Felimana Luna Park
"Carrousel 1040"
Non-Kiddie

FELIMANA LUNA PARK S.A.

CARROUSEL

Model 1040

OWNER /OPERATOR MANUAL

FELIMANA LUNA PARK S.A.

INSTRUCTIONS MANUAL

DOUBLE DECKER CAROUSEL – MODEL 1040

Carousel, model 1040, is a 28 horses ride for kids & adults. This popular ride is fabricated of structural steel tubing and plate frame with aluminum horses and fiberglass scenery. It is powered by electric-hydraulic drive and engineered for low maintenance. The Felimana Carrousel is one of the easiest setup and tear down rides available today.

The Model 1040

Features

- Travel Size: One 40' container and one 20' container.
- Set-up: Seven days with five men.
- Set-up size: 42' with fence; 38" without fence.
- Electrical: 220v single phase, 100 amps
  100' of lead cable provided
- Mechanical: 3 HP electrical power with energy flow reducer 30/1.
- Passenger Capacity: 446 lbs. per big horse; 215 lbs. per small horse; 800 lbs. per chariot and 800 lbs. per gondola.
- Lighting: Start lights on scenery.

Options

- Rack trailer for horses and scenery.
- Customized paint.
- Aluminum fences

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REGISTRATION

- This manual is for the FELIMANA LUNA PARK S.A. amusement ride.
- Your Model Number is 1040.
- Your Serial Number is
- Your ride was manufactured on 07/01/1997
- The ride was installed on 11/06/98

SAFETY

The following is a list of a few general selected rules which should be adhered to by everyone. Remember that in the long run the key to a Safe and Successful Operation is to have well trained and well supervised employees.

GENERAL SAFETY RULES

1. All work must be done by competent qualified mechanics capable of understanding the function of the parts and their proper installation.

2. Inspect ride, each day of operation, to determine that no portion of the ride is damaged, omitted or worn in such a manner that it is unsafe, or that unsafe condition may develop.

3. Perform manufacturers recommended maintenance procedures at intervals and in manner specified by operation and maintenance manual, in the following general areas:

A. Lubrication

B. Drive and Electrical Systems

C. Torquing of Bolts

D. Wear of Bolted or Pinned Joints

E. Adjustment and Care of Mechanical Components such as: Brakes; Arms; Drives.

F. Crowd Control Devices

G. Operating Controls

H. Emergency Controls

I. Factory Installed Safety Devices

4. Study each job carefully to determine all hazards, so that necessary safeguards can be taken.

5. Examine safety devices, tools, ladders, etc., before they are used to make sure they are in good condition. Ladders should be clean and unpainted.

6. Use proper tool or equipment for each job. Ground all hand electric power tools before use.

7. Wear close-fitting and comfortable clothing when working on or close to mechanical apparatus or live electrical circuits. Avoid finger rings, jewelry or other articles which may be caught in moving parts or come in contact with electrical circuits.

8. Protect your eyes by wearing approved Safety Glasses or Goggles.

9. Wear hard hats at all times. When working in elevated areas, use a safety belt.

10. Where work to be performed is hazardous such as live electrical circuits, at least two people shall work together.

11. If guards must be removed from equipment, make sure they are replaced before leaving the job.

12. Clean up after each job disposing of surplus materials.

13. Keep a record of parts replaced and date of replacement. Inform manufacturer of any replacement requirements that are frequent or cause unsafe condition.

TEN YEAR OVERHAUL

When your ride becomes ten (10) years old, a complete safety reconditioning is recommended. If your ride, whether you purchased it new or used, has been properly maintained, this reconditioning program will be easier.

This work may be performed by the following:

1. By FELIMANA LUNA PARK S.A. in its factory, by factory personnel.
2. In a factory which has the full capabilities of handling this type of work.
3. By the owner, provide the work is inspected by FELIMANA's inspector or other outside inspector, fully competent to check that all the work has been properly and completely performed.

SPECIAL CAUTION

The most important safety requirement on this ride is a well trained, alert operator. You must always remember this ride is not a product designed for use by an untrained person. Failure to do so could result in a severe personal accident. Many hours of direct training on the operation of this ride are mandatory before any individual can be allowed to take full responsibility. It is mandatory of the operator to be intimately familiar with this manual.

