

**MediGait**  
**The GaitAid Virtual Walker**

**Gait Training for Movement Disorders Patients**



Thank you for purchasing the GaitAid Virtual Walker! We hope you will benefit in the best possible way.

### The GaitAid Control Unit



### Connection and start up:

Insert two fully charged AA batteries into the battery compartment of the control unit (F). The unit will arrive with charged batteries already inserted.

The GaitAid device arrives with a wire connecting the goggles to the control unit. This wire may be disconnected when using the device without the goggles (audio feedback only through separate earphones). If this wire becomes disconnected, insert the wide connector at the end of the wire (G) into the wide slot on the top of the control unit (B). Make sure that the writing on (G) is facing you and so is the belt clip (C) as in the picture to the right.

**WARNING:** Never force the connector into the control unit. When the connector is positioned correctly as shown in picture on the right – the connector will slide into the slot with minimal force.



To operate device, turn the knob (A) in a clockwise direction. A blue light will illuminate next to the knob and an image of a tiled floor will appear in the goggles.

If the blue light flashes or the image does not appear – it is time to recharge the batteries as explained in “**Recharging the GaitAid Device**”.

Attach the belt clip (C) to your belt or your pants securely, so that the wide side of the control box faces forward. The glasses are worn over your nose. You will see a floating display in front of you with a graphic representation of a tiled path. The Virtual Walker is designed to be as non-obstructive as possible, so you will see the virtual image in addition to your surroundings. Some of your surroundings will be obscured by the goggles so it is necessary to practice in a safe walking path clear of obstacles before putting the glasses over your eyes.

Attached to the glasses are ear pieces which may be placed in your ears for additional auditory feedback. Auditory volume may be adjusted by turning the knob (A). \*\* If a hum is present --lower the volume on the remote cable and increase the volume on the unit.

## **Usage:**

### **Daily practice routine:**

As all people are unique in their physical abilities so are each persons practice sessions. Some people can only take a few steps to begin with and that is okay. Others may practice comfortably from 5-20 minutes once or twice a day. It is important to train with the device only for periods of time that are comfortable. **It is counterproductive to practice to fatigue.** It is important to listen to your body, it knows what it needs. If you are having an off day and would rather be resting then do not practice on that day and begin again when you feel ready. This is a process, not a race. Be gentle with your self , relax and take your time.

As a general suggestion – We recommend a commitment to practice from 5-30 minutes once or twice every day for the first two to four weeks.

Generally, after this initial two to four weeks, you should notice a marked improvement in your walking and you can reduce the practice time as you feel appropriate. If you do not notice improvement contact: [support@medigait.com](mailto:support@medigait.com) for consultation or call 888-777-9906.

If you feel you have reached a plateau – it is probably a good time to take a few days break from practice and then get back to it. Resting is an important part of any training regimen and learning process. Most people find that they can regain further improvement after a taking some time off.

There is continual support available to you during your training process. Please email: [support@medigait.com](mailto:support@medigait.com) or call 888-777-9906 with any questions. It is helpful to tell us your specific physical situation and challenges and we will offer you tips and suggestions tailored to your needs.

### **Level One Training Session**

The GaitAid device provides you with visual and auditory feedback on your motion. When using the device for the first time, it is better to start with one type of feedback until you are comfortable i.e. goggles or sound, before adding the other type of feedback.

Below you will find some helpful information to get you started. You will first find a very simplified version of a training session. Keeping it simple to begin with is important. As you get accustomed to training with the GaitAid you can progress onto the advanced level tips to further enhance your sessions.

### **Important Safety notes**

Before you begin create a predetermined path clear of all obstacles and have a caregiver present if needed for assistance.

If you use a cane or a walker in daily life continue to use it as it is important to feel and be safe at all times. *The GaitAid Virtual Walker is a feedback device designed to improve walking, reduce loss of balance and freezing. The Gaitaid is not to be used as a support device and does not prevent falling.*

## Using the goggles - Visual Feedback

### 1. Foot Warm up:

Balance starts on the bottom of our feet. It is a great idea to warm up by stretching and relaxing tight muscles. This exercise will provide greater awareness and proprioception.

\* Sitting- roll a tennis ball back and forth under your bare foot. Press down until it "hurts in a good way" . You can lean forward onto your thighs with your hands if you need more pressure. Roll the ball for 2- 5 minutes. It is best to do this on carpet to keep the ball from slipping away. Also it is helpful to have more than one ball ready while you exercise. If the ball rolls out from under your foot do not attempt to lean down and catch it, if you have balance problems this could lead you to a fall.

