User Manual
# Content

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Notes and Warning

**NOTE**: Indicating important information that helps you make better use of U2.

**WARNING**: Indicating either potential damage to hardware or loss of data and telling you how to avoid the problem.

Operating Installation

1. Get “U2 Message PRO Setup_x.x.x.x.exe” from your disk; double click to install the Message PRO software.
2. Select the language that you want to install; the system will display all the corresponding languages that PC supported.
3. Click Next to install the U2 Message PRO.
4. Click Next to choose installs location.
5. Click Browse you can customize the destination folder and then Click Install, to finish the installation procedure.
6. After installing successfully, the program will create icon on your desktop, double click **U2** to start the program.
**Message Browser**

**SD card**
The SD card is the ultimate source of transferring any editing message or setting for U2 printer.

In **MessagePRO**, three different icons representing SD card Status.

- ![No SD card, but still able to edit the message.](Image)
- ![SD card has not been initialized; please insert the card into U2 printer for activation.](Image)
- ![SD card is good to go; synchronizing between pc and SD card.](Image)

**Message Browser Screenshot**

- Message list: The message marked ★ means ready for printing.

**Menu Panel:**
- Take you back to **Message Browser** anytime.
- Manage different setting for U2 printer. See **Function** for detail.
- Manage different setting for **MessagePRO**. See **PC-Tools** for detail.
Tool Buttons Description

<table>
<thead>
<tr>
<th>Icons</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![create_message_icon]</td>
<td>Create a new message</td>
</tr>
<tr>
<td>![edit_message_icon]</td>
<td>Edit selected message;</td>
</tr>
<tr>
<td>![delete_message_icon]</td>
<td>Delete the selected message</td>
</tr>
<tr>
<td>![search_message_icon]</td>
<td>Search message (When the Message Name option is ON)</td>
</tr>
<tr>
<td>![printer_icon]</td>
<td>Setup the printing delay</td>
</tr>
<tr>
<td>![zoom_out_icon]</td>
<td>Zoom out (200%, 175% ... 20%)</td>
</tr>
<tr>
<td>![zoom_in_icon]</td>
<td>Zoom in (25%, 50% ... 200%)</td>
</tr>
</tbody>
</table>

Right click menu

<table>
<thead>
<tr>
<th>Copy to</th>
<th>Copy the whole message content to different message No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ink Report</td>
<td>Get the Ink Report of selected message</td>
</tr>
<tr>
<td>Rename</td>
<td>Rename message (When the Message Name is ON)</td>
</tr>
<tr>
<td>Select Print Message</td>
<td>Ready for printing</td>
</tr>
</tbody>
</table>

For left-handed, simply reverse the mouse button with its function.

Copy To: Select message # and name.

Copy To

Message #: 363
Message Name: Untitled

[OK] [Cancel]
Editing message

Message Editor

Click 🗄️ or Double-click under Message Browser.

Message Editor Tool Buttons

<table>
<thead>
<tr>
<th>Button</th>
<th>Description</th>
<th>Access Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>🍁</td>
<td>Add a object to the message</td>
<td>None</td>
</tr>
<tr>
<td>🍁</td>
<td>Modify the properties of an object</td>
<td>None</td>
</tr>
<tr>
<td>🍁</td>
<td>Delete the selected objects</td>
<td>Hotkey: Delete  Right Click: Delete</td>
</tr>
<tr>
<td>☑️</td>
<td>Copy object</td>
<td>Hotkey: Ctrl + C  Right Click: Copy To</td>
</tr>
<tr>
<td>☑️</td>
<td>Paste object</td>
<td>Hotkey: Ctrl + V  Right Click: Paste</td>
</tr>
<tr>
<td>🔍</td>
<td>Zoom out (200%, 175% ... 20%)</td>
<td>None</td>
</tr>
<tr>
<td>🔍</td>
<td>Zoom in (25%, 50% ... 200%)</td>
<td>None</td>
</tr>
<tr>
<td>🗃️</td>
<td>Line Mode:  Line Free \ 1Line \ 2Lines \ 3Lines \ 4Lines</td>
<td>None</td>
</tr>
</tbody>
</table>
### Line Mode

Click , access to **Line Mode**.

You can choose **Lines** or **Line Free**.

