Troubleshooting

Using the Tester

The Tester is used in place of the Thigh Cloth Electrodes and can help to troubleshoot if there is a disconnection in the Thigh Cuff and the EPG. The Tester provides audio feedback when connected to the Thigh Cuff and EPG and stimulation is applied using the Bioness Clinician Programmer, EPG, Foot Sensor, or Control Unit. See Figure 13-1.

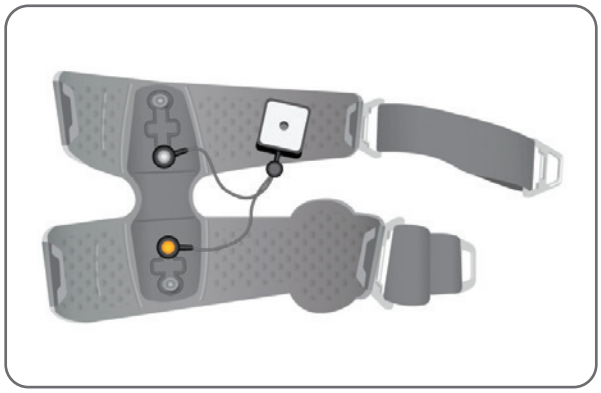

Figure 13-1: Tester Connected to Thigh Cuff

Error Code Descriptions

When an error occurs with the L360 Thigh System the EPG will emit an audio alert and the Status Indicator Light on the EPG will display a flashing red light. The Control Unit LCD display will show a flashing Error Indicator icon and a flashing Numeric Indicator communicating the error code. Refer to Table 13-1 for the error code descriptions and solutions.

Control Unit and Bioness Clinician Application Error Codes		
Error Code	**Description of Error**	**Solution**
E1	Overstimulation Fault	Stimulation is being delivered at a higher intensity than expected. This is a possible hardware issue. Stop using the L360 Thigh System and contact Bioness.
E2	Overstimulation Fault	Stimulation is being delivered at a higher frequency than expected. This is a possible hardware issue. Stop using the L360 Thigh System and contact Bioness.
E3	Understimulation Fault	Stimulation is being delivered at a lower intensity than expected. This is a possible hardware issue. Stop using the L360 Thigh System and contact Bioness.
E4	Understimulation Fault	Stimulation is being delivered at a lower frequency than expected. This is a possible hardware issue. Stop using the L360 Thigh System and contact Bioness.

Control Unit and Bioness Clinician Application Error Codes		
Error Code	**Description of Error**	**Solution**
E5	Charge Imbalance	This is a possible hardware issue. Stop using the L360 Thigh System and contact Bioness.
E6	Communication Fault	The Foot Sensor and EPG are not communicating. Press the Foot Sensor pressure sensor to activate the Foot Sensor.
E7, E8, E9	Software Fault	Reset the EPG. If error persists, stop using the L360 Thigh System and contact Bioness.
E10	Parameter Corrupted	The L360 Thigh System needs to be reprogrammed. Stop using the L360 Thigh System and contact Bioness.
E11, E22	Incorrect Cuff Fault	Make sure EPG is correctly inserted into the EPG cradle on the Thigh Cuff.
E12	Shorted Electrode Fault	Electrodes are shorted, cuff has an electrical short, or the hardware is not functioning correctly. Stop using the L360 Thigh System and contact Bioness.
E13	Bad Electrode Fault	Electrodes are worn or damaged. Replace any worn or damaged electrodes or electrode bases. Refer to the "Maintenance and Cleaning" chapter of this guide for instructions.
E14	Open Electrode Fault	Turn the EPG off by pressing the Power button on the EPG. Make sure the electrodes and/or electrode bases are snapped into the plug holes of the Thigh Cuff.
E15	EPG Battery Empty	Charge the EPG. Refer to the "Charging the L360 Thigh System" section in this guide.
E17	EPG Battery Temperature Fault	Battery temperature is too high. Disconnect the charger from the EPG. Place the EPG in a room within the operating conditions temperature range (5°C to 40°C/41°F to 104°F) for 30 minutes. After 30 minutes reconnect the EPG to the charger to continue charging.

Table 13-1: Control Unit and Bioness Clinician Application Error Codes

Frequently Asked Questions

If you have any questions or concerns, please contact the Bioness Client Support Department at 800-211-9136, Option 3 (USA & Canada) or your local distributor. You may also visit www.bionessrehab.com.

When charging the EPG, how will I know when the batteries are fully charged?

The Battery Indicator Light on the EPG will display a solid green light, briefly at power up, when the EPG battery is fully charged. Charging takes approximately three hours. If the EPG is completely discharged it can take up to six hours for the EPG battery to charge.

If I charge the EPG every day, will I harm the batteries?

No, daily charging will not affect the lifespan or functionality of the EPG battery. Daily charging of the EPG is recommended.

How will I know when the EPG battery charge level is low?

The Battery Indicator Light on the EPG will display a solid yellow light and the Status Indicator Light will flash red. When the battery is near empty the EPG will emit an audible alarm in addition to the low battery lights until it is completely discharged or connected to a power source..

How will I know when the Foot Sensor battery charge level is low?

A Foot Sensor battery will last for approximately six months, and then it will need to be replaced. When the Foot Sensor battery charge level is low, the red Indicator Light on the Foot Sensor will flash for five seconds.

What do I do if the electrodes or electrode bases are frayed, peeling, damaged, or falling off the Thigh Cuff?

Replace any worn or damaged electrodes or electrode bases. Refer to the "Maintenance and Cleaning" chapter in this guide.

How come the patient's knee is not moving satisfactorily, and the L360 Thigh System is not indicating any errors?

- Make sure the EPG(s) is turned off.
- Reposition the Thigh Cuff.
- Make sure the straps are snug.
- Turn on the EPG by pressing the Power button on the EPG.
- Test the placement of the Thigh Cuff by pressing and holding the Stim button on the EPG for at least five seconds. The EPG will deliver stimulation until the Stim button is released.

Why is the stimulation inconsistent when the patient is walking, but the L360 Thigh System is not indicating any errors?

Have the patient stop walking and shift their weight from side to side.

For patients using the Foot Sensor:

- Check for proper placement of the pressure sensor, reposition the pressure sensor slightly forward

in their shoe, or loosen the shoelace.

- Check the Foot Sensor wire for wear or fraying, and check the transmitter and pressure sensor for damage.
- If damaged contact Bioness for a replacement part.

What should I do if the patient's skin is irritated or has a skin reaction where the electrodes or Thigh Cuff adheres?

Have the patient stop using the L360 Thigh System immediately and contact Bioness. The patient should resume use only when the skin is completely healed. Give patients the L360 Thigh System Skin Care Guidelines and a skin conditioning protocol.

How can I verify that current is flowing through the L360 Thigh System?

Connect the Tester to the Thigh Cuff. The Tester will buzz when stimulation intensity is at least 10 mA.

What else can I use the Tester for?

The Tester can be used as an educational tool, to demonstrate when stimulation is on in the various stimulation modes.