

M A B

SYSTEMS

LI M I T E D Bontoft Avenue, Hull, HU5 4HF. Tel: 01482 342299 Fax: 01482 449872

POD

These instructions cover test routines and switch settings for the following games:

Super MAB Super X

Gimme 5

Sevens Up

MAB X

Software Update Fitting Instructions

Remove the cover from the Pod and carefully lever out the existing PROM and, if new security chips have been supplied, remove the two 'Alty' devices using the special extraction tool provided in the kit. Replace with the new devices, paying particular attention to the orientation. Also ensure that the chip labelled J1b (or G51 for Gimme 5) is located in the socket next to the PROM and J2b (or G52 for Gimme 5) is furthest to the right, as shown in Fig.1.

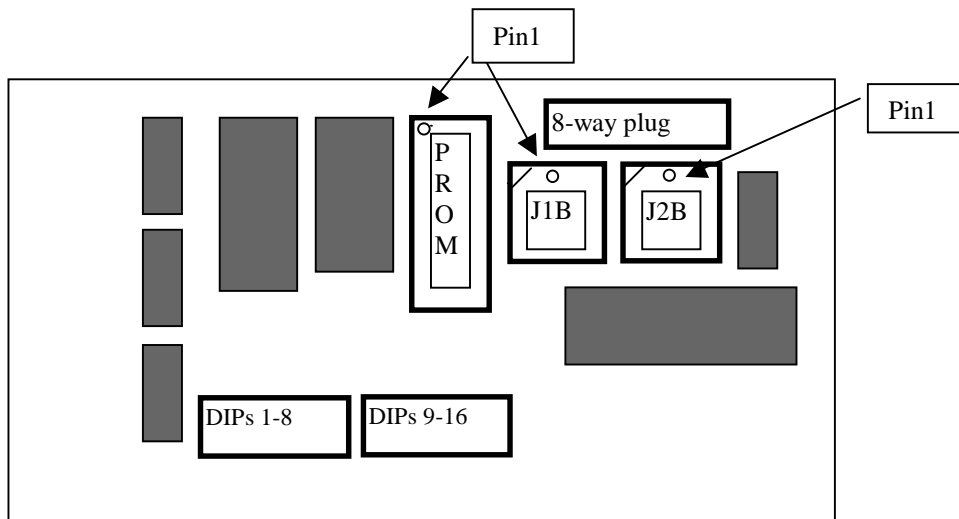


Fig.1 - Location of Pod components.

The new Sound Chip must be fitted to the main CPU board, located below the pod and linked to the pod via a 40-way ribbon cable. Fig. 2 shows the location of the chip. Remove the existing chip and replace with the new one, ensuring that the small notch on one end of the chip is at the correct end (see Fig 2).

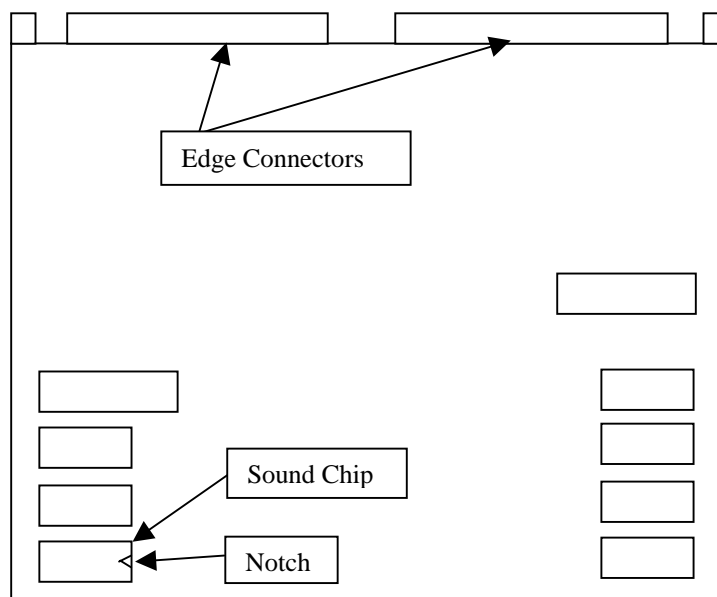
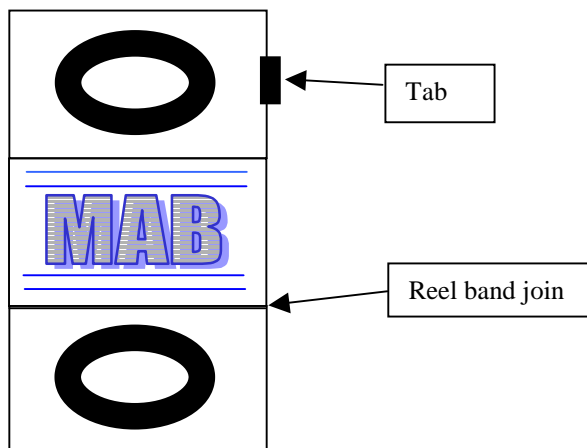


