Kiddie ride

Manual





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1. Introduction

This manual serves to:

- familiarize operator and user with the machine's construction,
- familiarize operator with proper transporting conditions,
- provide proper setup parameters, installation and power line hookup,
- familiarize operator, user and child guardian with proper and safe usage procedures, exploitation and conservation.

This manual is an integral part of the machine. Take good care of it and keep it to hand throughout the machine's life cycle. We urge you to read this manual and all the information it contains carefully before using the machine.

The nameplate with the technical data, serial number and mark are in a visible position on the back of the machine. The nameplate must never be removed.

WARNING! USER MUST FOLLOW ALL GUIDELINES INCLUDED IN THIS DOCUMENT FOR SAFE AND LONG LASTING MACHINE USAGE.



Machine's owner, operator and lessee are obliged to make this manual available to users and guardians, especially the safety instructions part, in this manner, so that the users and guardians become acquainted with its contents.



2. Purpose and usage

Kiddie ride is an amusement machine designed for children aged 3 to 10 years (weighting 29 to 66 lb [13 to 30 kg]). This is a motor-driven slow-speed machine with a chair rotating around a main axis.

THE MACHINE IS BUILT TO PROVIDE THE FOLLOWING FUNCTION:
ROTATING A CHILD IN A SAFE CHAIR AROUND THE MAIN AXIS OF
THE MACHINE FOR AMUSEMENT PURPOSES; ALL OTHER USES
ARE TO BE CONSIDERED IMPROPER. THE MANUFACTURER
DECLINES ALL LIABILITY FOR USES OTHER THAN THOSE
STATED ABOVE.

A child is placed on a machine-mounted chair, fastened with safety belts, the coin has to be inserted and after pressing "START" button the machine starts.

The chair rotates around the wheel radius clockwise or counterclockwise. The machine stops few times during a ride. After the ride is over, the chair stops in a low position. The ride has an emergency stop button ("STOP"). The ride can be continued with pressing "START" again.

The machine is equipped with the following safety guards:

- safety belts sensors,
- platform sensors,
- emergency stops ("STOP" buttons).

Safety belts sensors will not allow for a ride to commence while the safety belts are not properly fastened. Unfastening the safety belts during ride make stop the ride.



Platform sensor reacts to the presence of people in its area. Platform intrusion makes the ride stop.

Child guardian has the possibility to stop the ride at any time by pressing one of the emergency stop buttons ("STOP").

Every emergency stop is signalized by the machine with a spoken comment.

Once the cause of the sensors operation had been removed, the ride can be continued after pressing "START" button.

Kiddie ride can be placed in shopping malls, on festivals, picnics, open air festivals, kid parties, amusement parks and other like locations.

While choosing location, it has to be taken into consideration that the machine cannot be placed in a direct rainfall or snowfall. In order to protect the machine from overheating it must not be placed in direct sun and heat (long-lasting insolation, near heaters/radiators or other heating appliances.



3. Technical data

Measurements	Width [in]/[cm]	55/140
	Height [in]/[cm]	91/232
	Depth [in]/ [cm]	40/101
Weight [lb]/[kg]		474/215
Power US/EU	120V/230V +6,-10%, 50Hz	
Power rating factor	>0,5	
Power consumption stand	0,015/0,4	
Working conditions	0°C do +40°C	
Transporting and storing	0°C do +50°C	
Relative humidity	5 - 90% r.h.	
Safety class		I (zeroing)
Input/output appliances	Coin acceptor	
		Optional:

Table 1 – technical data



4. Safety precautions



- Only machine in working order can be used. After discovery of any
 mechanical or electrical damage or in any case of safety guards
 malfunction (safety belts sensor, platform sensor, emergency stop
 buttons) the usage of machine is not allowed and the staff should be
 notified immediately.
- 2) Child can use the machine only under adult guardian supervision.
- 3) Child's guardian takes full responsibility for child's safety.
- 4) Child's guardian is obliged to abide by safety precautions described in this manual.
- 5) It is forbidden for anyone to be on the platform or to climb the platform while the ride is running.
- 6) People remaining close to the machine area have to keep the save distance from chair and other moving elements.
- 7) It is forbidden to touch moving elements of the machine.
- 8) The machine can be used by only one child at a time.
- 9) Child using the machine has to remain calm.
- 10) Guardian, before placing a child on machine's chair, should check for any unwanted objects on the chair and if the chair or any other parts with which the child may come in contact are not heated.
- 11) It is forbidden to step on wet platform or to place child on wet chair.
- 12) It is forbidden for a child using the machine to lean out of chair and to touch moving parts of the machine.
- 13) It is forbidden to climb the machine, especially the chair.
- 14) It is forbidden to stand on the chair.
- 15) It is forbidden to stop the machine's ride without cause.
- 16) It is forbidden to take a child out of chair while the ride is running.
- 17) It is forbidden to get off chair while the ride is running.
- 18) It is forbidden to hold a child while the ride is running.