It is our philosophy that accidents are not acceptable as they represent human suffering and property damage which are preventable through proper management.

CAUTIONS

1. Be intimately familiar with this manual and properly trained before attempting to operate this ride. Do not loose this manual. Its 1998 replacement cost is $ 35.00. (plus delivery expenses).
2. This ride is electrically grounded. This helps prevent a person from being shocked should a short develop in the ride. Should you touch a live wire and grounded ride, you may be killed even though it is only 110v and you are young and healthy. Therefore, ALWAYS, ALWAYS DISCONNECT the main power source before doing anything electrical.
3. This ride is heavy moving machinery. Should you or anyone else be hit or become tangled in its machinery, the results will be worse than you expect.
4. Anything happening on or near this ride is your responsibility. Your not seeing anything is no excuse. Be extra alert at all times.
5. Always listen for any unusual noise from your ride. Should you hear or notice anything unusual, stop the ride and immediately call your supervisor before attempting any further operation.
6. Be polite and cautious even when customers are not. Your attitude has a major effect on safety on this ride.
7. Always allow plenty of time to complete all pre-opening and closing procedures. Keep your ride area clean and orderly.
8. In case of an accident, even a very small one:

a. Stop the Ride

b. Get help (office or supervisor)

c. Aid the injured as best you can

d. Stay calm

e. Control Crowds

f. When help arrives, assist them.

g. Remember the facts –do not gossip- you will have plenty of time to tell the real story at a later time.

9. Always make absolutely certain everyone is properly seated before starting the ride.

10. Check carefully that everyone is clear off the ride and outside the fence before starting the ride.

11. Do not let anyone climb on, play on, or lean over the fence.

12. Keep the fence at a safe distance from the ride.

13. Use common sense.

14. Understand that everything inside the fence is your personal responsibility.

15. Should there be an accident and you even had beer on your breath, had been drinking, or were taking any type of illicit drugs, you could be charged with a felony and sentenced to prison.

16. When erecting or dismantling a ride, most injuries occur because:

a. Something falls on someone.

b. Someone slips and falls.

c. Something touches a high voltage line.

17. Preventing a child from being injured is by far your most important job.

18. When you leave the ride turn power off.

19. Be cautious and ready for the unexpected when dealing with children.

CARROUSEL

PARKING AND INITIAL SET-UP

The Felimana 1040 Carrousel can easily be installed by 4 to 6 men in 7 days.

Detailed Steps

1. Select flat area and park ride at center of desired location allowing 42 feet diameter circle for clearance and fence. Adjust jacks until level.
2. Level structural main cross.
3. Install Center Pole Extension.
4. Install 4 obenques and secure attach them with 4 bolt nut washer.
5. Install 14 semi circular external structures.
6. Install 84 operating arm supporters.
7. Install 7 crankshaft.
8. Install crankshaft movement crown.
9. Install collector and carbon energy transmitter.
10. Install 28 supporters for side panels.
11. Hang 14 higher level supports.
12. Install motor and reducer and pinion driver supporters.
13. Install 14 wood panels corresponding to upper level floor.
14. Install 14 side panels for canvas.
15. Install 14 bottom panels for canvas.
16. Hang 14 external floor poles.
17. Hang 14 interior floor poles.
18. Install 14 wooden floor panels at the lower level.
19. Install 42 supporters for running board.
20. Install 14 aluminum running board.
21. Install main circular steel structure.
22. Install 14 side panels at the canvas.
23. Install 14 external crown panels.
24. Install 7 internal crown panels.
25. Install 14 vertical side panels.

26. Install 12 security fences for the upper level.
27. Install 12 belt panels for upper level.
28. Install 2 stairs.
29. Install 14 core panels for lower level.
30. Install 8 core panels for upper level.
31. Install 28 canvas junction panel.
32. Install 14 core panel junctions.
33. Install 14 base-board.
34. Hang 42 horse poles.
35. Attach 42 horses (28 big and 14 small).
36. Install 3 chariots and 2 gondolas and 3 lions.

