



Adventurer™ Balances Instruction Manual



TABLE OF CONTENTS

1. INTRODUCTION	3
1.1 Description	3
1.2 Features	3
1.3 Definition of Signal Warnings and Symbols	3
1.4 Safety Precautions	3
2. INSTALLATION	4
2.1 Unpacking	4
2.2 Selecting the Location	4
2.3 Leveling the Equipment.....	4
2.4 Connecting Power	5
2.5 Connecting the Interface	5
2.6 Initial Calibration.....	5
3. OPERATION	6
3.1 Overview of Display, Home Screen	6
3.2 Principal Functions and Main Menu	7
3.3 Overview of Parts and Features – Draft Shield Models	8
3.4 Overview of Parts and Features – Non Draft Shield Models	8
4. APPLICATIONS	9
4.1 Weighing	9
4.1.1 Item Settings	10
4.1.2 Sample Name.....	11
4.1.3 Save to USB.....	11
4.2 Parts Counting.....	11
4.2.1 Item Settings	12
4.3 Percent Weighing	14
4.3.1 Item Settings	14
4.4 Dynamic Weighing	15
4.4.1 Item Settings	15
4.5 Density Determination	16
4.5.1 Measuring the Density of a Solid Using Water (default)	16
4.5.2 Measuring the Density of a Buoyant Material Using Water	17
4.5.3 Measuring the Density of a Solid Using an Auxiliary Liquid.....	17
4.5.4 Measuring the Density of a liquid using a Calibrated Sinker (not supplied).....	18
4.5.5 Measuring the Density of Porous Material Using Oil	19
4.6 Check Weighing	22
4.6.1 Item Settings	22
4.7 Display Hold	23
4.7.1 Display Hold	23
4.7.2 Peak Hold	23
4.7.3 Item Settings	24
4.8 Totalization	24
4.9 Formulation	25
4.9.1 Item Settings	25
4.10 Additional Features	26
4.10.1 Weigh Below	26
5. MENU SETTINGS	27
5.1 Menu Navigation	27
5.1.1 Changing Settings	28
5.2 Calibration	29
5.2.1 Calibration sub-menu (InCal models).....	29
5.2.2 Internal Calibration	29
5.2.3 Automatic Calibration	29
5.2.4 AutoCal™ Adjustment.....	30
5.2.5 Span Calibration.....	30
5.2.6 Linearity Calibration.....	31
5.2.7 Calibration Test	31
5.3 Balance Setup	31
5.3.1 Balance Set-up sub-menu.....	31
5.3.2 Language	31
5.3.3 User Setting.....	32

5.3.4	Filter Level	32
5.3.5	Auto Zero Tracking	32
5.3.6	Auto Tare	32
5.3.7	Graduations	32
5.3.8	Date & Time	33
5.3.9	Approved Mode	33
5.4	Weighing Units	34
5.4.1	Units Sub-menu	34
5.5	Data Maintenance	34
5.5.1	Data Maintenance sub-menu	34
5.6	Communication	35
5.6.1	Communication Sub-menu	35
5.6.2	Baud Rate	35
5.6.3	Transmission	36
5.6.4	Handshake	36
5.6.5	Print Output	36
5.6.6	Auto Print	36
5.6.7	Print Content	36
5.6.8	Feed	36
5.6.9	Format	36
5.6.10	Print Calibration Data	36
5.7	GLP and GMP Data	38
5.7.1	GLP Data Sub-menu	38
5.7.2	Header	38
5.7.3	Balance Name	38
5.7.4	User Name	38
5.7.5	Project Name	38
5.8	Factory Reset	38
5.9	Lockout	38
6.	LEGAL FOR TRADE (LFT)	39
6.1	Settings	39
6.2	Verification	39
6.3	Sealing	39
7.	PRINTING	40
7.1	Connecting, Configuring and Testing the Printer/Computer Interface	40
7.2	Output Format	40
7.3	Printout Examples	41
8.	MAINTENANCE	44
8.1	Calibration	44
8.2	Cleaning	44
8.3	Troubleshooting	44
8.4	Service Information	44
9.	TECHNICAL DATA	45
9.1	Specifications	45
9.2	Drawings and Dimensions	54
9.3	Parts and Accessories	54
9.4	Communication	55
9.4.1	Interface Commands	55
9.4.2	RS232 (DB9) Pin Connections	56
9.5	The USB Interface	56
10.	SOFTWARE UPDATES	57
11.	COMPLIANCE	58