2. To start with visual feedback only, sit down and place the goggles over your eyes and attach the control unit to your pants or belt. Make sure the waist band is tight fitting and not lose which disrupts the feedback system. Take a few moments to get accustomed to the image of the tiles as they appear in front of you. Notice what you can see above and below the goggles. Focus on the horizon, **the tiles should be floating in front of you and not on the ground.**

### 3. Standing and Walking Posture:

Let your feet have a wide base of support. Focus on the horizon keeping your chin parallel to the floor.

4. Begin walking slowly and **imagine** that you are stepping on top of the tiles you see floating out in front of you. This is a very different sensation and may take a few sessions to get used to, know this is to be expected. Go Slowly, take your time. You do not need to be precise, you can also step on the lines in between the tiles. Find a walking pace that is comfortable to you and work from here.

\* If the tiles do not move with your step or seem to be moving too slowly this is the feedback system at work. Come to a complete stop and start again. **Tell yourself to land with your heel striking down first - a deliberate heel strike will move the tiles.**

\* If you take a bad step Stop-Breathe-and Start again. Take your time.

### 5. Turning Safely:

Practice using a wide U turn.

Continue to step on top of the tiles as you turn.

Never cross one leg over the other.



## Advanced Level Exercises

These exercises invite you to add more focus to your sessions. They will help you gain even step size, improve balance and posture. Also, by thinking about what you are doing the

brain bypasses the area damaged by the dis-ease. However, as you attempt a new exercise begin slowly , be gentle with your self and relax into the learning process.

### 1. *Toe lift / Heel strike*

Decide which foot you will start with.

<p>If it is your right foot- focus on the right tile on the bottom of the screen.</p> <p><b>Lift your toes first</b> and place the heel of the right foot down with a deliberate action/strike onto the tile.</p> <p>Now let the toes roll down and through the step.</p>	
<p>If it is your left foot, focus on the left tile on the bottom of the screen.</p> <p><b>Lift your toes first</b> and place the heel of the left foot down with a deliberate action/ strike onto the tile.</p> <p>Now let your toes roll through the step.</p>	

**\*\*** Lifting the toes before you make another move is the most important action to master. Not only will it improve your walking and heel strike, it can also help you get out of a frozen moment as it releases muscle spasm and reduces the fear of falling.

### 2. *Same Colored Tile-*

Repeat the toe/heel exercise above and add on stepping on the same colored tiles. You will continue stepping on top of the same color tile with each foot. **Imagine** that you are taking your next step on top of this colored tile. The floor will move towards you. The same color tile will be in front of your other foot. Continue walking on top of the tiles at a normal pace.

If you change your gait, you will receive immediate visual feedback from the movement of the tiles. Now walk as freely and normally as possible, trying to step on the tiles.

### 3. *Toes Up Through Tiles-*

Another way to practice lifting the toes. Imagine that the toes are leading the foot through the bottom of the tile that is your target. Finish your step as described above.

### 4. *Heel Down Through Tiles-*

Another way to practice heel strike. After lifting your toes through the tiles, imagine leading your foot with your heel down through the top of the tile that is your target.

#### **5. Tile Grab-**

Arm swing is an important part of a balanced gait. Imagine you are reaching out to grab the tile in front of you and pull it back behind you. This suggestion is only appropriate if you do not use a cane or a walker.

#### **6. Practice in Challenging Environments-**

It can be very beneficial to do training sessions in the environments that challenge you however take a caregiver with you for safety and support .

#### **Additional Practice Turning:**

If you have trouble turning use the following practice routine:

If you want to turn to the left: Take a step with your right foot on top of the right tile at the bottom of the screen. Once your body weight is shifted to your right leg, you may turn your body to the left and step with your left foot on top of the left tile.

Turning to the right, start out by stepping with your left foot on top of the left tile at the bottom of the screen. With your body weight on top of your left leg, you may turn your body to the right and step with your right foot on top of the right tile.

**Remember, when you want to turn, start by stepping with the opposite foot from the direction you want to turn to.**

#### **Auditory Feedback**

The auditory feedback will sound a click with every heel strike. You will also receive feedback to unbalanced movements. The object of the exercise is to focus on producing a good steady rhythm of clicks. Producing a good rhythm is a learning process bringing an improvement to your walking which lasts after the practice.

