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Version: 1.6.1

SERVICE MANUAL



IMPORTANT

Please read this manual carefully before using this machine.

Keep this manual within easy reach for reference.

PRECAUTIONS FOR USE

The following safety precautions are given throughout this manual. They must be strictly followed to protect those who install, use, or maintain this product; as well as to protect players, visitors, and property.

For safety reasons:

The following suggestions should be adhered to:



WARNING

Disregarding could result in serious injury.



CAUTION

Disregarding could result in injury or product damage.

The following graphic suggestions describe the types of precautions to be followed:



Indicates care should be taken.



Forbidden.



Indicates an action must be performed by an operator or a service technician.

Precautions to be followed:

Certain procedures require qualified in-shop maintenance personnel or an industry specialist. For these procedures, a qualified person must perform the task.

- Otherwise an electric shock, machine malfunction, or serious accident may result.
- Replacing machine parts, inspecting and maintaining machines, and troubleshooting must be performed only by qualified in-shop maintenance personnel or an industry specialist. This booklet instructs that hazardous tasks in particular must be handled by an industry specialist. *Qualified in-shop maintenance personnel* and *industry specialist* are defined as follows:

Qualified in-shop maintenance personnel

- A service staff member who has experience in the operation and maintenance of game machines. This staff member is responsible for assembly, installation, inspection, and maintenance of the machine.

Industry specialist

- An industry specialist is an individual engaged in designing, manufacturing, inspecting, and servicing amusement machines. This person must have an education in electrical, electronic, and mechanical engineering, and routinely maintains and repairs amusement machines.

PRECAUTIONS FOR USE

WARNING

Be sure to consult an industry specialist when setting up, moving, or transporting this product.

- This product should not be set up, moved, or transported by anyone other than an industry specialist.
- When installing this product, set the leg levels evenly on the floor and make sure that the product is installed stably in a horizontal position. Unstable installation may result in injury or accident.
- When installing this product, do not apply undue force on moveable parts. Otherwise, injury and accident may result, or the product may be damaged.

**This machine is for indoor use only.
Do not install the machine outside.**



**Do not install the machine near
emergency exits.**



**To avoid accidents or malfunctions,
protect the game machine from:**



- Rain or moisture
- Direct sunlight
- Direct heat from air-conditioning, heating equipment, etc.
- Hazardous flammable substances

**Do not place containers holding chemicals
or liquids on or near the game machine.**



**Do not place objects near the machine's
ventilation ports.**



**Do not bend the power cord or place heavy
objects on it.**



Never touch the power cord with wet hands.



**Never unplug the game machine by pulling
on the power cord.**



CAUTION

**Be sure to use indoor wiring within the specified
voltage requirements. When using an extension cord,
ensure the specified rating is met or exceeded.**

Be sure to use the attached power cord.



**Never plug more than one cord into an
electrical receptacle at once.**



**Do not lay the power cord in areas that
experience foot traffic.**



Be sure to ground this product.



**Do not exert excessive force when moving
the machine.**



**For proper ventilation, ensure the game
machine is at least 100mm (4") from walls.**



PRECAUTIONS FOR USE

WARNING

If there is any abnormality, such as smoke, unusual odor, or abnormal noise emitted from the machine, immediately turn OFF the main power switch and unplug the power cord from the receptacle to terminate operation. 

- Using the machine in abnormal conditions could result in fire, harm, or other accidents.

Should an abnormality occur:

1. Turn OFF the main power switch (if available).
2. Unplug the power cord from the receptacle.
3. Contact your nearest dealer.

Do not leave the power cord plugged in improperly or covered with dust. 

CAUTION

Do not use this product anywhere other than industrial areas. 

- Using this product in a residential area or an area next to a residential area could affect signal reception of radios, television sets, telephones, etc.
- Do not impact glass or clear surfaces.

Please do not play this game when:

- Consuming alcohol
- Physical maladies cause play to be dangerous
- Pregnant
- Wearing a pulse controller
- Experiencing cramping or fainting

Avoid excessive gestures and impacts when playing or moving the machine.

Pay attention to surroundings to avoid accidents.

Do not plug or unplug the power cord with wet hands. 

