



SmartTools Smart Cuffs BFRT System User Manual

[Home](#) » [SmartTools](#) » SmartTools Smart Cuffs BFRT System User Manual 

Contents

- 1 SmartTools Smart Cuffs BFRT System
- 2 DISCLAIMER
 - 2.1 SAFETY INSTRUCTIONS & CONTRAINDICATIONS
- 3 SPECIFICATIONS
- 4 APPLYING THE SMARTCUFFS
 - 4.1 APPLYING THE ARM CUFF
 - 4.2 APPLYING THE LEG CUFF
- 5 USAGE INSTRUCTIONS
 - 5.1 DEVICE OPERATION
 - 5.2 CHARGING
 - 5.3 UPDATE FIRMWARE
 - 5.4 CLEANING, MAINTENANCE AND STORAGE
- 6 EXERCISE RECOMMENDATION
 - 6.1 STRENGTH AND HYPERTROPHY
 - 6.2 THREE WHOLE BODY EXERCISES
 - 6.3 AEROBIC CONDITIONING
- 7 PRODUCT WARRANTY
- 8 COMMON MISTAKES/TROUBLESHOOTING
- 9 Documents / Resources
- 10 Related Posts



SmartTools Smart Cuffs BFRT System



DISCLAIMER

WARNING

- Do not remove screws or attempt to disassemble.
- Do not charge unattended.
- Do not immerse in water and keep away from any liquids.
- Unplug the charger once desired charge is reached prior to use. Do not use product while charging.
- **Never apply SmartCuffs to all four limbs at the same time.**
- For adult use only. Consult your doctor before using this product.

SAFETY INSTRUCTIONS & CONTRAINDICATIONS

DANGER: To reduce risks of electric shock, fire, and personal injury, this product must be used in accordance with the following.

- As with any new exercise program/device, consult your physician prior to use of this product. Especially if you have any of the following conditions: History of Deep Vein Thrombosis (DVT), Pregnancy, Varicose Veins, High Blood Pressure, Cardiac Disease, or Lymphedema.
- For adult use only.
- Use as instructed within this User Manual.
- If any pain, numbness or tightness/discomfort that exceeds a 7/10 is experienced, stop using immediately.
- Dizziness and tingling in the hands, fingers or feet and toes is not normal. If you experience dizziness, numbness or tingling attempt to reduce the pressure in 10mmHg intervals until symptoms disappear. If symptoms persist, **stop using immediately**.
- Never leave the SmartCuffs unit operating or charging unattended.
- Never apply SmartCuffs to all four limbs at the same time.
- Do not drop or misuse the SmartCuffs device.
- Do not tamper or alter the SmartCuffs device.
- Do not immerse in water.
- Examine the SmartCuffs device prior to each use.

- Only recharge with supplied charger.

SPECIFICATIONS

SmartCuffs Device



SmartCuff and SmartCuffs Device



SmartCuff



1. Up/home button (press once for up, press and hold for home)
2. Enteron button
3. Down button
4. Power on/off button
5. LED screen
6. Connection coupler
7. Micro USB charging port

8. Hose
9. D-ring
10. Valve protector
11. O-ring (black rubber piece)
12. Air release port

APPLYING THE SMARTCUFFS

APPLYING THE ARM CUFF



1. Apply cuff with the logo readable with valve on the outside of arm. Push the strap of the cuff through plastic D-ring (#9). Apply as tight as possible to the upper arm. The bottom flap of the cuff should slide under the top part of the cuff.
2. Attach the coupler (#6) by pushing down on the metal pin. You should hear a click. If no click is heard, the pin is already in position. Attach coupler into valve. A click will be heard.
3. You are ready to begin to operate the SmartCuffs device.

* To release air from the cuff in case of emergency, press down on the Air Release Port (#12) without covering the port entirely (or else you will block the escaping air). If this does not work, simply take the cuff off by releasing from the Velcro.

For more detailed information, videos, and instruction, download our SmartCuffs® Academy app on the Apple App Store or Google Play Store.