NOW YOU ARE READY TO INSTALL ELECTRICAL

ELECTRICAL INSTALLATION

1. Set up lightning control panel.
2. Set up motor (PLC) control panel.
3. Set up energy flow distributor.
4. Set up general ignition and stop panel.
5. Set up external master control panel.
6. Hook up 100' power cable from Control Panel to a 220/208 volt single phase supply. This unit works with ground wire.

All internal cables(provided by Felimana). Each cable is identified by a different type of connector.

RIDE IS NOW READY FOR START UP AND INSPECTION PROCEDURE

CARROUSEL

START UP AND INSPECTION

1. Inspect all pins and safety pins.
2. Inspect bolted connections.
3. Standing on center of ride, grease grease-fitting on Center pole and universals.
4. Turn on breakers and start ride. Run for approximately 5 minutes.
5. Stop ride and re-inspect each pin and bolted joints.

Ride is now ready for operation.

CARROUSEL

TEAR DOWN AN STORAGE PROCEDURE

1. Follow the Set-up Procedure in reverse order.

CARROUSEL

The following is presented in accordance with ASTM F698-88 STANDARD SPECIFICATIONS FOR PHYSICAL INFORMATION TO BE PROVIDED FOR AMUSEMENT RIDES AND DEVICES.

INFORMATION REQUIREMENTS

INFORMATION PLATE

The information plate is located on the mast with the following information.

RIDE SERIAL NUMBER

Assigned at time of manufacture. Located on name plate.

RIDE NAME AND MANUFACTURER

Felimana Luna Park S.A. Located on name plate.

RIDE MODEL NUMBER

Felimana 1040. Located on name plate.

DATE OF MANUFACTURE

Located on name plate.

RIDE SPEED

Maximum speed is 7 rpm. Not printed on label.

DIRECTION OF TRAVEL

Unit may be only operated in a counter-clockwise direction. Not printed on label.

PASSENGER CAPACITY BY WEIGHT

Maximum Total Passenger Weight is 20.698 lbs.

PASSENGER CAPACITY BY NUMBER

Maximum number of Passengers is 72 persons.

RIDE DURATION

The recommended ride duration is 3 minutes.

RECOMMENDED BALANCE OF PASSENGER LOADING OR UNLOADING

Balance of passenger loading or unloading is not required. Precise weight distribution is not critical to the operation or safety of the ride.

ENVIRONMENTAL RESTRICTIONS

The ride should not be operated in high winds, rain or other conditions which would limit the visibility of the ride operator, or result in slippery conditions for loading and unloading.

RECOMMENDED PASSENGER RESTRICTIONS

No person suspected of drinking or on drugs.

ELECTRICAL POWER REQUIREMENTS

The ride requires 220/208 volts, single phase 200 amps. The voltage should not vary 10% from this recommendation.

MECHANICAL POWER REQUIREMENTS

None.

WATER FLOW

None.

STATIC INFORMATION

The ride, including optional fence, is approximately 33.5' high by 42' diameter circle. The ride weights 11.830 lbs.

DYNAMIC INFORMATION

When the ride is operational, its dimensions are the same as when it is a rest. The ride weights 32.528 lbs.

FASTENER SCHEDULE

All fasteners, pins, cables, safety ropes and cleats must be replaced with items provided by the manufacturer.

LOAD DISTRIBUTION PER FOOTING

Non applicable.

ELEMENTS AND STRUCTURES

To be furnished by Owner/Operator where applicable.

CARROUSEL

The following is presented in accordance with ASTM F770-88 STANDARD PRACTICE FOR OPERATION PROCEDURES FOR AMUSEMENT RIDES AND DEVICES.

MANUFACTURER'S RESPONSIBILITY

- MANUFACTURER RECOMMENDED OPERATING INSTRUCTIONS

- DESCRIPTION OF THE RIDE, FUNCTION AND OPERATION

  The ride is a 72 seat circular ride fabricated of structural steel tubing and plate, powered by an electric drive.

