



Defender[®] 5000 Indicators Instruction Manual



TD52XW



TD52P

TABLE OF CONTENTS

1. INTRODUCTION	5
1.1 Safety Precautions	5
1.1.1 Relay Option Safety Precautions	5
1.2 Overview of Parts and Controls	6
1.3 Control Functions.....	9
2. INSTALLATION	10
2.1 Unpacking	10
2.2 External Connections.....	10
2.2.1 Scale Base with Connector.....	10
2.2.2 RS232 interface Cable to TD52P	10
2.2.3 AC Power to TD52P	10
2.2.4 AC Power to TD52XW.....	10
2.2.5 Battery Power.....	10
2.3 Internal Connections.....	11
2.3.1 Opening the Housing	11
2.3.2 Scale Base Without Connector	11
2.3.3 RS232 Interface Cable to TD52XW	13
2.3.4 MICRO SD Card Installation.....	14
2.4 TD52XW Rear Housing Orientation	14
2.5 Mounting Bracket	14
3. SETTINGS	15
3.1 Menu Structure	15
3.2 Menu Navigation.....	18
3.3 Calibration Menu	18
3.3.1 Zero Calibration	18
3.3.2 Span Calibration	19
3.3.3 Linearity Calibration	20
3.3.4 GEO Adjustment	21
3.4 Setup Menu	22
3.4.1 Capacity Unit.....	22
3.4.2 Range	22
3.4.3 Capacity	22
3.4.4 Graduation.....	23
3.4.5 Language	23
3.4.6 Power On Zero	23
3.4.7 Power On Unit	23
3.4.8 Key Beep.....	23

3.4.9 Transaction Counter	24
3.4.10 I/O Type	24
3.4.11 Reset	24
3.5 Readout Menu	24
3.5.1 Stability	24
3.5.2 Zero Range	24
3.5.3 Filter Level	25
3.5.4 Auto Zero Tracking	25
3.5.5 Auto Dim	25
3.5.6 ScreenSaver	25
3.5.7 Auto Off	25
3.5.8 Adjust Contrast	25
3.5.9 Reset	25
3.6 Discrete I/O	26
3.7 Weighing Unit	28
3.7.1 Gram (g)	28
3.7.2 Kilogram (kg)	28
3.7.3 Pound (lb)	28
3.7.4 Ounce (oz)	28
3.7.5 Pound: Ounce (lb: oz)	28
3.7.6 Tonne (Metric Tonne)	28
3.7.7 Ton (Short Ton)	28
3.7.8 Custom Unit (c)	28
3.8 GLP/GMP Menu	29
3.8.1 Date Format	29
3.8.2 Date	29
3.8.3 Time Format	29
3.8.4 Time	29
3.8.5 Project ID	29
3.8.6 Scale ID	29
3.8.6 Reset	30
3.9 Communication	30
3.9.1 RS232/2nd RS232 Configuration	30
3.9.2 Print Setup of RS232/2nd RS232	31
3.9.3 RS485 Configuration	34
3.9.4 Ethernet Configuration	34
3.9.5 Wifi Configuration	34
3.9.6 Bluetooth Configuration	34

3.9.7 Analog Configuration	34
3.10 Maintenance Configuration	34
3.11 Lock Key Configuration	34
4. OPERATION	35
4.1 Weighing	35
4.1.1 Application Setup	35
4.1.2 Auto Tare	35
4.1.3 Accumulation	36
4.1.4 ID Input	37
4.1.5 Input/Output (I/O) Setup	37
4.2 Counting	38
4.2.1 Set the Average Piece Weight (APW)	38
4.2.2 Application Setup	39
4.2.3 Accumulation	40
4.2.4 Input/Output (I/O) Setup	40
4.3 Check	41
4.3.1 Check Weighing (default)	41
4.3.2 Check Counting	42
4.3.3 Application Setup	43
4.3.4 Input/Output (I/O) Setup	44
4.4 Percent Weighing	44
4.4.1 Establishing a Reference Weight	45
4.4.2 Application Setup	45
4.4.3 Input/Output (I/O) Setup	46
4.5 Dynamic Weighing	47
4.5.1 Application Setup	47
4.5.2 Average Time Setup	49
4.5.3 Input/Output (I/O) Setup	50
4.5 Filling	51
4.5.1 Establishing target weights	51
4.5.2 Application Setup	51
4.5.3 Input/Output (I/O) Setup	52
5. SERIAL COMMUNICATION	54
5.1 Interface Command	54
5.2 RS232 Interface	54
5.3 Connecting to a Computer	55
5.4 Connecting to a Serial Printer	55
5.5 Printouts	55