

DDuck.US1 02/04/05
Manufactured by:
Coastal Amusements, Inc.
1935 Swarthmore Ave.
Lakewood N.J. 08701 (USA)
Tel: 1-732-905-6662
Fax: 1-732-905-6815
e-mail: sales@coastalamusements.com
visit our website at: www.coastalamusements.com
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## 1. Getting Started

### 1.1 Receipt Of Your Disco Duck

When you first receive your Disco Duck, carefully remove all packaging material and place the unit on a flat and level floor. Your Machine should be handled carefully during installation and when changing it's location to avoid damage to equipment and possible personal injury.

Your Disco Duck is designed for indoor use only; exposure to outdoor conditions will cause damage. Be sure all ventilation grills have at least 4 " $(100 \mathrm{~mm})$ clearance from other surfaces to permit adequate cooling. Before use the Dance floor should be electrically and mechanically connected and inserted into the front base of the your Disco Duck. Please use only supplied hardware to ensure maximum performance and longevity.

### 1.2 Electrical Connection

Your Disco Duck should be connected to the electrical supply with the supplied line cord to suit your installation requirements. A grounded three-prong outlet should always be used to operate your Disco Duck. Any electrical questions should always be referred to qualified professionals. The power switches are located inside the Coin Mechanism door next to the coin meters, and at the lower left corner or the cabinet back.

| Electrical wiring: USA |  |  |
| :---: | :---: | :---: |
| Supply | Hot | Black |
|  | Neutral | White |
|  | Ground | Green |

YOUR DISCO DUCK MUST BE GROUNDED!!

## 2. Game Operation

### 2.1 The Game

With the your Disco Duck switched on, the machine will initialize and immediately operate in attract mode. In this mode, the various panel lamps flash in attractive sequences. Sounds are played to draw attention, sound intervals can be set with an options menu - referenced later in this manual.

After inserting coins in to the coin mechanism, once the credits per play is reached, the player is greeted by a sound message inviting them to select a level of play. There are three levels available, 'EASY, MEDIUM \& HARD'. Selection is simply a matter of pressing the appropriate lighted button of the front of the your Disco Duck. The player is then prompted to stand on the dance floor.

The player is advised of the game start and shortly afterwards the music commences. There are five illuminated panels on the dance floor, each with a 'stamp-on dome', and these illuminate one at a time in a random fashion. The player is encouraged by sound prompts to 'dance' and step on each dome as it is illuminated. Every time an illuminated area is stepped on, the player's score increases allowing them to win more tickets. The number of tickets and associated thresholds are set in the options menu, which will be addressed later in this manual.

### 2.2 General Maintenance \& Care

Your Disco Duck is a tough and reliable machine, which when properly cared for will give years of profitable service. Regular cleaning is the key to optimum condition and performance.

To maintain all visible surfaces in an "as new" condition:
Plastic and Fiber Glass - use a general purpose (non aggressive) water based detergent and finish with a quality furniture polish.

Laminated Cabinet trims - clean with an all purpose non-aggressive cleaner and polish to a high gloss using a furniture polish.

Glass and Chrome - clean with a quality window cleaning solution.

## Do not use caustic or abrasive cleaners. Always use cleaning products in accordance with the manufacturers instructions.

It is recommended an initial inspection be carried out after approximately one month of usage, to check for any signs of wear on the moving parts, and the tightness of mechanical connections. Please make adjustments as required, and thereafter inspect yearly.

## Set-Up Procedure

Pressing the RESET switch while the game is in the attract mode will put the game into it's MAIN MENU. The EASY, MEDIUM, and HARD buttons will flash when you enter this mode. Pressing the HARD button while the machine is in the MAIN MENU mode will return the machine to attract mode.

Pressing the EASY button while in MAIN MENU mode allows you to enter the options menu. When you enter the OPTIONS menu the EASY, MEDIUM, and HARD buttons will light steadily. The HITS display will show option numbers. The various options can be scrolled through by pressing the EASY button, the list will cycle back to the beginning after the last option listed is shown. Pressing the MEDIUM button allows you to modify the displayed option. The current value of the selected option will show in the MISS display. (If the selected option contains more than two digits in its options, the additional number will be shown in the HITS display.) Press the EASY button to increase the value of the selected option. (Holding the button will allow the value to scroll up more rapidly.) Pressing the MEDIUM button again returns you to the options menu. Pressing HARD will return you to the main menu.

