

communication document for electronic scale at Jaynes serial port

1. Transmission Modes

There are three transmission modes: 1) continuous transmission, 2) weight-once transmission, and 3) response mode. In response mode, the upper computer sends commands, and the electronic scale sends back different data according to the command.

2. Data Transmission Format

S	T	,	N	T	,		1	2	3	4	.	5	6		k	g	CR	LF
Header1			Header2			Data (8 digits in length)								Unit				

Header1						Header2					
S	T	,	穩定 (STABLE)			N	T	,	淨重(NET)		
U	S	,	不穩定 (UNSTABLE)			G	S	,	毛重(GROSS)		
O	V	,	超重			T	R	,	皮重(扣重,TARE)		

JAYNES weight data is in ASCII characters and may include the following:

- "0" to "9" digits;
- " " blank characters;
- "." decimal point;
- "-" minus sign.

In response mode, if the upper computer has sent address information, the transmitted data is prefixed with @XX, XX for the specific address, such as @02 for address.

If the electronic scale has a checksum, there are two XOR checksum characters before CR and LF. The XOR checksum is calculated by performing XOR operations on characters excluding CR, LF, and the checksum. The high 4 bits and low 4 bits of the result are converted to characters. If the high 4 bits are 1, it is converted to the character '1'; if the high 4 bits are 15, it is converted to the character 'E'.

3. Upper Computer Command Format

R		T		CR		LF	
Header				13		10	

Header(Command)		
R	N	Read Net Weight (NET)
	T	Read Tare Weight (TARE)
	G	Read Gross Weight (GROSS)
	C	Read Internal Code
S	Z	Zero
	T	Tare
	U	Change of Unit of Measurement

If there are multiple devices connected, JAYNES can add an address before the command, in the format @xx.xx for address information. For example, to access the electronic scale with address 02, prefix @02.

If the JAYNES electronic scale has a checksum, there are two XOR checksum characters before CR and LF. The XOR checksum is calculated by performing XOR operations on characters excluding CR, LF, and the checksum. The high 4 bits and low

4 bits of the result are converted to characters. If the high 4 bits are 1, it is converted to the character '1'; if the high 4 bits are 15, it is converted to the character 'E'.
Note: The value of CR is 13, and the value of LF is 10.