and wishes you safe and enjoyable journeys.

For proper operation and to maintain the scooter's operational readiness, we recommend that you read this user manual and all warning labels prior to using the scooter.



Kibbutz Tzora, 9980300, Israel

Tel: +972-2-9908207

Fax: +972-2-9991552

E-mail: [info@tzora.com](mailto:info@tzora.com)

Web site: [www.tzora.com](http://www.tzora.com)



## Table of Contents

<b>SECTION A – PRE-SALES INFORMATION</b>		
1	Introduction	6
2	Technical Data	7
3	Safety	11
4	System Components and Details	12
<b>SECTION B – USER INFORMATION</b>		
5	Unfolding and Folding Instructions	21
6	Operating the Scooter	25
7	Batteries and Charging	29
8	Storage and Transportation	33
9	Helpful Hints for Everyday Use	34
10	EMI – Electro-magnetic Interference	35
<b>SECTION C – SERVICE INFORMATION</b>		
11	General Maintenance and Inspections	42
12	Fault Finding	45
13	Disposal and Recycling	47
14	Wiring Diagram	48

**NOTE:** Design details may change without notice.

## **SECTION A – PRE-SALES INFORMATION**

**REMARK:** For people with impaired vision, this manual is available in digital format upon request from the manufacturer; please send an email to [info@tzora.com](mailto:info@tzora.com).

### **1. Introduction**

The ***EasyTravel*** is a “Class A” Electrically powered scooter. It is intended to be used by individuals that are able to walk, but suffer from mild mobility limitations. The user must have sufficient arm and leg strength to get on and off the ***EasyTravel*** alone and to safely steer under all driving conditions.

The ***EasyTravel*** is intended for indoor and restricted outdoor use on pavements or paved footpaths only during daylight hours. The ***EasyTravel*** does not have lights and reflectors and therefore must not be used in the dark or in limited visibility conditions.

**CAUTION:** Failure to follow the instructions contained in this manual may result in injury to the user or to other persons.

## 2. Technical Data

Item	Lead Acid Battery	Lithium Battery
Category	Class A	
Maximum speed	6.0 km/h (3.7 mph)	
Power supply	24V from 2 charged sealed lead acid, maintenance-free (12V-12Ah) batteries.	24V from 1 charged sealed LiFePO4 maintenance-free (24V-12Ah) battery.
Charge time	7-10 hours	
Estimated range	Using recommended battery and depending on operating conditions and load:  Up to 13 km (8 mi)      Up to 15 km (9 mi)	
Climbing slope	6° (10%)	
Reversing width	1200 mm.	
Ascending and descending curb (step)	15 mm. (5/8 in.) maximum (see note on page 14)	
Ground clearance	4 cm. (1.6 in.)	
Maximum load	115 kg. (250 lb.)	
Resistance to ignition of materials & assemblies	UL94 V-0	
Scooter weight (excluding batteries)	20.5 kg (43 lb)	
Seat Weight	6 kg (13 lb)	
Battery pack weight	9 kg. (20 lb)	4.2 kg. (9 lb)
Front Wheels	200x50 mm (8x2 in.)	
Rear Wheels	200x50 mm (8x2 in.)	
Tyres	Flat-free PU	
Dimensions (Length, Width, Height)	101x57x90 cm. (39"x22"x35")	

Disclosure Information per ISO 7176-15:1996		
Item	Min	Max
Overall length with leg rest		1010 mm
Overall width		570 mm
Folded length		1010 mm
Folded width		570 mm
Folded height		520 mm
Total mass		29.5 kg    24.7 kg
Mass of the heaviest part		12 kg
Static stability downhill		6°
Static stability uphill		6°
Static stability sideways		6°
Energy consumption		15 km
Dynamic stability uphill		3°
Obstacle climbing		15 mm
Maximum speed forward		6 km/h
Minimum braking distance from max speed		92 mm
Seat plane angle	3°	5°
Effective seat depth	420 mm	440 mm
Effective seat width		440 mm
Seat surface height at front edge	500 mm	510 mm
Backrest angle	10°	12°
Backrest height	360 mm	370 mm
Footrest to seat distance	380 mm	390 mm
Leg to seat surface angle	10°	12°
Armrest to seat distance	170 mm	180 mm
Minimum turning radius	900 mm	

<b>MOTOR</b>	
Rated Voltage	24 V
Power	180 W

<b>LEAD ACID BATTERY</b>	
Manufacturer	Kung Long Batteries Industrial Co., Ltd. No. 6, Tzu-Li 3 Road, Nantou City, Taiwan
Model	WP12-12
Type	Rechargeable Sealed Lead Acid Battery
Nominal Capacity	20hour rate ( 0.6A to 10.50V ) 12A/h
Charge Retention (shelf life) at 20°C (68°F)	1 month 92% 3 month 90% 6 month 80%
Life expectancy:	Cycle Use: 100% depth of discharge 200 cycles 80% depth of discharge 225 cycles 50% depth of discharge 500 cycles Standby Use: 3~5years
No. of batteries	2
Nominal Voltage	12 V
Power	12A/h
Weight	Approx. 4.075kg (8.96 lbs.)

