



Modular System Control Data Sheets - Part 1

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- Suitable for casemakers, automatic, crash lock and four point gluers
- Displays for batch count, boards per hour and machine speed
- Single Channel, one or two guns with up to 8 Glue patterns
- Manual or Automatic glue position setting available
- Simple menu selection system in five European languages
- Outputs suitable for PVA Extrusion, Jet, Spray and Hot Melt heads
- Fully compensated with electronic glue pressure control if required
- Glue line verification software built in with alarm output available
- Sensor contamination warning software built in with alarm output available
- Encoder input for variable speed or internal clock for fixed speed applications
- Interchangeable with earlier MAC 100 and 200 control systems

Specification:

Part No: 150-000

Size - 300 x 200 x 80 mm

Weight - 2 Kg

Power - 115 or 230 V AC

Outputs - 24 V DC, 1A

Capacity -
1 x 8w MAC valve - extrusion application
or
2 x 4w MAC valve - spray application
and
1 x E/P regulator (0-10 V DC)

Inputs -
Sensor NPN or PNP 10-30 V DC
Encoder O/C 10-30 V DC

Performance -
upto 30,000 blanks per hour
line speed up to 10 metres/sec

Note: These figures should only be taken as a guide and depend on adhesive viscosity and valve response times.



- Suitable for crash lock and multi point gluers
- Displays for batch count, boards per hour and machine speed
- One Channel, easily upgradeable to two, two guns and eight patterns per channel
- Manual or Automatic glue position setting available
- Simple menu selection system in five European languages
- Outputs suitable for PVA Extrusion, Jet, Spray and Hot Melt heads
- Fully compensated with electronic glue pressure control output
- Glue line verification software built in with alarm output available
- Sensor contamination warning software built in with alarm output available
- Encoder input with multiplier for flexibility of encoder position
- Interchangeable with earlier MAC 200 control systems

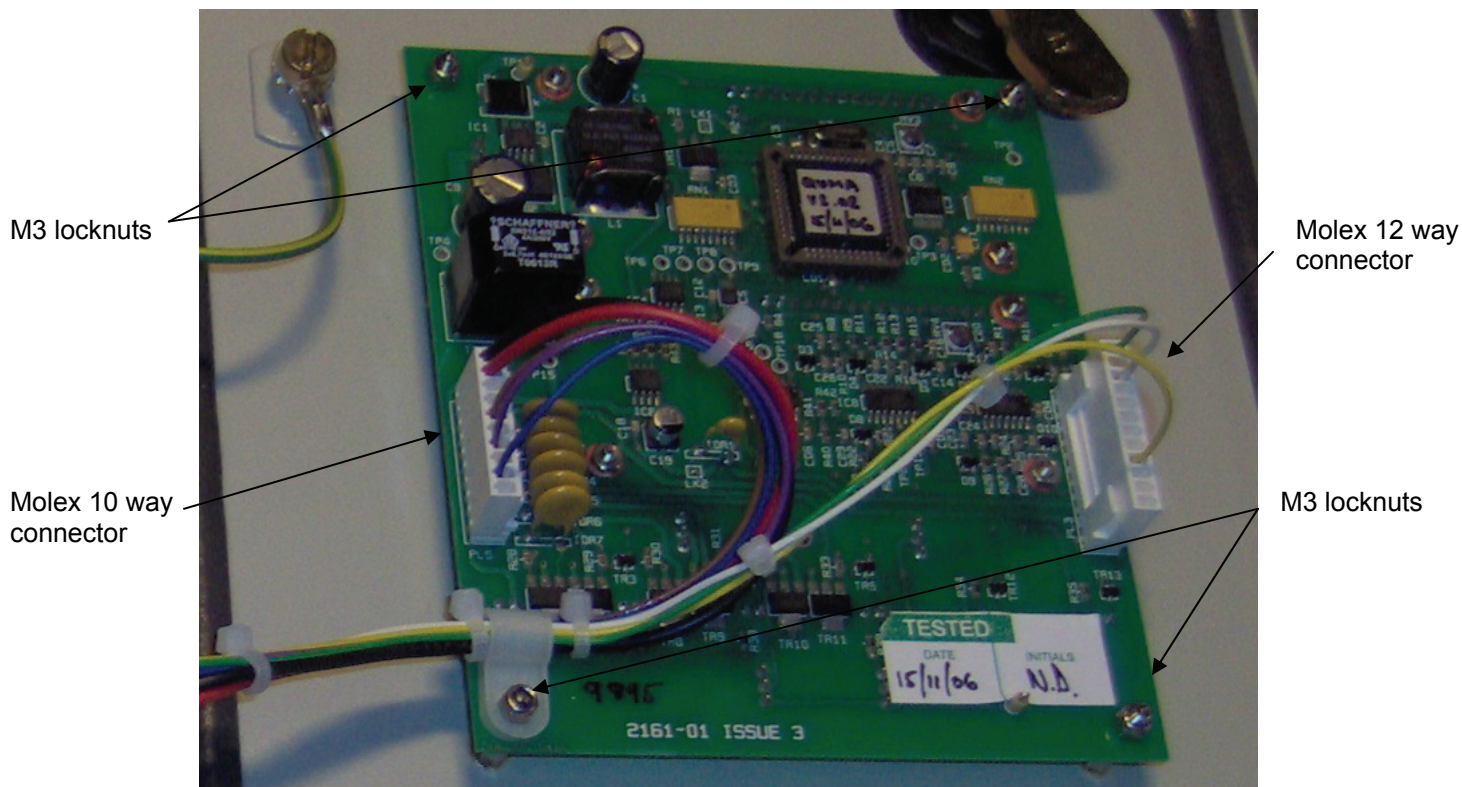
Specification:

Part No: 160-000

Size -	275 x 300 x 140 mms
Weight -	2.5 Kg
Power -	115 or 230 V AC
Outputs -	24 V DC, 3A
Capacity -	4 x 8w MAC valve - extrusion application or 4 x 4w MAC valve - spray application and 1 x E/P regulator
Inputs -	Sensor NPN or PNP 10-30 V DC Encoder O/C 10-30 V DC
Performance -	upto 30,000 blanks per hour line speed up to 10 metres/sec

Note: These figures should only be taken as a guide and depend on adhesive viscosity and valve response times.





Procedure to replace printed circuit board:

1. Make a note of all the settings in 'Prg code' (refer to manual or enter 0005 in each of 'Prg code' windows, press 'Function' to enter sub-menu and use 'Select' to scroll through menu).
2. **Disconnect power supply** before opening enclosure.
3. Disconnect the two 'Molex' connectors from the printed circuit board
4. Unscrew 4 x M3 locknuts at corners of pcb and remove circuit board.
5. Fit new pcb and secure with M3 nuts.
6. Reconnect 'Molex' connectors and **secure enclosure**.
7. Reconnect power supply and switch on controller .
8. Enter noted values in 'Prg code' menu and test system.

Service costs:

New MSC printed circuit board	£695.00
Initial 1 week hire charge of loan pcb	£ 75.00
Subsequent weekly hire charge	£ 50.00
Repair charges:	
Firmware upgrade (chip only)	£ 50.00
Switch replacement (single part only)	£ 10.00
Display replacement (single part only)	£ 60.00
Hourly charge (min. 1 hour)	£ 45.00

Other repairs quoted for after testing of pcb.

Notes:

We ship using Royal Mail 'Special Delivery' with extra insurance to cover the full value of the item. Please ensure when shipping to us that you have adequate insurance as lost or damaged items will be charged for in full.

All the above costs exclude V.A.T. which will be added at the prevailing rate.

- Suitable for crash lock and multi point gluers
- Displays for batch count, boards per hour and machine speed
- Two Channels, two guns and eight patterns per channel
- Manual or Automatic glue position setting available
- Simple menu selection system in five European languages
- Outputs suitable for PVA Extrusion, Jet, Spray and Hot Melt heads
- Fully compensated with electronic glue pressure control output
- Glue line verification software built in with alarm output available
- Sensor contamination warning software built in with alarm output available
- Encoder input with multiplier for flexibility of encoder position
- Interchangeable with earlier MAC 200 control systems

