

NeuroTrac® Simplex

QUICK START INSTRUCTION

(Please read the Operator's Manual prior to use!)

1. Remove battery cover. Insert 1 x 9 volt PP3 battery or a rechargeable Nickel Metal Hydride battery into the battery compartment. Replace the cover.
2. Insert the dual-conductor (channel) lead wire into the socket of the unit labelled as INPUT. For a precise EMG measurement, ALWAYS! Use the reference wire: attach one skin electrode to a black single leadwire (reference wire) and plug the reference wire to the EMG REF socket.
3. **If you use Simplex with Vaginal or Rectal** electrode probe, remove the probe from the package and follow the probe labelling. Connect the Vaginal or Rectal electrode to each of the pin connectors at the end of the lead wire. The red and black polarity are good either way. Some probes have a long wire built-in, with a direct socket to the unit.
4. Make sure the Vaginal or Rectal electrode is clean before use.
5. Insert the Vaginal or Rectal electrode using KY jelly or any other water-based lube (not mandatory).

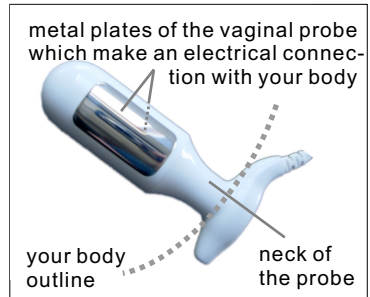
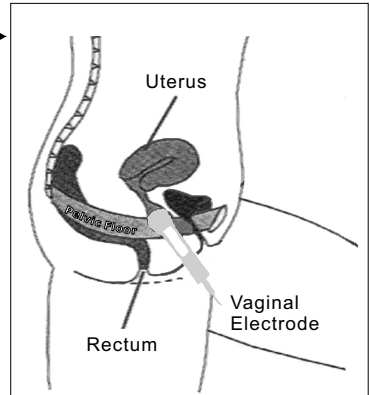
A typical vaginal electrode placement diagram: Don't insert too deep, the neck of the probe should be just inside the vagina, the metal plates of the probe should be fully inserted.

6. **For Skin electrodes placement**, make sure your skin around the treatment area is free from grease or oil.
7. Carefully peel the electrodes from the clear plastic film. Do not throw this clear plastic film away.

8. Attach the electrodes to your body. Place negative Black-pin near the upper insertion or top of the muscle. Positive Red-pin must be placed at the motor point of the muscle. The motor point is usually located at the center of the muscle mass where the motor nerve enters the muscle. Find the best position by slightly moving the positive electrode around. Your objective is to find the spot where the minimum muscle contraction will cause the greater EMG response.

9. Turn on the unit by pressing the **ON/OFF** button once.

10. Set up the Threshold level by pressing THRS+/- buttons, the value will be displayed on the top left of the display in microvolts (μV). The threshold scales the bargraph and sets the level above which you should contract and below which you should relax. This Level point is indicated as an arrow pointer, under the word "Simplex". The threshold should be set in such way that when you relax, the bargraph light goes down, when you contract, the bargraph light goes above the threshold pointer.



11. **Relaxation test:** You should be able to achieve the EMG reading of below 4 μV , ideally below 2 μV . Remember to use REF wire! If you think you are relaxed properly but the reading is too high and does not go down, please check troubleshooting section below to make sure the device is out of interference and properly connected.
12. **Biofeedback Training:** By pressing the Start button you start the training. The device prompts you to contract and relax, repeated several times. When you hear double beep and the arrow pointing up on the display - contract as soon as you can and keep muscles contracted. When you hear single-beep and the arrow pointing down - relax as quick as you can and keep relaxed until the next double-beep. The sound volume you can change by pressing the SET button and then adjusting the volume by +/- buttons.

Carefully clean Vaginal or Rectal electrode before and after use. Wash the probe gently in mild soapy water, rinse and make sure the probe is completely dry before returning to storage in the plastic bag.

For further information, please refer to Operator's Manual.

WARNINGS, IMPORTANT SAFETY INFORMATION

1. Do not immerse the unit in **water** or any other substance.
2. Do not use (unless medically advised) vaginal probe during **pregnancy** as any probe application without care may lead to possible infection issues.
3. **Probes and lead wires** are for **single patient** use only.
4. Always use the **reference** (REF) electrode for the precise EMG reading!

TIPS & TROUBLESHOOTING

If you experience problems with EMG readings we recommend you make the following checks.

1. The EMG reading becomes unstable, when the **reference REF** wire is not used.
2. **Check the lead wires** for splits or breaks in the wire or at the end, where the connectors are attached to the wire. Try another lead wire.
3. **Check the electrodes.** Try another pair of skin surface electrodes or another probe. Inferior surface electrodes may cause incorrect readings, we recommend you always use quality electrodes for EMG measurement.
4. **Exclude external interference.** The unit is properly shielded against typical electromagnetic interference, nevertheless the less magnetic fields around the better for EMG precision. Keep the unit in hands or even better place it on the thigh of the person receiving the treatment. Avoid placement on tables or other surfaces on which any other electrical devices are placed. If you use a laptop, make sure the mains power plug is earthed (have 3 not 2 pins). It is a good idea to replace the charger with the safer earthed model. Try to disconnect AC adaptor from mains and observe if your reading goes several μV reading down just because of this. If so, it's better to run the laptop on batteries while you use the EMG device. Finally, you may want to go to the areas with less power equipment to check if the device reading is getting lower when it is not connected to your body (ideally, less then 1.5 μV). Avoid areas with high electromagnetic fields.
5. If you are using Vaginal or Rectal probes, we recommend the patient uses conductive Gel for lubrication and better conductivity, as recommended by the Physiotherapist or Doctor.