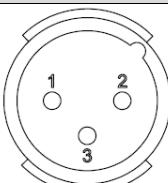
<b>LEAD ACID BATTERY CHARGER</b>	
Type	Off-board
Input	100-240VAC 50/60Hz 1.2-0.5A
Output	24VDC 2A
Charging temperature range	0°C to +40°C

See Chapter 7 for more information on the batteries and chargers.

LITHIUM ION BATTERY	
Manufacturer	Tianjin Enerbyte Electronics Co. Ltd. 21st , Hua Ming Road, Hua Ming Town, Dong Li District, Tianjin, P.R., China
Model	LiFePO4
Type	Rechargeable Lithium Battery
Nominal Capacity	20hour rate ( 0.6A to 10.50V ) 12A/h
Charge Retention (shelf life) at 20°C (68°F)	1 month 97% 3 month 91% 6 month 83%
Life expectancy:	Cycle Use: 80% depth of discharge >2000 cycles
No. of batteries	1
Nominal Voltage	24 V
Power	12A/h
Weight	Approx. 3.8 kg (8.4 lbs.)

LITHIUM ION BATTERY CHARGER	
Type	Off-board
Input	100-240VAC 50/60Hz 1.2-0.5A
Output	24VDC 2A
Charging temperature range	0°C to +40°C

See Chapter 7 for more information on the batteries and chargers.

BATTERY CHARGER CONNECTOR PINS	
 (1) RED (2) BLACK (3) BLUE	(1) + Positive (2) - Negative (3) Inhibit

The batteries and charger comply with the safety requirements of ISO 7176-25:2013.

The **EasyTravel Lite** and its accessories have been designed, manufactured and tested in accordance with the specification of the following:

**DIRECTIVE: Medical devices 93/42 EEC**





### **3. Safety**

During your initial use of the ***EasyTravel*** we recommend caution as you practice operating the unit in various situations. Keep the speed at a reduced level until you are comfortable controlling the scooter. Follow the safety tips and instructions and you will be comfortable manoeuvring through doorways, on and off lifts, over moderate terrain and up and down ramps.

These safety considerations and tips will help you to operate the ***EasyTravel*** safely. The ***EasyTravel*** is a powerful electric vehicle; these rules will help you prevent personal injury and damage to your scooter.

1. Read this manual and all labels before operating.
2. Do not carry passengers or exceed the maximum weight capacity.
3. Do not mount or dismount the ***EasyTravel*** unless it has come to a full stop and is turned off.
4. Do not back up on to uneven inclines or surfaces.
5. Always switch the speed selector to low when driving in a confined space.
6. Always reduce speed when turning.
7. Do not operate your scooter when under the influence of alcohol, medications or drugs that may impair your safety.
8. Always keep your feet on the foot platform when driving.
9. Do not sit on the scooter while being transported in a moving vehicle. Always fold down and secure your ***EasyTravel*** and transfer yourself to a vehicle seat.

### 3. SYSTEM COMPONENTS AND DETAILS

#### 3.1. *EasyTravel* parts – (Figure 1)

1. Battery pack (detachable)	11. Rear wheel
2. Front column (detachable)	12. Folded frame lock/release pin
3. Column lock/release triggers	13. Unfolded frame lock/release pin
4. Controller cover	14. Utility basket (holding capacity 20lbs/9kg)
5. Charging socket (Fig. 1A)	15. Charger and connecting cables (Fig. 1B)
6. Front drive wheels	16. Control Panel
7. Foot platform	17. Freewheel switch
8. Seat shell	
9. Seat cushions	

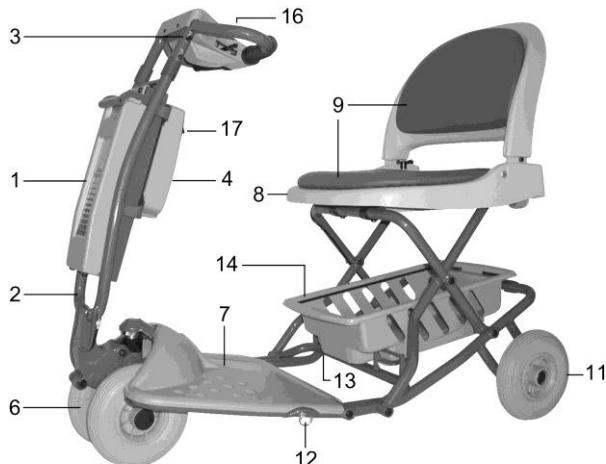
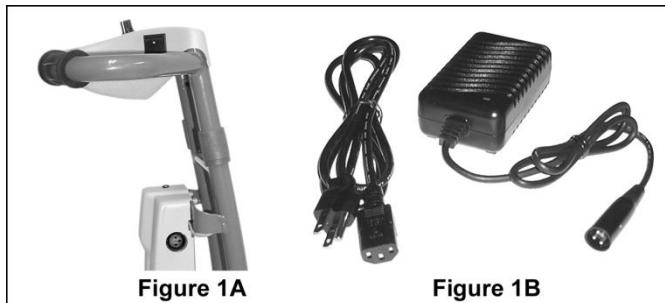