- Description of the Motion

  The ride runs counter-clockwise direction in a circle.

- Description of the recommended Passenger Loading Procedures

  The ride operator should unlock the entrance gate and permit the proper amount of persons to enter the ride are only after the ride has come to a complete stop.

- RECOMMENDED SAFETY PROCEDURE

- Maximum Riders, Weight and Ride Total

  The ride should carry no more than 52 adults. Maximum weight of any ride should not exceed 200 pounds per adult and 60 pounds per child.

- Ride Operator's Safety Check

  The ride should not be operated in high winds, rain or other conditions which would limit the visibility of the ride operator, or result in slippery conditions for loading and unloading.

- OPERATOR'S LOCATION AND OPERATING PROCEDURE

  The operator should have clear view of all functions of the ride at all times. The operator control console should be placed to the outside of the swing area.

Daily Pre-Opening Inspection

- Check all pins, safety pins and bolts.
- Insure the ground wire on the main lead is secure at its power source.
- Clean up the area.
- Be alert and think safety the rest of the day.

Ride Operators Position and Function

The rider operator should be positioned at the end of the loading area so he has clear and unobstructed view of the loading areas and the whole ride. The operator should know and understand the operations of the control console. The operator should know and understand hand signals used by the loading and unloading operators.

Recommended Series of Steps to Operate the Ride

1. Open the safety gate and let the required amount of patrons in.
2. Close and lock the gate.
3. Check to insure that all safety latches are properly attached.
4. Be alert and watch riders.

Emergency Procedures

Recommended Evacuation of the Ride

Evacuate the ride through the front gate.

Use of Emergency Power Equipment – N/A

Description of Emergency Equipment – N/A

Description of any Emergency Procedure Made Necessary by an Interruption of Power, and Restart Procedures.

With the interruption of electricity, turn off the ride and do not restart until checking that everyone is seated.

CARROUSEL

The following is presented in accordance with ASTM F770-88 STANDARD PRACTICE FOR OPERATION PROCEDURES FOR AMUSEMENT RIDES AND DEVICES.

OWNER / OPERATOR'S RESPONSIBILITY

OPERATION PROCEDURES

Each owner / operator of an amusement ride device shall read and become familiar with the contents of the manufacturer's recommended operating instructions and specifications. Each owner/operator shall prepare an operating fact sheet. This fact sheet shall be made available to each ride operator and attendant of the amusement ride. The owner's/operator's fact sheet (on a ride-to-ride basis) shall include but not be limited to:

- Specific ride operation policies and procedures with pertinent information from the manufacturer's instructions.

1. Description of the ride operation
2. Duties of the specific assigned position of the ride operator or attendant.
3. General Safety Procedures.
4. Additional recommendations of the owner/operator.

- Specific emergency procedures in the event of an abnormal condition or an interruption of service.

- The owner/operator shall provide training for each ride operator and attendant of the amusement ride. This training shall include but not be limited to the following, where applicable:

1. Instructions on ride operating procedures.
2. Instructions on specific duties of the assigned position.
3. Instructions on general safety procedures.
4. Instructions on emergency procedures.
5. Demonstration of the physical ride operation.
6. Supervised observations of the ride operator's physical operation of the ride.
7. Additional instructions deemed necessary by the owner/operator.

- The ride operator of each amusement ride shall conduct a daily pre-opening inspection of each ride prior to carrying passengers. This inspection shall include but no limited to the following:

1. Visual check of all passenger-carrying devices, including restraint devices and latches.
2. Visual inspection of entrances, exits, stairways, and ramps.
3. Test of all communications equipment necessary for the operation of the ride.
4. Prior to carrying passengers, the ride shall be operated for a minimum of one complete operating cycle.

- The owner/operator of an amusement ride may deny entry to the ride to any person, if in the opinion of the owner/operator the entry may cause above normal exposure to risk of discomfort or injury to the person who desires to enter, or if in the opinion of the owner/operator the entry may jeopardize the safety of other patrons or employees.

1. Ride operators should be given guidelines on the special considerations concerning patrons size, and the special considerations applicable to physically disable and mentally impaired patrons, related to their particular ride.

