

# Protocolos de conexión balanzas de peso electrónico DIG - B01 / DIG - B01P

## 1 AUTO COMMUNICATE PROTOCOL

### 1) FORMAT

BAUD RATE: 9,600

DATA BIT: 8

PATIRITY BIT → NO

STOP BIT: 1

when turn on, default to send 10 times every second, the rate can be adjust and he adjusting method is same as digital OP box.

### 2) DESCRIPTION

| COMMAND      | ANNOTATION  |
|--------------|---|
| SOH(01h)     | Start character   |
| STX(02h)     | First symbol  |
| STA          | 1 BYTE<br>STA status value:<br>F(46h): over weight or no zero when power on<br>S(53h): weight stable<br>U(55h): weight unstable   |
| Sign         | 1 Byte<br>Sign bit:<br>“(2dh): weight is minus<br>”(20h): weight is positive or 0   |
| Weight       | 6 Bytes<br>Weight<br>“W4W3.W2W1W0”: 6 bytes of ASCII  |
| Weight Units | 2 Bytes<br>Weight units<br>“U1U0”: 2 bytes of ASCII, like “kg”  |
| BCC          | Use BCC algorithm<br>In addition to the SOT, STX, ETX, EOT  |
| ETX(03h)     | Finial character  |
| EOT(04h)     | Final symbol  |
| STA2         | 1 Byte<br>Status<br>Bit 0~ bit3: value 0<br>Bit 4: value 1: weight is zero<br>Bit 5: value 1 : on Tare mode<br>Bit 6: value 1 : over weight or no zero when power on;<br>Value 0: weight is regular and power on successful |

## SENDING FORMAT (THE RESULT WHEN SCALE ANSWER)

| SHead1 | SHead2 | Status | Sign | Weight      | Weight Units | Check Sum | Tail1 | Tail2 | Status2 |
|--------|--------|--------|------|-------------|--------------|-----------|-------|-------|---------|
| SOH    | STX    | STA    | Sign | W4W3.W2W1W0 | U1U0         | BCC       | ETX   | EOT   | STA2    |

## 2 PASSIVE COMMUNICATION PROTOCOL

### 1) FORMAT

BAUD RATE: 9, 600

DATA BIT: 8

PATIRITY BIT → NO

STOP BIT: 1

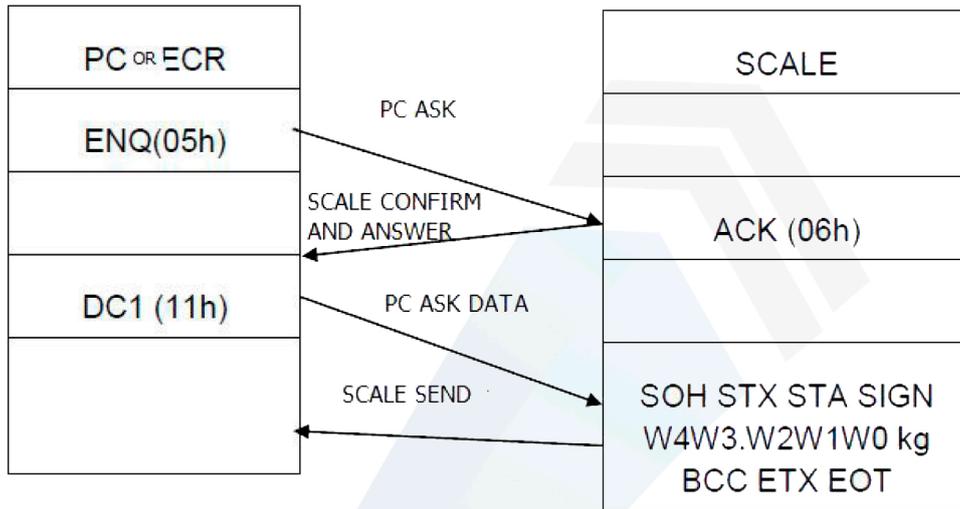
### 2) DESCRIPTION

| COMMAND      | ANNOTATION  |
|--------------|---|
| ENQ(05h)     | Ask for communicating   |
| ACK(06h)     | Confirm   |
| NAK(15h)     | No confirm  |
| DC1(11h)     | Ask data  |
| SOH(01h)     | Start character   |
| STX(02h)     | First symbol  |
| STA          | 1 BYTE<br>STA status value:<br>F(46h): over weight or no zero when power on<br>S(53h): weight stable<br>U(55h): weight unstable |
| Sign         | 1 Byte<br>Sign bit:<br>“(2dh): weight is minus<br>”(20h): weight is positive or 0   |
| Weight       | 6 Bytes<br>Weight<br>“W4W3.W2W1W0”: 6 bytes of ASCII  |
| Weight Units | 2 Bytes<br>Weight units<br>“U1U0”: 2 bytes of ASCII, like “kg”  |
| BCC          | Use BCC algorithm<br>In addition to the SOT, STX, ETX, EOT  |
| ETX(03h)     | Finial character  |
| EOT(04h)     | Final symbol  |

### SENDING FORMAT (THE RESULT WHEN SCALE ANSWER)

| SHead1 | SHead2 | Status | Sign | Weight      | Weight Units | Check Sum | Tail1 | Tail2 | Status2 |
|--------|--------|--------|------|-------------|--------------|-----------|-------|-------|---------|
| SOH    | STX    | STA    | Sign | W4W3.W2W1W0 | U1U0         | BCC       | ETX   | EOT   | STA2    |

### 3) COMMUNICATION FLOW CHART



### 3 AUTO OR PASSIVE TARE AND ZERO

#### 1) DESCRIPTION

| COMMAND | ANNOTATION   |
|---------|--|
| <(3Ch)  | Start character  |
| >(3Eh)  | Final character  |
| CMD     | 2 Bytes<br>Command<br>C1C0:<br>Tare command: "TK" (54h,4Bh)<br>Zero command: "ZK"(5Ah , 4Bh) |
| HT(09h) | Final symbol   |

Sending format

| SHead1 | CMD  | ETail1 | ETail2 |
|--------|------|--------|--------|
| <      | C1C0 | >      | HT     |