Figure 1



### 3.2. Control Panel – (Figure 2)

1. Switch
2. Hand control lever (right and left)
3. Speed adjusting knob
4. Indicator light (LED)
5. Battery gauge
6. Hand-grips



Figure 2

### 3.3. *EasyTravel* Optional Accessories:

1. Extra battery pack.
2. Optional Battery Charger (Fig.3) where Lithium Batteries are used.

**WARNING:** Where both lead/acid **and** Lithium batteries are being used, the user must take extra care to use the **correct** charger for the specific battery being charged.



Figure 3

**BELL:** If the user requires an audible warning device, a standard bicycle bell can be attached to the handlebar.

## SECTION B – USER INFORMATION

### 5. ASSEMBLY AND FOLDING INSTRUCTIONS

#### 5.1. Assembling your *EasyTravel*

##### *Unfolding Rear Frame*

Pull on the folded frame lock pin ring (Fig. 4/1) to release the foot platform and unfold the frame. Pull the seat backrest (Fig. 4/2) and lift it to the upright position. Ensure that the unfolded frame lock pin secures the platform in the horizontal position.

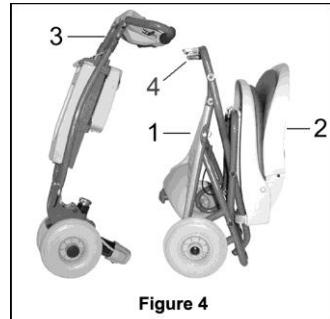


Figure 4

##### *Unfolding Front Column*

Pull the column lock triggers (Fig. 4/3) upward towards the handle to release the tilt lock. Move the drive unit away from the column (all the way) to open the quick-release housing. This is the column “detach” position.

##### *Connecting the Front Column to the Rear Frame*

Position the column in the “detach” position. Lift the front of the Foot platform and insert connection pin into the quick-release housing on the drive unit. This may be done without bending down by lifting the front of the seat “lip” while holding the front column hand-grip as shown in Fig. 5.

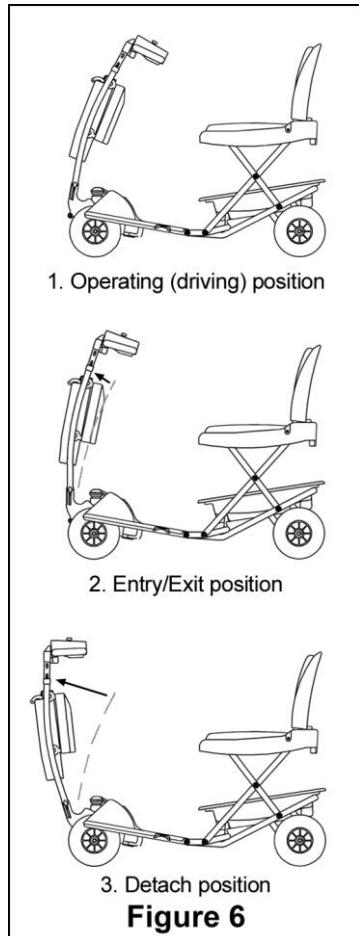


Figure 5

### **Front Column Adjustment (Figure 6)**

To adjust the angle of the front column, pull the column lock triggers upward. Move the column into the desired position and release. Push lightly back and forth on the column to ensure that it is locked in the desired position.

1. For driving the **EasyTravel**, adjust column to the rear-most position.
2. For getting in and out of the **EasyTravel** seat comfortably, the column may be moved away from the seat to the entry/exit position.
3. For detaching the front column from the rear frame, adjust the column fully forward to the detach position (Fig. 6/3); remove battery before adjusting the column to the detach position.



**CAUTION:** When getting in and out of the **EasyTravel** seat, step only on **CENTER** of foot platform. **DO NOT STEP ON SIDE OF FOOT PLATFORM** to avoid tipping the **EasyTravel**.

**NOTE:** The rear frame, when folded, can be lifted by the handles (Fig 4/4).

## 5.2. Folding and Unfolding your *EasyTravel*

### *Folding the EasyTravel*

**Step 1:** Fold backrest of seat down and ensure it is locked (Fig. 7/1)

**Step 2:** Hold handgrip of front column (Fig. 7/2) in the “Operating” or “Entry/Exit” position and push forward away from seat to fold platform upwards.

**Step 3:** Grasp platform handle (Fig. 7/3) and pull column lock triggers (Fig. 7/4) to fold column towards the platform. Fold together until folded frame lock pin (Fig. 7/5) and column latch (Fig. 7/6) click into place and hold *EasyTravel* in folded position.

