weightechUSA

Weighing Indicator

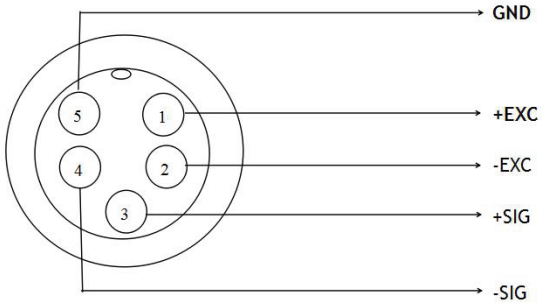
User Manual

2019

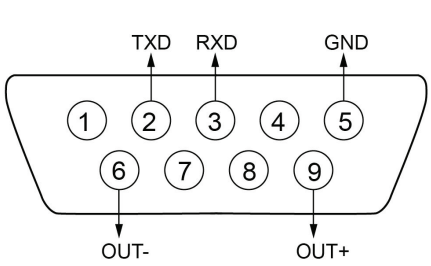
一. Technical parameter

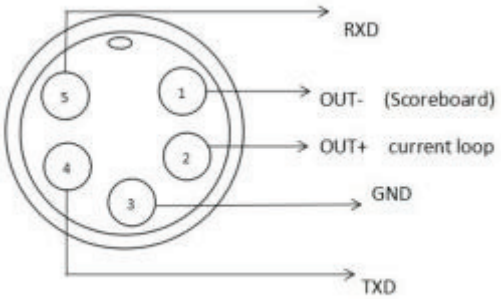
Accuracy:	Level Ⅲ
Specification:	(0 ~ 3000) d
Working voltage:	DC:5V
Division value:	1/2/5/10/20/50
AD output speed:	10 times / sec. Or 40times/sec.
Internal resolution:	≤24 mega-pixel
Operation temperature:	-10～40℃
Battery:	6V/4A
AC Power :	110-240v

二. Connection indicator with load cell



三. Communication interface(RS232)





Stainless steel indicator

四. Description of keys functions

The keys of the instrument serve as release, and immediate press and release can be effective.

1. [Model] key: long press this button to enables the indicator into the setting status of feature and parameters, while short press [Model] key to hold or off peak hold function.
2. [Print] key: long press this key to enables into the up-down alarm setting mode, while short press [Print] key can send the serial data, and moreover, in the parameter setting state, the key plays the role of confirmation.
3. [Switch] key: short press [Switch] key to enable weighing unit conversion in the instrument, while in the mode of parameter setting, this key is served as digital switching, and in status of digital input, digit is moved to right
4. [Tare] key: short click enables peeling of instrumentation, and in status of digital input, digit is increased
5. [zero] key: short press [zero] to enables the instrument returned to zero within zero-setting scope, and in status of digital input, digit is reduced

五. Indicator functions and operating instructions

1. Long press [Model] key to enters the settings in weighing mode, and the first major item "P1 unt" is displayed, and it is the serial port setting. At this time, continuous pressing of the [Model]key enters the next major item, and the press of [Print] key enters detailed parameter settings and saving and then goes to the next detailed parameter, and [Switch] key is used to make changes in single bit parameter and setting bit of a number of parameters. [Tare] key is to increase , [zero] is to reduce.
2. The specific adjusted parameters are as follows
3. If just weighing range, division value and weight calibration is modified, please refer to P5 and P7 function options

Items	Parameters	Features	Adjustment method
P1 UNt (set unit)	U1 kg	U1 must be “kg”	Press [Print] key can enter the next step
	U2 *	U2 “g”,it can change kg,g,lb,oz,pcs,off is close this unit	Ditto
	U3 *	U3 “lb”,it can change kg,g,lb,oz,pcs,off is close this unit	Ditto
	U4 *	U4 “oz”,it can change kg,g,lb,oz,pcs,off is close this unit	Ditto
	U5 *	U5 “pcs”,it can change kg,g,lb,oz,pcs,off is close this unit	Ditto
P2 TRA	tM *	Communication mode: 0 stable continuous transmission;	Press [Switch] key to change data.