From the main menu press the MEDIUM button to access the accounting menu. The buttons will again light steadily. Pressing the EASY button scrolls through the accounting items. Pressing the MEDIUM button displays the value for the item that was displayed. The value will be shown in both the HIT and MISS displays as follows. The first four digits (Leftmost) of the value will be displayed initially by both displays. The displays will then blink and display the last four digits (Rightmost) of the value. This will be followed by a brief pause in which both displays will go blank. Values will be displayed in both the HITS and the MISS display. After the value has been displayed hitting the HARD button will return you to the accounting menu. Pressing the HARD button again returns you to the main menu.

* Note: Setting Dip Switch Pole 3 to off on the ultra board will make the machine not pay out tickets.*

| OPTIONS MENU |  |  |
| :---: | :---: | :---: |
| 01 | Coins per Play (Default Setting 01) |  |
|  | 01 | One Coin/ Token per Game |
|  | 02 | Two Coins/ Tokens per Game |
|  | 03 | Three Coins/ Tokens per Game |
|  | 04 | Four Coins/ Tokens per Game |
| 02 | Mercy tickets (Courtesy Tickets) (Default Setting 00) |  |
|  | 00 | No Tickets |
| 'Through' |  |  |
|  | Attract Mode Music Settings (Default Setting 01) |  |
| 03 |  |  |
|  | 00 | Music Off |
|  | 01 | Music at 30 second Intervals |
|  | 02 | Music at 60 second Intervals |
|  | 03 | Music at 90 second Intervals |
|  | 04 | Music at 120 second Intervals |
| 04 | "Ouch" Attract phrases (Default Setting 01) |  |
|  | 01 "Ouch" phrases On |  |
|  |  |  |
| 05 | Flat Ticket Payout (default setting 0 "OFF") |  |
|  | 00 OFF |  |
| (Allows for a set ticket payout $0=$ Off $1-15=\#$ of tickets dispensed) |  |  |
| 06 | 15 | Fifteen |
|  | Number of Hits needed to Win First Ticket (Default Setting 05) |  |
| 01 One Hit to Win First Ticket |  |  |
| 'Through' |  |  |
|  | 20 Twenty Hit's needed to Win First Ticket |  |
| 07 | Maximum Number of Tickets to Dispense (Default Setting 40) |  |
| 01 Dispense One Ticket Only |  |  |
| 60 'Through' |  |  |
|  |  |  |  |  |
| 08 | Number of Hits needed for Additional Tickets After First (Default Setting 03) |  |
|  | 01 | One Ticket per Hit |
| 'Through' |  |  |
| 20 One Ticket per Twenty Hits |  |  |
| 09 | Game Play Time Span (Seconds) (Default Setting 40) |  |
|  | 20 | 20 Second Game Play Period |
| 'Through' |  |  |
|  | 90 | 90 Second Game Play Period |


| ACCOUNTING MENU |  |
| :--- | :--- |
| 01 | Coins Deposited* |
| 02 | Tickets Dispensed* |
| 03 | Tickets Dispensed per Coins Deposited |

* ALSO RECORDED BY ELECTROMECHANICAL METERS


## DISPLAY OF ACCOUNTING INFORMATION

Accounting values stored in the machine will be shown in BOTH the HITS and miss displays. The Displays will first show the four most significant digits ( $10,000,000$ 's $-1,000,000$ 's $-100,000$ 's $-10,000$ 's) the displays will then blink and show the remaining digits ( 1,000 's -100 's -10 's -1 's $)$. After a short period the displays will go blank.


## DEMO MODE

Your disco duck can be placed in "Demo" mode by switching the second pole of the Dipswitch to on. In Demo Mode the game will only award ONE ticket per play, and the anti-tricking feature of the coin mechanism will be disabled.

