

# BIOWAVEHOME

## quick reference for Biowave Noninvasive Electrodes

There are 4 buttons that control the device:

1. Power ON/OFF button
2. PLUS (+) button to increase intensity
3. MINUS (-) button to decrease intensity
4. PAUSE button to pause the treatment



Designed to Block Pain  
at the Source™

# BioWave Noninvasive Electrodes

The BioWave HOME Pain Therapy System can be used with the following BioWave Noninvasive Electrodes:

## B-Set For Pain in Two Locations

2 round equal size electrodes (2" diameter). Electrodes may be placed:

- over 2 locations of pain
- over the source of pain and the most proximal location of pain relative to the source
- one inch apart from one another to treat a large area of pain



## E-Set For Pain in a Single Location \*Extremities\*

1 small round electrode (1.375" diameter) for the primary pain site on extremities; and

1 rectangular dispersive electrode (2" x 4") to be placed over a bony prominence (a comfortable location to receive stimulation).  
Used for:

- single locations of pain in the knees, ankles, feet, toes, neck, shoulders, elbows, wrists, hands and fingers



## **U-Set** For Pain in a Single Location • Mid-torso •

**1 round electrode (2" diameter) for the primary pain site in the mid-torso region; and**

**1 large rectangular dispersive electrode (5" x 8") to be placed horizontally across the lower back (a comfortable location to receive stimulation). Used for:**

- **single locations of pain in the mid-torso region including, pain in the ribs, obliques, hips, buttocks, groin, adductors, abductors, gluteus maximus, hamstrings and quadriceps**



BioWaveHOME may be used with BioWave Percutaneous Electrodes as well. For protocols and placement instructions involving BioWave Percutaneous Electrodes, see the BioWaveHOME User's Manual and BioWavePENS Quick Reference Guide.

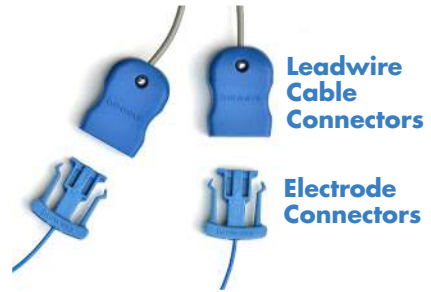
See following pages for noninvasive electrode placement examples.

**Warning: Electrodes must not touch each other.**

## Directions For Use

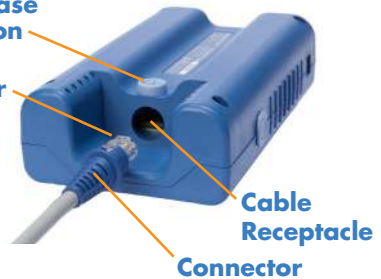
1. Clean your skin with a damp washcloth in the location the electrodes are to be placed.
2. Plug ELECTRODE CONNECTORS into blue LEADWIRE CABLE CONNECTORS. Either electrode can be attached to either blue leadwire cable connector.
3. Place electrodes on body. At least one ROUND electrode must be placed over the pain site. See and follow Electrode Placement Examples inside.
4. Orient LEVER on cable CONNECTOR so it is aligned with its mating keyhole inside the CABLE RECEPTACLE in the device. GENTLY slide cable CONNECTOR into CABLE RECEPTACLE so it clicks in place.
5. Press Power Button to turn unit on. Start up screen should read 0.0%.
6. Start treatment by pressing the PLUS (+) button.
7. Continue to press the PLUS (+) button throughout the treatment so that a steady strong but comfortable tingling and pressure sensation is felt under the electrode(s) covering the pain site(s).
8. Unit turns off automatically at end of 30-minute treatment.
9. Plug AC Charger into AC RECEPTACLE and other end into a standard wall outlet to recharge the battery. Unit provides up to 4 treatments on a single charge.

See User's Manual for detailed instructions.



Cable Release Button

Lever



PLUS Button

Power Button

AC Receptacle



## Electrode Placement Rationale

BiowaveHOME electrode placements are different from conventional electrical stimulation. The mixing of the proprietary therapeutic signals occurs in a 2.5 – 3 inch hemisphere (half of a sphere) beneath and surrounding each electrode, not along the surface of the skin between the electrodes. As a result, electrodes need to be placed directly over specific locations of pain, or one electrode over a single location of pain and the second over a comfortable location to receive stimulation - typically over a bony prominence near the treatment site.