(Communication settings)		1 continuous transmission mode; 2 stable transmission mode; 3 answer mode and 4 manual transmission mode 5. manual print mode 6. Stable print mode	Press [Print] key to confirm and enter the next step
	Adr **	Mailing address is useful in a multi-machine communication	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step
	b ****	**** is communication baud rate (1200,2400,4800,9600,19200)	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step
	tF *	00-10 (refer the attachment)	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step
	dpn *	Scoreboard (optional function) 0----close 1----open	
	blue *	Bluetooth (optional function) 0----close 1----open	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step
	tpy *	00----Godex printer 01----Jiabo printer 02----SRP275 printer 03----TP printer(B19P)	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step
	Rtc* (optional)	* Select the date and time in the print list On or off	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step
	dAtE (optional)	Need select clock module	Press [Print] key to Show the time

	..**	Set the date	Press [Switch] key to change data. Press [Tare]and[Zreo]change the number
	time		
	..**	Set the time	Press [Switch] key to change data. Press [Tare]and[Zreo]change the number
P3 FUN	Pr ***	Sleep parameters can be set to OFF and user can take 6 seconds as a gear ,from (06-60)	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step
	Lum *	* LED displays brightness(0-7)	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step
	HF **	** Data hold mode PH---Peak holding mode dH---Manual holding mode AH---Automatic holding mode OFF---Close this function	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step
	Hd **d	Animal function settings if it is set to OFF, this feature is turned off, user can take 10-d as a gear to set dynamic range from 10-d to 70-d. For instance: if it is set to 20d, when objects are varied within the range of 20d, the program automatically calculates the average value of the most suitable one and locks it, and there is a long beep when locked. When weight changes have beyond this range, it is unlocked, and there will be a short beep when unlocked, of which ——d means that it will be unlocked only	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step

		when the weight goes back to 0, but it can be locked when the weight is varied within the range of 80-d.	
	AHF **	Animal function holding mode: AH---The weight is locked, but the weight data can be adjusted slowly SH---The weight is locked, but the weight data can not be adjusted ,it must exceed the range of animal husbandry scale function to unlock	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step
	UF **	Alarm output signal mode: ud---Up and down alarm mode os---sequence mode	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step
	ME **	** on or off when the weight is negative choose alarm or no alarm	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step
	WS **	** on or off When alarm,Whether the weighing data stable	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step
	Ok **	** on or off When alarm,Only when the weight is between the upper and lower limit, the serial port outputs the signal	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step
	Znr **	Back to 0, the range of settings from 0 to 20, that is, from 0d to 20d range back to the range, then think back to 0, and conversely, that there is an object on the scales	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step
	HZr *	Manually zero range from 0 to 3, 0 --- don't zero, 1 --- 4% for full scale, 2 --- 20% for full scale, 3--- 100% for full scale	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step
	kZr *	Open zero range from 0 to 3, 0 --- don't zero, 1 --- 4% for full scale, 2 --- 20% for full scale,	Press [Switch] key to change data. Press [Print] key to confirm and

		3--- 100% for full scale	enter the next step
Pn ----		User put in the password, and the correct password can enter the following parameter setting, otherwise large item setting of serial port (P1 unt) is returned, and the user shall press [Print] key to confirm after inputting the password. Currently code is [Switch] [Switch] [Tare] [Switch]	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step
P4 FIL (Filtering parameters)	FrEq *	AD data output rate 0 --- 10Hz 1 --- 40Hz	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step
	FiLt *	Filtering strength setting ranges from 0 to 7 0---weak strength 7---strong intensity	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step
	Str *	Data filtering ranges from 0 to 9 0---Small range 9---big range	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step
	Stt *	Data filtering time form 0 to 9 0---Short time 9---Long time	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step
	Ztr *	Zero tracking range is from 0 to 9, and 0 means non-track, while 1 to 9 indicates the range from 0.5d to 4.5d	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step
	Ztt *	Zero tracking speed from 0 to 7 0---slow 7---fast	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step
	wtr *	Creep tracking parameters range from 0 to 9	Press [Switch] key to change data.

