EURO REGEL SPAIN S.A. Manufactured in Madrid FLIP

WRITE-RAM Ø94-633

INTRODUCTION

The ALTER-RAM Ø94-633 is a pocket instrument designed for use in maintenance work on SYSTEM III machines. Its specific function is to alter or reset data either completely or partially, within the RAM memory field contained in our electronic system.

The interchangeable and reprogrammable EPROM memory incorporated in this ALTER-RAM instrument, defines the form and field of its activities. The instrument also has a group of four switches which make it possible to select the field of memory or group of data that you wish to alter. The data introduced by the instrument, are loaded into the working memory and transferred to the RAM CMOS memory when the machine is started up.

The data are extracted from the machine automatically by means of the master system in the machine, and the operator has only to connect up the instrument, whilst the machine is switched off, having first selected the function or functions that he wishes to alter.

When an ALTER-RAM unit is used on a machine, the serial number of the instrument used is registered in the machine itself, along with a function code of the data or memory field which has been altered. This feature is used in order to know which instrument has been employed and on which group of data it has worked.

Irrespective of the alterations carried out, the working constants which the machines need, are automatically re-registered.

FUNCTIONS

The standard recording of the memory in this instrument, provides the following independent characteristics to each of the four switches numbered below from 1 to 4.

1) Switch 1 resets the three coin totalizers in the machine.

2) Switch 2 takes all the Handicaps back to their initial value of 1,000,000.

3) Switch 3 resets all the totalizers in the system, with the exception of the three coin rejector totalizers.

4) Switch 4 registers all the adjustments in a preset position which logically is different for each country. Where necessary you can have various types of memories with relevant programmes.

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The serial number of the instrument used is recorded in the machine's memory, in the register called "Last Printer Nº". The actual code of the memory field affected, is recorded in the register called "Last Coin Collection Date", and within this register each switch activated, is registered with its own number in the position indicated, and also with its number counting from left to right when reading the register on the display on the machine. For example, Switch 3 will be read out as a "3" on the third digit.

HOW TO USE IT

1) Switch off the machine or disconnect it from the mains.

2) On the ALTER-RAM, select the switches in accordance with the function that you are going to perform.

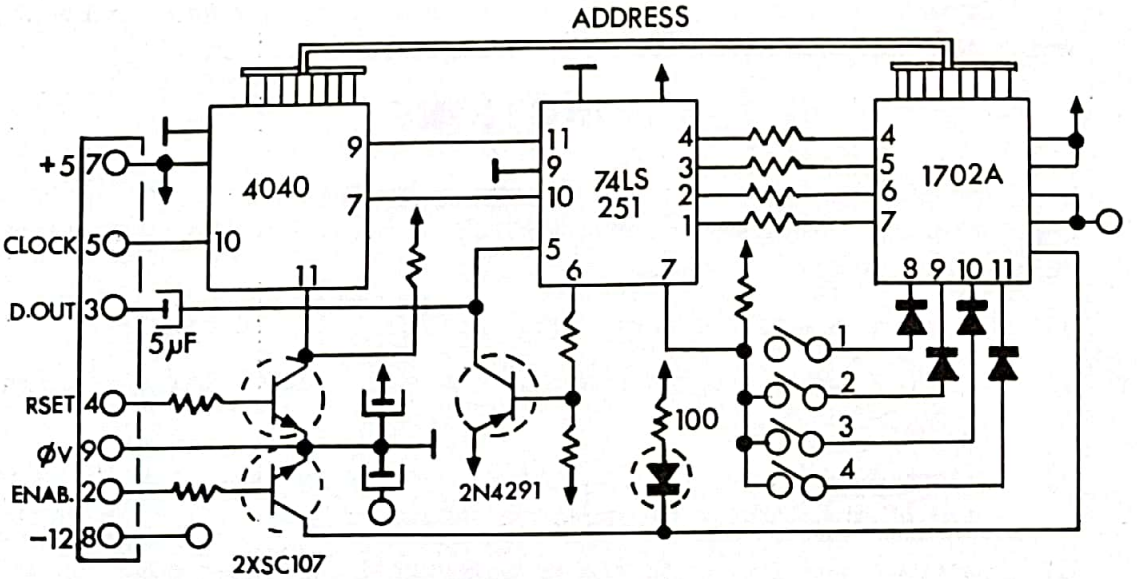
3) Connect up the instrument to the Master unit on the machine at the MD connector which has been provided for the Mini-printer and other accessories. Be careful with the position of the connector.

4) Switch on the machine and wait until it has finished the Self-check routine.

5) Start the game up (in play) and check that all the alterations have been carried out.

All the functions should have been altered in accordance with the preset programme, and also the machine now carries information on the ALTER-RAM instrument that has been used, and on which group of data in the RAM memory it has been put to work.

ALTER RAM UNIT



✱ ALL UNSIGNED RESISTORS ARE OF 15K.

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MANUAL ADJUSTMENT UNIT Ø95-115

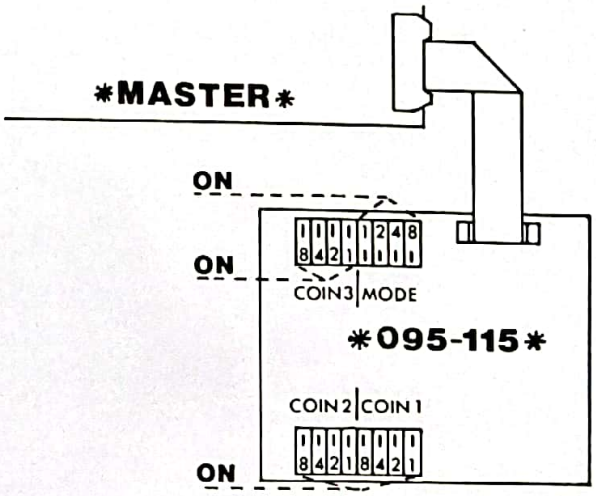
This unit makes it possible by means of conventional switches to adjust the positions in the RAM memory covering the three coin rejectors and Mode of Play (number of balls per play, Extra Ball and Free Play adjustments).

It is connected up to the machine via the MD connector provided on the Master Unit for the Mini-printer and other accessories. When the machine finishes the Self-check routine, it extracts from the Manual Adjustment Unit, the values at which the 16 switches are set, registering the relevant code in the working MOS memory.

As is already known to all, it is necessary to "start" the machine in order to ensure that these adjustments are permanently altered in the memory. At this point the adjustment values which are in the working RAM memory, are then filed away in the RAM CMOS memory and are then automatically recovered whenever the machine is switched on, at the end of the Self-check routine.

The codes to be programmed with the switches, are the same as in the case of a memory adjustment, each switch corresponding to a bit of the byte made up by each set of 4 switches. Therefore the adjustments will be programmed in accordance with the codes indicated on the Adjustment Tables for SYSTEM III.

The figure shows how this unit is connected up to the Master Unit, and also shows the function and value of each switch.



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