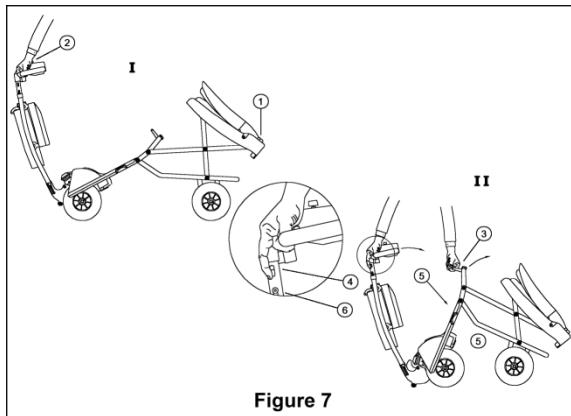


Figure 7

### *Unfolding the EasyTravel*

**Step 1:** Pull on the frame lock pin ring (Fig. 8/1) to release platform and rest front wheels on floor.

**Step 2:** Pull the seat backrest and lift it upright. (Fig. 8/2)

**Step 3:** Grasp top of seat backrest (Fig. 8/3) and pull column lock triggers (Fig. 8/4) to release column from platform. Pull outwards to unfold *EasyTravel* until

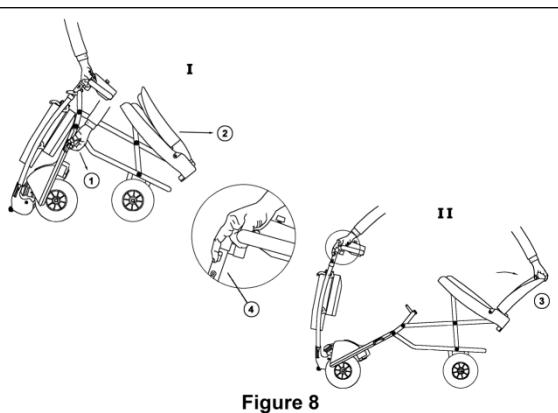


Figure 8

platform and column lock into the operating position.

## 6. OPERATING YOUR *EasyTravel*

### 6.1. Control Panel operation features

The switch located on the right side of the control panel (Fig. 9/1), will turn the power of the *EasyTravel* ON or OFF.

**NOTE:** Turn your *EasyTravel* switch to the OFF position when not in use in order to conserve battery power, and prevent unintentional operation.

The top speed may be adjusted by turning the Speed-adjusting knob (fig 9/3). By turning the knob to the HI position, your *EasyTravel*'s top speed will be up to 3.7mph/6kph. When the knob is set to the Lo position, the speed will be reduced to a slow crawl, ideal for less experienced drivers and for operating indoors.



### 6.2. Battery indicator Light (Fig. 9/4)

The light, located at the bottom of the handle control cover, displays battery status and fault indications as follows:

- ***Indicator light steady*** - This indicates that all is well.
- ***Indicator light flashes slowly*** - The controller is functioning correctly but batteries should be charged as soon as possible. The Battery Level Indicator (Fig. 9/5) shows the charge that is left.

- **Indicator light flashes rapidly** - This indicates that there is a fault.

Please follow the following procedure:

1. Switch off the **EasyTravel**
2. Make sure that the **EasyTravel** is not in the FREEWHEEL position.
3. Make sure that the charger is not connected to the **EasyTravel**.
4. Make sure that the control lever is in the middle position.

**CAUTION:** If control lever does not return by itself to the middle position - do not operate. Contact your service agent.

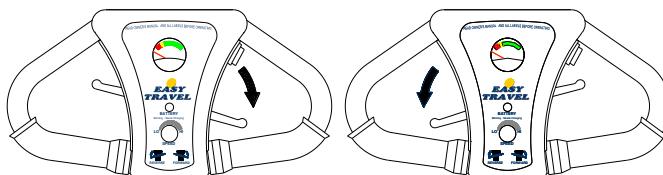
5. Switch the **EasyTravel** on again and check the indicator light. If it flashes rapidly again, switch off and do not operate. Contact your service agent!

### 6.3. Battery Gauge(Fig. 9/5)

The Battery Gauge (Fig. 9/5) shows the battery charge that is left.

### 6.4. Driving your **EasyTravel**

To drive forward, pull the right side of the hand control lever towards you (Fig. 10/1). You can also move forward by pushing the left side of the control lever away from you. By releasing the control lever, you will gradually come to a stop, and the **EasyTravel** brake will be applied automatically. To operate in reverse, pull the left side of the hand control lever towards you (Fig. 10/2).



1. FORWARD

2. REVERSE

**Figure 10**



## 6.5. Safety considerations when driving your *EasyTravel*

- ❑ Footpaths and sidewalks appear to be level but are usually slightly sloped for drainage of rainwater. Counter-steering may be necessary for overcoming excessive slopes. In such cases the speed should be reduced as necessary.
- ❑ When approaching ditches, bumps or similar obstacles – reduce speed as necessary.
- ❑ Do not operate *EasyTravel* in places or on surfaces where a loss of wheel grip could be hazardous, for example on wet grassy slopes.