Electrical signals can be focused to different parts of the body by pairing electrodes of different sizes with one another.

## Body Position During Treatment

Position of the body during the treatment is important. **Generally, the tissue being treated should be a little taut or in a stretch position.** Generally, sitting in a supported position in a chair, couch or bed is best for most treatment locations on the body. See User's Manual for more detailed information on optimal Body Position for different treatment locations.

## Motion During Treatment

The sensation from the treatment is a deep smooth tingling and pressure sensation as the muscle is held in tension in the volume of tissue being treated. Motion may cause a stronger or weaker sensation and will cause the location of the internal electrical field to shift slightly. Shifting of the electrical field is most prevalent when treating shoulders, elbows, wrists, hands, fingers and feet.

**B-Set: Two Locations of Pain**  
or one large area of pain. Two equal area 2" diameter round Pain Site Electrodes.

**E-Set: Single Location of Pain on Extremities.** One 1.375" diameter round Pain Site Electrode; One 2" x 4" rectangular Dispersive Electrode placed in a comfortable location (over a bony prominence).

**U-Set: Single Location of Pain in the Mid-Torso Area.** One 2" diameter round Pain Site Electrode; One 5" x 8" large rectangular Dispersive Electrode placed in a comfortable location (horizontally across the low back).

For Biowave Percutaneous Electrodes, see BiowavePENS Quick Reference Guide for placement instructions.

**The goal is to gently move the joint at the treatment location to shift the sensation caused by the electrical field so that it focuses directly onto and encompasses the primary location of pain. This is a fine tuning of the treatment that will provide the best treatment result.**

# Treatment Regimen Protocols

## Intensity Settings

Patients should increase the intensity based on sensation (not an intensity number) to a level that is strong but still comfortable. The body adapts to the electrical field very quickly over the first 2 - 5 minutes and then less so over the remainder of the 30-minute treatment. As a light numbness forms in the volume of tissue beneath each electrode and the sensation diminishes, continue to increase the intensity level with individual presses of the PLUS (+) button.

### Typical intensity ranges are as follows:

- Knees, ankles, feet: 60% - 90%
- Low and mid back, shoulders: 40% - 60%
- Neck, elbow, wrist: 30% - 50%

Generally, patients should try to reach a minimum intensity level of 30%. Some patients may tolerate more, some less.

## Pain Management

- One 30-minute treatment per day or on an as needed basis.
- May be used up to 4X per day if necessary. Each 30-minute treatment should be separated by 1 to 3 hours. Multiple treatments may provide a cumulative benefit.

BiowaveHOME is complimentary with heat or cold therapy. Use a towel or another barrier between the electrodes and a heating pad or ice.

## Athletic Training/Sports

- Three 30-minute treatments separated by 2-3 hours: immediately before practice or a game, immediately after practice or a game, and time permitting 2-3 hours later.

## Physical Therapy

- Use tape or wrap over the electrodes to help hold them in place.
- Begin a static treatment for 10 minutes to allow the effect of the electrical field to take place.
- After 10 minutes, decrease intensity by 5 - 10% to take the edge off of the sensation.
- Begin range of motion, exercise or stretching therapy *during remainder of treatment* to significantly increase range of motion with less pain and facilitate exercise therapy. You can move more resistance through a greater range of motion with less pain and because of long lasting residual pain relief, there may be little post exercise soreness.

## End of Treatment

Place noninvasive reusable electrodes back on blue release liner and store in resealable bag. Leadwire cable may be wrapped over the front and then around the stimulator.

To remove the leadwire cable, first lie the stimulator face down on a hard surface. Press firmly on the cable release button on the back of the stimulator and while holding it down, gently pull the connector straight out of its socket.

A full charge on the battery will provide up to four 30-minute treatments.

# Electrode Placement Examples

## Electrodes Must Never Touch Each Other:

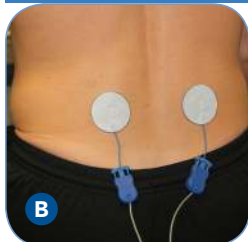
- **1.0 inch is the minimum spacing between electrodes on the back.**
- **0.5 inches is the minimum spacing between electrodes on extremities.**
- **There is NO maximum spacing between any electrodes.**

The following section shows photos of electrode placement examples ONLY for noninvasive electrodes.