Fig 2. Sound Chip Location in CPU Board

Fitting New MAB X Reel Bands

This version of MAB X uses a different style of reel bands to previous versions. To ensure correct alignment of the symbols the new bands must be attached as follows:

Locate the opto tab in the centre of its range of adjustment (identified by a strip of closely spaced teeth on the rim of the drum). Next, attach the reel bands such that the centre of the second symbol up (i.e. the 'O' above the MAB symbol) is adjacent to the tab (see diagram below).



Once the machine is up and running, use Test 3, described below, to check the position of the win line and make any small adjustments to the alignment by moving the tabs accordingly.

Test procedures for all POD machines

These tests relate to the following games on POD hardware:

MAB X	4v8
Sevens Up	5v3
Super MAB Super X	6v2
Gimme 5	8v4

Test Selection Mode

Open the back door and press the red test button. The Start, Autostart and Cancel buttons on the front panel will start to flash, and the credit display will indicate test number 1.

Available test numbers may be stepped through by pressing the Autostart button. The button may be either held down or pressed repeatedly until the desired test number is indicated.

To start the selected test, press the Start button. When the test has been performed, the indicated test number automatically steps to the next available number. To return the machine to normal play press Cancel.

Test 1 - Lamp Test

This test flashes all lamps together until the Cancel button is hit.

Test 2 - Coin Test

Coins may be inserted into the coin mech and the value of the coin is displayed on the bank display, e.g. if a 20p piece is inserted the bank display will read

0 0.2 0

If a token is inserted, this is indicated as

t 0.5 0

in this case showing the token value is 50p.

The machine will beep as each coin is inserted. Pressing Cancel returns to Test Selection Mode.

Test 3 - Reel Test

The reel motors are 'phased' to ensure they are in step, then the reels are spun to their home positions which is a line of MABs. This will be repeated each time the Start button is pressed.

Pressing the Cancel button returns to Selection Mode.

Test 4 - Switch Test

The bank display shows the state of various switches, as follows:

0 0.0 0

| | | |
| | | Not Used
Back Door Switch | |
1=Open,0=Closed | Test Button 1=Pressed,0=Not Pressed
|
Refill Key 1=Turned,0=Not turned

Note that activating these switches during the test will not have any effect on the machine. Press Cancel to leave the test.

Test 5 - Tube Setup

WARNING - This test should only be used when initially setting up or when recovering from a memory fault.

This test is used to specify which tubes are present in the machine and what type of level switch they use. The left three digits of the bank display indicate the current settings. From left to right the tubes are predefined as £1, 10p and 2p. A typical display would be:

c - -

where '-' means the tube is not present and 'c' means the tube is present and the level switch is of the normally closed type. In this example the machine has been set with only the £1 tube present. As another example, consider a bank display of:

o - o

where 'o' means the tube is present and the level switch is of the normally open type. This indicates that the machine has £1 and 2p tubes, but no 10p tube.

To change the settings, press Left Hold to step through the options for £1 tube, Centre Hold for 10p tube and Right Hold for 2p tube. To save the new settings press Collect and a beep will be heard. To leave the setup press Cancel.

Test 6 - Payout Test

This test can be used to pay out 10 coins from any tube that is present. Left Hold pays from the £1 tube, Centre Hold from the 10p tube and Right Hold from the 2p tube. The bank displays available tubes as follows:

0 - 0

In this example, only the £1 and 2p tubes are available. If the Left Hold button is pressed, the display counts down the coins paid in the corresponding digit, i.e.

9 - 0

8 - 0

.
.
.

0 - 0

Pressing Cancel exits this test.

Test 7 - Level Switch Test

This test displays the state of the available tube level switches. Taking the example above, where £1 and 2p tubes are present, a bank display of:

L - H

indicates that the £1 tube is Low and the 2p tube is High.

Press Cancel to exit this test.