- 19) It is forbidden to use the machine without safety belts properly fastened.
- 20) It is forbidden to push, move and swing/set in motion machine while the ride is running.



5. Safety

The device can work only with the electrical system having an earth connection and an efficient system of residual current.

Voltage parameters have to comply with data included in Table 1 – technical parameters.

Before plugging in the machine, check if socket and extension cord have correctly connected earthings.

While machine is working, no electric wires and no other metal elements might be touched, as this may result in electric shock.



When carrying through any actions that include opening the machine, be sure to disconnect the machine from the supply network before.

THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY DAMAGE MADE TO PEOPLE, ANIMALS OR ANY OTHER PIECE OF PROPERTY CAUSED BY NOT FOLLOWING THE SAFETY RULES.



6. Construction

1) Machine construction

The Kiddie ride machine is built of two parts: base with housing and chair and top housing (lid). The base includes platform sensor, and the chair has safety belts with fastening sensor.

The housing is provided with transmitting chain mechanism which transmits rotation from the motor to the kiddle ride chair. The built-in mechanism ensures the chair's leveling in one position.

The top housing protects the machine against the adverse effects of the weather.

Main assembly that ensures machine's correct work is the main board placed inside the kiddle ride (main board schematics, Drawing 1 in point 6.2), to which other operating and signalizing parts are connected.

The electric-electronic assembly consists of:

- power supply 100-240V AC/ 12V DC,
- main board,
- motor controller,
- platform sensor,
- safety belts fastening sensor,
- set of buttons,
- speaker,
- set of lighting diodes,
- coin acceptor,
- optional: bill acceptor, ticket dispenser, capsule dispenser.



2) Main board schematics

SENSOR – wheel position sensor

BUTTONS -START, STOP buttons

PERIPHERY – external devices (acceptors, dispensers)

SAFETY SENS. – platform, belt

M.COUNT - money counter

MOTOR – motor controller

LED – LED lighting

BUTTON STOP – emergency STOP

SPEAKER - speaker

OPTIONS – options

▼ ▲ ◀ ▶ – controller keypad

ENTER ▶ – enter

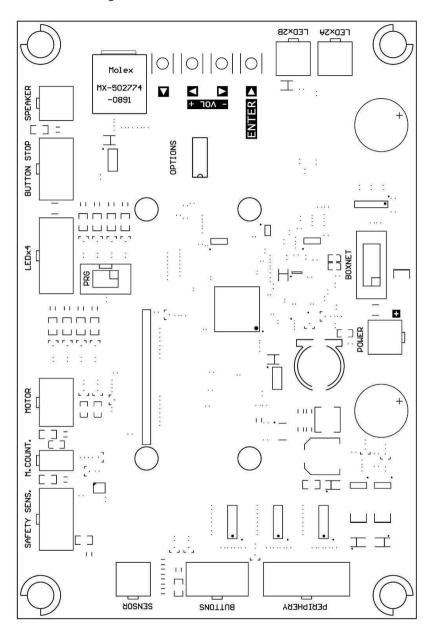
VOL ▼ ▲ - volume

POWER – power

BOXNET – Internet modem



Drawing 1 - main board schematics





3) Optional auxiliary devices

a) Ticket dispenser

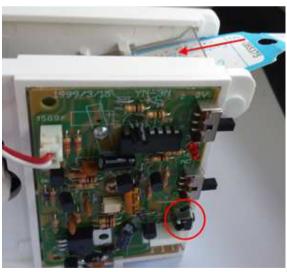
Switches setting



Switches should be in down position (as shown on Picture 1).

Picture 1

Ticket refill



First ticket from the batch should be pushed into the hole placed in the back of the dispenser (see arrow on Picture 2), then press the loading button placed at the bottom of the dispenser (circle on Picture 2), at the same time pushing tickets a bit until the mechanism catches them. NOTE: in some models tickets load automatically.

Picture 2



7. Machine transport

The automat is transported in upright position.

Automat's package may be pallet, to which the automat is fastened, and the sides may be covered with styrofoam. The top lid is covered with thick paperboard.

After the machine is taken out from the wrapping, she should be moved in upright position (using attached wheels).



8. Assembly and installation

Kiddie ride machine is supplied in two parts: base and top lid.

The top lid has to be mounted on the housing:

- position the lid,
- insert screws.
- connect the lighting cable to the main board.

Next, close all machine door and connect the power cord to the socket.