Specification: Part No: 250-000

Size - 275 x 300 x 140 mms

Weight - 2.5 Kg

Power - 115 or 230 V AC

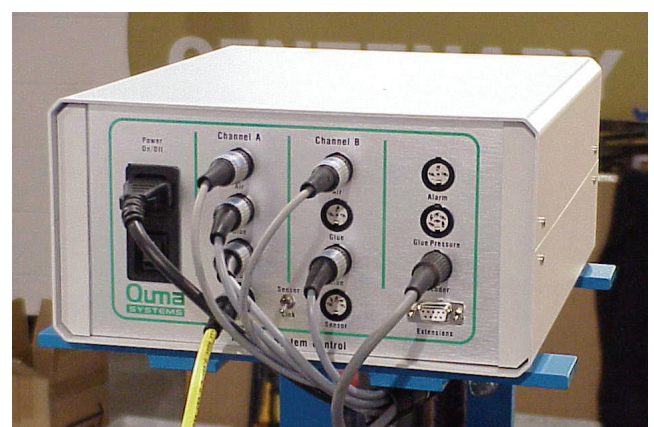
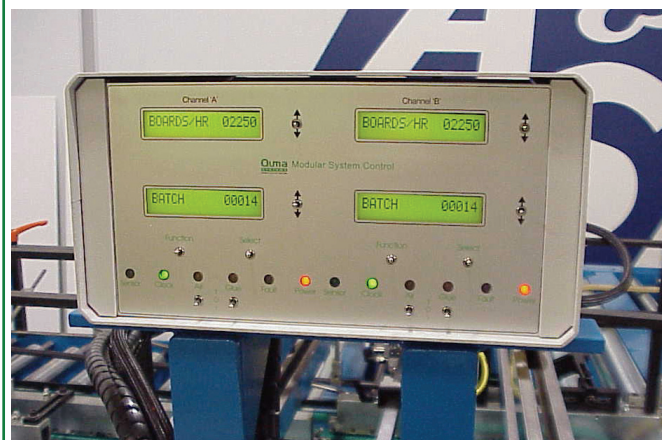
Outputs - 24 V DC, 3A

Capacity - 4 x 8w MAC valve - extrusion application
or
4 x 4w MAC valve - spray application
and
1 x E/P regulator

Inputs - Sensor NPN or PNP 10-30 V DC
Encoder O/C 10-30 V DC

Performance - upto 30,000 blanks per hour
line speed up to 10 metres/sec

Note: These figures should only be taken as a guide and depend on adhesive viscosity and valve response times.



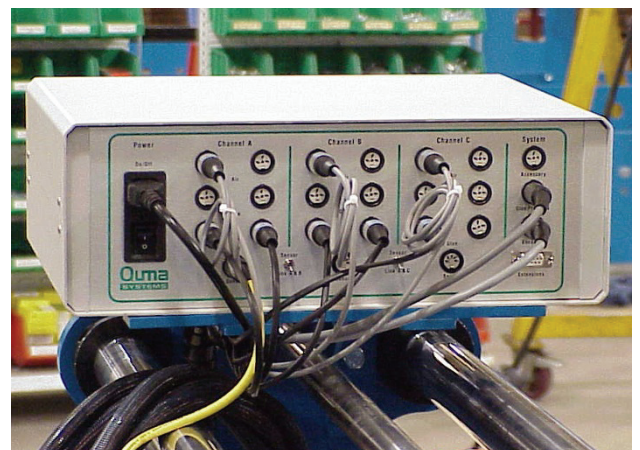
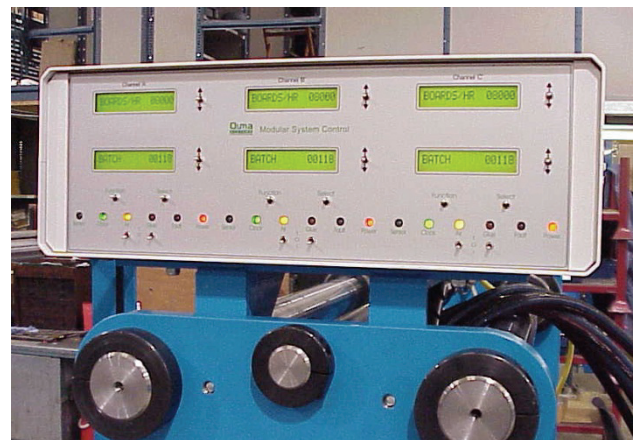
- Suitable for crash lock and multi point gluers
- Displays for batch count, boards per hour and machine speed
- Three Channels, upto four guns and eight patterns per channel
- Manual or Automatic glue position setting available
- Simple menu selection system in five European languages
- Outputs suitable for PVA Extrusion, Jet, Spray and Hot Melt heads
- Fully compensated with electronic glue pressure control output
- Glue line verification software built in with alarm output available
- Sensor contamination warning software built in with alarm output available
- Encoder input with multiplier for flexibility of encoder position
- Interchangeable with earlier MAC 200 control systems