The following is presented in accordance with ASTM F853-91 STANDARD PRACTICE FOR MAINTENANCE PROCEDURES FOR AMUSEMENT RIDES AND DEVICES.

OWNER / OPERATOR'S RESPONSIBILITY

MAINTENANCE

- Each owner/operator of an amusement ride shall read and become familiar with the contents of the manufacturer's maintenance instructions and specifications, when received as provided in paragraph 3.1. Based on the manufacturer's recommendations, each owner/operator shall implement a program of maintenance, testing, and inspections providing for the duties and responsibilities necessary in the care of each amusement ride. This program of maintenance shall include checklist to be made available to each person performing the regularly scheduled maintenance on each ride. The owner/operator's checklist (on a ride-to-ride basis) shall include but no limited to:

1. Description of preventive maintenance assignments to be performed.
2. Description of inspections to be performed.
3. Special safety instructions, where applicable.
4. Any additional recommendations of the owner/operator.

- The owner /operator of the amusement ride shall provide training for each person performing the regularly schedule maintenance on the ride, pertaining to their duties. This training shall include, but not limited to the following:

1. Instruction on inspection and preventive maintenance procedures.
2. Instruction on the specific duties of the assigned position.
3. Instruction on general safety procedures.
4. Demonstration of the physical performance of the assigned regularly scheduled duties and inspections.
5. Supervised observation of the maintenance person's physical performance of their assigned regularly scheduled duties and inspections.
6. Additional instructions deemed necessary by the owner/operator.

- Prior to carrying passengers, the owner/operator shall conduct or cause to be conducted a daily documented and signed pre-opening inspection, based o provided instruction, to insure the proper operation of the ride. The inspection program shall include, but not limited to the following:

1. Inspection of all passenger-carrying devices, including restraint devices and latches.

2. Visual inspection of entrances, exits, stairways and ramps.
3. Functional test of all communication equipment necessary for the operation of the ride.
4. Inspection or test of all automatic and manual safety devices.
5. Inspection or test of all brakes, including service brakes, emergency brakes, parking brakes, and back stops.
6. Visual inspection of all fencing, guarding, and barricades.
7. Visual inspection of the ride structure.
8. The ride shall be operated for a minimum of one complete operating cycle.

- An amusement ride or the specifically affected element, shall be appropriately inspected and operated, without passengers, to determine that it is functioning properly following an unscheduled cessation of operation caused by:

1. Malfunction or significant adjustment, or
2. Mechanical, electrical, or operational modification, or
3. Environmental conditions that affected the operation, or any combination of the three.

OWNER/OPERATOR'S RESPONSIBILITY

INSPECTION

- Each owner / operator of an amusement ride shall implement a program of regularly scheduled inspections providing for the duties and responsibilities necessary in the care of each amusement ride.
- Owner / Operators of amusement rides shall have an inspection program consistent with the inspections outlined in Practices F770 and F853.
- Inspection documents deemed appropriate by the owner / operator to be maintained in the ride file shall be filed according to the procedures outlined in Practices F7770 and F853.
- The owner operator of an amusement ride shall promptly notify the manufacturer of an incident, failure or malfunction which, in his judgement, seriously affects the continued proper operation of the ride and is information of which the manufacturer should be aware.

GENERAL GUIDELINES

OPERATOR SELECTION AND INSTRUCTION

1. Select competent, mature operators capable of understanding the function and use of amusement rides and their control.

2. Instruct each operator fully in the proper use and function of the ride he is to supervise, including:

- Controls and procedures for normal and emergency operation.
- Manufacturer's recommended maximum load.
- Manufacturer's recommended length of the ride as determined by the manufacturer or owner, or by special conditions such as weather, locations and crowds.
- Each operator must have an INMEDIATE AVAILABILITY and a complete working knowledge of the manufacturer's operator's manual for the ride he supervises.

3.Require each operator to inspect the ride he supervises on each day of operation.

- Determine that no portion of the ride is damaged, omitted or worn in such a manner that is unsafe or that may develop into an unsafe condition.
- Report any irregularities to superintendent or owner.
- Do not operate the ride if any irregularities are found until such condition is corrected.

