

M2200

P02 1011 Application

Marel hf.

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Contents

P02 1011 Application	3
IN GENERAL	3
ABOUT P02 1011	3
USING P02 1011	3
Starting Up	3
The Scale page	4
The Application Page	5
HOST INTERFACE	5
Standard Interface	5
Specific Interface	5

P02 1011 Application

In General

This is a technical description of the M2200-P02 1011 application.

The application's Lua source code is available from Marel hf free of charge but subject to conditions. For more information please contact service@marel.is.

The “Programming” chapter of the *M2200 P02 & M02 Packing Scale User's Guide* contains more information on Lua scripts and M2200 programming.

About P02 1011

P02 1011 is an MPS-compatible M2200 application for a packing scale that can be used with MPS terminal control programs, such as `pkm2term`.

The application does not include any controls.

Using P02 1011

Starting Up

To start using the P02 1011 application for the first time you must first set the application parameters.

To set the application parameters

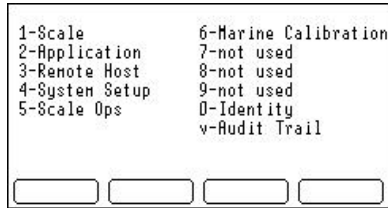


Figure 1 The Top Level Menu page.



Figure 2 Parameter list A.

- 1 Press and hold the PAGE  key for ca. three seconds to display the Top Level Menu page.
- 2 Select **4-System Setup** → **Settings** → **System parameters A**.
- 3 Select a line in the parameter list, press the CHECK  key to enter a value for the parameter, and then confirm by pressing  again.
- 4 Press  to return to the parameter list.

Note: You must scroll down with the arrow keys to see all parameters in the list.

If you select the **Accept all weights** option, the program will allow registration of items without regard to the packing limits.

The Scale page

The Scale page in P02 1011 shows the MPS terminal window (1), the packing bar (2), and the weight display (3).

You can use the arrow keys to select the previous or the next product.

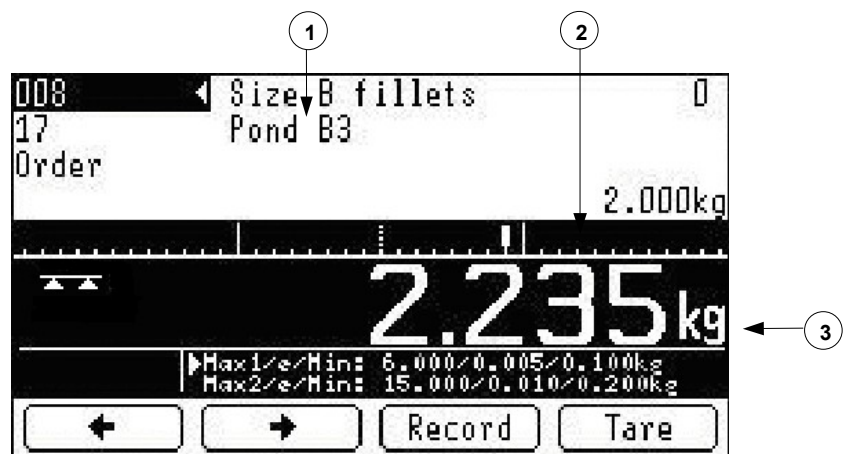


Figure 3 The P02 1011 application, Scale page.

The Application Page

From the Scale page press  to display the Application display.

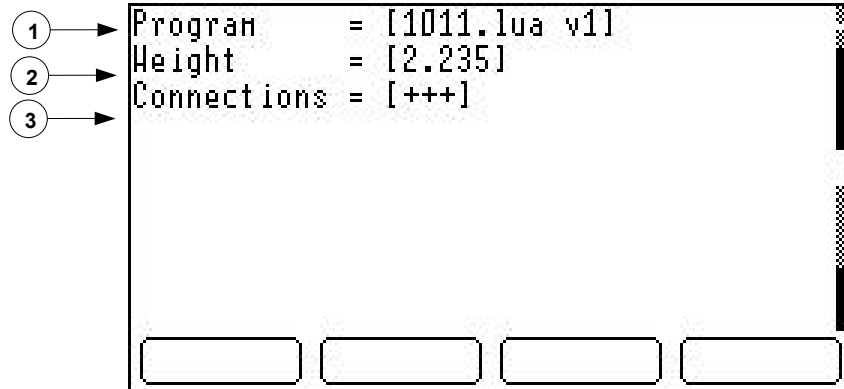


Figure 4 The Application display.

