

R17-T10-T20

EN

T-TOUCH COUNTING

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1. Precautions

- Please read this manual carefully before start to use.
- Please make sure AC power supply voltage and use proper T-Touch scale / indicator AC adapter.
- Do NOT self-repair or disassemble this product. Please refer to any sales/service center authorized by the manufacturer.
- Do not pour water / liquid on the scale. Do NOT plug/unplug with wet hands.
- Do not pull the adaptor by its when unplug, Unplug adaptor when the product will be not in use. If the product has built-in battery, before start use the product please fully recharge battery first.
- Please disconnect the power source before plugging/unplugging any connectors, maintenance, and cleaning.
- Please keep this product away from the children.
- Do NOT overload beyond the maximum weight limit.
- Do NOT place or use the scale near corrosive substances and flammable materials.
- Do NOT use this product in direct sunlight or near to heater.
- Please make sure operation temperature -10~40C and Humidity <95%
- Do NOT use strong solvent to clean this product.

2. Installation

2.1 Ports Description



USB ports can connect to a mouse, a keyboard, a bar code scanner, a 3G Internet chipset or a flash drive.



RS-232 port can connect to a printer or a computer.



AC adapter port: the device is charged when AC adapter is plugged in.



Load cell port: connect to load cell

2.2 Ports Description

The RS-232 port is located on the side or rear of the scale (refer to component description). It is a DB9 connector, and its signals are defined in the following.

Pin2: RXD, input signal

Pin3: TXD, output signal

Pin4: VCC, 5V power source, for wireless module

Pin5: GND, Grounding

When connect to computers, please use wiring (2<-->3)

2.3 Ports Description

Note: Only for weighing indicator and dual scale

Weighing indicator's will be have 1 or 2 load cell interface, which is normally located on the side or rear side (refer to component description), it is a 5pin or 7pin air connector.

Optional dual-channel scale (dual scale)has an additional load cell interface. It is a 5pin or 7pin air connector and locates on the side or bottom of the scale (refer to component description), and is wired details as follows:

5 Pin Connector
Pin 1 : Sig +
Pin 2 : Sig -
Pin 3 : Shield
Pin 4 : Exc -
Pin 5 : Exc -

7 Pin Connector
Pin 1 : Sig -
Pin 2 : Sig +
Pin 3 : Shield
Pin 4 : Sen -
Pin 5: Exc -
Pin 6 : Sen +
Pin 7 : Exc +

Note: if using 5 wire load cell, and if load cell connector has 7Pin, please short-circuit SEN+ to EXC+, and SEN- to EXC-.

3. Basic Operations

3.1 Power on

Press and hold ON/OFF key until to hear a beep sound. It will take around 30 seconds for to run the TOS operating system and application software.

3.2 Standby

Press ON/OFF keyfor to keep display standby / sleep. Press ON/OFF key again for to turn on the display.

3.3 Power off

Press and hold ON/OFF key until to show a Power Off window. Touch option YES to power off or NO to back to use.

3.4 Reboot

Hold ON/OFF key for 6 seconds, the system will reboot to recover from abnormal situation.

4. Panel Key Functions

Keys	Description
	Press ON/OFF key for to turn to power ON, power OFF, standby and system restart
	Press MENU key for to go to the menu operation, a menu table will be show at the bottom of the display.
	Press HOME key for to show the home screen.
	Press TARE key for to tare the scale. The weight that was displayed will be store as the tare value and that value will be subtracted from the measurement,
	leaving zero on the display. The "Net" indicator will be on.
	Press ZERO key to set the reading to zero (within the allowed range of 2%max). Usually it's required only when the platform is empty. When the zero point is obtained, the zero indication will be show

5. Touch Key Functions

Keys	Description
	Product Look Up (PLU)
	Product list search
	Change unit
	High / Low Setting
	Product group
	Sales / Weighing Record
	Shift to Gross and Net
	Sampling Operation
	Input unit weight
	PLU Page up and down
	High / Low Limits Operation

	Save and print
	Accumulation recall
	Record and Graphic

6. Indications

Indications	Description
	when the scale back to zero or by pressing  key
	When Tare, by pressing  key
	When the scale is in stable.
	Maximum capacity of the scale
	Minimum weight of the scale
	Division of the scale
	Software version
	Battery status
	Unit price weight is too low
	Date and time

7. Touch Keys Operation

7.1 Product Look Up

Press  key (PLU key) for to get product information

7.2 Products List& Sales Record

Press  key for to show the PLU list for to select the product,

7.3 Sales Record

Press  key to show the weighing records. It will show counting list details.

