

Lucky Numbers



USER'S MANUAL



introduction

Introduction:

The LuckyNumbers game is a dexterity game, illuminating 32 lamps in a fixed sequence. Low value lamps are lit much longer than high value lamps. The game stops when the button is pushed and wins the lamp value that was lit at that moment.

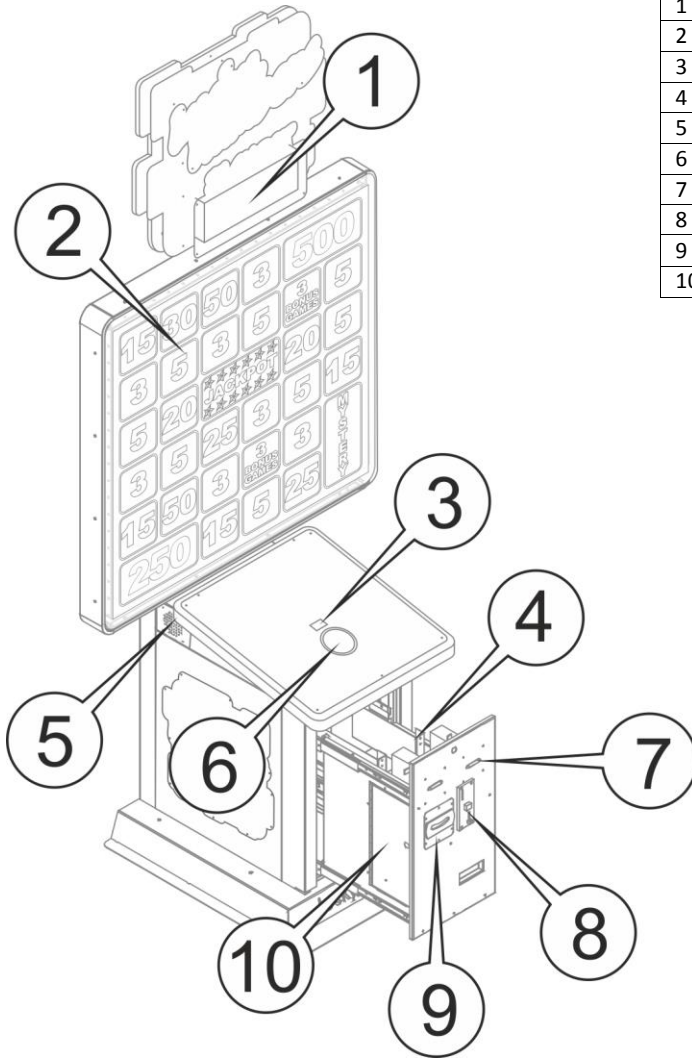
This document describes how to build the game and make the correct settings for various alternative configurations of the machine.

Lamp numbers and values for Field Layout = 1:

1	2	3	4	5	
6	7	8	9	10	11
12	13	14		15	16
17	18	19	20	21	22
23	24	25	26	27	32
28		29	30	31	

