# Description of communication protocols supported by scale \$200

# 0. CAS protocol

#### 1. The communication agreements

- 1. BAUD RATE -> 9600
- 2. DATA BIT -> 8 BIT
- 3. STOP BIT -> 1 BIT
- 4. PARITY BIT -> NO
- 6. DATA FORMAT -> ASCII
- 7. THE COMMAND DEFINITIONS
- "ENQ" -> 05H
- "ACK" -> 06H
- "SOH" -> 01H
- "STX" -> 02H
- "ETX" -> 03H
- "EOT" -> 04H
- "DC1" -> 11H

#### 2. The communication protocol

Scale side Cash register side 1. Cash register sends "ENQ" ENQ-05H 2. Scale sends "ACK". If it is no answer from ACK-06H the other side within 3 seconds, scale voids request. DC1 3. Cash register sends DC1 DATA BLOCKS 4. Scale sends data blocks

# 1. ELICOM protocol

## 1. The communication agreements

BAUD RATE - 9600 DATA BIT - 8 BIT STOP BIT - 1 BIT PARITY BIT - NO

## 2. The communication protocol

<u>PC</u> AA (16)

Scale No weight - BB<sub>(16)</sub>

When weight is stable: 3 bytes + CKS  $\underline{Example:}$  2,310kg = 00 23 10 33  $_{(16)}$ 

Scale is zero with command: CC (16)

#### 2. Dibal Protocol

#### 1. The communication agreements

BAUD RATE - 9600 DATA BIT - 8 BIT STOP BIT - 1 BIT PARITY BIT - NO

#### 2. The communication protocol

PC STX

<u>Scale</u> ACK

PC @1PU4PU3PU2PU1PU0 CR LF (PUn => digit price/kg

PC STX

Scale ACK

PC 10CR LF

<u>Scale</u> STX

PC ACK

Scale PD4PD3PD2PD1PD0 PU4PU3PU2PU1PU0 PX5PX4PX3PX2PX1PX0 0 CR LF

PDn weight sent by the balance
PUn digit price/kg sent by the balance
PXn total digit price sent by the balance

**NOTE:** When scale is in the following modes: instability weight, zero weight, overload or "negative" weight. The transmission of messages for WEIGHT, PRICE/KG, PRICE TO PAY the scale will replace all characters PDn, PUn, PXn by the character "X"

# 3. Mettler protocol

#### Commands

Each command end with <CR><LF>, where

 $\langle CR \rangle = 0Dh$ 

 $\langle LF \rangle = 0Ah$ 

The other part of the command is ASCII text

#### Command S – send stable weight value

Command S

Response: S S Weight value Kg

SI – command is not executable, the scale is busy

Example:

<u>Command</u> S

Response SS 0.360 Kg

#### Command SI – send weight value immediately regardless the stability

Command SI

Response: S S Weight value Kg - stable weight

S D Weight value Kg - unstable weight

SI – command is not executable, the scale is busy

Example:

**Command** SI

Response S D 0.360 Kg

#### Command SIR – send weight value immediately and repeat

#### **Command SIR**

Response: S S Weight value Kg - stable weight

S D Weight value Kg - unstable weight

S I – command is not executable, the scale is busy

#### Example:

Command SIR

Response S D 0.360 Kg

SIR is overwritten by the commands S, SI

#### **Command Z - Zero the scale**

#### Command Z

Response: Z A – zero setting is performed

ZI – command is not executable, the scale is busy

#### Example:

<u>Command</u> Z

Response ZA

#### **Command ZI – zero immediately**

Command ZI- Zero the scale immediately regardless the stability

Response: ZI D – zero is performed under non-stable conditions

ZI S – zero is performed under stable conditions

ZI – command is not executable, the scale is busy

#### Example:

Command Z

Response Z A

# 4. DELMAC protocol

**Note:** This protocol is working on speed 1200 baud rate and scale baud settings from scale menu does not take affect



