Short Instructions HandyStep® electronic[1]

BRANDTECH SCIENTIFIC, INC.

See reverse side for troubleshooting

Operating elements

1	Display
2	∇∆-keys (-/+)
3	ENTER key
4	MENU selection key
5	Battery compartment lid
6	STEP key
7	Locking lever

piston at lowest position

Display

a	Tip capacity/Step volume
b	Tip/Number of steps
c	Battery status
d	Volume unit
e	Function
f	Speed
g	Aspirating
h	Dispensing
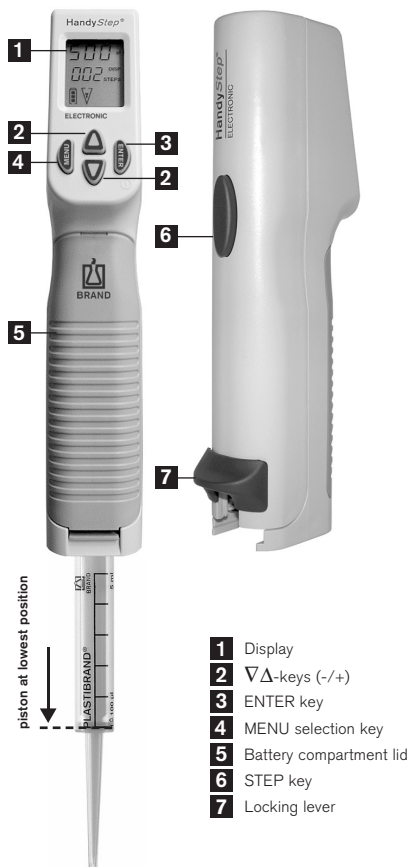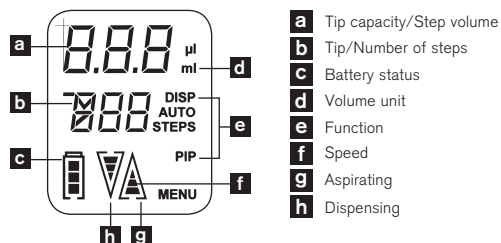
Mounting PD-Tip™ or other standard-sized syringe tip

1. Ensure locking lever is in fully upright position.
2. Slide tip in completely sideways.
3. Slide locking lever down completely.
4. If the display shows a flashing volume, the tip is not encoded for volume. Use ▲▼ to scroll to the correct tip volume. Confirm tip volume by pressing ENTER.

Warning:
Never try to remove tip when piston is not completely lowered.

Removing tip from instrument

1. Press ▼ until **E** appears in the display.
2. Push the **STEP** key. Pipette should empty, and piston will be in fully lowered position.
3. Lift the locking lever and slide the tip out.

Navigating the menus:
HandyStep® electronic uses a two-tier menu system for easy navigation. To activate the second tier, press and hold the **ENTER** key for more than 3 seconds.

First Tier Menus
Adjusting volume

1. Press **MENU** once
2. Use ▲▼ to adjust the desired volume
3. Press **ENTER** to confirm setting

Auto-dispensing mode

1. Press **MENU** twice
2. Use ▲▼ to turn **AUTO-DISP** mode on or off
3. Press **ENTER** to confirm setting

Second Tier Menus
Selecting Aspiration Dispensing speed

1. Press and hold **MENU** for greater than 3 seconds
2. Use ▲▼ to adjust aspiration speed
3. Press **ENTER** to confirm setting
4. Use ▲▼ to adjust dispensing speed
5. Press **ENTER** to confirm setting

Selecting Pipetting/ Dispensing mode

1. Press and hold **MENU** for greater than three seconds. Release, then tap once.
2. Use ▲▼ to select **PIP** or **DISP** mode.
3. Press **ENTER** to confirm.

[1] For quick reference only. Read Operating Manual completely before use. For more complete instructions, consult your Operating Manual.

Troubleshooting and Quick Reference for HandyStep® electronic

BRANDTECH
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For comprehensive instructions, see Operating Manual!
See other side for Short Instructions.

General Overview of Error Codes

Err Tip	Tip alignment error
Err 001	Tip insertion/removal error
Err 002	HandyStep® electronic motor under excessive strain
Err 003 and higher	Instrument electronic malfunction

Problem	Cause	Corrective action	How to prevent
Slow motor/ faint display	Low battery	Charge or change battery	—
Media drips from tip/ aspirates bubbles	Leaky tip	Change tip	—
Instrument displays **Err Tip**	Usually as a consequence of not clearing an Err 001 properly	1. Press **ENTER** key 2. Open locking lever 3. Remove tip 4. Close locking lever	Follow "How to clear Err 001" below
Instrument displays **Err 001**	Opening of locking lever when piston not in fully lowered position	1. Press **ENTER** key 2. Close locking lever 3. Push **STEP** key	Ensure piston is in lowest position before lifting locking lever
Instrument displays **Err 002**	Obstruction of tip orifice while aspirating or dispensing	1. Clear obstruction 2. Press **ENTER** key 3. Push **STEP** key	Keep tip orifice clear
Instrument displays **Err 002** (cont.)	Media is too viscous		Reduce speed of instrument, or use less viscous media
Instrument displays **Err 003** or higher	Software malfunction	1. Press **ENTER** key 2. Push **STEP** key 3. If error does not clear, remove battery, wait for about 10 sec., and replace	—
Instrument displays **Err 003** or higher (cont.)	Hardware malfunction	—	If error does not clear call BrandTech Customer Service
Instrument displays **ErrVol**	▲ key pressed while dispensing	1. Press **ENTER** key 2. Push **STEP** key	Don't press ▲ while dispensing
Instrument displays **ACC** when placed in charging dock	Battery missing from instrument	Insert battery	—
Charge indicator is flashing	Battery recently removed. Charge level indicator may be inaccurate	Charge battery inside the instrument for at least 3.5 hours	Only remove battery as required