## DIS(® DUCK DIAGחOSTICS

With the machine OFF place pole ONE of the Dipswitch on the ULTRA III board to the on position. Power up the game, the speakers will "chirp" three times and the machine will go into a display test. The LED Displays will count up from Zero to Nine, in the following sequence. First the HITS display will count up for the ONES digit, followed by the TENS digit. The machine will then switch to the MISS display and the ONES digit will count up followed by the TENS digit. Both displays will flash briefly; the HITS display will show 0 and the MISS display will remain blank.

At this point in the test, music will begin to play and all the floor and panel switches will illuminate. Drop a token or coin through the coin mechanism, the game will "chirp" and the hits display will show " 10 ".
Press the "RESET SWITCH", a chirp followed by the HITS display showing "13" should result. At this point the game will dispense three tickets and both electromechanical meters will advance three increments.


The floor switches test assumes that you are standing in front of the game facing the front panel. The switches will be tested individually by stepping on them in numerical sequence. As they are tested the game will chirp, the lamp in the floor switch will extinguish, the digital displays will show a "code" number and the corresponding panel duck lamp will light for three seconds.

| Floor Switch | Hits display | Front panel Duck |
| :---: | :---: | :---: |
| 1 | 0 | 1 |
| 2 | 1 | 2 |
| 3 | 2 | 3 |
| 4 | 3 | 4 |
| 5 | 4 | 5 |

The panel lamps are tested in the following manner. With the game in diagnostic mode press the EASY button. The game will "chirp" and the button light will briefly go out, the HITS display will show " 5 ". Pressing the easy button again will cause the five Duck lights on the panel to illuminate. The next press of the easy button will light the five Name lamps. The Chase lights will illuminate in pairs as the EASY button is pressed repeatedly.

Pressing the MEDIUM switch will result in the button light going out momentarily and the HITS display show a " 6 ". Pushing the MEDIUM button repeatedly will cause the back panel lights to illuminate as above except the lights will flash instead of lighting steadily.

Pressing the HARD switch will cause the button light to illuminate briefly the hits display will show " 7 " and all the back panel lights will then extinguish.

## susTEms

Your Disco Duck is operated by the integration of sophisticated circuits working in concert. The Ultra III board provides processing of game inputs and produces the output signals that make the game operate. Digital displays give information to the player and to the operator for customizing set up. Power supplies ensure that the correct voltages are supplied to components. Together these units provide you the customer with a reliable and fun machine to optimize profit potential.

## ULTRA III

The ULTRA III board is located vertically on the sidewall of the cabinet. Access is obtained through the rear access door. U13 and U20 contain the software for the game. This board is the heart of the your Disco Duck, controlling the operation of the game.


## Program

Main Program: DDuck.US1 02/04/05

## SOUND BOARD



The soundboard is located on the sidewall immediately below main board. The Volume is controlled on the Power amplifier board mounted to the behind and to the right of the coin door as you are facing the front panel of the game. U5 on the soundboard contains the sound control files; U6 and U7 contain the digital audio files with the games sounds and music. Access to remove the board is best achieved via the rear access panel.

## POWER AMPLIFIER



## Light Controller board

The light controller board controls all of the cabinet lighting as well as the dance floor lights. The board receives data signals from the Ultra board on J3. Clock signals are received on J4. J2 switches the dance floor lamps, and the remainder of the lamps are switched on J1, J5, J6, and J7.


Digital Displays
Two digital displays on the front of the Disco Duck provide the player with information on the number of "hits" and "misses" scored during game play. When the machine is in "set up" or "accounting" mode these displays provide the operator with information allowing the game to be customized to an individuals preferences. The Ultra III board drives these displays via the units wiring harness.


## Power Supplies

The power supplies for your Disco Duck consist of a self-contained power supply and a step down transformer - bridge rectifier power supply. These units provide the required DC voltage levels, namely: $+5 \mathrm{~V},-5 \mathrm{~V},+12 \mathrm{VDC}$, a step down transformer bridge rectifier combination supplies 18 VDC for lighting effects. The self-contained power supply contains no user serviceable parts and should be replaced as a unit if the need arises. The step down transformer and bridge rectifier should only be repaired by fully qualified personnel.


