

2. Specifications and Operator Interface

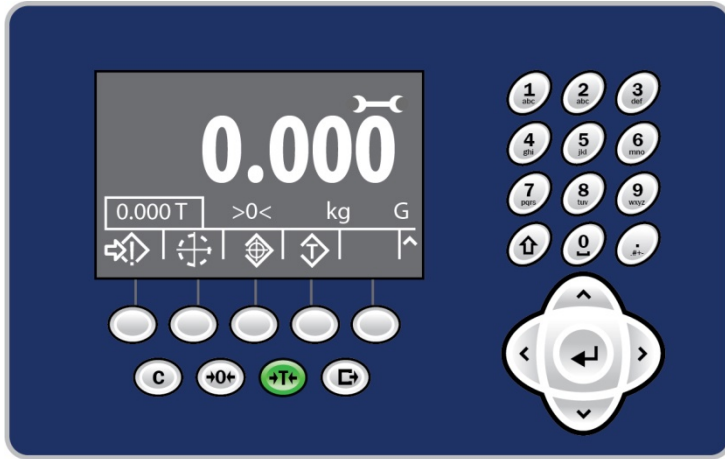
Specifications

Enclosure Types	Panel-mount: Stainless steel front panel with aluminum frame	
	Harsh environment desk/wall/column-mount: Type 304 stainless steel enclosure	
Dimensions (l × w × d)	Panel-mount: 265 mm × 160 mm × 66.5 mm / Harsh environment: 265 mm × 148.4 mm × 163 mm	
Shipping Weight	3.2 kg (7 lb)	
Environmental Protection	Panel-mount front panel sealing is UL-approved and certified to IP65	
	Harsh environment is UL-approved and certified to IP69K	
Operating Environment	All terminal types can be operated at temperatures ranging from –10° to 40° C (14° to 104° F) at 10% to 95% relative humidity non-condensing	
Hazardous Areas	Not all versions of the IND570 can be operated in areas classified as Hazardous by the National Electrical Code (NEC) because of the combustible or explosive atmospheres in those areas. Contact an authorized METTLER TOLEDO representative for information about the IND570xx model for hazardous applications.	
AC Input Power (Harsh and panel-mount models)	Operates at 100–240 VAC, 50–60 Hz, 500 mA	
	Panel-mount version provides a terminal strip for AC power connections.	
	Harsh environment version includes a power cord configured for the country of use.	
DC Input Power (Panel-mount models only; not for POWERCELL model)	Operates at 24 VDC, -15% - +20%, 1.25A	
	Panel-mount version provides a terminal strip for DC power connections	
	24VDC input power option not available on the harsh models	
Scale Types & Update Rates	<p>Analog load cells, up to Twelve 350-ohm load cells (2 or 3 mV/V). Update rate > 366 Hz.</p> <p>or</p> <p>IDNet High-Precision Line (+12V versions only, including T-Brick cell, M-Cell, Point-ADC). Update rate determined by IDNet base.</p> <p>or</p> <p>SICSpro High-precision platforms that include Advanced Setup Mode, PBK9/PFK9 non-hazardous area and Category 3/Division 2 bases (MPGI load cells), update rate ~50Hz</p> <p>or</p> <p>Up to 14 POWERCELL load cells for IND570, and up to 6 POWERCELL load cells for IND570xx. Update rate selectable up to 50 Hz.</p> <p>or</p> <p>Single PowerDeck platform. Update rate selectable up to 50 Hz.</p>	
Analog Load Cell	Excitation voltage: 10 VDC. Minimum sensitivity: 0.1 microvolts	
Interface and Function Update Rates (max)	Analog bases	Weight display: 10 Hz Internal discrete I/O: 50 Hz External discrete I/O (ARM100): 25 Hz PLC cyclic data: 25 Hz SICS continuous (SIR): 20 Hz MT Continuous Output: 20 Hz Continuous Template (serial): 20 Hz (19.2-115.2Kbaud), 14 Hz (9600 baud) Continuous Template (Eprint): 10 Hz
	IDNet terminal versions	Weight display: 10 Hz Internal discrete I/O: 20 Hz External discrete I/O (ARM100): 20 Hz PLC cyclic data: 20 Hz SICS continuous (SIR): 20 Hz MT Continuous Output: 20 Hz Continuous Template (serial): 20 Hz (19.2-115.2Kbaud), 14 Hz (9600 baud) Continuous Template (Eprint): 10 Hz

