

microTargeting™ Controller Firmware ver. 2.20

Directions For Use

L011-59 (Rev. A2, December 2013)



www.fh-co.com



FHC, Inc.
1201 Main Street
Bowdoin, ME 04287 USA
Fax +1-207-666-8292
www.fh-co.com



FHC Europe
(TERMOBIT PROD srl)
42A Barbu Vacarescu Str, 3rd Fl
Bucharest 020281 Sector 2
Romania

FHC Latin America
Calle 6 Sur Cra 43 A-200
Edificio LUGO Oficina 1406
Medellín-Colombia



24 hour technical service:
1-800-326-2905 (US & Can)
+1-207-666-8190

microTargeting™ Controller Firmware ver. 2.20

Directions For Use

Product Feature:

microTargeting™ Controller firmware version 2.20 enables users to advance the electrode drive in fixed steps by setting predefined step sizes. Firmware version 2.20 incorporates product features of previous firmware releases, such as the ability to use an initial offset (version 2.14). Use of the fixed step advancing or initial offset features are voluntary - if the functions are not engaged, the functionality of the microTargeting™ Controller remains unchanged.



WARNING: see the microTargeting™ Drive Accessories User Guide

For Example:

The user would like to start a track 20 mm above target, and advance the electrode in 0.5 mm increments. To do this, advance the drive to 20 mm above target (drive reads 10 mm, since by default target is at 30 mm on the drive). Using HyperTerminal or similar, type "O10000". Zero the Controller by pressing the small black button on its front panel. The Controller will read -20 mm. Next, to set a step size of 0.5 mm, type "SS500" in HyperTerminal. This will set the next stop point 0.5 mm from the current position. Now, turn the remote knob clockwise (to "Advance") to advance the electrode. As the drive approaches -19.5 mm, the drive will decelerate and stop at -19.5 mm. Release the knob on the remote (return to "Zero"), and turn the knob clockwise again to resume advancing.

Use of this feature:

To use the serial interface of the microTargeting™ Controller to set an initial offset:

- Open HyperTerminal or similar
- Type "O" (offset) followed by a number to enter an initial offset, with the number corresponding to the size of the initial offset. Remember that the default starting depth is 30 mm above target. For example, to start at 20 mm above target, type "O10000" to enter a 10 mm initial offset.
- Enter "O" and press "Enter" to query the Controller for the current value for the initial offset.
- Entering an initial offset larger than the drive limit will cause the Controller to return an error message.
- Press the auto-retract button once (the small black button on the Controller remote) to return the drive to the initial offset depth. Press the auto-retract button a second time to return the drive to the theoretical zero point.
- The initial offset value is reset to zero every time the Controller power is cycled.

To use the serial interface of the microTargeting™ Controller to set a step size:

- Type "SSXXX", where XXXX is a number in microns, to set the depth of the next stop point measured from the drive zero point. For example, with the drive zeroed 30 mm above target, type "SS15500" and press enter to set a stop point at 14.5 mm above target.
- If the step size is greater than the drive limit depth, the microTargeting™ Controller will return an error message.
- Enter a step size of 0 to disable stop points.

With the step size set to a value greater than 100 um, turn the knob on the remote clockwise ("Advance"). The drive will advance and automatically decelerate and stop at the preset stop point. Release the knob (return to "Zero") and then turn the knob clockwise again to resume advancing the drive.

Fixed step advancing does not apply when the drive is retracting.

Refer to "66-EL-MS: microTargeting™ Display / Controller Addendum" (A989-07), included with the microTargeting™ Controller shipment, for additional usage instructions and serial commands.