When you hear clicks out of sync with your steps – you are getting feedback to unbalanced steps. Try walking slower and producing a good rhythm of clicks. When you are successful, you can practice at a slightly higher speed until you can produce a good rhythm and continue increasing your speed at slow increments over time as is comfortable to you.

You can combine the audio and visual feedback by inserting the ear buds hanging from the goggles into your ears.

To practice with audio feedback only – disconnect the cable connecting the goggles (**G**) to the control unit by carefully pulling the connector from the wide slot. Connect the separate headphones to the headphone jack on the control unit (**D**).

Use knob (**A**) to control the volume. A clockwise turn will increase the volume while a counter-clockwise turn will decrease the volume.

## Handling your GaitAid Virtual Walker

### Recharging the GaitAid Device

The rechargeable batteries will allow 6-7 hours of use. The recharge time is 4 hours. The device will stop charging automatically when batteries are fully charged. You may use non rechargeable AA batteries or another kind of recharge-ables but do not attempt to use the recharger for non rechargeable batteries.

To recharge batteries, turn the device off by turning knob **(A)** counter-clockwise until you feel a click. Connect the wall unit to an electric socket and the other end to the control unit at **(E)**. An orange light **(G)** illuminate when charging. When batteries are full, the light will turn off.

**If the blue light **(G)** flashes or display goes blank** - When power is low, the blue light **(G)** will flash and display through glasses may go blank even though the unit is still functioning. It is possible to continue to use the device with audio feedback only at this stage. In order to use the visual feedback you will need to recharge the batteries again.

### Tips for comfortable viewing

While wearing the viewer, adjust its position until you can see the entire video image clearly. The position and angle of the viewer relative to your eyes are important for proper viewing. When the viewer is properly positioned, the video image should be in full view and free of distortion.

### Nose pads

You can make adjustments to the viewer's position by widening or narrowing the nose pad using gentle squeezing (see Figure 1). Three different sized nose pads (small, medium and large) are provided which allow for further height adjustments in order to obtain a personalized, more comfortable fit (see Figure 2, also see "Changing the nose pad"). The GaitAid is shipped with the medium-sized nose pad installed.



Figure 1



Figure 2

### Changing the nose pad

Hold the viewer with the front pointing away from you. Place both of your thumbs on top of the nose pad and support the bottom of the viewer with your fingers (see Figure 3). Using your thumbs, press the nose pad straight down firmly to disengage it from the viewer. To reinstall a nose pad, support the viewer with one hand (see Figure 4). Using the index finger of your other hand, align the nose pad with the slot in the viewer. Press the nose pad up into the slot until it snaps into place.

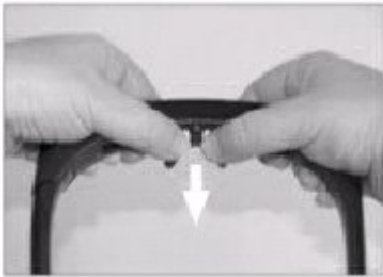


Figure 3

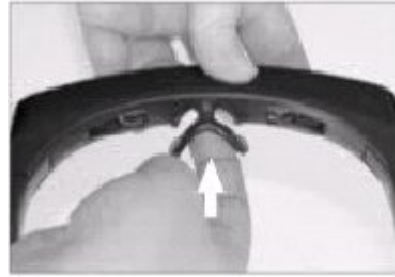


Figure 4

### **Ear buds and ear bud pads**

Cover the ear buds with the protective ear bud pads. Three different size ear bud pads (small, medium and large) are provided; the GaitAid ships with medium size attached (see Figure 5). Choose a pad size that fits comfortably in your ear. Insert the ear buds into your ears (see Figure 6). *Cleaning pads and buds- wipe with alcohol.*