	SICSpro terminal versions	Weight display: 10 Hz Internal discrete I/O: 50 Hz External discrete I/O (ARM100): 25 Hz PLC cyclic data: 25 Hz SICS continuous (SIR): 20 Hz MT Continuous Output: 20 Hz Continuous Template (serial): 20 Hz (19.2-115.2Kbaud), 14 Hz (9600 baud) Continuous Template (Eprint): 10 Hz
	POWERCELL terminal versions	Weight display: 10 Hz Internal discrete I/O: 50 Hz External discrete I/O (ARM100): 25 Hz PLC cyclic data: 20 Hz SICS continuous (SIR): 20 Hz (15 Hz when update rate is 15 Hz) MT Continuous Output: 20 Hz (15 Hz when update rate is 15 Hz) Continuous Template (serial): 20 Hz (19.2-115.2Kbaud), 14 Hz (9600 baud) (15 Hz when update rate is 15 Hz) Continuous Template (Eprint): 10 Hz
Keypad	26 keys; 1.22-mm thick polyester overlay (PET) with polycarbonate display lens	
Communication	<p>Standard Interfaces</p> <p>Serial Port: COM1 (RS-232/RS-422/RS-485), 300 to 115,200 baud (isolated, in POWERCELL models) Serial Port: COM4 (POWERCELL models only) (RS-232) 300 to 115,200 baud USB Host Port: Type A connector, +5V at 100mA for connected devices (not certified for use in hazardous areas)</p> <p>Optional Interfaces</p> <p>Ethernet Port: Ethernet 10 Base-T COM2 serial port: RS-232, 300 to 115,200 baud COM3 serial port: RS-232/RS-422/RS-485, 300 to 115,200 baud</p> <p>Supported Protocols</p> <p>USB Inputs: ASCII characters (barcode, keyboard), on-demand file import USB Outputs: Demand output, Report printing, on-demand file export Serial Inputs: ASCII characters, ASCII commands for CTPZ (Clear, Tare, Print, Zero), SICS (level 0 and level 1, some support for level 2 commands), Remote Display, Shared Data Server access Serial Outputs: Continuous and Demand outputs, SICS host protocol, report printing, interfaces with external ARM100 Remote Input/Output modules. Optional COM-570 Application Software available for legacy serial protocols. Ethernet Inputs: ASCII commands for CTPZ (Clear, Tare, Print, Zero), SICS (level 0 and level 1, some support for level 2 commands), Remote Display, Shared Data Server Access Ethernet Outputs: Continuous and Demand Outputs, report printing</p> <p>PLC Interfaces</p> <p>A single interface supported: Analog output, ControlNet, DeviceNet™, EtherNet/IP, Modbus TCP, PROFIBUS® DP, PROFINET®</p>	
Approvals	<p>Weights and Measures</p> <p>USA: NTEP Class II 100,000d; Class III/IIIL 10,000d; CoC #13-123 Canada: Class II 100,000d; Class III 10,000d; Class IIIHD, 20,000d; AM-5933 Europe: OIML R76 Class II approved divisions determined by platform; Class III and IIII 10,000e; TC8458</p> <p>Product Safety</p> <p>UL, cUL, CE</p>	
Hazardous Area (IND570xx models only)	FM - US	Class I,II Division 2 Groups C, D, F, G; Class III Division 1
		Class I Zone 2 IIB T5
		Zone 22 IIIC T85°C
		-10°C ≤ Ta ≤ +40°C
	FM – Canada	Class I,II Division 2 Groups C, D, F, G; Class III Division 1
		-10°C ≤ Ta ≤ +40°C
	ATEX	Zone 2 - II 3 G Ex ic nA [ic] IIB T5 Gc
		Zone 22 - II 3 D Ex tc IIIC T85°C Dc
		-10°C ≤ Ta ≤ +40°C