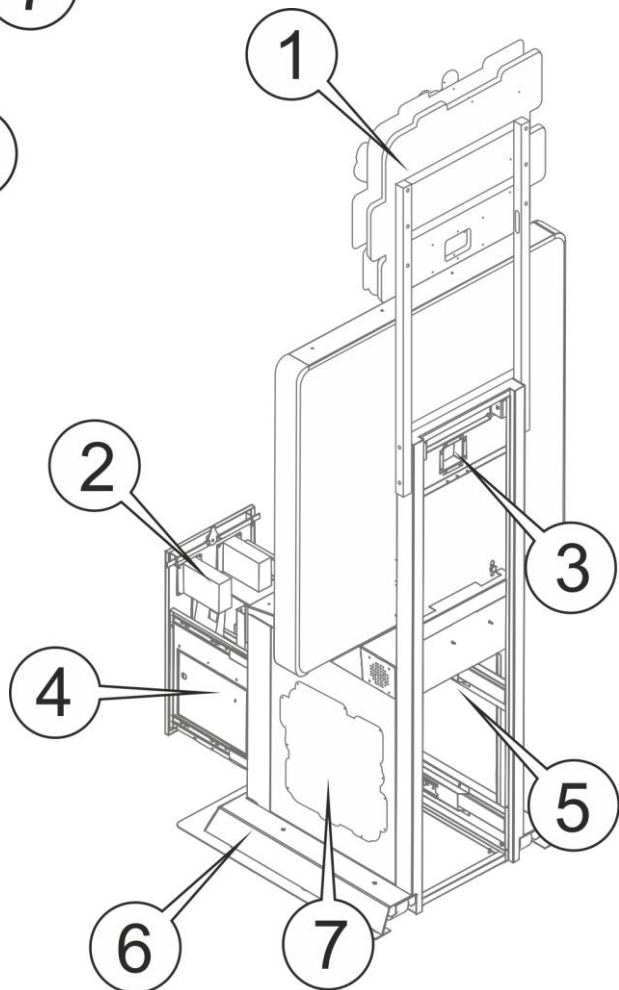


device description

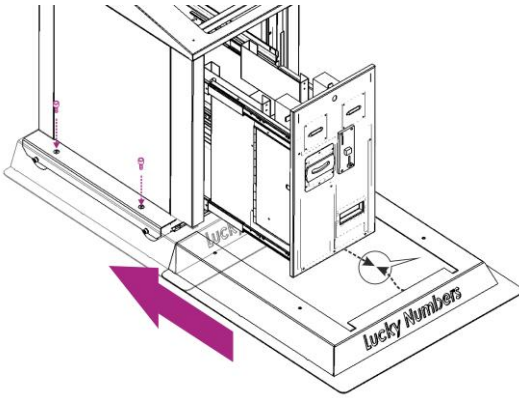


1	Jackpot value display
2	Playfield
3	Credits display
4	Tickets holder x2
5	Speaker
6	START/STOP button
7	Tickets out x2
8	Coin acceptor
9	Bill acceptor
10	Bill cashbox

1	Upper marquee
2	Ticket dispenser
3	Playfield/jackpot/marquee to PCB connectors
4	Coins cashbox
5	PCB/power supply/amplifier access
6	Base
7	Side marquee x2



machine assembly



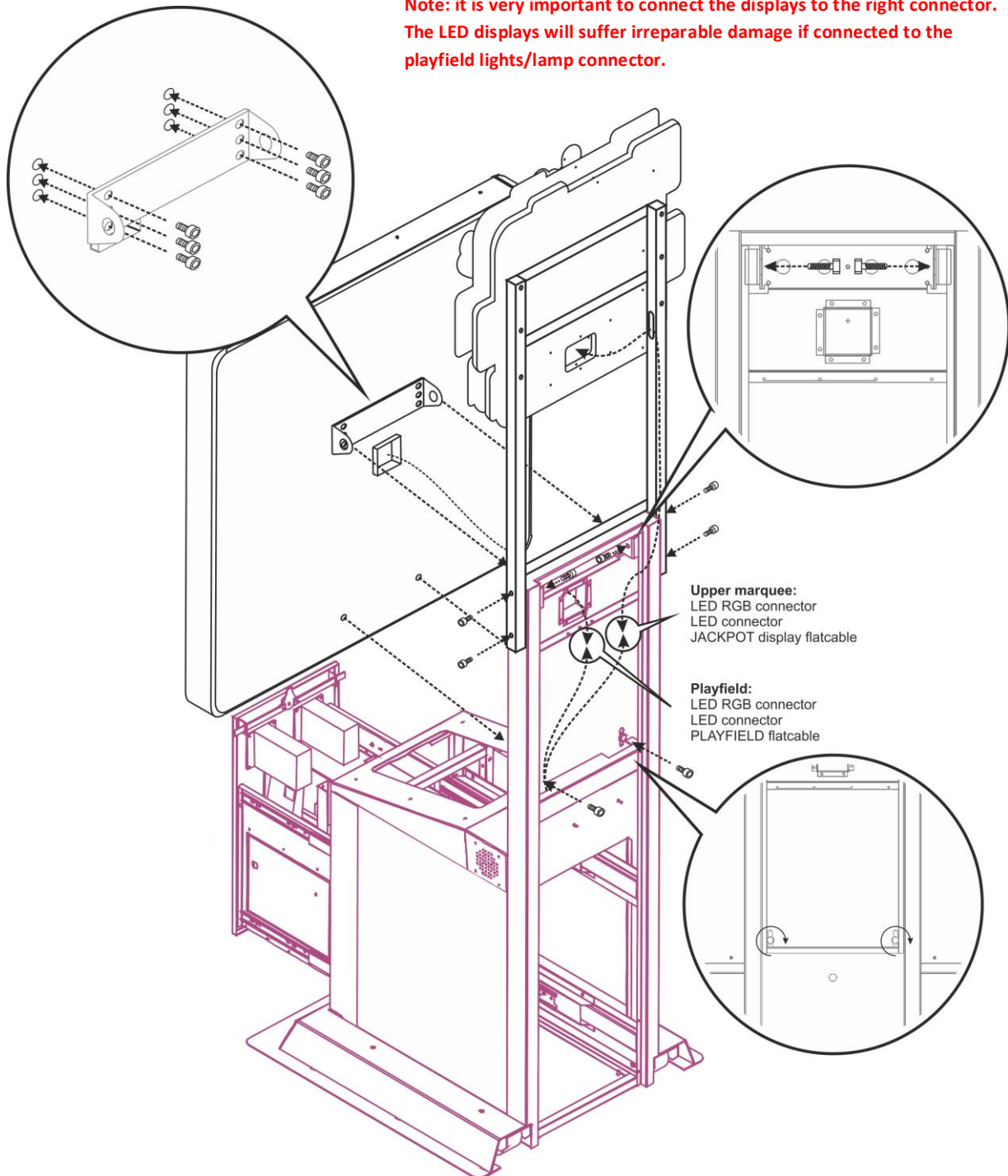
Slide the base on the lower part of the device, be sure to connect LED backlight connectors. Mount the base using the supplied screws.