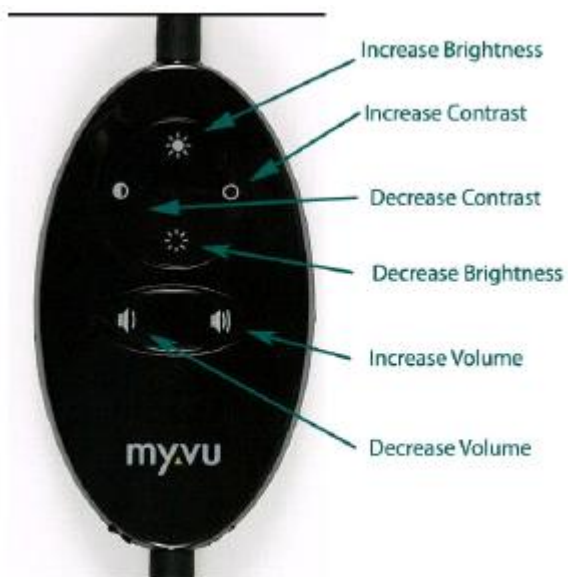
Figure 5



Figure 6

### **Using the remote control halfway along the cable between the viewer and the control unit to adjust contrast, brightness and volume**

In addition to controlling the volume with the knob on the control unit, you can control the sound volume by using the volume controls on the remote control. The remote control also allows you to control image contrast and brightness by holding down the appropriate button on the remote control. You can return the brightness and contrast settings to the factory default settings at any time by pressing the volume-up and volume-down buttons simultaneously. Figure 7 shows the button functions and layout on the remote control.



**Figure 7**

Figure 7

**Warning:** Use care when handling the cables. Avoid kinks and knotting of the cables as careless handling can result in permanent damage to the cables. Do not use the cables as lanyards or for other purposes.

The GaitAid Virtual Walker is durable, but not indestructible.

Handle with care as you would other portable electronics.

Do not place the device on or near hot surfaces such as heaters, stove top or electrical components. Do not leave this product inside an automobile on a hot or cold day. Do not immerse the device in liquids.

Do not disassemble or attempt to repair or modify this product.

### **Surface Cleaning**

The viewer may be wiped with a clean, soft cotton cloth, or lens cloth.

The ear buds may be removed from the goggles and cleaned with alcohol. If sharing unit with others, make sure to clean ear buds thoroughly or use different earphones attached separately.

**Warning:** Do not use alcohol or other solvents to clean the viewer.

### **Troubleshooting**

#### **No image and no sound**

- Make sure that the GaitAid is fully charged. If the GaitAid battery is low, use the AC adapter to charge your GaitAid.

- Make sure the viewer connector is seated properly into the connector port on the bottom of the control unit.

### **Hearing a HUM in the Ear Buds**

- Turn the volume down on the remote cable and then turn the volume up on the unit box.

### **Tiles Do Not Move with Each Step or Move too Slowly**

- Make sure the unit is clipped to pants with a firm fitting waistband. Loose fitting pants such as sweat pants can interfere with the feedback system. When the control unit is firmly attached you will receive feedback telling you that some steps are not solidly hitting the ground or are uneven. Reduce your walking speed and make sure to be deliberate with your heel strike in every step.

### **Blue Light Flashing**

- Batteries need to be recharged

### **Video image is not bright enough**

- Make sure the viewer connector is seated properly into the connector port on the bottom of the control unit.
- Reset the brightness and contrast levels to their factory default values by pressing and holding the Volume-Up and Volume-Down buttons simultaneously.

### **Video image is fuzzy or out of focus**

The viewer has a focal distance that is preset at the factory. There is no focus adjustment. If you cannot see the image clearly, you may need to wear a corrective lens with your viewer.

This is likely if you

normally have to wear prescription glasses to use a laptop computer or to watch television. A clip-on prescription lens, the Rx Clip-on, is available for the viewer (see note on prescription eyeglasses below).

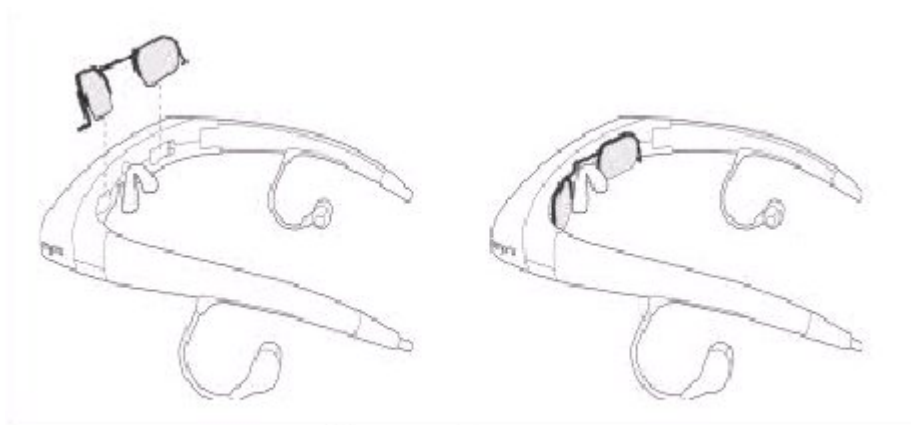
### **Weak or nonexistent audio**

Verify that all connectors are properly attached. Adjust the volume turning the volume knob (A).