		Zone 2 - Ex ic nA [ic] IIB T5 Gc
	IECEX	Zone 22 - Ex tc IIIC T85°C Dc -10°C ≤ Ta ≤ +40°C
	FM - US Cert. No.:	FM17US0016X
	FM - Canada Cert. No.:	FM17CA0009X
	ATEX Cert. No.:	FM14ATEX0047X
	IECEX Cert. No.:	IECEX FMG 14.0022X

Front Panel and Display Features



Alphanumeric keys  Used for data entry

Enter  Enter key

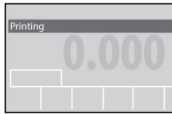
Arrows  Navigation keys

Metrology Display



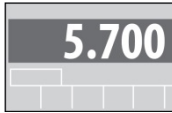
Displays metrological information (if so configured)

System Line



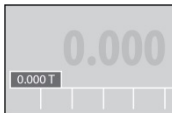
Displays user messages

Weight display



Displays current weight on scale

Tare



Shows the current tare value and type – preset (PT) or pushbutton (T)

Legend Area



Displays current operational status

Softkeys



Provide one-touch access to terminal functions

Clear



When in the net weight mode, press CLEAR to clear the current tare value; the display will revert to the gross weight value. When in data entry mode, CLEAR functions like a backspace or ESCAPE key

Zero



Press the ZERO scale function key to capture a new gross zero reference point

Tare



Press the TARE scale function key to display a net zero weight when a container is on the scale

Print



Press the PRINT scale function key to transmit data from the terminal or register a transaction

3. Operating Instructions

Weights and Measures Approved Mode

When the terminal is used in metrologically-approved applications, it will be sealed with a wire. Do not tamper with the wire seal.

Panel, US



Panel, Canada



Harsh, Standard

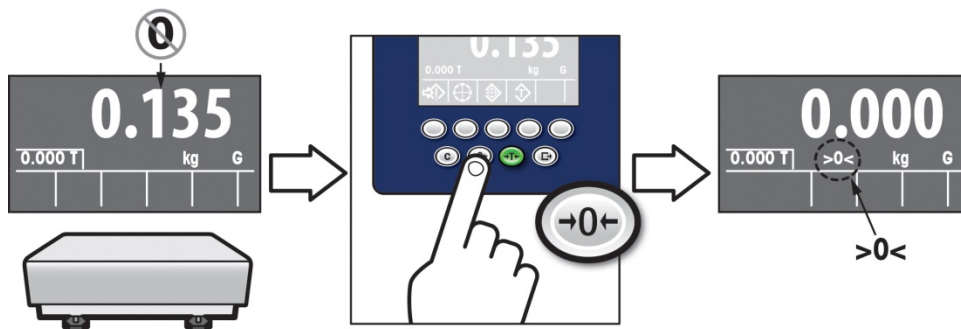


Harsh, Reversed Cover

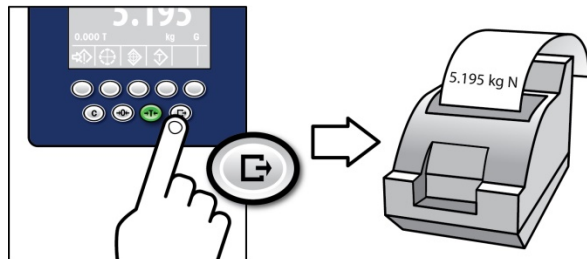


The display will also show metrology information at upper left – e.g. IIII Cap 100 kg/d=10 g

