

PC Communication protocol description - LonG

Computer → Balance: ENQ=(S I CR LF),

Balance → Computer: 16 Bytes, 8 bits, 1stop, no parity, 4800bps)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
*		*	*	*	*	*	*	*		*	*		*	CR	LF
+	*	10 ⁷	10 ⁶	10 ⁵	10 ⁴	10 ³	10 ²	10 ¹	10 ⁰	*	E	E	*		
-		0	0	0	0	0	0	0	0						
										

* - space (20h), E – unit or name,

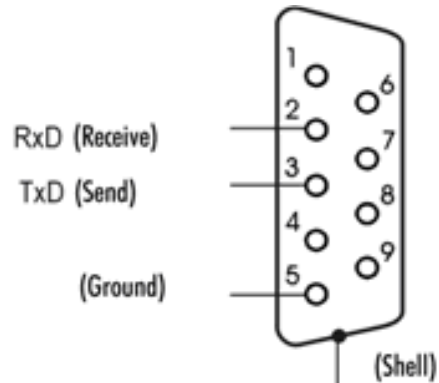
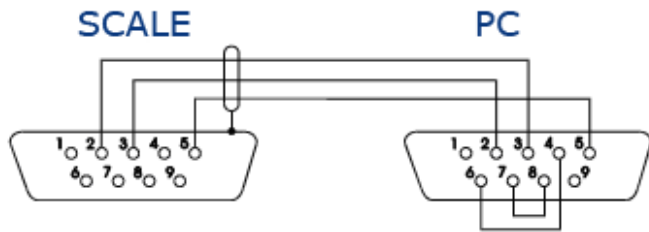
- 1 - space or mark
- 2 - Space
- 3÷4 - digit or space
- 5÷9 - digit, decimal point or space
- 10 - Digit
- 11 - Space
- 12 - K,l,c,p or space
- 13 - G,b,t,c or %
- 14 - Space
- 15 - CR
- 16 - LF

Important:

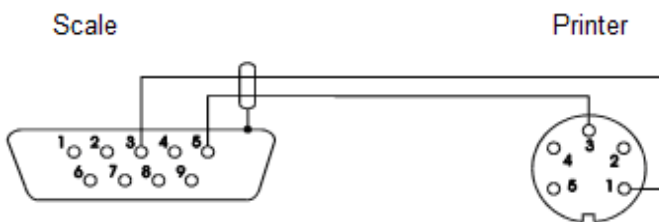
Transmission initiating signal ENQ=(S I CR LF) has the same effect as pressing the P or key.

T key	-S, T, CR, LF	(53h, 54h, 0Dh, 0Ah)
I/O key	-S, S, CR, LF	(53h, 53h, 0Dh, 0Ah)
MENU key	-S, F, CR, LF	(53h, 73h, 0Dh, 0Ah)
ZERO key	-S, Z, CR, LF	(53h, 5Ah, 0Dh, 0Ah)
key	-S, I, CR, LF	(53h, 49h, 0Dh, 0Ah)
lower threshold tHr	-S, L, x,x ... x, CR, LF	(54h, 4Ch, x=30h÷39h or decimal point, 0Dh, 0Ah) max 13 Bytes
upper threshold tHr	-S, H, x,x ... x, CR, LF	(53h, 48h, x=30h÷39h or decimal point, 0Dh, 0Ah) max 13 Bytes

RS232C, balance - computer / 9-pin interface Configuration):



WD-1 Configuration:



Configuring Sending Data Modes – Scale to PC

AD and AGC Models:

1. Press the M key
2. Wait for function “Print” (Print) to appear and press the T key.
3. Wait for “Send” (Send) to appear and press the T key.
4. Once a desired sending mode is displayed press the T key to activate.

