

# **Agility Knee**

## **User Manual**

(Draft)

## A Revolution In Motion

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#### FCC ID XXX12345

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference. and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Freedom Innovations is responsible for radio frequency compliance. Changes to any portion of the wireless system not expressly approved by Freedom Innovation could void the user's authority to operate the equipment.

This product complies with FCC radiation exposure limits set forth for an uncontrolled environment

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### **Wireless Operation**

#### FCC ID XXX12345

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The Agility Knee uses a wireless link for configuration. This allows wireless configuration of the Agility's computer system for a particular user. Wireless operation is only required when settings must be changed. This is NOT required during normal daily operation. Once configured the Agility is fully functional without a wireless link connection.

The Agility Knee communicates over a wireless link with a PC running the Microsoft Windows XP operating system. Future support may include other operating systems and Windows CE (Personal Digital Assistants) based systems. The wireless system is fully configured and there are no user adjustments available for wireless control.

The wireless system uses the 2.4MHz frequency band and is compatible with remote Bluetooth<sup>TM</sup> devices. The PC based software uses the Microsoft operating system for wireless communication. It is not compatible with non-Microsoft drivers or with devices requiring installation of non-Microsoft drivers. The system has been tested with the Belkin<sup>TM</sup> Bluetooth<sup>TM</sup> USB adaptor F8T001 version 2.11 and later. This device is a class one Bluetooth device. It is available at many well stocked electronics stores as well as through web retailers. Other adaptors may work but operation is not guaranteed and technical support for other adaptors is not provided at this time.

Wireless operation is initiated by insertion of the battery into the Agility Knee. The user can verify that the processor started and that the wireless link is active by observing the flashing sequence on the LED located on the right inside of the Agility. This LED will flash three times on start up. Two quick flashes followed by one longer flash. At this point the Agility wireless link is ready for connection

from the PC using the Agility control and configuration software.

To conserve battery power the wireless link listens for a connection for five minutes. If no connection is found the wireless link is shut down. Once a connection is established, the wireless link remains active for the duration of the connection. Once the connection is terminated, the Agility will again listen for five minutes. If no connection is established, the wireless link powers down. The wireless link can be restarted by removing and reinserting the battery. This begins a new five minute wait for connection sequence.

The wireless system is disabled after five minutes without connection from PC based software. This conserves battery power and assures that the wireless link is not active in most situations. This provides both conservation of battery power and security for the user.

#### Connection Establishment

Use the following to establish wireless connection to the Agility.

- 1. Insert the battery into the agility
- Start the Agility control program
  Click on the control programs search button

- 4. Select the desired Agility knee from the knees found.
- 5. Click on the connect button.

#### Notes:

- 1. Normally only a single Agility will be found. More than one Agility may be found particularly in clinical situations. The desired knee can be confirmed by the serial number in the drop down selection list. The wireless range of the Agility depends on the environment. It may operate up to 100 meters. Typical operation, however, is limited to approximately 10-20 meters.
- 2. The control program may be started before or after battery insertion.
- The search button may need to be clicked more than once to find a particular Agility. This occurs more often on the first connection attempt involving a particular pc and a particular Agility.
- The range for initial connection may be less than the operational range. If the Agility is not found, try moving it closer to the PC's antenna.
- Connection may fail on the first attempt. If it does simply click the connect button a second time. If this does not resolve the problem, move the Agility closer to the PC's

6. The blue green led will be on anytime an active connection exists to the Agility. This can be used to verify connection particularly in multiple knee environments.