Zero

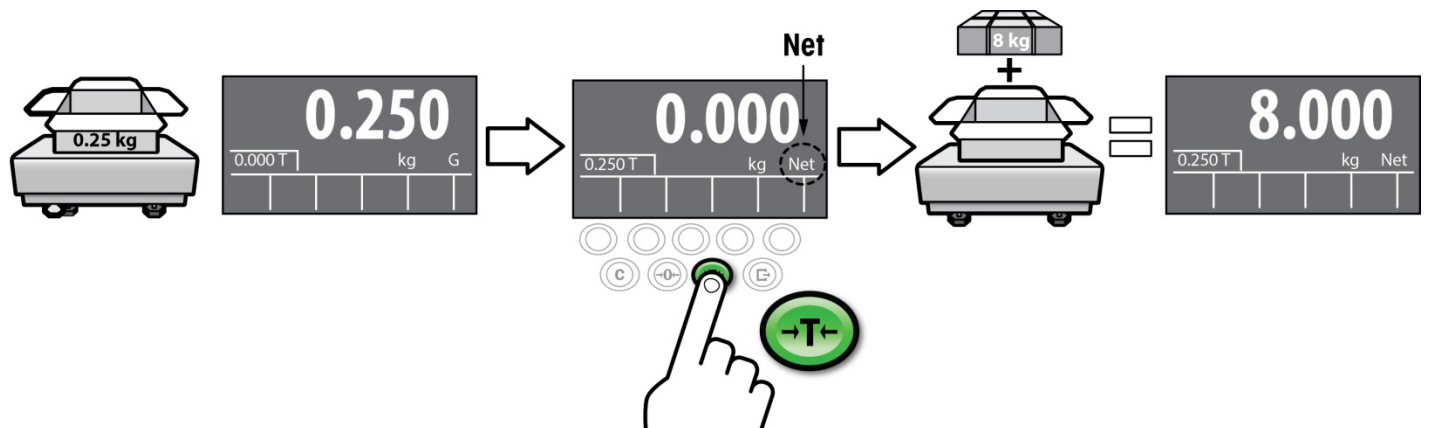


Print

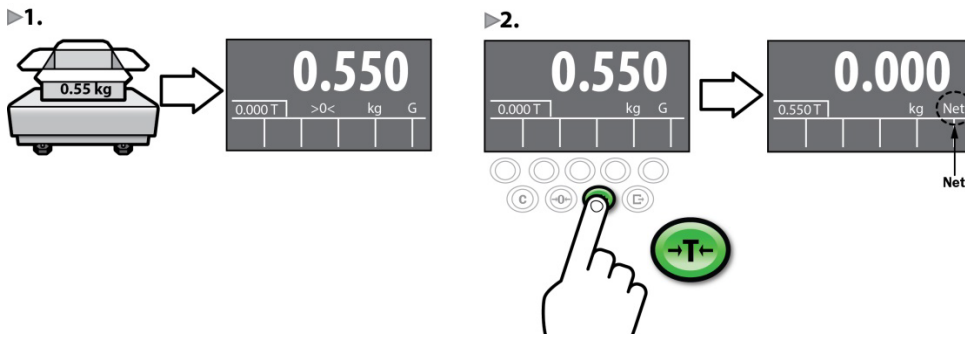


Tare

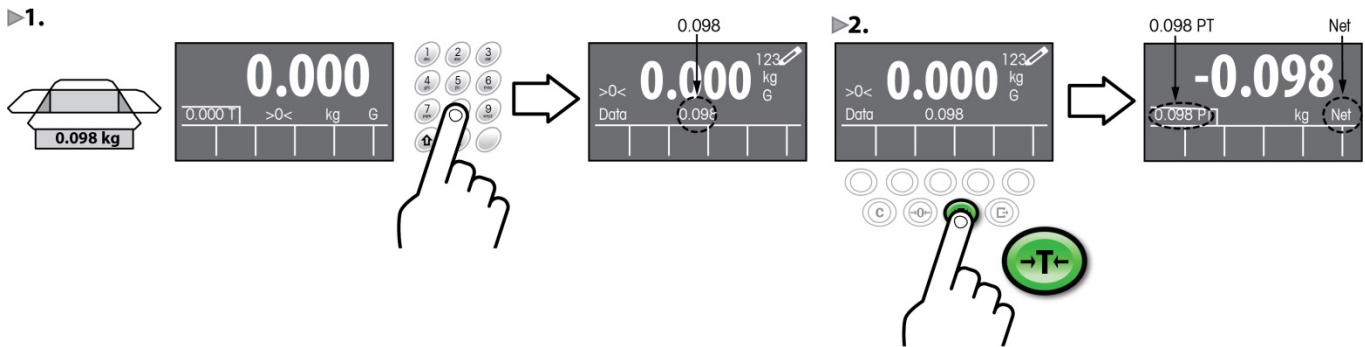
Description