View Through Rear Access Door

## Counters/Meters

Electromechanical counters are provided that record the coins-in and the tickets out. These counters are located behind the coin mechanism' access door, together with the main On/Off switch.

Power Supply Switch

## Lighting \& Dance Floor

The filament lamps fitted in this your Disco Duck dance floor are 12V 5W 10mm Wedge type. Replacement lamps should always be of the same specification.

The dance floor is secured to the your Disco Duck cabinet by metal brackets fitted to the dance floor. The floor should be closely aligned with the front of the machine, and the electrical harness routed in to the cabinet where it mates to the cabinets wiring harness. The dance floor can then be connected to the cabinet, and secured in place using the supplied hardware.


Floor Deck Lifted \& Supported
Rear View Of 'Stamping Dome’
To access to the internal components of the dance floor, disconnect the floor from the your machine's cabinet by removing the four securing bolts and sliding outward. Removing two silver counter sunk screws allows access to the inner workings of the dance floor. After removing these screws, lift the floor decking upward. Located in the base of the dance floor is a support arm that may now be raised and slotted in to the space provided on the rear of the floor decking, thus supporting its weight.

## TROUBLESHO®TInG

The built in diagnostics (see Diagnostics section on page 9) of Disco Duck allow you to easily check all lights and switches of the machine. The machine also will give an error code of " 90 " in the HITS display should the ticket dispenser jam. Should something go wrong with the coin switch, the machine will give a voice prompt warning of a coin error to alert operators. The exception to this is when the machine is in DEMO mode, (DIP switch pole 2 ON); in this mode the coin error is suppressed to allow a momentary ON button to be used in place of the coin switch.

As with any Coastal Amusements product we want our customers to feel free to contact us at any time. Our technical service staff can assist in the resolution of any problem or concern that you may have.

We may be contacted at:

## Coastal Amusements

1935 Swarthmore Ave. Lakewood NJ 08701

Or by phone at:

> (732) 905-6662
> Monday -Friday 8:00AM to 4:30PM ET

Or by Fax at:
(732) 905-6815

Or Email us at:
Service@coastalamusements.com

## Also, please visit our website at coastalamusements.com to get the latest technical tips, news, and product information!