		0---non track 1---samll range 9---big range	Press [Print] key to confirm and enter the next step
	Wtt *	Creep tracking parameters speed from 1 to 15 1---slow 9---fast	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step
	ZSH *	0 keep the display function, set from 0 to 7, in the vicinity of zero in this range (0d~7d), the indicator shows 0, do not move, it is recommended not to be too large, default 1	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step
	WSH *	When the scale is loaded, the weight is temporarily locked within the range of 1D. 0---Do not use this function 1---use this function	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step
P5 C-D	E **	Accuracy of instrument is selected among 01,02,05,10,20 and 50	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step
	d *	The decimal number of meter is 0,1,2 and 3	Press [Switch] key to change data. Press [Print] key to confirm and enter the next step
	******	Full scale of indicator	User presses [switch] key to change the flashing digit, pressing [tare] key and [zero] key to change the value of the blinking digit, and pressing [print] to enter zero calibration after modifying.
P7 CAL	ULoad	Zero calibration	Press [Print] key to confirm and enter the next step
	******	Display calibration weight	User presses

			[switch] key to change the flashing digit, pressing [tare] key and [zero] key to change the value of the blinking digit, and pressing [print] to finished calibration
P9 AD		Indicator enters into the AD status display	User presses [print] to enter the AD display.
	*******	AD status display	Press [print] key to exit

Remarks:PH is the peak hold mode. When the function is turned on, the weight is locked when the weight is >=20d and stable. The key must be press[Model] to unlock the weight.

dH to manually hold, manually press [mode] keys, weight lock, and then manually press [mode] key to unlock the weight.

AH is an automatic hold method. When the function is switched on, the weight is locked when the weight is >=20d and the weight is locked. After about 6S, the weight is unlocked. Weighing on the scale <20d, and then on the scale, lock the weight.

4. In the weighing status, long press【Print】key to enter into the setting of the alarm function. The specific parameters are as follows（the optional functions）

The indicator shows	function	Methods for adjustment
—H—L—	Alarm Model of higher and lower limits. H stands for the set value of higher limit; L stands for the set value of lower limit; The weight is in the position where the light flickers and the alarm goes off. For example, when the weight is greater than the value of the higher limit, the left side flickers and the alarm goes off. If neither side	Press the【Switch】 key to make correction, and press the【Print】key to enter into the next parameter setting.

	flickers, then it means the function has been turned off.	
HL(shows numbers after 3 seconds) ******	This parameter is the parameter of higher limit value	Press the【Switch】key to correct the flicker bit; press the key【Tare】and the key【Zero】to correct the value of flicker bit, and after the correction, press the key 【Print】 to enter into the next parameter setting.
LL(shows numbers after 3 seconds) ******	This parameter is the parameter of lower limit value	Press the【Switch】key to correct the flicker bit; press the key【Tare】and the key【Zero】to correct the value of flicker bit, and after the correction, press the key【Print】to return to the weighing interface.

5. Simple calibration

In the empty scale, When user presses [Tare] and holds on, the indicator display “CAL” for about three seconds, and then show the weight. At this time, modified weight to the calibration weight and then put on the weights and calibration is performed by pressing [Print] key after three seconds. Indicator enters the normal display state after calibration.

6. Counting function

In the weighing status, long press the 【Switch】key, and “count” is show, then press the 【Print】key, and ”C00000” is show. Now indicator is in a counting state, press 【Print】key and the indicator can be switched between quantity and weight (current unit). After power off, the sampling value is not saved. In counting, the units cannot be switched. After using counting function, do not use the function of keeping and animal .