When handling the power cord, follow the instructions below: 

- Do not damage the power cord.
- Do not bend the power cord excessively.
- Do not heat the power cord.
- Do not bind the power cord.
- Do not place the power cord between objects.
- Do not modify the power cord.
- Do not twist the power cord.
- Do not pull the power cord.
- Do not stand on the power cord.
- Do not pierce or sever the power cord.

If the power cord or power plug becomes damaged, stop using the machine immediately and ask your nearest dealer to replace the parts.

PRECAUTIONS FOR USE

WARNING

Be sure to turn **OFF** the main power switch and unplug the power cord from the receptacle before inspecting or cleaning the machine. 

When replacing parts, be sure to use parts of the correct specification. Never use parts other than the ones specified. 

Only an industry specialist should open the machine, as a high electric current is present. For game machines with monitors, care should be taken when opening the back doors to avoid damaging the monitor and other components. 

If the power switch is present on the service panel and switched **OFF** without turning **OFF** the main power switch of the power supply unit, some parts in the unit will remain live. When opening the back door, be sure to turn **OFF** the main power switch and unplug the power cord from the receptacle. 

Strictly refrain from disassembling or repairing parts which are not indicated in this manual, as well as performing remodeling or modifying any unspecified settings. 

To clean the game machine, wipe it with a soft cloth dampened in a neutral detergent.

- Using thinners of organic solvents or alcohol may decompose material.
- Electrical shock or equipment failure could be caused by water entering the inside of the machine.

CAUTION

Components in the game are sensitive to vibrations and impact. Care should be taken when moving and transporting the game machine. Be sure to not let the machine tip over. 

Before moving the machine, be sure to turn **OFF** the main power switch, unplug the power cord from the receptacle, and remove the power cord from the machine. 

Before moving the machine, ensure the levelers are in the fully raised position, not touching the floor, and move the machine on its casters.

Avoid using excessive force when moving the machine.

PRECAUTIONS IN HANDLING

- When setting up, inspecting, maintaining, moving, or transporting this product, follow the procedures and instructions set forth in this manual and perform such work safely.
- Do not set up, handle, inspect, maintain, move, or transport this product under conditions equivalent to the “WARNING” or “CAUTION” conditions specified in this manual.
- If a new owner is to have this product as a result of transfer, etc., be sure to transfer this manual to the new owner as well.

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1. PRODUCT FEATURES

Neon FM™ is an electrified rhythm & action game for arcades and mobile devices. Players pound the five colored panels with their hands to the beat of the music and are scored on their timing.

Licensed, contemporary music selection for western audiences

The game features over 80 tracks of licensed music that are currently enjoyed at venues across the United States, Europe, and beyond. The music is also licensed for public performance, guaranteeing operators are in compliance with artist unions and will not have to pay additional fees for use of the songs.

Easy to learn, difficult to master

The intuitive user interface eschews pages of menus for a streamlined interface that requires no reading or explanation. Each song has many levels of difficulty, allowing players of any skill to play songs that suit their taste. The Beginner Mode reduces gameplay to 3 buttons, and the Pro Mode challenges players to complete a song with fewer than 10 misses under the strictest of conditions.

Gameplay adapts to players

Performing poorly and depleting the health bar doesn't end the game—we simply reduce the difficulty and give the player a short breather before continuing. This feature is especially helpful for new players familiarizing themselves with the game.