APPLYING THE LEG CUFF



1. Apply cuff with the logo readable with valve on the outside of leg. Push the strap of the cuff through plastic D-ring (#9). Apply as tight as possible to the upper leg. The bottom flap of the cuff should slide under the top part of the cuff.
2. Attach the coupler (#6) by pushing down on the metal pin. You should hear a click. If no click is heard, the pin is already in position. Attach coupler into valve. A click will be heard.
3. You are ready to begin to operate the SmartCuffs device.

* To release air from the cuff in case of emergency, press down on the Air Release Port (#12) without covering the port entirely (or else you will block the escaping air). If this does not work, simply take the cuff off by releasing from the Velcro.

USAGE INSTRUCTIONS

DEVICE OPERATION

1. With your SmartCuff(s) applied to desired limb(s), press <Enter/Power On> button (#2).
2. Press <Start Exercise> or <Update Settings>.
In Update Settings, you can <Choose Language>, <Factory Reset> or <Update Firmware>. For help updating firmware, see the Update Firmware section on the following page.
3. After Pressing <Start Exercise>, Choose the exercising limb: <Arm> or <Leg>.
4. Choose Intensity Level <Low>, <Medium>, or <High>. *The higher the intensity level, the higher the personalized pressure.
5. For the first session, the device will establish your baseline pressure. For subsequent uses, it will ask you to either: 1) Repeat Pressure 2) Recalculate Pressure.
6. Once the pressure is set, the unit will prompt you to "Disconnect Hose and Begin Exercise".

7. Disconnect the hose by pressing down on the metal clip attached to the Coupler (#5). If you are exercising two limbs, attached hose to non-inflated cuff and press <Repeat Pressure>.
8. Begin exercise.
9. Once exercise is completed, deflate the SmartCuff(s) by reattaching hose to the SmartCuff(s) and press <Start New Session>.
10. Turn off device by pressing the <Power> button (#4).

CHARGING

- To ensure battery longevity, fully charge for 6–8 hours before first use.
- To charge, connect the Micro USB end into the charging port (#6) and plug-in the USB side of the charging cable into the supplied adapter. Plug adapter into wall outlet.
- Battery meter will be in the top right-hand corner of each screen once turned on.
- Battery can be recharged at any time.
- Not recommended to deplete the battery.

TIP: For efficiency, charge battery when the battery meter shows 2 bars.

UPDATE FIRMWARE

Follow the on-screen instructions. This initial process is done easiest using a mobile phone. NEVER exit screen or power off while updating new firmware.

1. Press <Update Settings> on home screen.
2. Choose <Update Firmware>
3. Open mobile phone Wi-Fi settings and connect to the Wi-Fi Access Point displayed on the SmartCuffs device.
4. On your phone, navigate to <http://10.1.1.1>
5. Provide Wi-Fi credentials when prompted on your phone and click submit.
6. SmartCuffs device will then connect and update automatically.

CLEANING, MAINTENANCE AND STORAGE

SmartCuffs Device

- Use slightly damp towel or alcohol to clean the SmartCuffs device and dry with soft cloth.
- DO NOT hand wash the SmartCuffs device.
- Store in a cool dry place.

SmartCuffs

- Use alcohol spray or wipes to clean the SmartCuffs. You can also hand wash the SmartCuffs with cold soap and water and hang dry. DO NOT put in dryer.
- Store in a cool dry place.

EXERCISE RECOMMENDATION

STRENGTH AND HYPERTROPHY

Establish the ability to perform 30 repetitions of an exercise PRIOR to applying occlusion. This will equate to about 20% of your 1RM to start. See Appendix 1 for establishing your 1RM estimate. You do not want to exercise to failure (inability to complete all repetitions).