Specification:

Part No: 275-000

- Size - 400 x 300 x 140 mms
- Weight - 3 Kg
- Power - 115 or 230 V AC
- Outputs - 24 V DC, 3A
- Capacity -
6 x 8w MAC valve - extrusion application
or
12 x 4w MAC valve - spray application
and
1 x E/P regulator
- Inputs -
Sensor NPN or PNP 10-30 V DC
Encoder O/C 10-30 V DC
- Performance -
upto 30,000 blanks per hour
line speed up to 10 metres/sec

Note: These figures should only be taken as a guide and depend on adhesive viscosity and valve response times.





Specification: Part No. 940-550

Box size	-	154 x 114 x 83.5 mm
Material	-	Polycarbonate
Colour	-	Light grey
Protection	-	IP65
Sockets	-	E/P regulator (0-10V) Glue solenoid (24 V) Spray solenoid (24 V) Sensor (NPN 24 V) Encoder (OC 24 V)
Cable	-	8 core screened
Connector	-	7 pin DIN latching

Features:

- Mimics all the connections from the MSC 1 controller.
- Suitable for case makers where control and glue application are on opposite sides of the machine.
- Enables a second glue station to be set up.
- Minimises number of cable and hose extensions.
- Screened cable minimises risk of interference.
- 5 or 10 metre cable length available

This simple alarm is designed to alert the operator to the probability that a piece of board is obstructing the sensor and, as a result, one or more cartons will not have been detected and glued.

MSC 1 Controller Installation

Please turn off and disconnect the power supply before starting this installation!

1. Choose a suitable entry point for the supply cable to the alarm unit.
2. Drill a 16 mm hole and fit the cable gland supplied.
3. Connect the external cable to the terminal block and to the alarm unit as per the connection diagram supplied with the unit.
4. If a visual warning is also required a Red or Green Xenon beacon may be connected to the same circuit. (Quma part no. 260-300)

Note: The update from April 2007 onwards is a change of polarity of the brown lead. If connected to pin 5 on the 10 way Molex connector it is Positive. If connected to pin 6 it is Negative and will need changing to pin 5 to successfully trigger a Xenon beacon!

If in doubt please consult a qualified electrician!

Setting up the alarm unit (Quma part no. 260-400)

1. There are 32 tones available in this alarm unit - consult the leaflet supplied and select a suitable tone by positioning the dip switches as shown in the diagram.
Example: No 19 'Slow Whoop' The code table shows '01001' meaning switches 1,3 & 4 are OFF (down) and switches 2 & 5 are ON (up). Note that switch 6 is a voltage selection switch and should be left in the OFF (down) position
2. Before testing it is suggested that you set the volume switches as shown in the diagram at a -20dBA setting with switch 7 OFF (down) and switch 8 ON (up). The operating volume can be selected later.

Programming the controller

1. Re-connect the unit and switch on.
2. Wait a few seconds for the unit to display 'BOARDS/HR'.
3. Press the **function** switch until 'PRG CODE' is displayed
4. Enter the value 0005 in both windows
5. Press the **function** key once and 'EDGE OFFSET' will be displayed
6. Press the **select** key until 'SENSOR WARNING' is showing
7. Press the lower switch to show 'ENABLED'
8. Press the **function** switch to come out of the 'PRG CODE' menu

Operating the alarm

1. Press the function switch until 'LOCKOUT' is displayed
2. Enter the full length of the carton + 50-100 mm in the lockout window
3. Press the function switch until 'BOARDS/HR' is shown
4. When the alarm goes off the fault light will also come on. To reset after an alarm press the top right hand switch alongside 'BOARDS/HR'.
5. To temporarily switch off the alarm go to 'LOCKOUT' and set to 0000