

LITE BOX COMPARATOR

ELECTRONICS DIVISION

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INTRODUCTION -

The C O M P A R A T O R \$\infty 94-631\$ is essentially a receiver for the information sent by the Master Unit to the Lite Box and therefore, when it is connected up to replace the Lite Box, all the data is represented on the comparator screen by means of the 32 seven segment displays provided

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DESCRIPTION

The Comparator functionally speaking contains all the units that go to make up a Lite-box on a 4 player SYSTEM III electronic pintable.

This equipment can be connected up to any SYSTEM III machine, and is therefore used to determine by means of comparison, whether any particular fault which affects the lite box, is located in one of the lite box units, or in the Master Unit itself.

Fundamentally the Comparator, besides the display control unit, is also equipped with 32 displays which carry out the same functions as the indicators on the pintable machine, according to the sub-divisions given below:

- a) 20 displays (5 per player) indicating the scores on the four counters;
- b) 1 display for the Match Number;
- c) 1 display showing Ball in Play, Tilt and Game Over;
- d) 1 display indicating Extra Ball;
- e) 1 display showing Free Play;
- f) 2 Credit Indicator displays;
- g) 4 displays (1 per player) indicating: Selected,
 in Play, one million and Handicap;
- h) 2 displays (which have no equivalent in the actual pintable machine) and which complete the information given by the Master Unit.

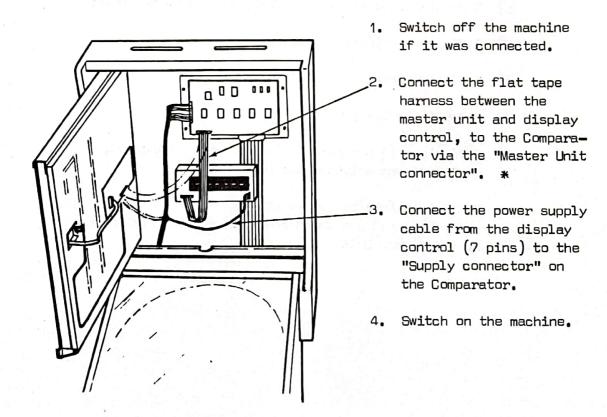
APPLICATION

Amongst the applications of this equipment, we can give special mention to the function of "comparison" when applied to a lite box which apparently has a fault in one of its units. By this method, we are able to ascertain whether the fault is situated on one of the boards in the lite box under comparison, or whether the trouble is to be found in the Master Unit (GPKD) in the case of data, or even a fault in the power supply coming from either the power board or the master unit.

On games which have only one score counter, use of the comparator gives us access to visual representation of all the memory range.

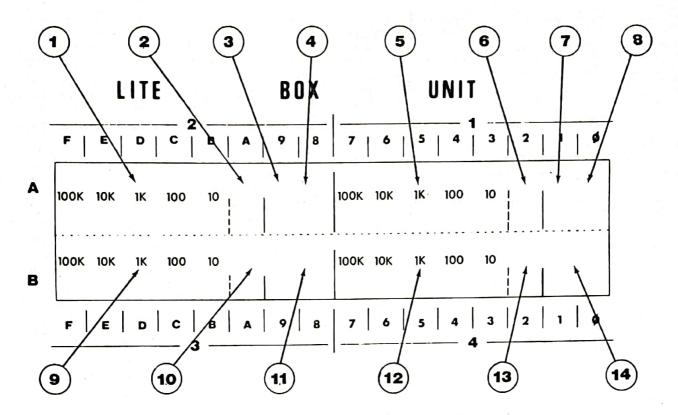
All the data shown by means of Leds and lamps, are represented on 7 segment displays.

INSTALLATION



* Respect the position of the connectors, as shown in the above Fig.

INDICATORS



In Area 4 the following data are represented:

- 1. Score display for 2nd Player
- 2. Indicator for 2nd player
 - 3. Match number
 - 4. Ball in play, Tilt, Game Over (STATE OF PLAY)
 - 5. Score display for 1st player
- * 6. Indicator for 1st player
 - 7. Extra Ball
 - 8. Free Play
 - 9. Score display for 3rd player
- * 10. Indicator for 3rd player
- ** 11. Nº of advances on counters and the last figure affected
 - 12. Score display for 4th player
- * 13. Indicator for 4th player
 - 14. Credit (the \emptyset column = tens; the 1 column = units)
- (*) (1) Selected
 - (2) In Play
 - (3) One million points
 - (4) Handicap
- (**) This is merely a technical indication, and the machine itself does not have any equivalent indicators.

