Manual

Advanced

Printer

MxPro 5

The operation and functions described in this manual are available from Software Version Mx5000-050-02 onwards.

Specifications:

Models, Sales Order Parts:	
Mxp-512	Mx-5000 Internal Printer

Applications / Limitations:
When the printer is fitted, only four of the eight key-switch positions can be used.

Compatibility:
All Mx-5000 Series Panels except Mx-5101S. The printer fully supports the complete Western European character set – Code Page 1252. It is possible to support other code pages.

Item	Specification Details
Temperature	-5C to +40C
Relative Humidity	93%
DC Power Supply	24V
Current (Quiescent)	18mA (max)
Current (Printing) Typical 30% duty cycle	538mA (average) / 1.0A (peak) @ 24V
Printer Type	Thermal dot matrix
Printer Resolution	384 dots per line
Paper	Thermal, 58mm wide x 32mm diameter roll (10m Long)
Sensor	Paper Out / Door Open
Approvals	G210022

As our policy is one of constant product improvement the right is therefore reserved to modify product specifications without prior notice

Table of Contents Page

1 Introduction

Fast and quiet printing
Automatic printing of fire alarms, faults, alarms and test are configurable
On-demand printing of status for inputs, outputs, disablements, event log and network faults
In-built self-diagnostics
Bi-directional communications with the panel electronics
Front panel paper feed button
User / installer logo option
Compact design with simple paper loading
Printing is fully supported during AC Power failures

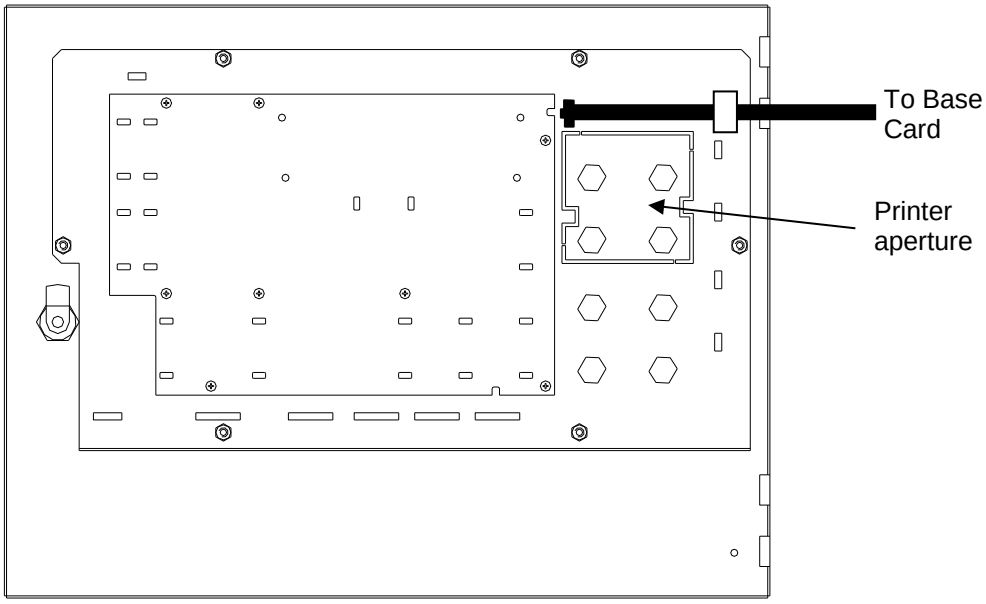
2 Installation

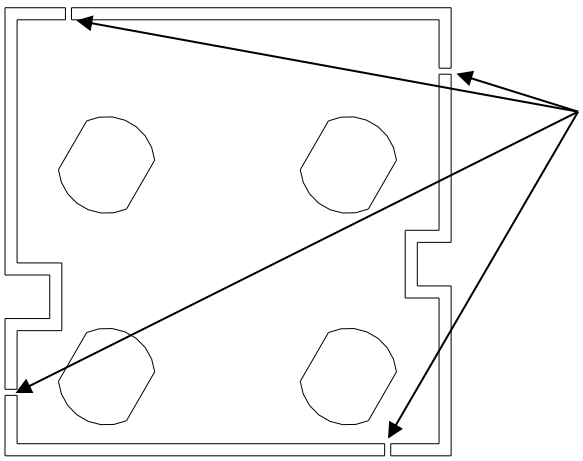
Isolate ALL sources of power before installing or removing printed circuit boards.