This page shows the application's name and version (1), the current weight (2), and a connection status string (3).

Connection status indicators

- The first character in the connection status string is “+” if there is an active connection on the message port, otherwise the flag is set to “-”.
- The second character shows the same for the terminal port.
- The third character is “+” if the CAN unit is online, otherwise the flag is set to “-”.

Host Interface

Standard Interface

The P02 1011 application supports the standard M2200 terminal program interface. See separate documentation for this interface.

The terminal application can only use the top four lines on the scale display. The fifth line is used to display the packing bar.

Specific Interface

ID button message

A REC_IDBUTTON message is sent to the persistent output queue when an ID button is read. The message is only sent if there is an open socket connection on the output queue.

Field	ID Value	Value
REC_IDBUTTON	80	N/a
FLD_BUTTONID	55	Button number

Table 1: REC_IDBUTTON format.

Sample message:

<STX>(80<TAB>55<TAB>9f000002fe64d609<ETX>

Serial port 2 message

A REC_SCAN message is sent to the persistent output queue when serial data is input to comm port 2. The message is only sent if there is an open socket connection on the output queue.

Field	ID Value	Value
REC_SCAN	84	N/a
FLD_SCAN	60	Serial input
FLD_PORTID	62	Port ID

Table 2: REC_SCAN format

Sample message:

<STX>(84<TAB>60<TAB>780879306045<TAB>62<TAB>2<ETX>

Packing message

A REC_PACK message is sent to the persistent output queue every time a pack is recorded.

Field	ID Value	Value
REC_PACK	103	N/a
FLD_WEIGHT	1	Pack weight
FLD_NOMINAL	77	Pack nominal weight
FLD_UNIT	2	Unit for nominal weight
FLD_TARGET	78	Pack target weight
FLD_ACCEPT	11	Accept status
FLD_TARE	59	Active tare
FLD_TARETYPE	81	Tare type, “preset” or “button”
FLD_FGIVEAWAY	79	Fixed giveaway
FLD_VGIVEAWAY	80	Giveaway percentage
FLD_MATERIAL	6	Product ID

Table 3: REC_PACK format

Sample message:

```
<STX>(103<TAB>1<TAB>2.235<TAB>77<TAB>2.000kg<TAB>2<TAB>kg<TAB>78<TAB>2.2<TAB>11<TAB>0<TAB>59<TAB>0<TAB>81<TAB>button<TAB>79<TAB>0<TAB>.2<TAB>80<TAB>0<TAB>6<TAB>0<ETX>
```

Weight status message

A REC_STATUS message is sent to the persistent output queue when the scale has a new stable weight.

Field	ID Value	Value
REC_STATUS	14	N/a
FLD_WEIGHT	1	Current weight
FLD_UNIT	2	Weighing unit
FLD_STATUS	11	Weight status string
FLD_TARE	59	Current tare
FLD_TARETYPE	81	Tare type, “preset” or “button”

Table 4: REC_STATUS format

The message is only sent if there is an open socket connection on the output queue.

Additionally, the message is only sent automatically if the steady weight event is active. This event is normally activated by the application program but can be set manually by accessing the System page and selecting **Settings → General Events → When weight becomes steady**.

The message can also be requested by the application program by sending a REC_LUA message to the indicator, see below.

Sample message:

```
<STX>(14<TAB>1<TAB>-0.96<TAB>2<TAB>kg<TAB>11<TAB>sz<TAB>59<TAB>0.96<TAB>81<TAB>button<ETX>
```

The weight status strings contains three letters:

- The first letter is either “s” for stable or “m” for unstable.
- The second letter is “z” if the scale is at zero or “n” if not.
- Set manually letter is “t” if there is an active tare or “n” if not.

REC_LUA messages to the indicator

REC_LUA messages are application specific control messages for the indicator. These messages do not define identifiers for individual fields.

Field	ID Value	Value
REC_LUA	87	N/a
#1	1	Lua command.
#2	1	Send weight status message

Table 5: REC_LUA messages

Sample message:

<STX>(87<TAB>1<TAB>1<ETX>