# CLINICIAN'S Cast Application Guide B



# **Incorporation of Transducer Holder into Cast**

- 1. Physician to determine location of fracture site. Mark an "X" on the cast and on the skin if the cast is not already applied.
- 2. Place felt pad on cast. Remove round plug and ensure the "X" is the centre of the hole. Trace outline of the square felt pad on the cast.



3. Remove the marked area with a cast saw. The cast padding and stockinette are then cut to show the skin underneath.



4. Insert the felt pad into the cast window. You may need to remove some layers of the square felt pad to ensure the pad is the same thickness as the cast, and if necessary cut to fit hole.



5. Place Transducer holder over fracture site and felt pad. As per picture incorporate into cast using a roll of cast tape. Ensure cat tape goes over corners of Transducer holder to secure.



6. Open Transducer holder by pushing two turquoise tabs on either side of transducer holder towards centre.



7. Hold Transducer and place a small amount of Transducer gel on the Transducer face. Approximately 1.5cm diameter.



8. Position the Transducer in the window of the cast directly over the fracture site.



Ultrasound gel must be touching the skin. Close cap to secure.



9. Press ON/OFF button once to begin treatment. Timer will illuminate and count down from 20 minutes and then turn off automatically.



10. Remove Transducer head from treatment site. Clean gel from Transducer head, strap and skin with a soft cloth.



11. Place the round felt plug into the cast window and close cap to secure.





#### MELMAK COMPONENTS **ULTRASOUND GEL** 250 gram bottle. Gel must be applied to ultrasound Transducer head prior to all treatment to enable ultrasound signal to **MINI USB CONNECTOR** pass from Transducer through skin to the for battery charging & PC communications fracture site. Only use Gel supplied by your (for administrators only) local Melmak Distributor. ASSEMBLED TRANSDUCER HOLDER & STRAP Used to position ultrasound Transducer over LCD SCREEN fracture site ON / OFF FELT Push button ACCESSORIES For cast application **DISPLAY STATISTICS MELMAK DESKTOP SOFTWARE CD** Push button (for clinician use only) Newak Patient / Device Management PC-based Program ULTRASOUND **USB CABLE** TRANSDUCER Used for charging Melmak Device via PC or for connection to PC for set up or data logging. Length 1m. (Consider references to USB cable & charging via PC). **BATTERY CHARGER** (including adaptors) USB Cable is used for charging the internal non-replaceable battery of the Melmak Device. Length 1.8m. For international use LENGTH 1.5m multiple adaptors are supplied. **INSTRUCTIONS FOR USE MANUAL** Operation instructions

#### I. Indications and Intended Use

The Melmak Device is indicated for the treatment of fresh bone-fractures and established non-unions excluding treatment of the skull and the vertebral column. The location and type of fracture will influence results.

This non-invasive treatment can only be prescribed by a Physician or other Health Professional.

#### II. Safety Instructions

The Melmak Device is intended for non-invasive use only, and should only be used as prescribed by a Physician or other Health Professional for it's intended use.

The Operating Guide must be followed accurately. The Melmak Device is to be used only with Melmak specified and supplied equipment and not in combination with other devices.

For external use only.

The Melmak Device is to be operated and stored under dry conditions.

For any queries please contact your local Melmak Distributor.

### III. Rechargeable Battery & USB Connection

The Melmak Device Control Unit is powered by a non-replaceable, rechargeable Lithium-Ion (Li-On) battery pack. A medical grade battery charger with inbuilt USB connector is used to charge the internal battery. Country specific adaptor must be used.

The USB mini connector on the top edge of the Melmak Device is used for charging and for connection to a PC for data logging.

All functions of the Melmak Device will be disabled if the device

is not charged. The voltage level of the battery pack is constantly monitored by the Control Unit while operating and the voltage level is displayed on the LCD.

When the battery voltage falls below the critical battery level during a treatment session, in addition to flashing, the LCD will also show "Lo~bdt" signal. When the "Lo~bdt" signal is present, the current treatment will be completed but further treatments will not be possible until the Melmak Device is recharged.

During the charging process, the LCD will show the letter "P" and the animated battery symbol will be displayed.

During the charging process, the Melmak Device cannot be operated.

### IV. Patient/Device Management PC-based Program

Melmak Device administrators have access to a proprietary PC-based Patient/Device Management program used to upload and download information to and from the Melmak Control Unit.

The minimum system requirements are:

- Operating System: Microsoft Windows XP/Vista/7 operating system
- 1GB of RAM
- 500MB of hard drive space
- Screen Resolution of 1280 x 1024
- Keyboard and mouse
- Unoccupied USB port

## PLEASE REFER TO CLINICIAN'S MANUAL FOR FULL OPERATING CARE / INSTRUCTIONS