- **Lines**:
  - a. One Line: Editing system text (2.7mm, 3.6mm, 5.5mm, 8.0mm, 10mm, 12.7mm), Window Font and various objects;
  - b. Two Lines: Editing system text (2.7mm, 3.6mm, 5.5mm), Window Font and various objects, However, no barcode allow and objects can’t cross the dividing line;
  - c. Three Lines: Editing system text (2.7mm, 3.6mm), Window Font and various objects. However, no barcode allow and objects can’t cross the dividing lines;
  - d. Four Lines: Editing system text (2.7mm), Window Font and various objects. However, no barcode allow and objects can’t cross the dividing lines;

- **Line Free**: No restriction of creating any combination of objects and texts in any way you desired.

**Window Font** is not the system text, but an object with graphics.

![New Message](image)

A Line Free edited message can’t be re-edited after downloading to U2 printer via SD card.
Text

1. Add Text Object: In Message Editor, click ➕ > Text.

2. Editing Text Object attribution as following:
   - Message Content: Input the letters and numbers.
     - System default text does not support lower case.
   - Position: Display X/Y-axis, width and height of the object.
## Windows Font

1. Add Windows Font Object: Under **Message Editor**, click 
   ![Windows Font Object](image).

2. Editing Windows Font Object attribution as following:
   - **Content**: Input any character supported by your Windows.
   - **Font**: Select font type and font size for object content.

   - For non-Roman character, you must select the appropriate font type in order to display correctly on the message screen.
   - **Position**: Display X/Y-axis, width and height of the object.

   ![Object Type: Windows Font](image)

   - **(Content tab)**

   ![Object Type: Windows Font](image)

   - **(Font tab)**

## Logo

1. Add LOGO Object: Under **Message Editor**, click 
   ![Logo Object](image).

2. Editing LOGO Object attribution as following:
   - **Content**: Open a logo file.

   - You can only open logo file through designed folder. (Refer to Logo Management)
   - **Position**: Display X/Y-axis, width and height of the object. (Refer to **Text**)

   ![Logo Object](image)
Production Date

1. Add Production Date Object: Under **Message Editor**, click **Insert > Object**.
2. Editing Production Date Object attribution as following:
   - **Content**: Current Date.
     - It can't be edited as current date reflects to the date of your window system.
   - **Font**: Select font size for object content. (Refer to **Text**)
     - For font size editing availability, please see line mode.
   - **Position**: Display the X/Y-axis, width and height of object. (Refer to **Text**)

   - **Parameters**: Click **and select the Date/Time Format from drop-down menu.**
   
     If the **Data/Time Format** you desired does not exist in the system, you can simply add/edit the format template accordingly.
3. Format Editing.

If the data/time format you need does not exist in system, please click button to add/delete/modify data/time format. (Refer to Message Editor-> Date/Time Format)

**Expiry Date**

1. Add Expiry Date Object: Under Message Editor, click .
2. Editing Production Date Object attribution as following:
   - Content: Expiry Date.
   - It can’t be edited as current date reflects to the date of your window system.
   - Parameters: Refer to Production Date.
   - Font: Refer to Production Date.
   - Position: Refer to Text.

![Expiry Date Object](Content tab)

**Shift**

1. Add Shift Object: Under Message Editor, click .
2. Editing Counter Object attribution as following:
   - Content: Shift Code.
   - Font: Refer to Production Date.
   - Position: Refer to Text.

![Shift Object](Content tab)
• Parameters: Click the , access to the Shift interface.

Allow user records all operators and their starting time.

<table>
<thead>
<tr>
<th>Shift Name (Capitalize font only)</th>
<th>Start Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>n1</td>
<td>00:00</td>
</tr>
<tr>
<td>n2</td>
<td>12:00</td>
</tr>
<tr>
<td>n3</td>
<td>13:00</td>
</tr>
<tr>
<td>n4</td>
<td>18:00</td>
</tr>
<tr>
<td>n5</td>
<td>20:15</td>
</tr>
</tbody>
</table>

The print content is depended on the actual printing time, not editing time. (Refer to U2 PRINTER USER MANUAL)

**Single Counter**


2. Editing Counter Object attribution as following:
   - Content: Display the minimum value of Single counter.
   - Font: Refer to Production Date.
   - Position: Refer to Text.

   (Content tab)

   • Parameters: Click the , and input the Minimum, Maximum and Step value.
Minimum—the first value of counter.
Maximum—the last value of counter without restart.
Step—difference between two adjacent values.
To count up: input positive step value.
To count down: input negative step value with minus sign (-).