7.4 Products Search from the list.

Press  key, display will be show the products list and numeric keys for to enter PLU no. Enter PLU number and press OK key, display will be show the products list accordingly. If want to go to back from the search list press back key.

7.5 Sample Operation.

If you know the items quantity, place the known quantity items on the platform and press  key for to input known sample value. Display will be show numeric keys and "Quantity" display will be show and blink for to input Quantity value. Input value by pressing numeric key and press OK key for to confirm. "Quantity" display will be show the sample value and "Unit Weight" display will be show the value of the per unit value.

If you want to exit from the sample input option, press back key when it's shown numeric keys. If the display showing  symbol, please redo your sampling operation with higher quantity. Unit Weight operation.

7.6 Unit weight operation.

If you know the unit weight value, it can input by pressing  key. Numeric keys will be show and "Unit Weight" display will be blink for to input value. Press numeric keys for to input "Unit Weight" value and press OK key for to confirm. "unit Weight" display will be show the sample weight and "Quantity" display will be show the total pcs accordingly.

If you want to exit from the sample input option, press back key when it's shown numeric keys.

If display  symbol, to ensure the counting accuracy, please re-enter a higher unit weight or use higher resolution scale.

7.7 Change Weighing Unit.

Press  key for to change weighing unit to " kg" / "lb"

7.8 Gross/ Net Operation.

Press  key to shift between gross weight and net weight. This function is only available after tare.

7.9 Page up / Down

Press  key for to PLU list up or press  key for to PLU list down

7.10 High / Low limit Operation.

Press  key for to set High and low limits, *Numeric keys will be show and “Lo Limit” display will be blink for to input value. Press numeric keys for to input “Lo Limit” value and press OK key for to confirm. “Hi limit” display will be blink for to input Hi limit value and press OK key for to confirm.*
 If you want to exit from the sample input option, press back key when it's shown numeric keys.

If weighing range is below of the lower limit, weight display back ground will be “Orange Color”, if it between the limits, “Weight” display back ground will be “Green Color” and if weighing range is higher than the limits weight display back ground will be “Red color”.

7.11 Accumulation

Once select the PLU and place the goods on the platform, Press  key to save data to the memory and if printer is connected, printer will be print.

7.12 Memory Recall and Delete memory

Press  key to recall accumulation memory. Display will be show total saved data, printing and memory clear options

Options:

MC (Memory Clear): By pressing MC, all saved data will be clear.

Print: By pressing Print key, accumulation data will be print, if printer is connected.

Print-MC: By pressing Print-MC key, it will print accumulation data and will clear all memory.

Esc: By pressing Esc key, it can go back to normal display.

7.13 Graphic

Press  key to change to graphic mode

8. User Interface Operations.

8.1 Graph mode

Press Graph button to perform weighing operation visually.

This graph includes a range of check bar and target

quantity reference table. This will help to improve efficiency and avoid mistakes.



8.2 Full-screen Mode

Touch main weight display window, it will change to full screen display mode. In full screen display mode, only have 5 keys: weight, quantity, lock, unit, and M+. Press weight display window again to return to normal display mode.



8.3 Record mode

Press RECORD button to view previous weighing record, which includes serial number, product name, weight, unit weight, quantity, and time.

No.	Product	Weight(kg)	g/pcs	Piece	Time
001	apple	2.00	50.00	15	09:05
002	banana	1.50	20.00	20	09:20
003	orange	4.20	30.00	35	09:50
004	orange	5.50	30.00	10	10:02
005	apple	2.00	50.00	5	10:05
006	grapes	3.10	0.80	16	10:20
007	grapes	2.50	0.50	29	10:25
008	Pear	1.00	100	31	10:30
009	Pear	2.00	80.0	29	10:40

9. Menu popup

Press  key, a menu table window will be open at the bottom of the display.

9.1 On-Screen Keyboard

On-Screen Keyboard will be open automatically for to edit or input new data,



English/numeric: input English letter and numeric

-  Backspace
- Tab: when input text, use this key to change line
- SIGN: Special symbols.
- 123: Numeric keyboard
- X: Exit editing
-  : Shift to Capital letter / small letter.

9.2 Setting Parameter

Press  key for to enter into the parameter settings. Settings display will be open.