## 6.6. Armrests (optional)

To enable easier entry to and exit from your *EasyTravel* the armrest can be lifted, see Fig. 10A.



Figure 10 A

## 6.7. Batteries

### ***Battery information***

The *EasyTravel* is designed to use sealed lead acid, maintenance-free, 12V batteries.

Always turn your *EasyTravel* OFF before removing and installing batteries. To get the maximum out of your batteries, it is recommended to fully charge the batteries overnight after every day of use. **Reconnecting the charger when the batteries are partially discharged or fully charged will not harm them.** Extended charging is good for the batteries and you cannot overcharge them.

Battery range depends on operator weight, terrain and the condition of batteries used. Charge your batteries daily and/or overnight when the *EasyTravel* is not in use.

### ***Battery Recharging Instructions***

To recharge, turn off *EasyTravel* It is possible to either charge the battery while connected on the *EasyTravel* (see instruction 1 below) or directly (instruction 2).

1. Plug the charging connector into the **EasyTravel** charging socket and then connect the charger to an electrical outlet socket.
2. Plug the charging connector in the back of the battery pack and then connect the charger to an electrical outlet socket.

During charging, the indicator light on the charger will be orange. When the battery is approaching full charge the indicator light will turn green. In order to achieve the maximum battery capacity and efficiency, it is advised to charge them overnight, and at least four hours after the indicator light has turned to green.

### ***Safety Instructions***

**CAUTION:** Failure to follow these instructions may result in personal injury or property damage.

1. Never smoke or allow an open flame in the vicinity of the batteries.
2. Use the charger for charging lead acid batteries only. It is not intended to supply power to an extra-low-voltage electrical system or to charge dry cell batteries.
3. Never charge a frozen battery.
4. Do not operate the charger in a closed-in area or restrict ventilation.
5. Prevent external damage to AC and DC cords. Do not use charger if cords are damaged.
6. Connect DC charging cord to the Charging Socket before connecting charger AC supply cord to the electrical outlet, and disconnect the AC cord from the electrical outlet before disconnecting charge cord.
7. Be extra cautious not to drop a metal object onto the battery case.
8. Remove jewellery.

### ***Battery Storage***

**Before storage, battery packs should be fully charged, and should be recharged at least once every three months.**

Store batteries indoors in a dry environment.

Storage temperature range: -20°C (-4°F) to 40°C (104°F)

Charging temperature range: 0°C (32°F) to 40°C (104°F)

Operating temperature range: -20°C (-4°F) to 50°C (122°F)

**WARNING:** Store batteries in the 'correct' position. (See Fig. 11).

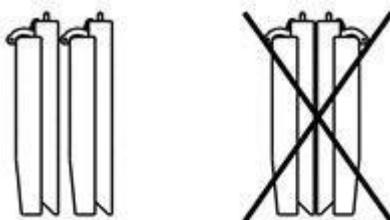


Figure 11

### ***Battery Replacement and Disposal***

The EasyTravel battery pack contains two 12V maintenance-free batteries. Replacement of the batteries is only permitted to an authorized dealer.

Battery cells may emit minor acid fumes.

Batteries must be recycled. Disposals of potentially damaged batteries present hazards of injury from acid leakage and environmental pollution.

**NOTE:** When removing a battery, always set it on cardboard, newspaper, or surfaces that cannot be damaged by acid fumes or liquid from the battery.

## **7. MOVING AND TRANSPORTING YOUR *EasyTravel***

### **7.1. Moving Your *EasyTravel* in Freewheel Mode when unfolded:**

The Freewheel switch (Fig. 1/17) is used for releasing the brake and moving the ***EasyTravel*** without operating the motor. Before activating, make sure your ***EasyTravel*** is switched on. Turn Freewheel switch to the "freewheel" position and push or pull the ***EasyTravel*** manually.

**NOTE:** The Freewheel mode can only be activated **after** the battery is in place and the power switch (Fig. 9/1) is turned on. Doing otherwise will cause a fault situation indicated by rapid flashing of the Indicator light (Fig. 9/4). See section 4.2.

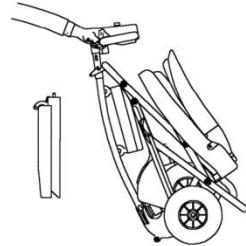
The ***EasyTravel*** is fitted with an electromagnetic breaking mechanism.

**WARNING:** The Freewheel switch should never be engaged on a slope.

**CAUTION:** The seat back must remain in the upright position.

## 7.2. “Walking” your *EasyTravel* in the folded position

The folded *EasyTravel* may be pulled along suitcase style. The battery should be carried separately (Fig. 12) or in the utility basket. See folding instructions on page 8.



**Figure 12**

## 7.3. Transporting Your *EasyTravel* Quickly And Easily

Your *EasyTravel* can be disassembled and transported in most car trunks.

When disassembling for transportation or storage:

1. Disconnect battery pack and place in Utility basket (Fig. 13/1)
2. Disconnect front column (Fig. 13/2) and fold rear frame separately (Fig. 13/3)
3. For storage – set down front column in a stable position.
4. For transportation, place *EasyTravel* components in car trunk as shown in figure 14.