**Lot-Box Counter**

1. Add Box/Lot Counter Object: Under *Message Editor*, click $\text{Add}$.
2. Editing Counter Object attribution as following:
   - Content: Display the minimum value of Lot-Box.
   - Depends on the field name you selected. You need add two Box/Lot Counter Objects as *Box* and *Lot*.
   - Font: Refer to *Production Date*.
   - Position: Refer to *Text*.

![Content tab](Content tab)

- Parameters: Click the $\text{Parameters}$, and input the Lot and Box Counter value.

![Lot-Box Counter](Lot-Box Counter)

- Definition Function: Box and lot should be used together, when the box prints over the max value, the box will reset to minimum value and lot will advance a step value. Input each field value of counter according to your needs. (Refer to *U2 PRINTER USER MANUAL*)
Barcode

1. Add barcode object: Under Message Editor, click ▶️.<br>
2. Editing Barcode Object attribution as following:<br>
   - Barcode Type: Select barcode type.<br>
   - Content: Input the content of barcode.<br>
   🔄 For barcode editing rules, please refer to U2 PRINTER USER MANUAL.<br>
   - Width-Level (Range: 1~10)<br>
   🔄 At the width-level 1 or 2, Text Mode turns OFF automatically.<br>
   🔄 At the width-level 3 to 10, you can select Text Mode ON or OFF.<br>
   🔄 Width-level indicates the spacing between bars.<br>

String

1. Add String Object: Under Message Editor, click ▶️.<br>
2. Editing String Object attribution as following:<br>
   - Content: String 1, you can select deferent string. (String No.1~5)<br>
   - Font: Refer to Production Date.<br>
   - Position: Refer to Text.
(Content tab)

- Parameters: Click the button, and input the text string into a string field.
Function

Function on MessagePRO configures the function setting to U2 printer. U2 printer will synchronize the configurations automatically when the SD card is inserted into the U2. Some U2 functions are not available for MessagePRO, such as Language and System Clock.

Configuration

![Configuration Interface]

1. Measurement
Choose the unit measurement between Metric and British Units.

2. LCD Backlit Saving
Reduce the power consumption by enhancing the backlight brightness to black level.
Enable both LCD Backlit and password, while the backlight reaches the set-timing and turns into back screen, the system also logs off simultaneously.

3. Daylight Saving Time
Daylight saving time (DST), and "Summer Time" in much of Europe, is the practice of moving local time forward one hour in the spring and backwards in the autumn.
**Alarm Option**

1. **Alarm-kit (Optional)**
   When external Alarm kit has been connected to your system, the printer will detect the Alarm-kit automatically.

   The following form will tell you how Alarm LED will show due to all kinds of malfunction!

   **Alarm LED Instruction**

<table>
<thead>
<tr>
<th>Condition</th>
<th>LED Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ink Low</td>
<td>Orange</td>
</tr>
<tr>
<td>Normal Work</td>
<td>Green</td>
</tr>
<tr>
<td>Ink Empty</td>
<td>Red</td>
</tr>
<tr>
<td>Ink error: Ink Cartridge area code or sales code error</td>
<td>Red</td>
</tr>
<tr>
<td>No Cartridge</td>
<td></td>
</tr>
</tbody>
</table>

2. **Counter Alarm**
   Allow the printer making alarm sound when the pre-setup counter value has been reached.

   When **COUNTER ALARM** is **ON**, you are able to turn the **ALARM** ON/OFF in every single Counter with in a message.

3. **Key Tone**
   Turn key tone of the U2 ON or OFF.
**Editing Option**

1. **Customer Year**
   Allow you to print customized year despite of the system year.

2. **Rollover Hour**
   Allow you to print different date base on your production shift schedule.  
   ![Diagram of Rollover Hour]
   At 24 hour time convention, input time in the morning or afternoon reflects different printing date as following diagram presented:
   **For example**: System Date: 2010/09/21 and separate input time as ①②③.

- ① Since the system time already ahead of input time, before system time reaches 06:00 the next day, Printing Date: 2010/09/22.
  After system time reaches 06:00 the next day, Printing Date: 2010/09/23.
- ② Before system time reaches 11:00 at same day, Printing Date: 2010/09/20. After 11:00 at same day, Printing Date: 2010/09/21.
- ③ Before system time reaches 20:00 at same day, Printing Date: 2010/09/21. After 20:00 at same day, Printing Date: 2010/09/22.
When both input times ahead of system time but ₁ in the morning and ₂ in the afternoon, notice the differences printing date between two scenarios.

