

Firmware Ax0F06-011 – communication protocol

1. Commands supported in any operating mode

1.1 Confirm the presence of the scale

Command:

SJ\r\n

Response:

MJ\r\n

2. Commands supported in weighing mode

2.1 Perform I/O key action (scale turn off / turn on)

Command:

SS\r\n

Response:

MS\r\n

2.2 Perform $\rightarrow T \leftarrow$ key action (scale taring)

Command:

ST\r\n

Response (after taring):

MT\r\n (taring successful)

MQ\r\n (taring unsuccessful)

2.3 Perform $\rightarrow 0 \leftarrow$ key action (scale zeroing)

Command:

SZ\r\n

Response (after zeroing):

MZ\r\n (zeroing successful)

MQ\r\n (zeroing unsuccessful or scale without zeroing feature)

2.4 Perform MENU key action

Command:

SF\r\n

Response:

MF\r\n

2.5 Perform PRINT key action

Command:

SP\r\n

Response:

<scale_printout>

2.6 Perform internal adjustment

Command:

SC\r\n

Response:

MC\r\n (start of internal adjustment)

MC_END\r\n (end of internal adjustment)

MQ\r\n (scale without internal adjustment feature)

2.7 Perform external calibration (non-legalized scales)

Command:

SCE\r\n

Response:

MCE\r\n (start of external calibration)

MCE_LOAD\r\n (scale waits for external load)

MCE_UNLOAD\r\n (scale waits for unloading)

MC_END\r\n (end of external calibration)

MQ\r\n (legalized scale)

2.8 Send stable result

Command:

SI\r\n

Response (after stabilization):

<result_data>\r\n

2.9 Send result immediately

Command:

Sx1\r\n

Response:

<result_data>\r\n

2.10 Send result immediately with stability status

Command:

Sx3\r\n

Response:

<stability_data><result_data>\r\n

2.11 Send calibration report

Command:

SW1\r\n

Response:

<calibration_report>\r\n

2.12 Send current tare value

Command:

ST?\r\n

Response:

MT<tare_data>\r\n

2.13 Set current tare value

Command:

ST<tare_data>\r\n

Response:

MT\r\n (setting tare successful)

MQ\r\n (setting tare unsuccessful)

2.14 Display message

Command:

SN<message_time><message_text>\r\n

Response:

MN\r\n

2.15 Send scale serial number

Command:

SEN?\r\n

Response:

<s/n_data>\r\n

2.16 Send scale date of production

Command:

SED?\r\n

Response:

<dateofproduction_data>\r\n

2.17 Send scale name

Command:

SET?\r\n

Response:

<scale_name>\r\n

2.18 Send scale time & date

Command:

```
Sd&t?\r\n
```

Response:

```
<date&time_data>\r\n
```

2.19 Set scale date & time

Command:

```
Sd&t<date&time_data>\r\n
```

Response:

```
Md&t\r\n
```

3. Data formats

<result_data> - char[14]

byte 1 - '-' (for negative result) or space,

byte 2 - space,

byte 3 - digit or space,

byte 4-9 - digit, '.' (decimal point) or space,

byte 10 - digit,

byte 11 - space,

byte 12-14 - unit.

Examples:

```
- 0.1234 g
 3000.34 g
   1001 pcs
```

<stability_data> - char[1]

S result stable,

U result unstable.

<tare_data> - char[max.16]

Examples:

```
100g
0.34 g
```

<message_time> - char[2]

Examples:

```
02 2 seconds,
99 99 seconds.
```

<message_text> - char[max.40]

Examples:

```
Press >T< to tare!
1234567890123456789012345678901234567890
```

<s/n_data> - char[max.9]

Examples:

702001234

630001234

<dateofproduction_data> - char[11] (YYYY-MM-DD format)

Examples:

2024-05-24

2013-12-31

<scale_name> - char[max.20]

Examples:

AGN220

AG3000

<date&time_data> - char[11] (YYYY-MM-DD HH:MM:SS format)

Examples:

2024-05-24 09:15:03

2013-12-31 23:05:00