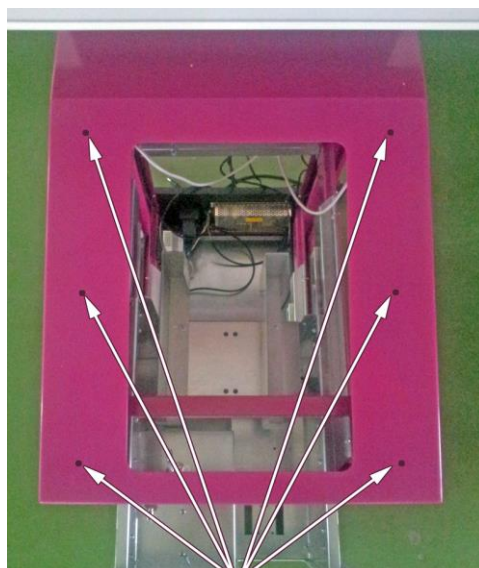
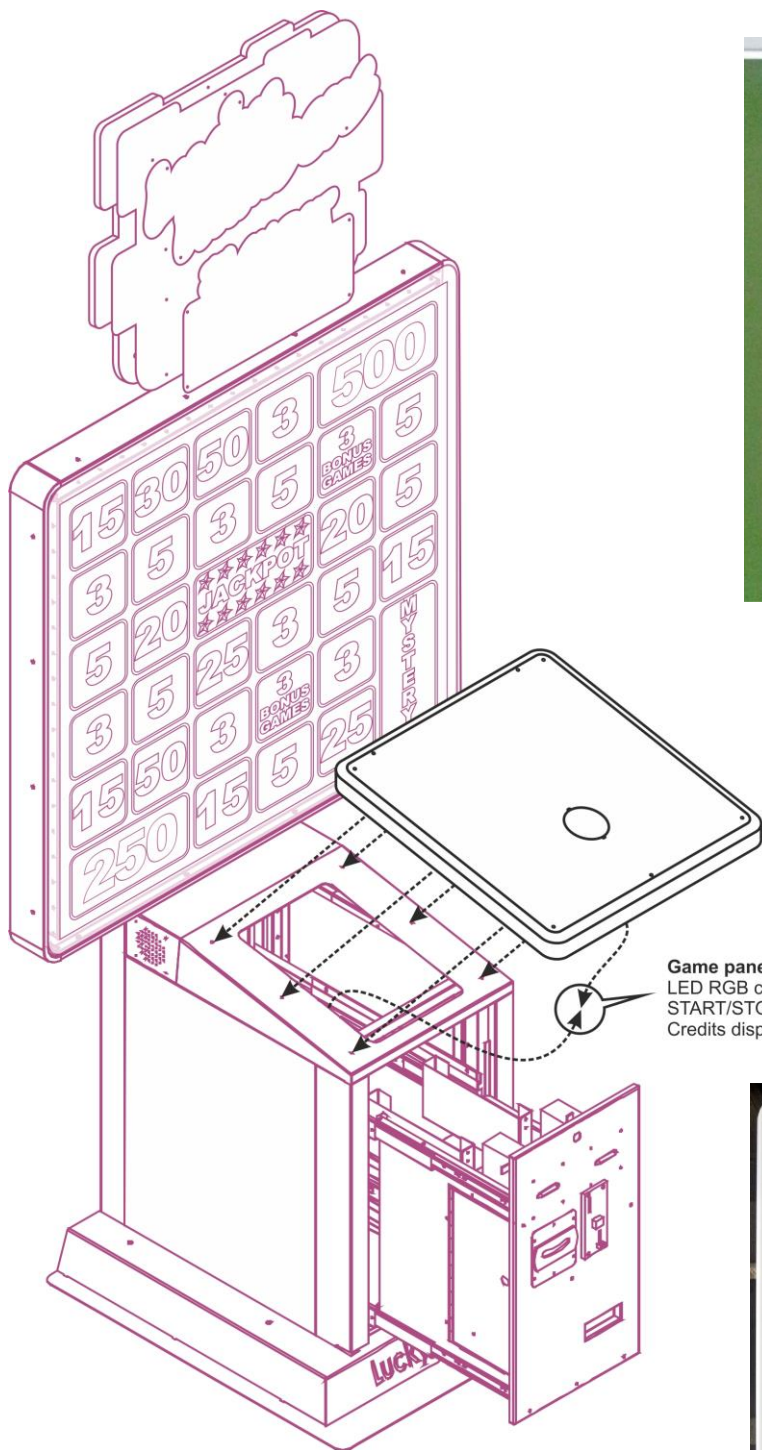
Install the top marquee with JACKPOT display applying it on the rear of the unit, earlier thread the cables through the hole on the right side of the machine. Screw the top marquee using the supplied screws.