4. Instruct the operator to allow no passenger to ride who is visibly ill or under the influence of drugs or alcohol.

5.Instruct operators and attendants on the proper methods of securing passengers in the ride. Do not allow a passenger in the ride who cannot be properly secured due to passenger in the ride who cannot be properly secured due to passenger size or because of malfunction of the securing device or behaving dangerously, such as standing up.

6.Advise the operator against starting or operating the ride while any person (passenger, spectator or employee) is in an endangered or unsafe position on the ride or within the ride area.

7.Insist that each operator remain in full control of the operating controls during operation of the ride, and give his full attention to the ride and his passengers.

8.Instruct operator to allow no other person, other than trained operator, to operate the control of the ride.

9.Instruct operator to inspect and correct or replace damaged, lost or worn parts that are unsafe or that may develop into unsafe parts simultaneously with assembly or disassembly.

10.Advise operator of owner / supervisor procedure for assisting ill or injured passengers.

11.Advise operator that factory-installed safety devices are not to be tampered with or removed.

12.Instruct operators and attendants that patrons are required to secure all loose articles such as keys, change, eye glasses, etc.

13.We recommend that every operator takes a first aid course.

OPERATIONAL LOAD TEST

Any operational test, including load testing performed on a ride shall be completely nondestructive in nature. Overload testing exceeding the rated limits listed on the information plate, operational manual, field inspection guide or specifications sheet shall be deemed inappropriate. Where maximum total passenger weight is not readily available, passenger capacity multiplied by 200 pounds per adult.

Nondestructive testing with inert loads can be accomplished only with special care as to placement of the load so that it is centered both vertically and horizontally as would be the load of the passenger it replaces. Extra seat reinforcement must be used to offset any load concentration created by inert loads. Such test shall be documented and certified as nondestructive by the person making the test and the agency requiring it. Results of all load test shall be communicated to the factory upon completion by the Certifying Agency.

Conducting a nondestructive operational load test assures the testing agency that it will carry a give load in a give moment and in no way assures future safety of the ride.

Conducting a destructive load or overload test also assures the testing agency that it will carry a give load in a given way at a five moment and in no way assures future safety of the ride.

However, it also introduces the probability of inflicting serious irreparable damage to the ride that may or may be not apparent at the time of the test.

We consider inert load testing of any nature appropriate only for situations requiring experimental development of stress-strain testing during prototype development. A certificate of load test on the prototype and certification that each production ride met the design criteria when it was manufactured is available from the factory upon request.

ASSOCIATIONS

ASTM, American Society for Testing and Materials, is a non-profit organization which, through the use of industry volunteer committees, sets the standards that manufactures, operators and inspectors are urged to follow. If you, as a ride owner, are interested in working with the industry to set the standards, contact ASTM.

Each January at a United States ride manufacture's facility, AREA hosts its annual Maintenance and Safety Seminar. Participants include employees of traveling shows, amusement parks and state and federal officials responsible for ride inspection and safety. The seminar includes five days of classes designed for every level of employee. Classes include electrical, hydraulics and pneumatics, welding, non-destructive testing, inspection techniques, the psychology of safety, truck driving, developing and safety program, developing a maintenance program, and training and evaluation of ride personnel.

FELIMANA LUNA PARK S.A. strongly recommends that all ride owners, operators, and maintenance personnel attend the seminar annually. Contact AREA for exacts dates, times and tuition.

For your convenience, below is a list of amusement-related associations, including addresses and phone numbers.

American Recreational Equipment Association
P.O. Box 557
Delaware, Ohio 43015 (614) 363-9715

American Society for Testing and Materials
1916 Race Street
Philadelphia, PA 19103 (215) 299-5585

International Association of Amusement Parks and Attractions
4230 King Street
Alexandria, VA 22302 (703) 671-5800

International Independent Showmen's Foundation
P.O. Box 188
Gibsonton, FL 33534 (813) 677-9377

Outdoor Amusement Business Association
4600 W. 77th St.
Minneapolis, MN 55435 (612) 831-4643