Observe anti-static precautions at all times when handling printed circuit boards.

2.1 Mounting the printer assembly

The printer is mounted onto the display plate in a pre-defined aperture.





Using a pair of strong side cutters, cut through the 1mm pips of the metal plate as shown below:

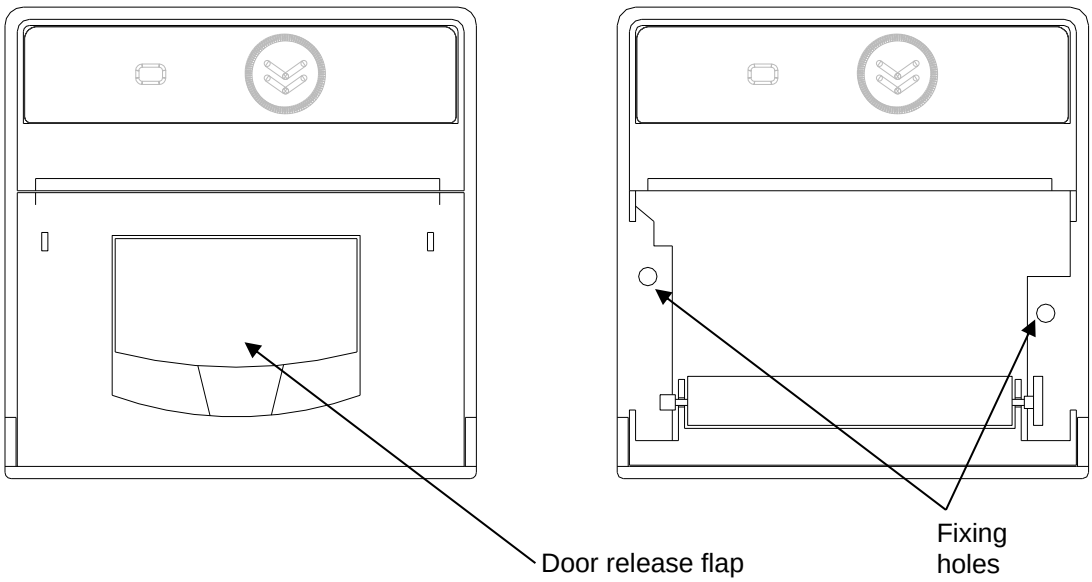
Using a sharp knife and working from the front face, cut through the membrane label using the outer edge of the aperture as a guide.

When the aperture plate is free, trim off and tidy the edge of the label to the edge of the aperture.

Take care not to damage the fascia label.

Offer up the printer to the aperture and guide the printer into position (at an angle) ensuring that the connector on the PCB does not collide with the metalwork.

Push into position. Open up the paper roll aperture and then secure the printer mechanism using the two self-tapping screws in the two holes either side of the printer paper roll recess.