Install the playing field by placing the mounting bracket in the rear wall hole. Place two screws in the holes in triangular brackets (see picture below).

Place the two screws under the handle to level the playfield. Remember about adding spacers between the playing field and the wall.

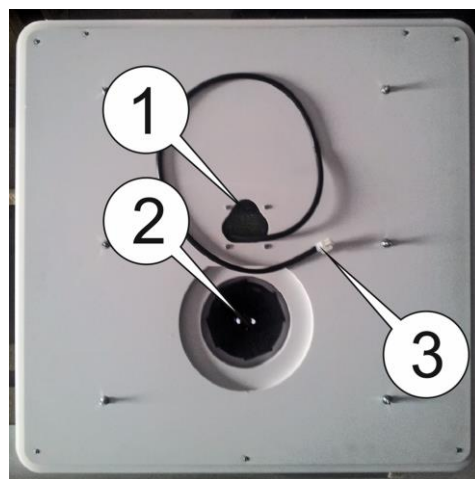
Note: it is very important to connect the displays to the right connector. The LED displays will suffer irreparable damage if connected to the playfield lights/lamp connector.





Place the threads in the lower part of the panel in the holes located on the oblique part of the device and attach it on the inside, with accompanying nuts.

Game panel:
 LED RGB connector
 START/STOP button connector
 Credits display flatcable



Connect flat cable to to the credits display soccet (no. 1) and attach switch with bulb to the START / STOP button socket (no. 2).
 Connect black cable with four pin connector (no. 3) to a connector located in the lower back part of the unit.



Lamp panel output (9):

The lamp panel of the LuckyNumbers game consists of 36 lamps, preferably LED lamps of 12V 3 Watt max.