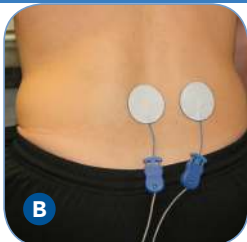
For PERCUTANEOUS ELECTRODE PLACEMENTS, contact your physician, see the BiowavePENS Quick Reference Guide or call technical support:

1-877-BIOWAVE ext 1 (1-877-246-9283 ext 1)

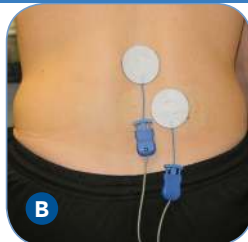
## Low Back



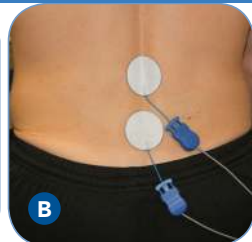
Equal Back Pain in 2 Locations  
(e.g. Bilateral Low Back Pain)



Low Back Pain on One Side of Spine  
(e.g. Unilateral Pain)

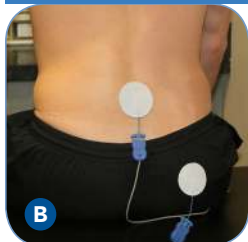


Low Back Pain Focused Over a Facet Joint

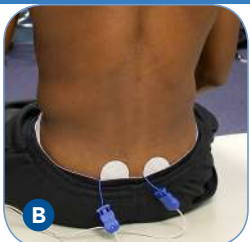


Low Back Pain Focused Over the Spine

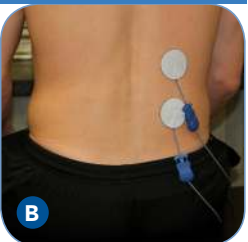
## Low Back



Radiating Back Pain - One Pad Over Origin of Pain, One Pad Over First Pain Site (Pads Must be on Skin)



Sacroiliac (SI) Joint Pain; Pain from Interstitial Cystitis



Back Pain Over Large Area  
(e.g. Rotational Strain)



Hip Pain in One Location

**B** B-Set

2 Locations of Pain

**E** E-Set

1 Location of Pain

**U** U-Set

1 Location of Pain

**WARNING: Electrodes must not touch each other.**

# Electrode Placement Examples (continued)

## Ribs/Obliques



Rib or Oblique Pain  
in One Location

## Groin

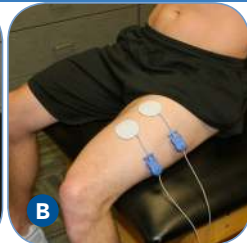


Groin Pain in One Location

## Quadriceps



Quadriceps Pain  
in One Location

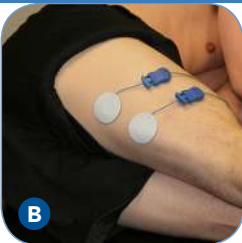


Quadriceps Pain  
Over Large Area

## Hamstrings

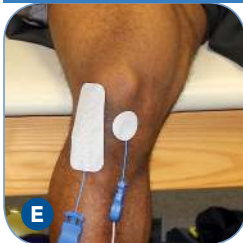


Hamstring Pain  
in One Location



Hamstring Pain  
Over Large Area

## Knees



Central Knee Pain  
(e.g. ACL Sprain)



Pain in Inside of Knee  
(e.g. Bursitis, OA, MCL Sprain)

## Knees



Pain Above Knee  
(e.g. Quadriceps Tendinitis)



Pain Below Kneecap  
(e.g. Patellar Tendinitis)



Pain Throughout Entire Knee  
(e.g. OA or Total Knee  
Replacement)



Pain in Outside of Knee  
(e.g. Bursitis, OA, LCL Sprain)

**B B-Set**

2 Locations of Pain

**E E-Set**

1 Location of Pain

**U U-Set**

1 Location of Pain

**WARNING: Electrodes must not touch each other.**



## Knees

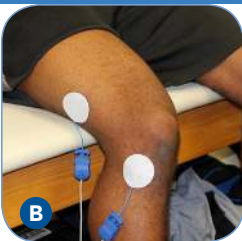


Pain in Back Side of Knee  
(e.g. PCL Sprain)

## Illiotal (IT) Band



Pain in Illiotal (IT) Band  
in One Location



Pain in Illiotal (IT) Band  
in Two Locations

## Shins



Pain in Shin Over Large Area

## Calves



Calf Pain in One Location  
(e.g. Gastrocnemius Strain)



