

### PhD Ultra Quick Reference Card

Operation	Procedure
Turn on	Press Mode.
Turn off	Press and hold Mode until display says "release."
Auto Cal	Turn PhD Ultra on. Take to fresh air. Press Mode 3 times to enter "Auto Cal Mode." Press Mode to do Auto-Zero. When complete press Mode to do Auto Span. Attach calibration adaptor. Apply span gas. Remove fittings when Auto Cal complete.
Use hand aspirated sample draw kit	Attach sample draw kit to instrument. Hold finger over end of probe. Squeeze bulb. Bulb should stay deflated until finger removed. Allow one squeeze of bulb for every one foot of sample hose.
Use continuous sample pump	Slip pump onto instrument. Pump should run as long as the instrument is turned on. <b>Test for leakage before every use.</b> Hold finger over end of probe. Pump should shut down. Remove finger and reset pump by pressing Mode. Allow one additional second for each foot of hose.

February 17, 1999 v.2.0 P/N 13-041

biosystems

## PhD Ultra Advanced Features Guide

Operation	Procedure
<b>Change operating mode</b>	Simultaneously press “+” and “-” to change mode. LCD will identify new mode.
<b>Add user name / location from list in memory</b>	Press “+” while in normal operation, then press “-” to see names in memory. Use “+” and “-” keys to scroll through list. Press “alarm” to make choice. Use same procedure to choose location.
<b>Add new user name / location</b>	Press “+” while in normal operation, then press “+” again to add new user ID. Use “+” and “-” keys to scroll through list of characters. Use Mode to choose the high-lighted character. Move cursor to “*” and press Mode when finished. Use same procedure to add new location.
<b>Review session data</b>	Make sure PhD Ultra is in Technician mode. Turn PhD Ultra on while holding down “-” key. Press “+” then press “Cal” to view data. Use “+” and “-” to move to new session.

February 17, 1999 v.2.0 P/N 13-041

biosystems