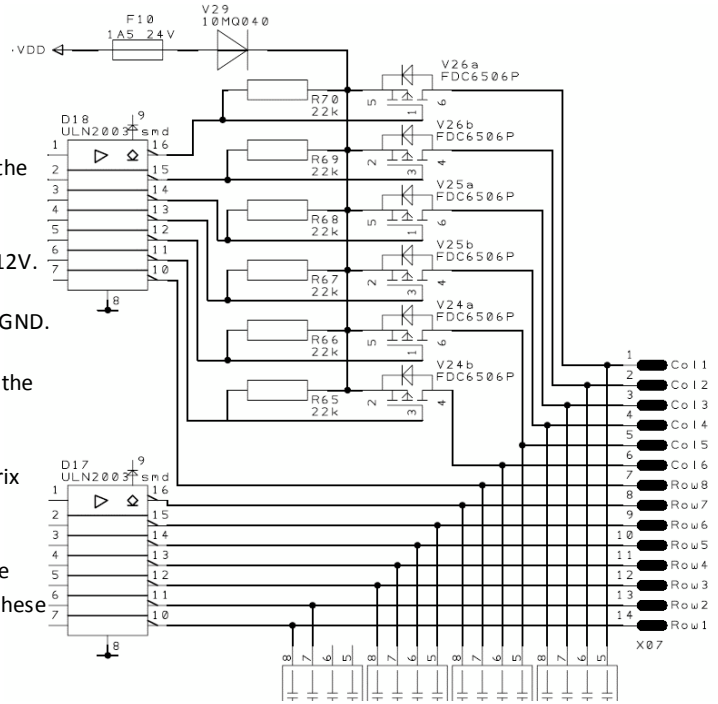
The lamps are connected in a 6x6 matrix. The circuit diagram of the driver shows the connections:

- pins 1 to 6 are column drivers that switch the vertical lines to 12V.
- pins 7 to 14 are row drivers that switch the horizontal lines to GND.

Column 1 / Row 1 is the top, leftmost lamp. Column 6 / Row 6 is the bottom, rightmost lamp.

Typically, dedicated lamp boards are installed that have the matrix interconnections conveniently build-in.

If discrete lamps are to be used, small interconnection boards are available that connect 4 lamps with 2 pole pin-headers. Nine of these boards are required to connect the entire panel:



Start/Stop Connector (8):

Connect pushbutton switches with lamps to the flatcable as follows:

The buttons switch to pin 1 (GND), while the common pin for the lamps is pin 16 (12V). The lamps may be 5W at most.

If the Auto-start facility is enabled, the Start button is no longer required since the game will start immediately when credits are available.

The error lamp will be lit if the machine runs out of tickets.

The bonus and jackpot lamps will be lit when bonus games or the jackpot has been won, during the time that tickets are being dispensed.

Ticket dispenser (7):

Tip: when changing the dispenser for another type, remove power, disconnect the dispenser, reapply power and go to the settings menu to select the new type of dispenser. Then remove power again and apply power. Failure to do so, may start the dispenser and make it run indefinitely until the board is restarted.

Benchmark Intelli-Dual dispenser (type =0):

Connect according to the picture:

Take good care of connecting the correct colors and the wire link between pins 1 and 5:



pin 2: blue (notch)

pin 3: black (GND)

pin 4: red (12V)

pin 5: white (Run)

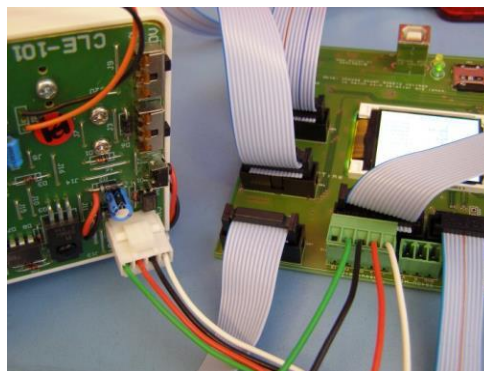
Do *not* install the “prize motor pull down” jumper on the control board: this prevents the ticket dispenser from dispensing one or more tickets each time the machine powers up.

If the dispenser runs out of tickets, LuckyNumbers will indicate the error after 5 seconds and wait for the operator to restock and press the button on the dispenser to restart it.

CLE-101 dispenser (type =1):

Connect according to the picture:

LuckyNumbers X10	Function / color	CLE-101
pin 1		
pin 2	Sensor /green	OUT
pin 3	GND / black	GND
pin 4	12V / red	12V
pin 5	Run / white	IN



Install the “prize motor pull down” jumper JP01 on the control board: this prevents the ticket dispenser from dispensing one or more tickets each time the machine powers up.