The machine has to be installed in its location:

- the machine has to be placed on hard stable ground in a way that its base is properly leveled. The level should be acquired using spirit level; the adjustment is done by tightening screws (plates under the base),
- it is important that the middle housing stands upright, as in other case the seat reel or coin acceptor might not work properly,
- during installation it is important to watch the power cord so that it does not get pressed down,
- the machine, once connected to the power supply, is ready to work.



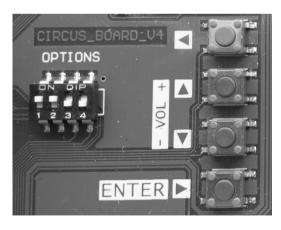
9. Machine parameters configuration

1) Machine setup:

After machine power up, the display shows the following information:



- CIRCUS VER.02.02 software version,
- **VOL** = **30**% current volume level. The level volume can be adjusted by pressing ▼ **△** arrows. The volume is saved to the main board,
- CR = available credits. The gained credits are dependent on the machine's settings. After the machine's power off, credits counter is reset.



KEYPAD – use this 4-buttons keypad to go through service settings

OPTIONS – option microswitch



OPTIONS - microswitch

Switch 1 – Service option activation (switch ON).

Switch 2 – Free credits activation (switch ON).

Switch 3 – Deactivation of safety belt sensor (switch **ON**).

Switch 4 – Deactivation of platform sensor (switch **ON**).

2) Service settings:

Navigating through service options using KEYPAD

- ▼ ▲ Service option change P=
- → Service option value change VAL=

The display shows:



- P= 1 service option number
- **VAL= 0** service option current value



Service options table:

Option	Description	Remarks
P1	Temporary money counter (erasable)	Pressing ENTER ► for 1 sec. to reset the counter
P2	Total money counter (non-erasable)	Shows total number of basic coins collected by the machine since its manufacture
Р3	Free credits counter (non-erasable)	Free credits activation: OPTIONS, 2 on ON
P4	Conversion rate MONEY - CREDITS	Determines "price" of each credit (game). For example, P4 VAL = 4 means, that 1 credit costs 4 basic coins — a basic coin is a coin usually programmed on channel 1. For a basic coin of \$0,25 it will be 4x \$0,25 that is \$1 (1 credit costs \$1). Default: 4
P5	Coin on channel 1	Default: 1
P6	Coin on channel 2	Default: 0
P7	Coin on channel 3	Default: 0
P8	Coin on channel 4	Default: 0
Р9	Bill acceptor channel	Default: 4
P10	Number of tickets for credit	Default: 1
P11	Dispensed tickets counter (erasable)	Pressing ENTER ► for 1 sec. to reset the counter

Table 2 – service options



10. Inspection, day-to-day maintenance and conservation



All maintenance should be done by a manufacturer-authorized service or a person empowered by the manufacturer.

1) Coin acceptor maintenance

Coin acceptor should be cleaned periodically (every 2000 - 3000 credits). Best way to clean it is by using simple cloth slightly soaked in distilled alcohol. Focus should be placed on cleaning the area where coins slide through (make sure sliding part is in open position). Do not use acetone or dissolvent.

2) Mechanism maintenance

Periodically, once a month or even more often if needed, the moving parts (chain, bearing, grease fitting of rolling bearing) have to be lubricated with lubricant.

3) Fuse change

The machine is equipped with a one time-delay fuse (motor security). A blown fuse has to be exchanged for a new fuse of the same type: 125V/8A time delay ceramic fuse.



To change the fuse unscrew two screws (1) and then take off the cover and unscrew the fuse (2).



4) Periodic inspection

Once a year a thorough inspection of the machine has to be done by a manufacturer-authorized service or person empowered by the manufacturer.



11. Possible errors and repair methods

1) If main board is not working:

check if the power supply is connected to the main board.

2) If coin acceptor is not working:

- check if the coin acceptor is not clogged up,
- check if the coin acceptor is not dirty or dusty,
- check the ribbon cable connecting main board with coin acceptor.

3) If mechanism/motor is not working:

- check the fuse in motor's controller,
- check chain tension.
- check platform sensor and safety belts sensor,
- check wheel position sensor,
- check the main board.

4) If "START" or "STOP" button is not working:

check connecting cables.

5) If the power supply is not working:

 check the voltage on the power supply; if it's ok. and the machine's not working, exchange the power supply.

6) If the machine does not run:

- check if the power cord is not damaged,
- check if there's power in the socket.

7) If the sound's not working:

- check if it's not at low volume,
- check speaker cable connection, and if it's correctly plugged to the main board,
 - check if the cable from speaker's side is not detached.



8) If the light is not shining:

- Check the connection between main board and lights.



12. Equipment and spare parts

- Screws for mounting the top lid.