Setting	Basic Information
Basic Information>	User Information
System Setting >	Advertising
Weighing Setting >	
Operation Setting >	
Calibration >	
Communication >	

Setting		
Basic Information	User Information	For to edit user information's,
	Advertising	For future modification
System Setting	Gravity 9.794 >	For gravity settings,
	Date and Time >	For to set date and time and date/time format
	Language English >	For to select language
	Back light 80% >	For to adjust display brightness,.
	Touch Screen Correction >	For touch screen calibration,
	Software Update >	For to update software
	System Information T/OS v1.03>	For to check OS version and memory status
	Set Password	For to set password
	Reset Database	For to reset Product and Record data
Weighing Setting	Approval Setting NONE >	For to select approval or no n approval model
	Range Mode SINGLE >	Select weighing range
	Decimal 0.000 >	Scale decimal settings
	Capacity 30.000 >	Scale capacity settings
	Division 5 >	Scale division settings
	Auto Zero %50 >	For to select auto zero range
	Manual Zero % 2>	For to select manual zero range
	Zero Tracking 2d>	For to set automatic Zero tracking
Tare Mode Multi-Tare Permission O	For to select multi tare operation	
Operation Setting	Measure Speed Medium >	AD Speed settings
	Measure Unit kg lb>	Weighing units enable / disable
	Check Beep Mode No Beep >	Beep sound settings for check weighing
	Acc only when ok Off >	Accumulation settings
Calibration	Calibration 2013-07-25	For normal calibration
	Linearity Calibration >	For Linear Calibration
	Trim >	Trim adjusting
	Internal Counts 0 >	Internal counts checking
Communication	Com Off 9600 8 None 1 >	Communication settings

- **Note: Please refer 4. Parameter Settings for operations.**

9.3 ID Settings

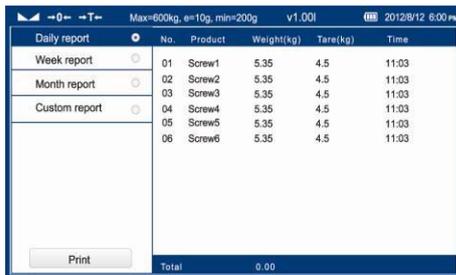
Press  key to enter products edit screen.



Press  to add product PLU, press  to delete current product PLU, press  to edit current product PLU; Press  to clear all product information, press  button to cancel the action, and  button to save.

9.4 Reports

Press  Key for to get different management report. It can check daily, monthly and product/custom based report.



9.5 Data Import / Export

Press  key to import preset PLUs to scale or export weighing records to a PC.

9.6 Accumulation mode

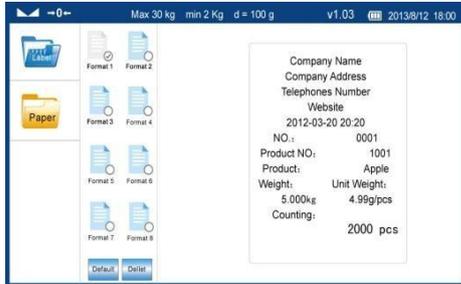
Press  for to select accumulation mode option. Three accumulation modes are there:

- Manual**; for manual accumulation,
- AutpAcc (load)**; for auto accumulation when goods placed on the platform,
- Auto Acc (unload)**; for auto accumulation (unload).

9.7 Print Format

Press  key for to print format settings.

Select label or receipt, and select from the existing formats. Print preview will display on the right. Once select the format, press “default” button to confirm. Then select desired printing to finish setting the format.



Note: You may select none or multiple printers. If none, it will not print; if multiple, it will print from multiple printers.

10. Parameter Settings

Press  menu button. Click on settings to enter the detail settings page.

On-Screen Keyboard will be open automatically for to edit or input new data when It's touching to the required field.

On-Screen Keyboard operation

English/numeric: input English letter and numeric

 Backspace

Tab: when input text, use this key to change line

SIGN: Special symbols.

123: Numeric keyboard

 Exit editing

 : Shift to Capital letter / small letter.

11. Basic Information

11.1 User information

Select settings -> basic information -> User information.

The company information interface will be appear, it can insert information by using on-screen keyboard. If you touching somewhere in the required field, on-screen keyboard will be appear. .

Click on << at the left corner keyboard for to exit editing.

Company information will be included in the receipt and reports, and company logo will be appear when turning on the machine.

11.2 System settings

11.2.1 Gravity settings

Select setting -> system settings -> gravity settings.

Input gravity value by using on-screen keyboard. Click << key at the top of the left corner to exit editing.

Please ensure that you have input correct gravity value every time before calibration

11.2.2 Date and Time

Select settings -> system settings -> Date and Time setting.

Insert date and time by using on-screen keyboard / calendar. It can choose different date and time formats.

Click << key at the top of the left corner to exit editing.

11.2.3 Language settings

Select settings -> system settings -> Language.

Select language from the list.