2.2 Cable Installation

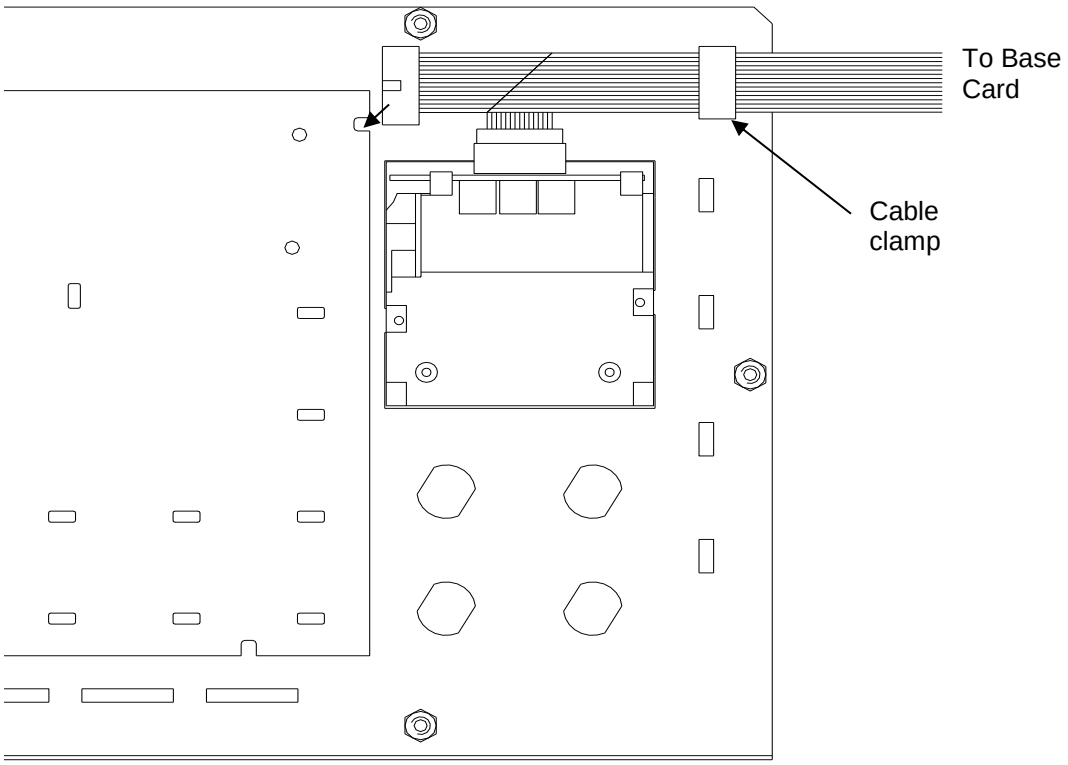
Remove the existing ribbon cable between the display and the base card.

The supplied cable is provided with three connectors. Plug one connector into the display card and then plug the second connector into the printer.

Route the cable through the clamp and plug into the connector on the base card (ensure that the heat shrink protection is in place under the tabs on the base card chassis plate.

The cable is common to all panels. Route the cable up the side of the back box and fold up any excess and use the clamp to hold in place.

CAUTION: Observe orientation (bumps) on the connectors when mating with the headers.



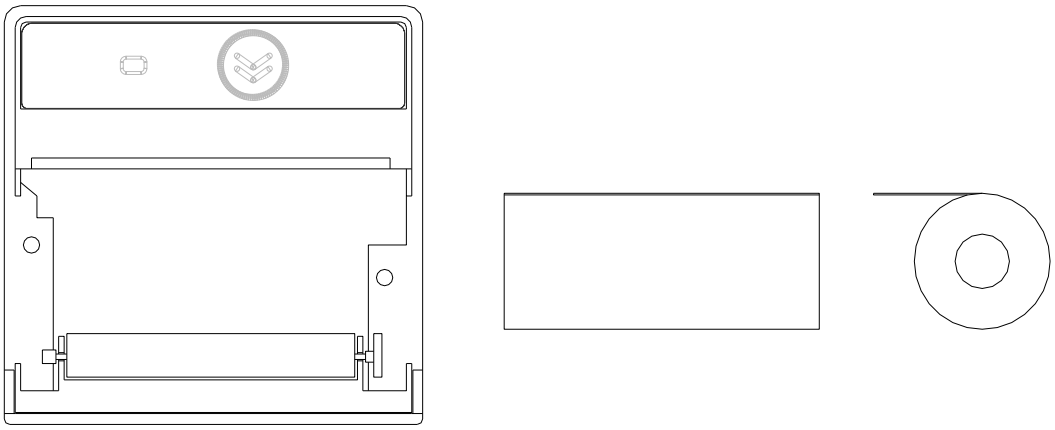
2.3 Installing the paper roll

Using the door release flap, open the paper roll aperture door.