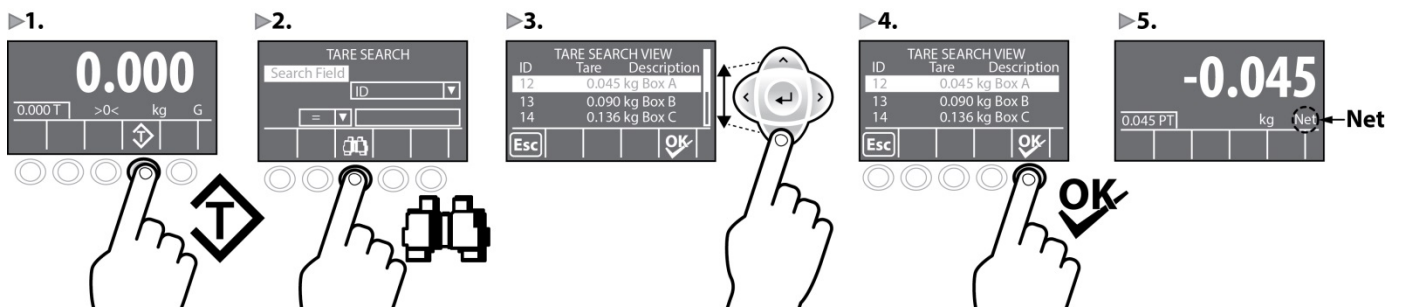
Pushbutton Tare



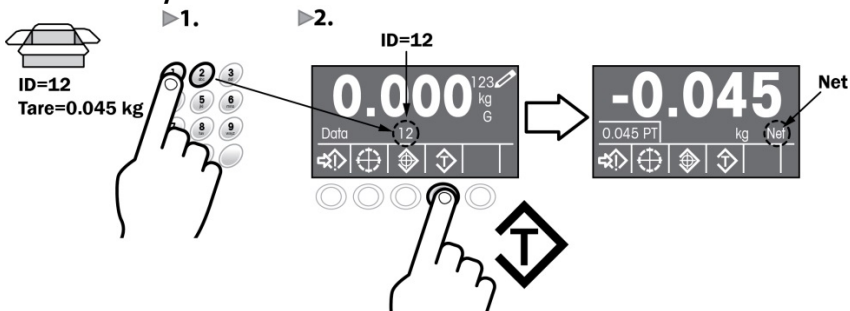
Keyboard Tare



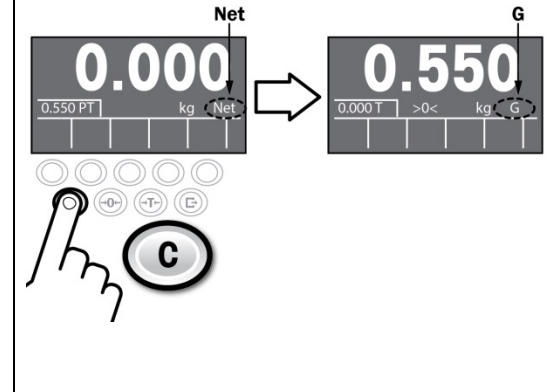