System will restart after changing and confirming by pressing OK option, If want to go back, press CANCEL option.

11.2.4 Backlight

Select settings -> System settings -> Backlight.

Scroll left or right by using adjusting bar for to adjust brightness of the backlight. Click << key at the top of the left corner to exit editing.

11.2.5 Touch-screen correction

Select settings -> System settings -> Touch-screen correction.

A confirmation pop-up will appear. Confirm to enter calibration page. A white cursor will appear in a black screen; keep clicking on the white cursors until completing the calibration process.

Note: Take effect after re-starting the scale.

11.2.6 Software Update

Unzip the software update file into flash drive's home directory, file folder name should be "Tscale Update" and insert the flash drive into the USB port.

Select settings -> system settings -> Software Update.

A confirmation pop-up will appear; confirm and finish the updating process. System will restart after the update.

11.2.7 System information

Select settings -> System settings-> System information

Display will be show Operation System version, remaining storage memory, and other system information.

11.2.8 Set password

Select settings -> system setting->Set password,

Input current password at first (initial password: 0000), then input new password twice as per choice. Then Press OK to confirm.

11.2.9 Reset database

Select settings -> system setting->Reset database.

Press reset, system will clear all data in the database.

The machine has some preset data for testing purpose. Before using the scale, please clear all data in database. Please do this operation very carefully. This operation will remove all data in database.

11.3 Weighing setting

Note: If want to change any weighing settings, it will ask password.

Default password is 9999.

11.3.1 Approval setting

Select settings -> weighing settings -> approval setting.

Select the approval (OIML / NTEP) / non approval option. Click << key at the top of the left corner to exit editing.

Authentication details are below

	OIML	NTEP	None approval
Auto zero range	10%	10%	According to user setting
Manual zero range	2%	2%	According to user setting
Auto zero tracking	0.5e	0.5e	According to user setting
Zero in net mode	disable	disable	enable
Calibration switch	need	need	No need
overload	Max+9e	105%Max	Max+9e
Weighing unit	kg	lb	selectable

11.3.2 Weighing Mode

Select settings -> Weighing Settings ->Range mode.

Select signal range, dual interval, dual range, for to select weighing mode.

Click << key at the top of the left corner to exit editing.

11.3.3 Decimal point

Select settings -> Weighing Settings -> Decimal setting.

Select desired decimal point from the list.

11.3.4 Capacity Setting

Select settings -> Weighing Settings ->capacity setting.

Use the number keypad to input capacity (two windows will be appear for double indexing value or dual range/dual interval). Click << key at the top of the left corner to exit editing.

Note: When using dual interval or dual range, it is required to have max2 > max1.

11.3.5 Division setting

Select settings -> Weighing Settings -> Division.

Select the desired division from the list. Click << key at the top of the left corner to exit editing.

Note: When using dual interval or dual range, it is required to have $e2 > e1$.

11.3.6 Auto zero range (initial zero)

Select settings -> Weighing Settings -> Auto Zero.

Select the desired choice from the list. Click << key at the top of the left corner to exit editing.

Note: This setting will be disabled in approval model.

11.3.7 Manual Zero range

Select settings -> Weighing Settings -> Manual Zero,

Select the desired choice from the list. Click << key at the top of the left corner to exit editing.

Note: This setting will be disabled under approval mode.

11.3.8 Auto zero tracking

Select settings -> Weighing Settings ->Zero Tracking.

Select the desired choice from the list. Click << key at the top of the left corner to exit editing.

Note: This setting will be disabled under approval mode.

11.3.9 Tare Mode

Select settings -> Weighing Settings ->Tare Mode.

Select the desired continuous tare choice. Click << key at the top of the left corner to exit editing.

Note: This setting will be disabled under approval mode.

11.4 Operation Settings

11.4.1 Measure speed

Select settings ->Operation Settings ->Measure speed.

Select the desired Measure speed choice (Slow/Medium/Fast). Click << key at the top of the left corner to exit editing.

11.4.2 Measure Unit

Select settings ->Operation ->Measure unit.

Select the desired unit choice (kg/lb). Click << key at the top of the left corner to exit editing.

11.4.3 Check Beep Mode

Select settings ->Operation ->Check Beep Mode.

Select the desired mode (No Beep/Beep On Ok/ Beep On Ng). No

Beep: There is no beep sound while check weighing operation

Beep On Ok: It will get beep sound, when between the high –Low limits.

Beep On Ng: It will get beep sound, when its more than higher limit.

Click << key at the top of the left corner to exit editing.

11.4.4 Acc only when ok

Select settings -> Operation ->Acc only when ok.