Slim design, modular units

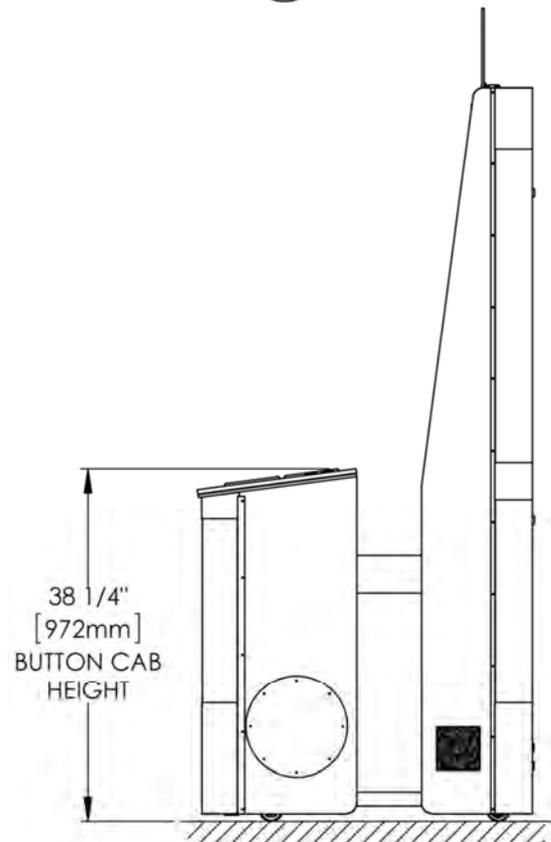
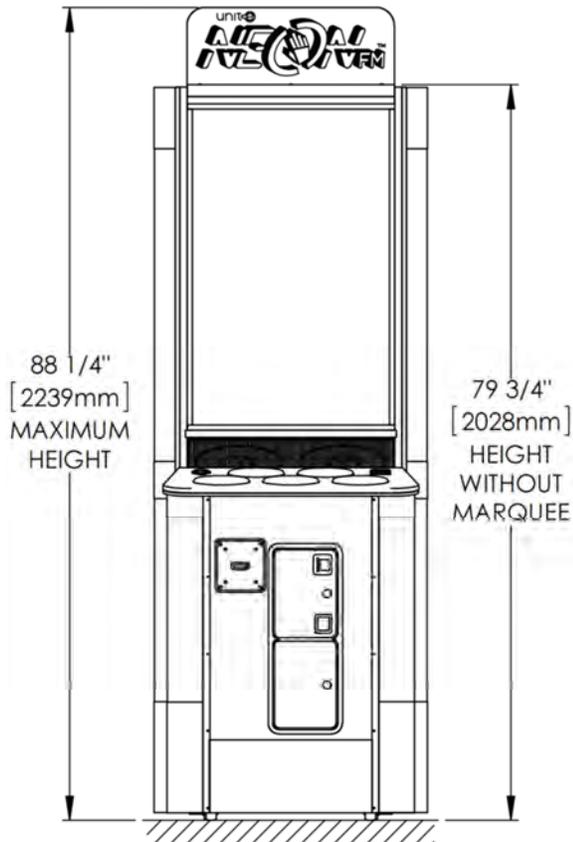
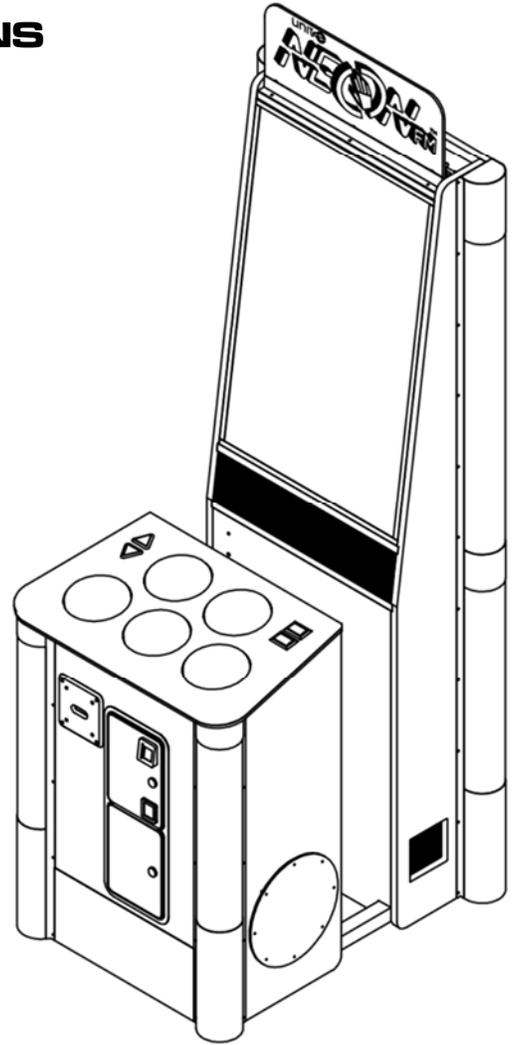
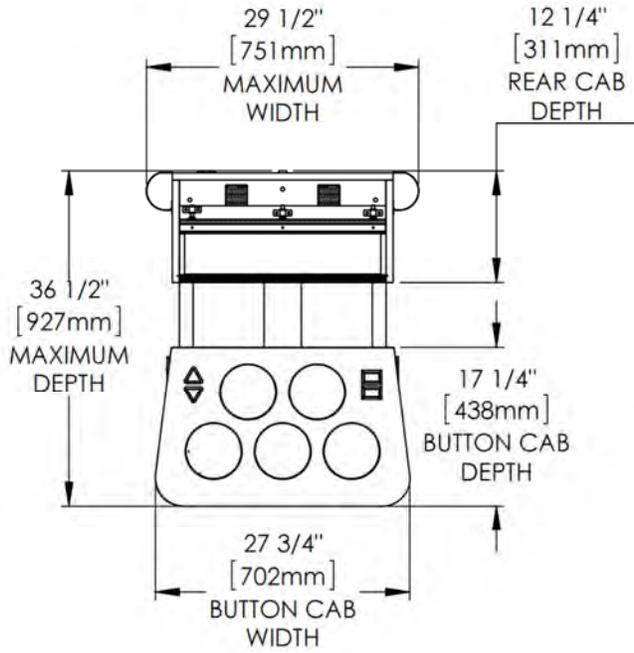
The machine's small stature enables operators to optimize the efficiency of their floor space, maximize revenue per square foot, and fit more revenue-generating machines into a space than other, larger machines allow. Each machine can be separately positioned to contour to corners, rounded areas, and other non-standard angles, while still retaining multiplayer features.