3. Message Name
Allow you to name/rename any message as your desire.

4. Counter Reset
To reset the counter before printing the message

5. Pre-Zero
Displays a digit or nothing! If the expression has a digit in the position where the # appears in the format string, display it; otherwise, display nothing in that position. This symbol works like the 0 digit placeholder, except that leading and trailing zeros aren't displayed if the number has the same or fewer digits than there are # characters on either side of the decimal separator in the format expression.

6. Shift
Allow user records all operators and their starting time. Enter shift name and time. (Refer to Message Editor -> Shift)

7. Date/Time Format
This option allows you to customize time notation. To create a new format:

a. Click ▼ or ▶ to personalize Data/time Format.
b. Editing Data/Time Format:

Click the format buttons as you desired! For some symbol such as (> / :), just input from your keyboard directly.
Printing Setup

1. **PrintHead**
   - Direction: Switch the direction of printing.
     - ABC: Left to right from the direction of conveyor.
     - ABCK: Right to left from the direction of conveyor.
     - ABCK: Left to right from the direction of conveyor and rotate 180°.
     - BYK: Right to left from the direction of conveyor and rotate 180°.
   - Nozzle: Switch left (Default) or right or dual.
   - Resolution: User can adjust resolution from 50~600, when the encoder is OFF.
     - User can only adjust horizontal resolution.

2. **Pre-purge**
   Enable Pre-purge function, the Printer will output ink dots periodically, preventing the ink solidified on the nozzle in a dry environment or long printing gap time.

   Pre-Purge is an important attribution to the printing quality, especially with different semi-porous and none-porous ink, it is critical to adjust parameter for different environments due to the unique ink character and de-cap time.

3. **Photocell**
   A sensor targets to objects and triggers the print timing. Select different photocell prior to you need.
   - **INTERNAL**: Default internal photocell of U2 printer.
   - **EXTERNAL**: Connect an external photocell via external device interface.
4. Encoder and Conveyor
When the speed of conveyor is inconsistent, install an encoder can ensure the print perfection regardless the speed of conveyor.
- When the Encoder is OFF, according to your conveyor equipment, input the conveyor speed.
- When encoder is ON
Input PULSE/CYCLE and DIAMETER of encoder and the software calculates the DPI automatically.

⚠️ Don’t recommend modify PULSE/CYCLE, and default value is 2500.

ANSER offers optional 400DPI encoder with 1.98” wheel diameter.
PC-Tools

The setting in this section only reflects to MessagePRO.

User Account

1. Login Option

Click 🚫 and select its properties.
Login function.
Enable this option; the program will add Logout in menu panel and User Management function. Click and then you can choose Switch User or Exit.

List all users
List of all users checked: Every time you login, the program will display all the users of the system. Click Drop-Down box, and select the user you want to login.

List of all users unchecked: Every time you Login, you need to input user name.
2. User Management

Click 🧑‍💻 to setup each user’s accessibility.

<table>
<thead>
<tr>
<th>User Operation button</th>
</tr>
</thead>
<tbody>
<tr>
<td>Icon</td>
</tr>
<tr>
<td>🧑‍科教</td>
</tr>
<tr>
<td>🧑‍科教</td>
</tr>
<tr>
<td>🧑‍科教</td>
</tr>
<tr>
<td>🧑‍科教</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Buttons/fields of user operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Icon</td>
</tr>
<tr>
<td>User name</td>
</tr>
<tr>
<td>Password</td>
</tr>
<tr>
<td>Confirm password</td>
</tr>
<tr>
<td>Select All</td>
</tr>
<tr>
<td>Unselect All</td>
</tr>
</tbody>
</table>
System Backup/Restore

1. Backup

Click button and input a new backup file name.

2. Restore

Click , and select a backup file and then click OK.

⚠️ All settings will be restoring to factory default value.
Logo Management

In order for U2 printer to locate the logo, all logo must be centralize and store to a dedicated folder.

Click , and import the Logos that you want to create in a message.

When you import a Logo, please awareness the height of logo due to the restriction by each Line Mode.

1. One Line: The height of the logo ≤ 75 pixels;
2. Two Lines: The height of the logo ≤ 37 pixels;
3. Three Lines: The height of the logo ≤ 25 pixels;
4. Four Lines: The height of the logo ≤ 18 pixels;

Under 300DPI condition logos can be printed with original size.

1. If you do not use encoder, go to Function > Printing Setup > PringHead > Resolution and choose 300DPI;
2. If the resolution is not 300DPI, first you may calculate a value like “x=Current DPI / 300”, then use Paint software to open the logo, choose Image > Stretch/Skew... and input the value of ‘x’ to “Horizontal” row.