For to select accumulation turned on/off, select the desired choice. Click << key at the top of the left corner to exit editing.

11.4.5 Weight Mode

Select settings -> Operation -> Weight Mode.

Select the desired mode. Click << key at the top of the left corner to exit editing.

11.5 Calibration

11.5.1 Calibration

Select Settings -> Calibration ->

Calibration set up display will be open.

Select start and enter step 1: Zero calibration. Unload platform and wait for the stability signal, and click next. Input required calibration weight value and click to confirm.

Place the standard weight as per entered calibration weight value, on to the platform and wait for to get stability signal, and click next.

Note:

Calibration failure: please check the standard weights, stable indication and internal counts. If ok, restart the calibration

Calibration success: Select preference of the next calibration. Click finish. System will remind the user for the next calibration when the date comes.

11.5.2 Linear Calibration

Select Settings -> Calibration -> Linear calibration .

Select start and enter step 1: Zero calibration. Unload platform and wait for the stability signal, and click next.

First point calibration: Select an integer weight value, for better performance keep 25% of the scale capacity. Wait for the stability signal, and click next.

Second point calibration: Select an integer weight value, for better performance keep 50% of the scale capacity. Wait for the stability signal, and click next..

Third Point Calibration: select the maximum scale capacity value, ie; 100% of the scale capacity..

The last point must be full capacity.

Calibration ends when the last point is finished.

11.5.3 Trim

Select Settings -> Calibration ->Trim .

It can use for to adjust weight value, if you know the exact weight value or required value.

Display will be show current weight, and weight after correction.

it can use -1d, -10d, +1d, +10d keys for to adjust, when the right window shows the correct weight, press OK for to confirm. Click<< key to go back to the setting mode.

During correction, if you want to give up current operation, just press reset key.

11.5.4 View Internal Counts

Select Settings -> Calibration -> Internal Counts.

The AD internal counts will be appear. Click<<key to go back when finish viewing.

11.6 Communication

11.6.1 Serial Ports

Select settings -> Communication.

Select the serial port and edit its options, including transmit mode, baud rate, data bits, and stop bits.

Click << key at the top of the left corner to exit editing.

When the printer is set to CONT mode, the serial port continuously outputs the following (all data is in ASCII code, baud rate 600-9600 bps, 8-bits, and no parity.)

-/	<input type="checkbox"/>								k	g	CR	LF
-WEIGHT DATA-									-WEIGHT UNIT-		-TERMINATOR-	

12. Maintenance

12.1 Error Message

Error message	Solution
Out of zero range	Zero operation will not work when current weight is out of the zero range. For approved model, manual zero range is 2% of capacity
No A/D signal	A/D chip or load cell / connections damaged and need replacement
Unstable, can't zero	Please only perform zeroing when stable indication turns on
Cannot Tare	Tare operation does not work when current weight is negative or zero. Tare value should be higher than the minimum capacity (20d)
Out of initial zero range	This error message will only show when starting the machine. For approved models, it is outside the 10% of capacity.
Overload	Unload if any goods on the platform, Check load cell and try to re-calibrate. For normal model, overload is max+9d; for OIML approved model, overload is max+9e; for NTEP model, overload is 105% max

12.2 Specification

Capacity		Tabletop Scale: 3kg/6kg/15kg/30kg/45kg	
		Weighing indicator: free setting	
		Platform scale: 30kg/60kg/150kg/300kg/600kg	
External resolution	None approved	3000e	2x3000e dual range
	approved	2x30000e dual range	
Tare range		Max-1d	
Pan size		Tabletop scale A/Q series: 230x300mm Tabletop scale J series: 240x370mm Platform scale: 350x450mm/420x520mm/600x800mm	
AD method		Sigma delta	
AD speed		Max. 60 times/second	
Internal counts		1,000,000	
Weighing unit		kg, g, oz, lb	
Calibration unit		kg, lb (lb only for NTEP model)	
Load cell excitation		5VDC	
Input signal range		0~20mv	
Zero point signal range		0~5mv	
Load cell sensitivity		1mv/v~3mv/v	
Load cells		up to 4 x 350 ohms cells	
Operation temperature		-10~40C	
Operation humidity		<95%	
Display		7" TFT LED backlight	

Display resolution	800x480
Display H/V ratio	16:9
Touch control mode	Resistance screen
Communication interface	1xRS-232、2xUSB
Optional interface	Wifi、zig bee
CPU	iMX233 (ARM9 kernel) 454MHz
RAM	128MB DDR
Data memory	256MB NAND flash
power	AC adapter 12V/2500mA or main power 110V/220V

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