Stb (Stb)	Stable	Stable weighing result is transferred from the scale after pressing the P key
Auto (Auto)	Automatic	Weighing result is automatically transferred from the scale after it stabilizes (no push key required)
Cont (Cont)	Continuously	Weighing results is continuously transferred from the scale at all times. (no push key and no stability required)



AGCN and AGZN Models:

1. Press the MENU key
2. Wait for function “RS-232” (RS-232) to appear and press the T key.
3. Wait for “Sending” (Send) to appear and press the T key.
4. Once a desired sending mode is displayed press the T key to activate.

b. P Stb (Stb)	Button plus Stability	Stable weighing result is transferred from the scale after pressing the P key,
butt. P (butt. P)	Button Only	Weighing result is transferred from the scale after pressing the P key (no stability required)
Auto (Auto)	Automatic	Weighing result is automatically transferred from the scale after it stabilizes (no push key required)
Cont (Cont)	Continuously	Weighing results is continuously transferred from the scale at all times. (no push key and no stability required)



AG and AGN Models:

1. Press the MENU key
2. Select Configuration
3. Select RS-232C or USB.
4. Use <> keys to select a data sending mode.


button + stab.	Button plus Stability	Stable weighing result is transferred from the scale after pressing the  key,
button only	Button Only	Weighing result is transferred from the scale after pressing the  key (no stability required)
after stabil.	Automatic	Weighing result is automatically transferred from the scale after it stabilizes (no push key required)
continuous	Continuously	Weighing results is continuously transferred from the scale at all times. (no push key and no stability required)

BA and BTA Models:

1. Press the MENU key
2. Wait for Port 1 (Port 1) RS232 or Port 2 (Port 2) USB to appear and press the T key.
3. Wait for Sending (SENDING) to appear and press the T key.
4. Once a desired sending mode is displayed press the T key to activate.

o stab (o 5tb)	Button plus Stability	Stable weighing result is transferred from the scale after pressing the  key,
o (o)	Button Only	Weighing result is transferred from the scale after pressing the  key (no stability required)
Auto (Auto)	Automatic	Weighing result is automatically transferred from the scale after it stabilizes (no push key required)
Cont (Cont)	Continuously	Weighing results is continuously transferred from the scale at all times. (no push key and no stability required)

Exchange data:

- Transmit the weight (equivalent to the Print Key, , in weighing: Computer→Scale: **S I** CR LF (53h 49h 0Dh 0Ah) – initiating signal, Scale→Computer: scale sends 16 Bytes of data as follows:

Byte	1	- The character ‘-’ or space
Byte	2	- Space
Bytes	3,4	- digit or space
Bytes	5-9	- digit, comma, or space
Byte	10	- Digit
Byte	11	- Space
Byte	12	- k, l, c, p or space (for kg,lb,ct,pc, or%)
Byte	13	- g, b, t, c or %
Byte	14	- Space
Byte	15	- CR
Byte	16	- LF
- ‘Display the MENU’ (corresponds to the key **MENU** in weighing): Computer→Scale: **S F** CR LF (53h 46h 0Dh 0Ah), Scale→Computer: no response.
- Setting the threshold 1 (optional):
Computer→Scale: **S L DI...DN** CR LF (53h 4Ch DI...DN 0Dh 0Ah) where: DI...DN – Threshold value, up to 8 characters,
Scale→Computer: no response,
- Example:
To set 1000g in weight B1.5 (d=0.5g) type: **S L 1 0 0 0 . 0** CR LF (53h 4Ch 31h 30h 30h 30h 2Eh 30h 0Dh 0Ah). To set 100kg in weight B150 (d=50g) type: **S L 1 0 0 . 0 0** CR LF (53h 4Ch 31h 30h 30h 30h 2Eh 30h 30h 0Dh 0Ah),
- Setting the threshold 2 (optional):
Computer→Scale: **S H DI...DN** CR LF (53h 48h DI...DN 0Dh 0Ah), where: DI...DN – threshold value, up to 8 characters,
Scale→Computer: no response
- ‘Tare the weight’ (corresponds to the **→T←** key in weighing): Computer→Scale: **S T** CR LF (53h 54h 0Dh 0Ah),
Scale→Computer: no response.
- ‘Zero the scale’ (corresponds to the key **→0←** in weighing): Computer→Scale: **S Z** CR LF (53h 5Ah 0Dh 0Ah),
Scale→Computer: no response.
- ‘Turn On / Off the Scale (corresponds to the key **I/⏻** in weighing): Computer→Scale: **S S** CR LF (53h 53h 0Dh 0Ah), Scale→Computer: no response.