Insert the roll so that the paper exits from the top as shown over the top of the roller.

Close and snap shut the door.

Tear off any excess paper using the tear-off strip.



After power is applied, ensure that the fault LED is not illuminated.

Feed the paper, if required, using the paper feed button.

Refer to operation section for details of how to configure and operate and how to perform a test print.

2.4 Logo Programming

The printer can be configured to print the logo used on the panel display.

This logo will be printed on a power up test print.

The logo is automatically updated, along with the display, when using the PC Logo Tool.

2.5 Fault LED

The fault LED on the front face will illuminate if the printer detects an internal problem such as paper out / door open.

The panel will also indicate a fault condition and give further details on the nature of the problem.

3 Configuration

To configure and test the printer, select the printer options from the main level 2 menu.

```
[Print Menu]

INPUTS OUTPUTS     FAULTS      DISABLED
LOG    FEED PAPER         SETUP-PRINTER
```

Use the ←↑↓→ buttons to highlight and select the “SETUP-PRINTER” option

Use the ←↑↓→ buttons to highlight and press ✔ to select the “Internal” option.

(Note: If required the panel will support simultaneous printing to an external printer too, but the “wide” option should not be ticked when an internal printer is in use).

```
 [FIRES] [ALARMS]  [FAULTS] [TESTS]
    -        -         -       -

(Printer: Internal External/Wide)
             ✔        -       -
```

On the top line tick any events that should be automatically printed as soon as they occur.

FIRES	any device entering a fire condition
ALARMS	any device entering a pre-alarm or plant alarm condition
FAULTS	any fault detected by this panel
TESTS	any device that is activated during a fire-test

On networked systems the fires, alarms and tests, if selected, print events occurring on other panels in the network (The network configuration software will allow this to be restricted to just certain parts of the building if required).

Escape from the printer set-up and move to the test menu. Perform a “Test – Print” and check that the printer is functioning correctly.

For full information on the print displays and configuration options, please refer to the ‘User Manual’ (680-166).

4 Operation

The printer will automatically print events as they occur depending on the settings defined in the configuration. For full information on the print displays and options, please refer to the 'User Manual' (680-166).

4.1 Print Menu

The print menu also allows on-demand printing of a wide variety of items.

These options allow the present state of the system to be printed – not just from the panel to which the printer is attached but also from anywhere on the network.

```
[Print Menu]

INPUTS OUTPUTS     FAULTS      DISABLED
LOG    FEED PAPER         SETUP-PRINTER
```

- INPUTS - Prints device text, zone, device type, analogue value, device state
- OUTPUTS - Prints device text, zone, device type, device state
- FAULTS - Prints location and state of all devices in a fault condition
- DISABLED – Prints location and state of all disabled devices

When any of these options are selected, the panel analyses the network and suggests default ranges for printing (e.g. if DISABLED is selected, the display will suggest the first through to the last zone on the network containing disabled devices). For example:

```
[  2 Zone(s)with Inputs Disabled]

 First Zone   : 340
 Last Zone    : 373

(Press → to Start Print )
```

These defaults can be changed as required. Use the arrow and number keys to select and enter the required zone numbers.

It is possible to feed the paper using the FEED PAPER menu option. The paper can also be advanced using the button on the front of the printer.

4.2 Test Menu

To invoke the printing of a test print sequence, select the Test Menu:

```
[Test Menu]                User 1 Node  1

   ZONES    DISPLAY    BUZZER    PRINTER
   OUTPUTS
```

Use the ←↑↓→ buttons to highlight the Test Printer Option and press the ✔ button to confirm. The panel transmits 16 lines of test characters to the printer. The information sent is echoed on the display.

When the test print is completed, the display automatically reverts to the Test Options Menu.

Press the **'Esc'** button at any time to cancel the test print.

USER NOTES