**Figure 13**



**Figure 14**

## 8. HELPFUL HINTS FOR EVERYDAY USE

Before using your **EasyTravel** take the following precautions:

- Ensure that the front column and rear frame are locked together.
- Ensure that the rear frame is locked open.

### Speed Controls

Always operate your **EasyTravel** at a reasonable speed for both your personal safety and others.

### Stopping

Dynamic braking will gradually bring your **EasyTravel** to a stop when hand control lever is released.

### Ramps and Inclines

Lean forward and carefully manoeuvre your **EasyTravel** up a ramp or incline. Be aware that not all ramps are constructed according to Government standards. The Government standard for wheelchair ramps is 2.5 cm (1 inch) rise per 30 cm (1 foot).

Lower the speed setting to a slow speed when descending inclines.

### Using an elevator

Backing into an elevator allows you to exit forward. Be sure that the elevator is level with the floor.

### Opening Doors

When a door opens towards you, approach at an angle and just off to one side. Adjust the speed knob to a low setting. Grasp the doorknob, reverse and pull the door open. For doors that open away from you, position the front roller against the door, close to the doorjamb on the doorknob side of the door. After you release the latch, use the roller to push the door open.

**WARNING:** Be careful with glass doors to avoid personal injury!

## 9. GENERAL MAINTENANCE AND INSPECTIONS

Minimum maintenance should prevent unnecessary repairs.

### Keep Your *EasyTravel* Shining

Wipe the seat clean with a damp cloth. Protect the painted parts with a coat of auto wax.

**WARNING:** Water or Excessive moisture around the controller unit or electrical connections may cause contamination of electrical circuitry, damage and malfunction as well as personal injury. Do not leave your *EasyTravel* in the rain or in excessively humid locations.

### Daily Checks

With the *EasyTravel* switched off, check that the hand control lever mechanism returns to the rest position when you push and release. If there is a problem do not use the *EasyTravel* and contact your authorized dealer.

### Weekly Checks

- Throttle test:** Pull the throttle to the full speed position and switch ON the Power switch. The *EasyTravel* should not move and the LED on the panel should flash. If the *EasyTravel* does move – do not use your *EasyTravel*. Contact your authorized dealer.
- Automatic brake and drive test:** This test should be carried out on a level surface with at least 3' / 1 m. clear space around the *EasyTravel*:
  - Switch the *EasyTravel* on.
  - Move the control lever only slightly in the forward direction until you hear a “click” when the brake disengages. The *EasyTravel* should start to move forwards slowly.
  - Immediately release the throttle. You must be able to hear a “click” when the brake engages back, within a few seconds.
  - Repeat the test in the reverse direction.

If you do not hear the brake operating, or the *EasyTravel* does not move slowly in the expected direction – do not use your *EasyTravel*. Contact your authorized dealer.

## **Monthly Care**

Clean upholstery, plastic and metal parts with a mild surface cleaner.

**CAUTION:** Keep cleaning solvents away from electrical wires and connectors.

## **Half-Year Care:**

1. Apply a lubricant/cleaner (such as WD40 or similar) these locations:
  - Column tilt lock pin and housing.
  - Unfolded lock pin and housing.
  - Battery pack lock pins.
2. Lightly apply Vaseline or similar lubricant to battery contact pins and springs on front column.
3. Check for tire wear.

## **Overload Fuses**

The electric circuits of the ***EasyTravel*** are provided with two overload protection fuses. Replacement of the fuses is only permitted to an authorized technician. Both fuses are commercially available automotive-blade type.

### **Location of the fuses**

- Battery Pack fuse 20A, - Within Battery pack
- Control circuit fuse 1A, – Underneath controller cover

**NOTE:** Fuses of a different rating should not be used!

**WARNING:** Do not attempt to repair or service the ***EasyTravel*** or any of its components, as this will void your warranty.

**SERVICE AND REPAIR: CONTACT YOUR AUTHORIZED DEALER.**

## 10. EMI – ELECTROMAGNETIC INTERFERENCE

**CAUTION:** It is important that you read this information regarding the possible effects of electromagnetic interference on your *EasyTravel*.

### **Electromagnetic Interference (EMI) From Radio Wave Sources**

Motorized scooters may be susceptible to electromagnetic interference (EMI), which is interfering electromagnetic energy (EM) emitted from sources such as radio stations, TV stations, amateur radio (HAM) transmitters, two-way radios, and cellular phones. The interference (from radio wave sources) can cause scooters to release their brakes, come to a sudden stop, or move in an uncontrolled manner. It can also permanently damage a scooter's control system. The intensity of the interfering EM energy can be measured in volts per motor (V/m). Each Motorized scooter can resist EMI up to a certain intensity. This is called its "immunity level". The higher the immunity level, the greater the protection. The FDA has stated that all newly manufactured electric mobility vehicle models should have a resistance of at least 20 V/m, which would provide a reasonable degree of protection from the more common sources of radiated EMI.