Calf Pain - Round Pad is Over  
Pain Site, Rectangular Pad is  
Angled Across Knee

## Ankles and Feet



Foot or Ankle Pain  
in Two Locations



Lateral Low Ankle or Foot Pain  
in One Location

## Ankles and Feet



Medial Low Ankle or Foot Pain  
in One Location



Plantar Fasciitis



Achilles Tendinitis (Primary  
Pain in Achilles Tendon)



Achilles Tendinitis  
(Primary Pain in Heel)

**B B-Set**

2 Locations of Pain

**E E-Set**

1 Location of Pain

**U U-Set**

1 Location of Pain

**WARNING: Electrodes must not touch each other.**

# Electrode Placement Examples (continued)

## Ankles, Feet and Toes



Foot Pain Beneath Ankle on Outside of Heel



Pain in Top of Foot (e.g. Metatarsal or Neuroma Pain)



Pain in Toe Joint (e.g. Turf Toe or Phalange Pain)

## Neck



Neck or Cervical Pain in One Location

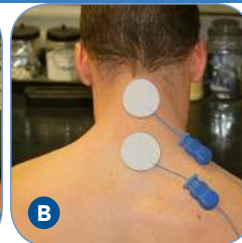
## Neck



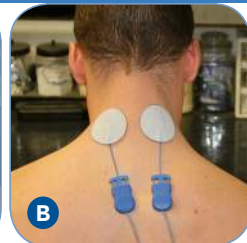
Neck or Cervical Pain with Secondary Radiating Pain



Neck or Cervical Pain in 2 Locations



Neck or Cervical Pain in Multiple Discs

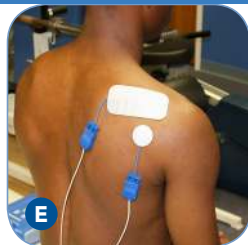


Bilateral Neck or Cervical Pain

## Shoulders



Pain in Front of Shoulder (e.g. Biceps Tendinitis)



Pain in Back of Shoulder (e.g. Infraspinatus Strain)



Pain in Edge of Shoulder (e.g. Rotator Cuff Tendinitis)



Trapezius Pain in One Location (under small round pad)

**B B-Set**

2 Locations of Pain

**E E-Set**

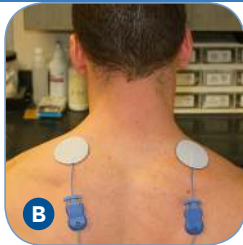
1 Location of Pain

**U U-Set**

1 Location of Pain

**WARNING: Electrodes must not touch each other.**

## Shoulders



Pain at Top or Throughout Shoulder (e.g. AC Sprain or Frozen Shoulder)

Equal Shoulder Pain in Two Locations or Frozen Shoulder

Equal Trap Pain in 2 Locations (e.g. Bilateral Trapezius Pain)

Pain in Outside of Elbow (e.g. Lateral Epicondylitis)

## Elbows



Pain in Inside of Elbow (e.g. Medial Epicondylitis)

Pain Behind Elbow (e.g. Triceps Tendinitis)

Pain in Back of Wrist (e.g. Sprains, Strains, Tendinosis)

Pain in Front of Wrist (e.g. Sprains, Strains, Tendinosis)

## Wrists, Hands and Fingers



Thumb Pain (e.g. Thumb or UCL Sprain)

Pain in Finger Joints (e.g. Metacarpal Phalangeal Joints)

Pain in Back of Wrist For Small Diameter Wrists (Small round pad is placed over pain site; Rectangular Pad is placed along front of wrist)

Pain in Front of Wrist For Small Diameter Wrists (Small round pad is placed over pain site; Rectangular Pad is placed along back of wrist)

**B B-Set**  
2 Locations of Pain

**E E-Set**  
1 Location of Pain

**U U-Set**  
1 Location of Pain

**WARNING: Electrodes must not touch each other.**



# BIOWAVEHOME

## Need help?

- 1-877-BIOWAVE x1
- [support@biowave.com](mailto:support@biowave.com)
- [biowave.com](http://biowave.com)

**BIOWAVE**

Manufactured by  
BioWave Corporation  
Norwalk, CT

©2015-2018 BioWave Corporation

MADE IN  
**USA**



Device must only be  
used with power  
supply provided.

See User's Manual for  
more information

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