7. Print set

In weighing state ,long press [Zero] enter into print set .

Indicator show	Function	Adjustment method
I 00001	Input the Art No.	Press the【Switch】key to

		correct the flicker bit; press the key【Tare】and the key【Zero】to correct the value of flicker bit, and after the correction, press the key【Print】to return to the weighing interface.
N 00001	Input the S/N	Press the【Switch】key to correct the flicker bit; press the key【Tare】and the key【Zero】to correct the value of flicker bit, and after the correction, press the key【Print】to return to the weighing interface.
PtF **	** Select Printer Format **Godex printer** indicator have two data output formats,1-7 for one, 8-99 for another, the specific print form can be based on the output data, edit their own list, download to the printer. **GP(Jiabo)printer** Jiabo printer, 1-8 is the printer's fixed format print list, can directly print with the printer, 9-99 is a data output format, you need to edit the list according to the data, then write the program, download to the printer. SRP275 printer 1-5 is a fixed-format printed list of the printer, which can be used directly. 6-99 is other output data. This printer is not supported. Do not use it. B19P 1-8 is a fixed-format printed list of the printer, which can be used directly. 9-99 is other output data. This printer is not	Press the【Switch】key to correct the flicker bit; press the key【Tare】and the key【Zero】to correct the value of flicker bit, and after the correction, press the key【Print】to return to the weighing interface.

	supported. Do not use it. Pay attention to the paper size of the sheet.	
Arr *	The Coupling of Print Sheets	Press the【Switch】key to correct the flicker bit; press the key【Tare】and the key【Zero】to correct the value of flicker bit, and after the correction, press the key【Print】to return to the weighing interface.

六. Error code

1	ERR-3	Incorrect value of input data
2	ERR-2	AD abnormal
3	ERR-4	Counting failed when sampling
4	ERR-5	Indicator internal voltage is low, do not operate EEPROM
5	ERR-6	Counting is too low and needs to be resampled
6	ERR-10	Indicator has high precision, but can continue to be used
7	ERR-14	Data error received in indicator serial communication
8	-----	Please wait, the indicator is operated inside
9	No	Failed operation
10	yes	Successful operation
11	Lowbt	Battery low, please change
12	Full	Overload (greater than the maximum range + 8d)

七 Maintenance and precautions

1. To ensure the clarity and service life, the instrument should not be placed directly under sunshine, or location should be relatively smooth.

2. It is inappropriate to used it in places with serious dust and vibration to avoid the use in wet environments.

3. Sensors and instrumentation shall be reliably connected, and the system should have a good ground, keeping away from strong electric field and strong magnetic field, and the sensor and instrument should be away from strong corrosive substances, keeping away from flammable materials.

▲! It is avoided to use in occasions with flammable gas or flammable vapors; pressure vessel canned system shall not be used.

▲! In the area with frequent lightning, you must install reliable arrester to ensure the safety of operating personnel and to prevent damage to the instrument and the device from lightning.

▲! Sensor and indicator are static sensitive devices, and anti-static measures must be taken in practical use, and it is strictly prohibited to conduct welding operations or other strong farm operation in the weighing platform; in the thunderstorm season, reliable lightning measures must be implemented to prevent damage to sensors and the instrument caused by lightning, to ensure the personal safety of operating personnel and safe operation of weighing equipment and related equipment.

4. It is not allowed to use strong solvents (such as: benzene and nitro oils) to clean the cabinet.

5. It is not allowed to inject the liquid or other conductive particles into the instrument to prevent damage to the instrument and electric shock.

6. Before join line between meter and the external devices is plugged, powers of instrument and relevant devices must be cut off!

▲! Before join line of sensors is plugged, the power of instrument must be cut off (shutdown)!

▲! Before join line of big screen is plugged, the power of meter and the big screen must be cut off!

▲! Before join line of communication is plugged, the power of instrument and upper computer must be cut off!