Your *EasyTravel* as shipped, with no further modification, has an immunity level of 20 V/m. This immunity was tested with the inclusion of these accessories: a utility basket with a spare battery-pack and the charger unit carried inside it.

**There are a number of sources of relatively intense electromagnetic fields in the everyday environment. Some of these sources are obvious and easy to avoid. Others are not apparent and exposure is unavoidable. However, we believe that by following the warnings listed below, your risk to EMI will be minimized.**

The sources of radiated EMI can be broadly classified into three types:

- 1) **Hand-held portable transceivers** (transmitters-receivers) with the antenna mounted directly on the transmitting unit. Examples include citizens band (CB) radios, "walkie-talkies", security, fire, and police transceivers, cellular telephones, and other personal communication devices.  
\*\*NOTE: Some cellular telephones and similar devices transmit signals while they are ON, even when not being used;
- 2) **Medium-range mobile transceivers**, such as those used in police cars, fire trucks, ambulances, and taxis. These usually have the antenna mounted on the outside of the vehicle; and
- 3) **Long-range transmitters and transceivers**, such as commercial broadcast transmitters (radio and TV broadcast antenna towers) and amateur (HAM) radios.

**NOTE:** Other types of hand-held devices, such as cordless phones, laptop computers, AM/FM radios, TV sets, CD players, and cassette players, and small appliances, such as electric shavers and hair dryers, so far as we know, are not likely to cause EMI problems to motorized scooters.

### **Motorized scooter Electromagnetic Interference (EMI)**

Because EM energy rapidly becomes more intense as one moves closer to the transmitting antenna (source), the EM fields from hand-held radio wave sources (transceivers) are of special concern. It is possible to unintentionally bring high levels of EM energy very close to the motorized scooter's control system while using these devices. This can affect the scooter's movement and braking. Therefore, the warnings listed below are recommended to prevent possible interference with the control system of your **EasyTravel**.

## **WARNINGS**

Electromagnetic interference (EMI) from sources such as radio and TV stations, amateur radio (HAM) transmitters, two-way radios, and cellular phones can affect motorized scooters. Following the warnings listed below should reduce the chance of unintended brake release or powered wheelchair movement, which could result in serious injury.

- 1) Do not operate hand-held transceivers (transmitters-receivers), such as citizens band (CB) radios, or turn ON personal communication devices, such as cellular phones, while your **EasyTravel** is turned ON;
- 2) Be aware of nearby transmitters, such as radio or TV stations, and try to avoid coming close to them;
- 3) If unintended movement or brake release occurs, turn your **EasyTravel** power switch OFF as soon as it is safe to do so;
- 4) Be aware that adding accessories or components, or modifying your **EasyTravel**, may make it more susceptible to EMI (Note: There is no easy way to evaluate their effect on the overall immunity of your **EasyTravel**);
- 5) Report all incidents of unintended movement or brake release to your Authorized **EasyTravel** dealer or service centre, and note whether there is a source of EMI nearby.

### Guidance and manufacturer's – electromagnetic emission

The electric Exercise Machine is intended for use in the electromagnetic environment specified below. The customer or the user of the Electric Exercise Machine should assure that it is used in such an environment.

**Table 1 - Emission**

Phenomenon	Compliance	Electromagnetic environment
RF emissions	CISPR 11 Group 1, Class B	Home healthcare environment
Harmonic distortion	IEC 61000-3-2 Class A	Home healthcare environment
Voltage fluctuations and flicker	IEC 61000-3-3 Compliance	Home healthcare environment

### Guidance and manufacturer's – electromagnetic immunity

The electric Exercise Machine is intended for use in the electromagnetic environment specified below. The customer or the user of the Electric Exercise Machine should assure that it is used in such an environment.

**Table 2 - Enclosure Port**

Phenomenon	Basic EMC standard	Immunity test levels
		Home Healthcare Environment
Electrostatic Discharge	IEC 61000-4-2	±2kV, ±4kV, ±6kV, ±8kV, contact ±2kV, ±4kV, ±8kV, ±15kV air
Radiated RF EM field	IEC 61000-4-3	10V/m (80MHz-2.7GHz) 20V/m (26MHz-2.5GHz) 80% AM at 1kHz
Proximity fields from RF wireless communications equipment	IEC 61000-4-3	Refer to table 3
Rated power frequency magnetic fields	IEC 61000-4-8	30A/m 50Hz or 60Hz

**Table 3 – Input a.c. power Port**

Phenomenon	Basic EMC standard	Immunity test levels
		Home Healthcare Environment
Electrical fast transients/burst	IEC 61000-4-4	±2 kV 100kHz repetition frequency
Surges Line-to-line	IEC 61000-4-5	±0.5 kV, ±1 kV
Conducted disturbances induced by RF fields	IEC 61000-4-6	3V, 0.15MHz-80MHz 6V in ISM and amateur radio bands between 0.15MHz and 80MHz 80%AM at 1kHz
Voltage dips	IEC 61000-4-11	0% $U_T$ ; 0.5 cycle At 0°, 45°, 90°, 135°, 180°, 225°, 270° and 315° 0% $U_T$ ; 1 cycle and 70% $U_T$ ; 25/30 cycles Single phase: at 0°
Voltage interruptions	IEC 61000-4-11	0% $U_T$ ; 250/300 cycles