Search for Stored Tare



Recall Tare by ID

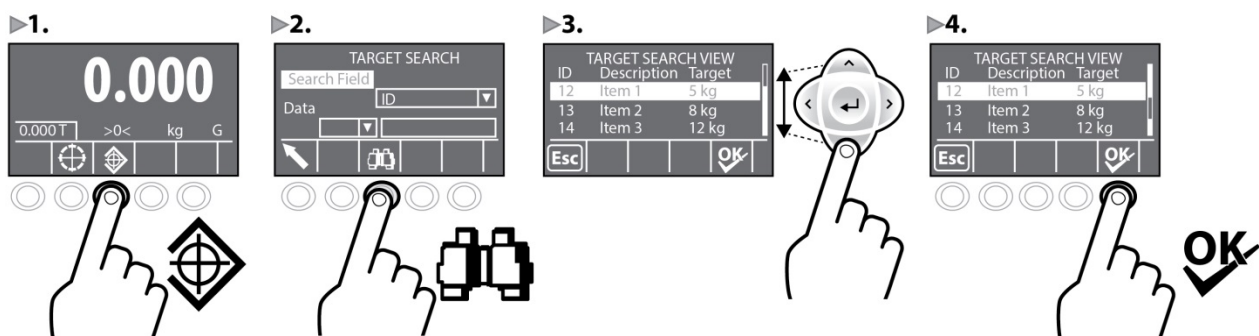


Clear Tare

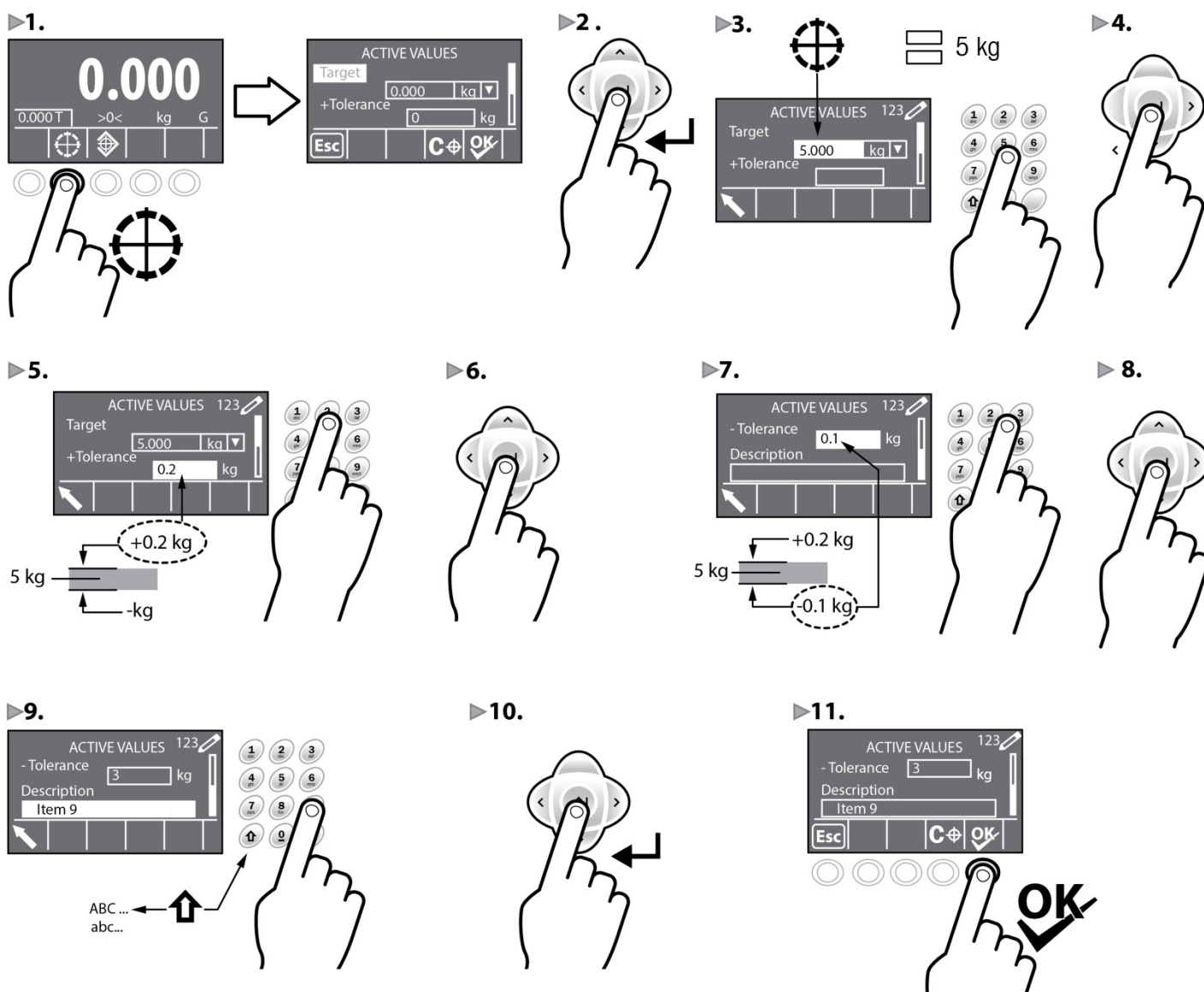


