



**Defender[®] 6000 Indicators
Instruction Manual**

**Defender[®] 6000 Waagen
Bedienungsanleitung**

**Indicadores Defender[®] 6000
Manual de instrucciones**

**Manuel d'instructions sur les
indicateurs de Defender[®] 6000**

**Indicatori[®] Defender 6000
Manuale di istruzioni**

Table of Contents

1.	INTRODUCTION	3
1.1.	SAFETY PRECAUTIONS	3
1.2.	INTENDED USE	3
1.3.	OVERVIEW OF PARTS AND CONTROLS	4
1.4.	MAINBOARD	5
1.5.	CONTROL FUNCTIONS	6
2.	INSTALLATION	9
2.1	UNPACKING	9
2.2	EXTERNAL CONNECTIONS.....	9
2.2.1	Scale Base with EasyConnect™ Connector.....	9
2.2.2	Power input to i-DT61PW.....	9
2.2.3	AC Power to i-DT61XWE.....	9
2.3	INTERNAL CONNECTIONS	9
2.3.1	Opening the Housing.....	9
2.3.2	Scale Base without EasyConnect™ Connector.....	11
2.3.3	Communication Interface Cable to i-DT61PW.....	14
2.3.4	RS232 Interface Cable to i-DT61XWE.....	15
2.4	MOUNTING BRACKET.....	15
3.	OPERATION	16
3.1	TURNING THE SCALE ON/OFF.....	16
3.2	WEIGHING MODE	16
3.2.1	Enter the Mode and Start Weighing	16
3.2.2	Accumulation and Statistics	16
3.2.3	Check	17
3.2.4	Application Settings	18
3.3	COUNTING MODE	19
3.3.1	Enter the Mode	19
3.3.2	Establish an APW	19
3.3.3	Start Counting	19
3.3.4	Application Settings	19
3.4	PERCENT MODE	20
3.4.1	Enter the Mode	20
3.4.2	Establish a Reference Weight.....	20
3.4.3	Start Percent Weighing	20
3.4.4	Application Settings	20
3.5	DYNAMIC MODE.....	21
3.5.1	Enter the Mode	21
3.5.2	Start Dynamic Weighing	21
3.5.3	Application Settings	21
3.6	FILLING MODE.....	22
3.6.1	Enter the Mode	22
3.6.2	Start Filling	22
3.6.3	Resume and Pause Filling.....	22
3.6.4	Display of the Dot Matrix Screen.....	22
3.6.5	Application Settings	23
4.	MENU SETTINGS	24
4.1	MENU NAVIGATION	24
4.1.1	User Menu.....	24
4.1.2	Button Navigation.....	25
4.2	CALIBRATION MENU.....	26
4.2.1	Initial Calibration.....	26
4.2.2	Zero Calibration [ZERR].....	26
4.2.3	Span Calibration [SPAN].....	26
4.2.4	Linearity Calibration [L #?].....	27
4.2.5	GEO Adjustment [GEO].....	27
4.2.6	Calibration Test [L.E.S.E]	28

4.2.7	<i>End Cal [End]</i>	28
4.3	SETUP MENU	29
4.4	READOUT MENU	33
4.5	UNIT MENU.....	35
4.6	GLP/GMP MENU	35
4.7	COMMUNICATION	36
4.7.1	<i>RS232 Menu</i>	36
4.7.2	<i>Print Menu</i>	37
4.7.3	<i>RS485 Configuration</i>	40
4.7.4	<i>Ethernet Configuration</i>	40
4.7.5	<i>Analog Configuration</i>	40
4.8	MEMORY	40
4.8.1	<i>Memory menu (for i-DT61PW model)</i>	40
4.8.2	<i>USB memory (for i-DT61XWE model)</i>	40
4.8.3	<i>Alibi Memory (for i-DT61XWE model)</i>	41
4.9	DISCRETE I/O (FOR I-DT61XWE MODEL)	46
4.9.1	<i>I/O Type</i>	46
4.9.2	<i>Input</i>	47
4.9.3	<i>Output</i>	47
4.10	LOCK KEY CONFIGURATION	47
4.11	LIBRARY (FOR I-DT61XWE MODEL).....	48
4.12	USER (FOR I-DT61XWE MODEL).....	50
4.13	USB (FOR I-DT61XWE MODEL)	52
4.13.1	<i>USB Flash Drive</i>	52
4.13.2	<i>RFID</i>	52
4.13.3	<i>Barcode</i>	52
4.13.4	<i>Keyboard</i>	52
4.13.5	<i>Wi-Fi/Bluetooth Dongle (Optional)</i>	53
5.	LEGAL FOR TRADE	55
5.1	SETTINGS.....	55
5.2	VERIFICATION	55
5.3	SEALING	55
6.	MAINTENANCE	57
6.1	CLEANING.....	57
6.1.1	<i>Cleaning for i-DT61PW Model</i>	57
6.1.2	<i>Cleaning for i-DT61XWE Model</i>	57
6.2	TROUBLESHOOTING	58
6.3	SERVICE INFORMATION	58
7.	TECHNICAL DATA	59
7.1	SPECIFICATIONS	59
7.2	TABLE OF GEO VALUES.....	61
8.	COMPLIANCE	62
9.	APPENDICES	64
9.1	APPENDIX A.....	64
9.2	APPENDIX B	66

1. INTRODUCTION

This manual contains installation, operation and maintenance instructions for i-DT61PW and i-DT61XWE indicators. Please read it completely before installation and operation.

1.1. Safety Precautions

Definition of Signal Warnings and Symbols

Safety notes are marked with signal words and warning symbols. These show safety issues and warnings. Ignoring the safety notes may lead to personal injury, damage to the instrument, malfunctions and false results.

WARNING For a hazardous situation with medium risk, possibly resulting in severe injuries or death if not avoided.

CAUTION For a hazardous situation with low risk, resulting in damage to the device or the property or in loss of data, or minor or medium injuries if not avoided.

ATTENTION For important information about the product. May lead to equipment damage if not avoided.

NOTE For useful information about the product.

Warning Symbols



General hazard



Explosion hazard



Electrical shock hazard

Safety Precautions



CAUTION: Read all safety warnings before installing, making connections, or servicing this equipment. Failure to comply with these warnings could result in personal injury and/or property damage. Retain all instructions for future reference.

- Before connecting power, verify that the AC adapter's input voltage range and plug type are compatible with the local AC mains power supply.
- Do not position the equipment such that it is difficult to reach the power connection.
- Only connect the power cord to a compatible grounded electrical outlet.
- Make sure that the power cord does not pose a potential obstacle or tripping hazard.
- Operate the equipment only under ambient conditions specified in these instructions.
- The equipment is for indoor use only.
- Do not operate the equipment in hazardous or unstable environments.
- Do not place the equipment upside down on the platform.
- Use only approved accessories and peripherals.
- Disconnect the equipment from the power supply when cleaning.
- Service should only be performed by authorized personnel.



WARNING: Never work in an environment subject to explosion hazards! The housing of the instrument is not gas tight. (Explosion hazard due to spark formation, corrosion caused by the ingress of gases).



WARNING: Electrical shock hazards exist within the housing. The housing should only be opened by authorized and qualified personnel. Remove all power connections to the unit before opening.

1.2. Intended Use

This instrument is intended for use in light industry. It must only be used for measuring the parameters described in these operating instructions. Any other type of use and operation beyond the limits of technical specifications, without written consent from OHAUS, is considered as not intended. This instrument complies with current industry standards and the recognized safety regulations; however, it can constitute a hazard in use. If the instrument is not used according to these operating instructions, the intended protection provided by the instrument may be impaired.