Test 8 - Set Payout Percentage

This test is used to set the payout percentage between 72% and 99% in steps of 1%. The bank display shows:

P E r C

and the current percentage value is shown on the credit display. Pressing the Left Hold button reduces the value by 1%, Right Hold increases it by 1%. To save the new value and leave the setup press the Start button. To leave the setup without changing the value press Cancel.

Test 9 - Individual Lamp Test

This test is mainly for use after wiring looms have been disturbed and can be used to check operation of individual lamps. The Start button is used to step through the available lamps and the bank display shows the current lamp number. Each lamp is tested by turning it on while all other lamps are turned off, then turning it off while all other lamps are turned on. This allows wiring faults to be located. The bank indicates the current situation as, for example:

1 0.2 3

meaning lamp 23 is on, all others are off, or

0 0.2 3

meaning lamp 23 is off, all others are on.

Test 10 - Set Bank Limit

This test is used to set the bank limit to 0 (direct payout), £30 or £50. The bank display shows:

b A n C

and the current bank value is shown on the credit display. Pressing the Left Hold button steps backwards through the possible values, Right Hold steps forwards. To save the new value and leave the setup press the Start button. To leave the setup without changing the value press Cancel.

Setting up Mars Mechs for use with MAB software

The latest releases of MAB software have been written to allow connection to the most commonly used mech configurations. These cover mechs which have been programmed to accept the £2 coin, as well as those that haven't.

Also covered are mechs which have been programmed to accept promotional tokens.

Where £2 mechs are currently in use and are fitted with either the Mars (Orange) or Coin Controls (Green) converter boxes, the boxes must be removed and the loom plugged directly into the coin mech connector.

Coin mechs currently used on all-cash machines will continue to work, providing the options switches, described below, are correctly set. Machines accepting 20p tokens should continue to use existing software, as the new releases do not support token payouts.

Listed below are the Mars mech programming schemes which are supported.

Channel->	F	E	D	C	B	A
Type 1	£1	50p	20p	10p	5p	-
Type 2	£1	50p	20p	10p	Token	5p
Type 3	£1	Token	20p	10p	5p	-
Type 4	£1	£2	20p	10p	5p	50p
Type 5	£1	£2	20p	10p	Token	50p
Type 6	£1	£2	20p	10p	5p	Token

In all cases, channels A and B may be omitted, allowing the use of 4 and 5 channel mechs.

Software Setup

The DIP switches on the POD are used to configure the software for the type of mech fitted. This is done using three switches (refer to the DIP Switch Settings sheet for the switch numbers)

The state of the switches depends on a few basic questions. Start with all three switches in the OFF position, then answer the following questions.

Does the mech accept the £2 coin?

If 'No', leave switch 6 OFF.

If 'Yes', enable the £2 coin by putting switch 6 into the ON position.

Does the mech accept a token?

If 'No', the setup is complete.

If 'Yes', answer the next question.

What is the value of the token?

If the token value is £1, put switch 8 into the ON position. The setup is then complete.

If the token value is 50p, answer the next question.

Does the token replace the 50p coin?

If the token *does not* replace the 50p coin, put switch 7 into the ON position.

If the token *does* replace the 50p coin, put switch 7 AND switch 8 into the ON position.

MAB X Win Plans

The win plan is set on Bank 1 switches 4 and 5. There is a choice of 4 plans for each possible stake (some are duplicated and may be changed in later versions).

The available plans are as follows:

Stake	Switch ->	4	5	
	v			
2p		Off	Off =	£0.20, £2.00
		On	Off =	£0.20, £2.00
		Off	On =	£0.20, £2.00
		On	On =	£0.20, £2.00
5p		Off	Off =	£0.50, £2.00
		On	Off =	£0.50, £5.00
		Off	On =	£1.00, £5.00
		On	On =	£1.00, £5.00
10p		Off	Off =	£1.00, £5.00
		On	Off =	£1.00, £8.00
		Off	On =	£1.00, £10.00
		On	On =	£1.00, £10.00
20p		Off	Off =	£2.00, £10.00
		On	Off =	£2.00, £15.00
		Off	On =	£2.00, £15.00
		On	On =	£2.00, £15.00
25p		Off	Off =	£2.00, £10.00
		On	Off =	£2.00, £15.00
		Off	On =	£2.00, £15.00
		On	On =	£2.00, £15.00
30p		Off	Off =	£2.00, £10.00
		On	Off =	£2.00, £15.00
		Off	On =	£3.00, £15.00
		On	On =	£3.00, £15.00