If the dispenser runs out of tickets, LuckyNumbers will indicate

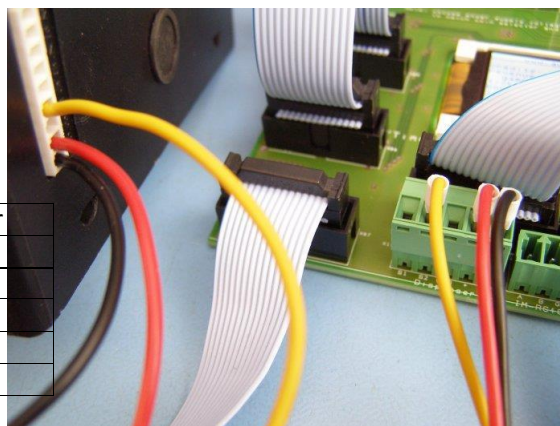
the error after 5 seconds and wait for the operator to restock the dispenser. That will automatically restart it, but some tickets may not be dispensed if extra pulses were detected during restocking. Press the button on the dispenser to issue a few extra tickets.

Suzo-Happ cube hopper Mk II (type = 2):

Connect according to the picture:

Take good care of connecting the correct pins:

LuckyNumbers X10	Function / color	Cube Hopper
pin 1		
pin 2	Sensor /yellow	Pin 6
pin 3		
pin 4	12V / red	Pin 8
pin 5	Run / black	Pin 9



Install the “prize motor pull down” jumper JP01 on the control board : this prevents the hopper from dispensing one coin each time the machine powers up.

If the hopper runs empty, it will stop after 5 seconds, and automatically retry after 30 seconds. This will prevent the motor from overheating.

Entropy 2000CR dispenser (type = 3):

Connections and wire colors are the same as for IntelliTicket (type 0, see above). Also, do *not* install the “prize motor pull down” jumper on the control board: this prevents the ticket dispenser from dispensing one or more tickets each time the machine powers up.



If the dispenser runs out of tickets, LuckyNumbers will indicate the error after 5 seconds and stop the motor. Since it cannot detect when the tickets are refilled or unjammed, the operator has to press any of the menu buttons on the control board, or press the START button on connector (8) to restart the dispenser.

Coin selector (5):

The 10 pin flatcable connector is designed to connect to an EMP 8x0.00 coin selector. The flatcable carries the DC power supply to the selector, and coin inputs 1 to 6.

Audio connector (4):

Sound effects are generated on-board from MP3 files on the micro-SDcard. This stereo jack connector supplies low level audio signals that are acceptable for almost any PC speaker system with built-in amplifier. Choose a system with the appropriate amount of output power.

Power supply and expansion connector (3 and 21):

The power supply connects to the electronic control board through a 4-pin connector.

Plus is at the top, GND at the bottom. The intermediate 2 pins are communication wires that link the optional extension boards to the control board.

Please check the wiring carefully before switching on.

The DIN-rail mounted switch-mode power supply can deliver 12V DC 60W from any mains power (110-240V, 50 and 60Hz). It supplies the electronic control board, the LED displays (approximately 15W), the lamp panel, the lamps in the switches, and the coin selector.

SD card (2):

The SD card contains audio sample files in MP3 format. There is one sound sample for each prize, and then some for pause, play and active (flash). Preferably, the MP3's should have a sample rate of 144kbps to 192kbps, but other rates may also function. If any of these files is missing at power-up, the display will show an error message.

Do NOT change the SD-card under power. Switch off first!

To access the micro-SD card, slide the silver cover approximately 1mm upwards until it hinges open. Install the micro-SD card exactly into the slots, keep it depressed there, then close the cover and slide it down.

The micro-SD card must be formatted as FAT32, the most common format for these cards. FAT12, FAT16, NTFS, ExFAT and other formats are not supported. If necessary, reformat the disk on a Windows PC with a micro-SD slot or USB-interface, and force the PC to use FAT32 or use a special tool, e.g. from:

https://www.sdcard.org/downloads/formatter_4/

Cards with a capacity of 1 to 16GB (a.o. Lexar and Sandisk) have been successfully tested in the machine, and larger capacities should work as well. Note however that there may be cards for sale that do not work in embedded systems. It is strongly advised to first test a card before ordering a larger batch.



Service menu navigation

How enter service menu:

Press UP or DOWN to enter service menu. Use ACCEPT / ENTER button to accept selected options, UP or DOWN to increase/decrease them.