**Recommended separation distances between portable and mobile RF communication equipment and the Electric Exercise Machine**

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

**Table 4 – Proximity fields from RF wireless communications equipment**

Test frequency (MHz)	Band (MHz)	Immunity test levels
		Home Healthcare Environment
385	380-390	Pulse modulation 18Hz, 27V/m
450	430-470	FM, ±5kHz deviation, 1kHz sine, 28V/m
710	704-787	Pulse modulation 217Hz, 9V/m
745		
780		
810	800-960	Pulse modulation 18Hz, 28V/m
870		
930		
1720	1700-1990	Pulse modulation 217Hz, 28V/m
1845		
1970		
2450	2400-2570	Pulse modulation 217Hz, 28V/m
5240	5100-5800	Pulse modulation 217Hz, 9V/m
5500		
5785		

## 11. FAULT FINDING

Hereunder are some types of disorders, which can usually be repaired rather simply. If these following measures are unsuccessful, contact your authorized dealer!

<b>Problem</b>	<b>Check Point</b>
The driving of the wheelchair is too slow or insufficient, the status indicator lamp flashes slowly	Batteries are exhausted and need to be recharged
The <b>EasyTravel</b> does not function, the Battery/Status indicator flashes rapidly. Count the number of flashes:	<b>1 flash</b> The battery needs charging or there is a bad connection to the battery. Check the connections to the battery or charge batteries.
	<b>2 flashes</b> There is a bad connection to the motor. Check all connections between the motor and the controller.
	<b>3 flashes</b> The motor has a short circuit to a battery connection.
	<b>4 flashes</b> Freewheel is engaged.
	<b>5 flashes</b> Not used.
	<b>6 flashes</b> The controller is being inhibited from driving; this may be because the battery charger is connected.
	<b>7 flashes</b> A throttle fault is indicated. Make sure that the throttle is in the rest position before switching on the scooter
	<b>8 flashes</b> A controller fault is indicated. Make sure the controller connections are secure.
	<b>9 flashes</b> The parking brakes have a bad connection. Check the parking brake and motor connections. Make sure the controller connections are secure.
	<b>10 flashes</b> An excessive voltage has been applied to the controller. This is usually caused by a poor battery connection. Check the battery packs and controller connections.

## 12. DISPOSAL AND RECYCLING

- The packing material must be separated to plastic and paper/cardboard components and submitted to authorized recycling locations.
- The **EasyTravel** device consists of electronic components, cables, plastic parts, steel and aluminium frame and adapter parts. Do not discard of any components to normal garbage facilities. When **EasyTravel** is no longer operational, it is to be dismantled and separated into above material groups and submitted to authorized recycling facilities.

## 13. TECHNICAL DATA

Speed	Continuously adjustable, up to 6 km/h (3.7 mph)
Power Supply	24 V from Two rechargeable maintenance-free Sealed Lead/acid batteries Standard size: 12V – 7.2 Ah Jumbo size: 12V-12 Ah
Charging time	7 – 10 hours
Max. admissible slope	6 °(10 %)
Max. negotiable curb height	5 cm / 2"
Range approx.*	Standard battery 6.5 - 8 km / 4 - 5 Miles Jumbo battery 11 – 13 km / 6.5 – 8 Miles
Tires	Flat-free PU 200 x 50
Dimensions:	57 X 104 X 86 cm / 22"X41"X34"
Weights:	
Rear frame	12.9 Kg / 28.5 Lb
Front column (without battery)	8.6 Kg / 19 Lb
Battery Pack	Standard: 6.5 Kg / 14.5 Lb. Jumbo: 9.2 Kg. / 20.2 Lb.
Total weight	28 Kg / 62 Lb.
Maximum users weight	114 Kg. / 250 lb.

\*The actual range depends on the operation conditions and the load

## WARRANTY

The warranty period for the **EasyTravel** is twelve months and covers faulty materials and workmanship (consumables not covered: tyres, upholstery, lamp bulbs, plastic coverings and batteries). Worn parts damaged as a result of excessive loading, improper handling, intentional damage or unauthorized maintenance or modification are not covered by the warranty.

For safety and for warranty assurance reasons, any modifications and repair of the **EasyTravel** or its components must be performed exclusively by authorized personnel and exclusively with original spare parts.

The **EasyTravel** and its accessories have been designed, manufactured and tested in accordance with the specification of the following:

DIRECTIVE: Medical devices 93/42 EEC



Kibbutz Tzora,  
99803, Israel  
Web site: [www.tzora.com](http://www.tzora.com)



MDI Europa GmbH  
Langenhagener Straße 71,  
D-30855 Langenhagen,  
Germany



**Distributed / Service and repair:**