Setting Targets

Recalling Target from Target Table

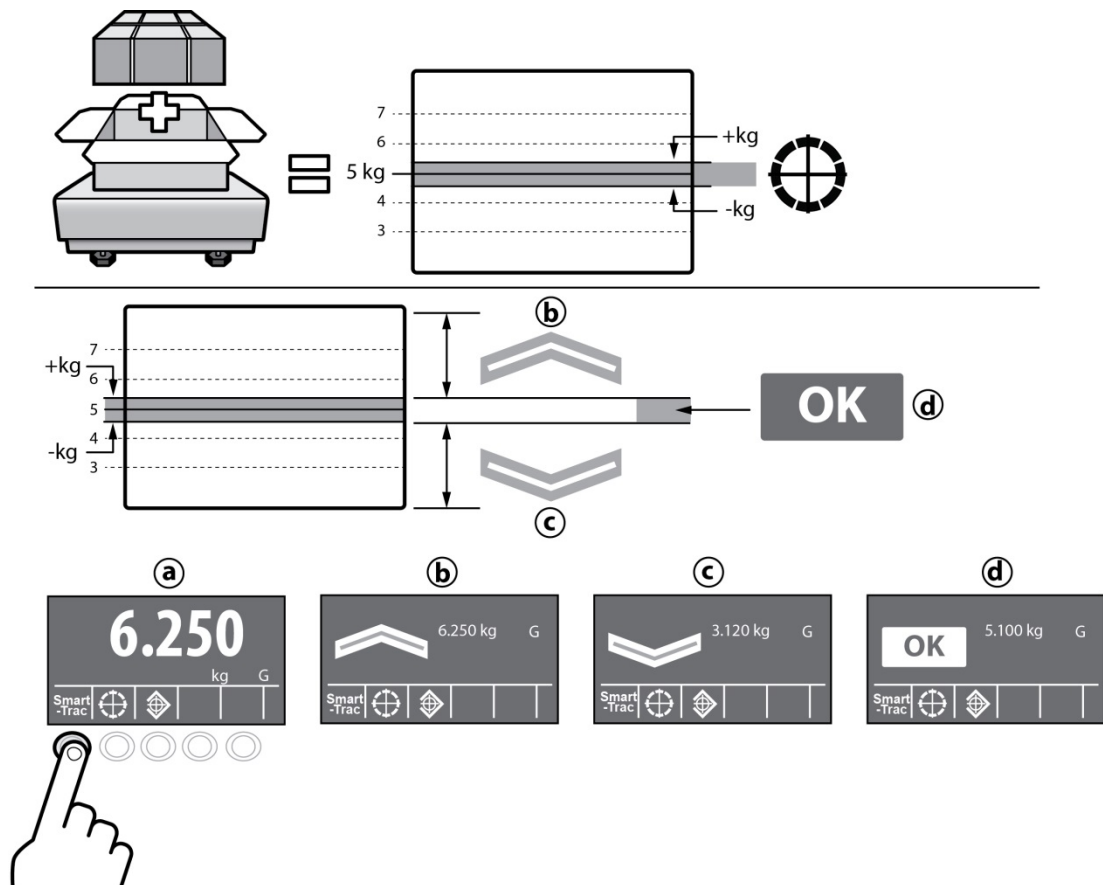


Direct Entry of Target Value

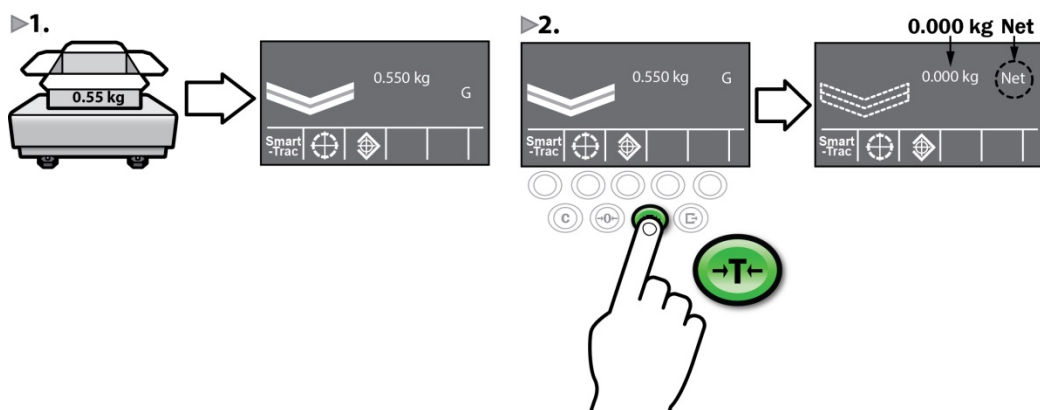