Service menu options

1. Credit settings
 - a) Free play
Yes – play for free
No – standard coin operated mode
 - b) Coins Multiple
Coin value multiplier per channel
 - c) Coins Value
Set coin values per channel
 - d) Reset temp count
Resets temporary counters. Requires PIN: 1204
 - e) Reset allcount
Resets all counters. Requires PIN: 1547
 - f) Game cost
Set how much credits one game costs. (default: 1)
2. Game settings
 - a) Ticket enabled
Yes(default) / No
 - b) Layout
1: standard layout (default)
2: divided by 2 layout 1 values
3: multiplied by 2 layout 1 values
 - c) Mode
 - Random Lamps :
Yes – playfield lamps will light randomly
No – playfield lamps will light one by one (default)
 - d) Chance
 - Average Tickets/game
Set automatic level adjuster to dispense set value of tickets
 - Difficulty
Set manually difficulty 1-9
 - Tmax [ms]
Maximum lamp lighting
 - Tmin [ms]
Minimum light lighting
 - Jackpot max
Maximum jackpot value
 - Jackpot min
Minimum jackpot value
 - Jackpot add
Add value if not win jackpot
 - Bonus games
Set value of banus games
 - Mystery value
Set value of MYSTERY value
 - e) AutoStart
Yes – start game automatically
No – start game by player button



- f) Dispenser
 - 0 = Benchmark IntelliTicket single or dual fast dispenser.
 - 1 = CLE-101 slow ticket dispenser.
 - 2 = Cube hopper.
 - 3 = Entropy 2000CR (default)

3. Sound menu

- a) Game volume
- b) Demo volume
- c) Sound time
- d) Mute time

4. Game counters

Shows every counter values

5. Pole counters

Shows each pole counter

6. Factory reset

Reset to factory defaults. Requires PIN: 2541

7. Save and exit

Exit menu with saving changes

8. Exit

Exit menu without saving changes



difficulty level

The dexterity game has a variable time that a field is lit, with high value fields showing much shorter than low values. The default values give a good average number of tickets, but may need to be adjusted, in particular when changing the field layout and when the number of tickets is too high or too low.

The LuckyNumbers game uses the following formula:

$$T = T_{min} + (T_{max} - T_{min}) / (1 + (\text{tickets} / \text{DextFact}))$$

Examples:

	default high value layout		recommended for low value layout:
tickets	DextFactor = 5 (default) Tmin = 10 (default)	DextFactor = 2 (harder) Tmin = 10 (default)	DextFactor = 1 Tmin = 6
0	200	200	200
1	168	137	103
3	129	86	55
5	105	64	38
15	58	32	18
50	27	17	10
250	14	12	
500	12	11	

Adjust these values to achieve a good profit/pleasure ratio.

“Modulate”:

To make the game a bit harder to play, the lamp time can be modulated for low value lamps. This modulation adds a random time, up to 100ms, to the low value lamps. This will prevent the user to adjust his timing merely to the rhythm of the lamps. The setting “Modulate if <=:” in the chance menu is by default set to 15. This means that all lamps with a value of 15 or less will have a modulated on-time.



terms of warranty

Magic Play Sp. z o.o. warrants that the LUCKY NUMBERS will be free from defects in electronics (motherboard, amplifier, power supply, ticket dispenser, jackpot and credits displays, LED lights, coin acceptor) for a period of two years from the date of delivery.

Warranty terms do not cover parts not included above.

Should the product prove defective during the warranty period, Magic Play, at its option, shall:

1. Repair the defective part by means of telephone support or depot service at no charge for parts of labor.
2. Replace the defective part with a comparable product which may be new or refurbished.

Provided that

1. Magic Play is informed of the defect immediately after it occurred. The faulty part should be dispatched to Magic Play or its authorized distributor as soon as possible.
2. Magic Play diagnoses the defects were not caused by improper use, neglect, unauthorized modifications, repair, setup or testing.
3. Only parts recommended and approved by Magic Play are covered by Magic Play Terms of Warranty.

UNDER NO CIRCUMSTANCES SHALL MAGIC PLAY SP. Z O.O. BE HELD RESPONSIBLE FOR LOSSES IN PROFIT, USAGE OR ACCIDENTAL SERIOUS DAMAGE TO THE MACHINE!

BUYER _____

DATE _____

SERIAL NUMBER _____

SELLER _____