PARTS LIST

| PART\# | DESCRIPTION | $\begin{aligned} & \hline \text { QTY / } \\ & \text { GAME } \end{aligned}$ |
| :---: | :---: | :---: |
| CA-CAB-DIS-CEC | CABINET (PLYWOOD) | 1 |
| CA-CM-ENT-31-94N-2 | TRI-DOOR (COIN MECH) | 1 |
| CA-PCB-MEM-BB20A-2 | 2 DIGIT DISPLAY PCB | 2 |
| CA-PCB-WOM-LITEDRIV | LIGHT DRIVER PCB | 1 |
| CA-PCB-MEM-ULTRA3 | Ultra III PCB W/O MEMORY | 1 |
| CA-PCB-MEM-8BIT-0 | 8- BIT STEREO NO MEMORY IC'S | 1 |
| CA-TD-DEL-1275CE | TICKET DISPENSER W/CE SUPRESS | 1 |
| CA-SUB-RB-TBIN | TICKET BIN PREPPED | 1 |
| CA-MOD-EMI-HS015 | EMI FILTER HS015 (UL APPROVED) | 1 |
| CA-SPE-4Z-8OHM100W | SPEAKER 4 OHM 100WATT | 2 |
| CA-BUT-MPB-GRNEASY | BUTTON GREEN, EASY | 1 |
| CA-BUT-MPB-REDHARD | BUTTON RED, HARD | 1 |
| CA-BUT-MPB-YELLMED | BUTTON YELLOW MEDIUM | 1 |
| CA-MET-DAS-DAS-624 | METAL, DASH, COIN BOX SWITCH BRACKET | 1 |
| CA-MTR-HS-HS-005 | METER 12V W/DIODE EC2006 | 2 |
| CA-SWI-PB-8411K11 | MOMENTARY SWITCH EC2004 | 1 |
| CA-SWI-TOG-2047 | TOGGLE SWITCH EC2107 | 1 |
| CA-FUS-HOL-HKPHH | FUSE HOLDER 1/4" Q.C. | 1 |
| CA-FUS-SB-313002 | 2 AMP SLO BLO FUSE EC2106 | 1 |
| CA-SWI-DIS-22220112 | SWITCH, REED \#22-2201-12 | 10 |
| CA-BUT-DIS -FOOT | BUTTON, FOOT, RED \#95-2580 | 5 |
| CA-HAR-DIS-12VAC | 12 VAC HARNESS | 1 |
| CA-HAR-DIS-LAMPEXT | FOOT LAMP EXTENSION HARNESS | 1 |
| CA-HAR-DIS-FTPADSET | FOOT PAD HARNESS SET (5)/ SET | 1 |
| CA-HAR-DIS-LGCOIN | LARGE COIN MECH HARNESS | 1 |
| CA-HAR-DIS-FANEXT | FAN EXTENSION HARNESS | 1 |
| CA-HAR-DIS-DISPLAY | DISPLAY HARNESS | 1 |
| CA-HAR-DIS-DECK | DECK HARNESS | 1 |
| CA-HAR-DIS-DC | DC HARNESS | 1 |
| CA-HAR-DIS-COMMUN | COMMUNICATION HARNESS | 1 |
| CA-HAR-DIS-COINMECH | COIN MECH HARNESS | 1 |
| CA-HAR-DIS-BUTTON | BUTTION HARNESS | 1 |
| CA-HAR-DIS-AC | AC HARNESS | 1 |
| CA-HAR-DIS-ACEXT | AC EXTENSION HARNESS | 1 |
| CA-HAR-DIS-INTFACE | INTERFACE HARNESS | 1 |
| CA-HAR-DIS-MARQUEE | MARQUEE HARNESS | 1 |
| CA-HAR-DIS-SPEAKER | SPEAKER HARNESS | 1 |
| CA-BUT-DIS-SPRING | SPRING FOR FOOT BUTTON \#96-257901 | 5 |
| HL-LAM-DIS-6124 | BULB, 12V 5W \#6124 | 5 |
| HL-LAM-DIS-8474 | LAMP HOLDER \#8474 | 5 |
| CA-LAM-DIS-BULB1112 | BULB 12V 0.1AMP WEDGE BASE \#1112 | 54 |
| CA-LAM-DIS-BULB512 | BULB 12V 2.2 AMP WEDGE BASE \#512 | 15 |
| CA-CM-INS-10530050 | COIN INSERT 0.984/25¢ | 2 |
| CA-PS-FM-WY-15C | POWER SUPPLY WY15C (UL APPROVED) | 1 |
| CA-C\&G-DIS-FLOORPAN | FLOOR PANEL | 1 |
| CA-C\&G-DIS-MAINPLEX | MAIN PLEXI | 1 |
| CA-C\&G-DIS-CONTPANL | CONTROL PANEL | 1 |
| CA0-C\&G-DIS-GASKET | GASKET FLOOR | 5 |
| CA-XFR-RAW-60T7171 | TRANSFORMER 120VAC TO 12VAC | 1 |
| CA-TER-DLR-323HDS02 | TERMINAL BLOCK 323-HDS/02 | 2 |
| CA-FAN-12V-32.5DBA | FAN 4" EC2002 | 1 |
| CA-FAN-GUA-SC80-W2 | METAL FAN GUARD 4" HW2002 | 1 |
| CA-MET-DIS-FOOTPAN | FOOT PANEL PLATE | 1 |
| CA-MET-DIS-LBRKT | "L" BRACKET | 2 |
| CA-MET-DIS-LITCOVER | LIGHT COVER | 5 |
| FE-PCB-SD-AMP | AMPLIFIER BOARD | 1 |
| CA-REC-25A-GBPC2502 | BRIDGE RECTIFIER | 1 |
| CA-CAP-ELR-2200UF35 | AXIAL LEAD ELECTROLYTIC CAP. 2200んF @ 35V | 1 |