Checkweighing

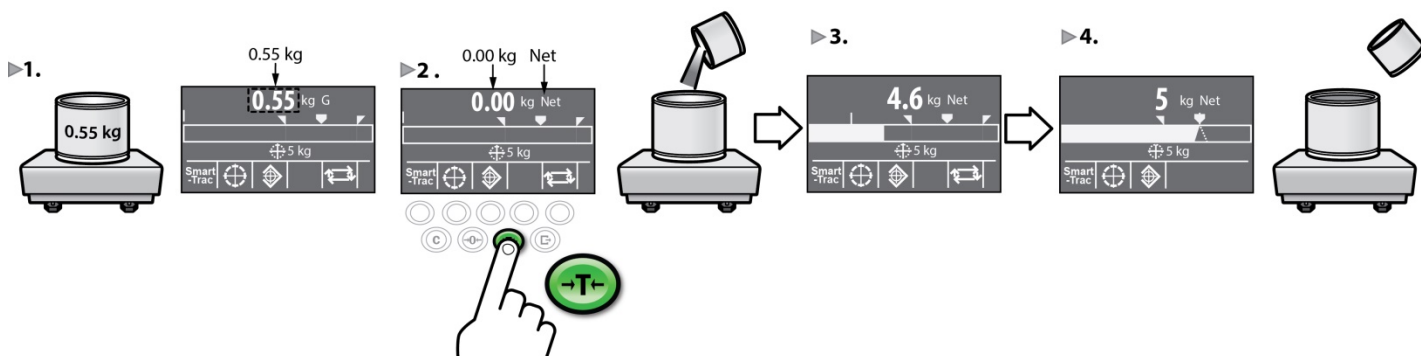
Description



Checkweighing with Tare



Basic Manual Filling



Basic Automatic Filling