THREE WHOLE BODY EXERCISES

- **HIP HINGE OR SQUAT VARIATION**

(i.e. Deadlift or Barbell Squat)

- **UPPER BODY PUSH**

(i.e. Benchpress)

- **UPPER BODY PULL**

(i.e. Lat Pulldown)

- **TWO ISOLATED EXERCISES**

(i.e. Bicep curl, Tricep pushdown, Hamstring curl, Quad Extension)

A SET OF BFR EXERCISES IS PERFORMED BY:

- **PERFORMING 30 REPETITIONS** (not to failure!). This should not be too difficult to complete.
- Resting for 30-60 seconds
- **PERFORMING 15 REPETITIONS** (not to failure!). This should be a little difficult.
- Resting for 30-60 seconds
- **PERFORMING 15 REPETITIONS** (not to failure!). This should be a little more difficult.
- Resting for 30-60 seconds
- **PERFORMING 15 REPETITIONS** (not to failure!). This should be very difficult.
- Go to next exercise (i.e. resting for 30-60 seconds)

AEROBIC CONDITIONING

Establish your Heart Rate Reserve (HRR)

Work on treadmill, rower, bike, stair stepper, etc. at 30% HRR to start and increase intensity by 10% each week. More fit individuals can start at 45% of HRR will need to increase the intensity by 10% each week (up to 60% HRR).

20 minutes maximum cuff inflation is recommended for safe training.

PRODUCT WARRANTY

SmartCuffs device, cuffs, accessories and other attachments are a Limited One-Year Warranty.

The SmartCuffs device,

cuffs, accessories, and other attachments are warranted by Smart Tools Plus, LLC, an Ohio corporation ("SmartTools"), against manufacturing defects in material and workmanship for a period of one year from the date of purchase from SmartTools. In the event of any such defect occurring during the warranty period, SmartTools will, at its option, (a) correct the defect by repair or by replacement of the applicable part or component that fails as a result of such defect, without charge for parts and labor; or (b) replace the device with one of the same or then current design.

The foregoing warranties do not cover normal wear and tear or cosmetic damage, and are void if the device and/or the attachments and other accessories (collectively, the "product") are not used in accordance with the

user manual, are otherwise misused or modified in any way, and/or are repaired or altered by anyone other than an authorized service representative of SmartTools. These warranties expressly exclude transportation, shipping or insurance costs, or defects, damages, or failure resulting from misuse, abuse, improper or abnormal usage, or neglect.

All replaced parts and products become the property of SmartTools. New or reconditioned parts and products may be used in the performance of warranty service. Repaired or replaced parts and products are warranted for the remainder of the original warranty period only. You will be charged for repair or replacement of parts and products made after the expiration of the applicable warranty period.

COMMON MISTAKES/TROUBLESHOOTING

SIZING	If you are on the border of two sizes, choose the smaller size otherwise the pressure will not be enough to occlude. Make sure the cuff is fitting tightly around the limb to ensure proper Personalized Pressure calculation.
APPLICATION	Make sure the bottom flap slides under the top portion of the cuff.
VALVE	Always press the metal button down when applying or removing the valve from the stem.
CONNECTION	Ensure you hear a click when you attach the coupler to valve. If you have trouble connecting, the black O-ring might be dried out. If this is the case, apply a small amount of Vaseline to the O-ring and reconnect.
EXERCISE	Exercises are meant to be sub-maximal. Ensure one can perform each exercise for the pre-determined number of reps prior to using the cuffs.
COMPRESSION SCALE	Discomfort or tightness should NEVER exceed a 7–8/10. If the compression scale exceeds a 7–8/10, press the stem to release air until the pressure reduces below a 7–8/10.
ABRUPT SHUT OFF	If the unit shuts down unexpectedly, check the battery level. If the battery level is 1 bar or shows the “!” icon, the unit does not have enough power to complete what was requested. Plug into charger and charge to 2 or bars.
ERROR DURING INFLATION	Check to make sure the cuffs are fitting properly and that the air bladder is fully enclosing the limb. Make sure you are sliding the bottom flap of the cuff underneath the top flap. Also, be sure to remain still throughout the UOP calculation. Any movement will disrupt the pressure sensor and cause an error. Finally, if you are consistently getting errors in the standing or seated position, try laying on your back and retry UOP calculation.

smarttoolsplus.com



[SmartTools Smart Cuffs BFRT System](#) [pdf] User Manual
Smart Cuffs, BFRT System, Smart Cuffs BFRT System