### **A note to individuals who wear prescription eyeglasses**

The viewer will not fit over larger sizes of eyeglasses. Whether or not you will need to use your eyeglasses with the GaitAid system depends on the degree of correction that you require. For those who cannot fit the viewer over their current eye wear yet desire ophthalmic correction, a clip-on lens is available. The Rx Clip-on is customized to your prescription and attaches easily to the viewer (see Figure 8). This corrective lens can be ordered by contacting Medi Gait.

The corrective lens only corrects the image of the tiles and does not provide correction for seeing the real world.



**Figure 8**

Figure 8

**Technical support**

Telephone: 888.777.9906

Fax: 888.777.9906

e-mail: [support@medigait.com](mailto:support@medigait.com)

[www.medigait.com](http://www.medigait.com)

**Specifications**

Operating temperature: .....32 to 104°F (0 to 40°C)

Storage temperature: .....-4 to 140°F (-20 to 60°C)

**Limited Warranty**

Medi Gait LTD (MediGait) warrants this product against defects in material or workmanship as follows:

**PRODUCT:** MediGait will repair this product with new or refurbished parts, free of charge, for a period of one (1) year from the date of original purchase in the event of a defect in materials or workmanship.

**REPAIRS:** MediGait will repair or replace defective parts used in the repair or replacement of this product with new or refurbished parts, free of charge, for a period equal to the remainder of the original limited warranty period on the original product, or for 60 days after the date of the repair or replacement, whichever is longer.

This warranty is extended only to the original purchaser. To obtain warranty service, you must take this product, or deliver the product freight prepaid, in either its original packaging or packaging affording an equal degree of protection, to MediGait. See below for additional information.

This warranty only covers failures due to defects in materials and workmanship, which occur during normal use. The warranty does not cover damages which occurred in shipment, cosmetic damage, damage that is attributable to acts of God, failures which are caused by products not supplied by the warrantor, or failures which result from accident, misuse, abuse, neglect, mishandling, faulty installation, misapplication, improper installation, operation or maintenance,

alteration, modification, introduction of sand, humidity or liquids, line power surge, improper voltage supply, lightning damage, or subjecting the product to operating/environmental conditions in excess of the maximum values or below the minimum values set forth in the applicable specifications, or products serviced by anyone other than Medi Gait LTD .

This warranty excludes consumable parts such as batteries and power supplies.

This warranty is valid only in the United States.

THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED ABOVE. REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE PURCHASER. MEDIGAIT SHALL NOT BE LIABLE FOR LOST PROFITS, LOST SALES, LOSS OF USE OF THE PRODUCT, OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND TITLE, ARE LIMITED TO THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE.

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SELLER SHALL HAVE NO LIABILITY FOR ANY CLAIM, LOSS, DAMAGE OR EXPENSE OF ANY KIND, INCLUDING FOR LOST PROFITS, SPECIAL, INDIRECT, CONSEQUENTIAL, EXEMPLARY OR INCIDENTAL DAMAGES, WITH RESPECT TO THE SELECTION, QUALITY, CONDITION, MERCHANTABILITY, SUITABILITY, FITNESS, OPERATION, PERFORMANCE, OR THE USE, MAINTENANCE OR REPAIR OF THE PRODUCTS EVEN IF SELLER OR BUYER HAS BEEN ADVISED OF THE POSSIBILITY THEREOF. THE PRICE STATED HEREIN WAS ARRIVED AT IN CONSIDERATION FOR LIMITING SELLERS WARRANTIES AND LIABILITY AS PROVIDED HEREIN.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you.

This warranty gives you specific legal rights and you may also have other rights, which vary from state to state.

If a problem with this product develops during or after the warranty period, please contact: technical support at Medi Gait LTD at the address provided on the preceding page of this manual.

**Warning: The GaitAid Virtual Walker is a feedback device which improves balance, walking and reduces freezing and shuffling gait. It is not intended to be used as a support device such as a cane or walker and does not prevent falling.**