Robust online feature set

- Players load settings, gain levels and ranks, and save their scores and compete in online leaderboards simply by scanning a QR code with their smartphone.
- Multiplayer games are automatically created and joined through song selection.
- Operators can review their machine's income online and gather insight on the behavior of their patrons.
- New songs delivered online twice a month, at no cost to the operator, to ensure gameplay remains lively.
- Game requires no online connection, but does forfeit these features if not connected.

2. DIMENSIONS AND SPECIFICATIONS

2-1. DIMENSIONS

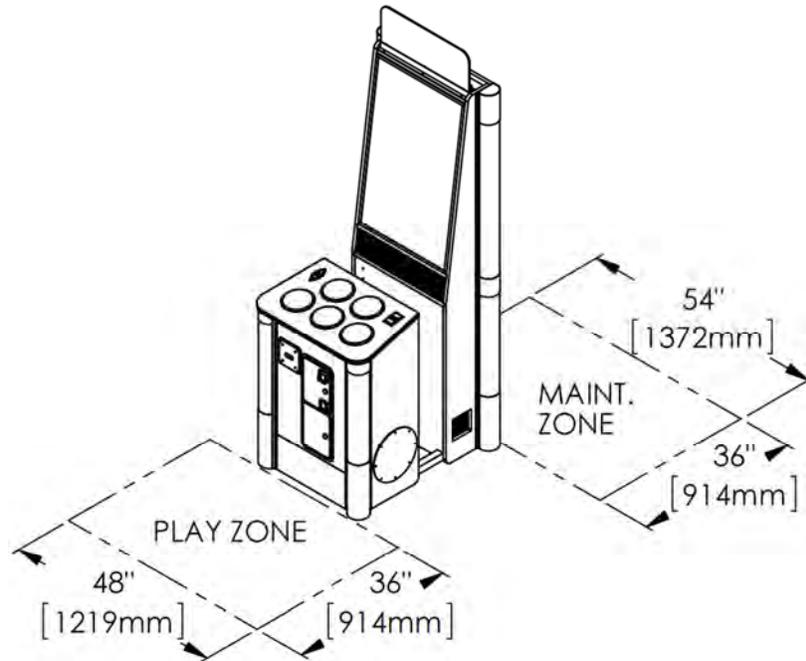


2-2. SPECIFICATIONS

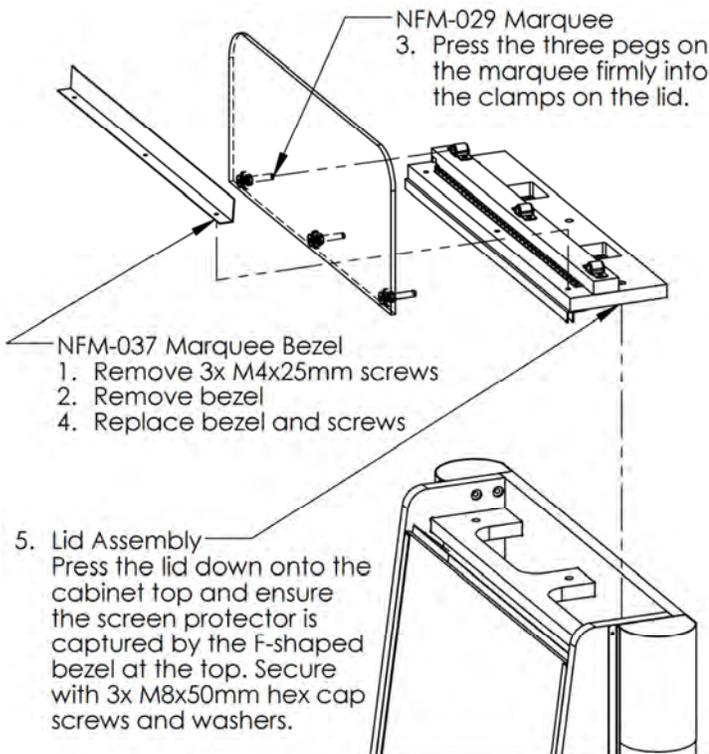
DIMENSIONS (W x D x H)	28" x 36" x 80" (71 x 92 x 204 cm)
PACKING DIMENSIONS (W x D x H)	33" x 40" x 86" (84 x 102 x 219 cm)
WEIGHT	263 lbs. (120 kg)
PACKING WEIGHT	463 lbs. (210 kg)
FREIGHT CLASS	125
H.S. CODE	950410
SCREEN SIZE	38.5", 39", 39.5", or 40" (97.8, 99, 100.3, 101.6 cm)
POWER RATED VOLTAGE RANGE	AC 110V / AC 220V
POWER RATED FREQUENCY RANGE	50 Hz ~ 60 Hz
CONSUMPTION	150 W

3. INSTALLATION

Maintenance Zone and Play Zone should be observed and clear of obstacles to avoid accidents.



3-1. MARQUEE



MARQUEE INSTALLATION STEPS

1. Remove 3x MARQUEE SCREWS from MARQUEE BEZEL.
2. Remove MARQUEE BEZEL from top of machine.
3. Slide 3x MARQUEE PEGS into the 3 slots atop machine.
4. Replace MARQUEE BEZEL on top of machine.
5. Install 3x MARQUEE SCREWS into MARQUEE BEZEL.

4. SERVICE MENU

The service menu allows you to configure the game machine for your venue and troubleshoot hardware issues.

Press the “service” button located inside the coin door when the game is at the song selection screen to enter the service menu. On most screens, the ▲ and ▼ buttons change selections and the red (“CANCEL”) and blue (“CONFIRM”) rectangular buttons decrement/increment the selection.

4-1. MAIN SERVICE MENU



Main service menu

Current status information is displayed in the upper-right corner. You may use this information to ensure the remote settings are configured properly (such as venue name), and to check the status of your connection to the internet and the game server.

BOOKKEEPING (6-2)

Check the current income of the game.

VIDEO TEST (6-3)

Verify hardware connections to the game buttons.

INPUT TEST (6-4)

Verify hardware connections to the game buttons.

COIN OPTIONS (6-5)

Adjust settings related to machine income.

TICKET OPTIONS (6-6)

Adjust settings related to redemption features.

GAME OPTIONS (6-7)

Enable or disable gameplay features.

NETWORK OPTIONS (6-8)

Configure internet connection and connect to wi-fi.

RESET FACTORY SETTINGS

Return the machine’s settings to factory defaults.

Language: Choose the language used by the game.

Free play: Decide whether the game charges players to play.

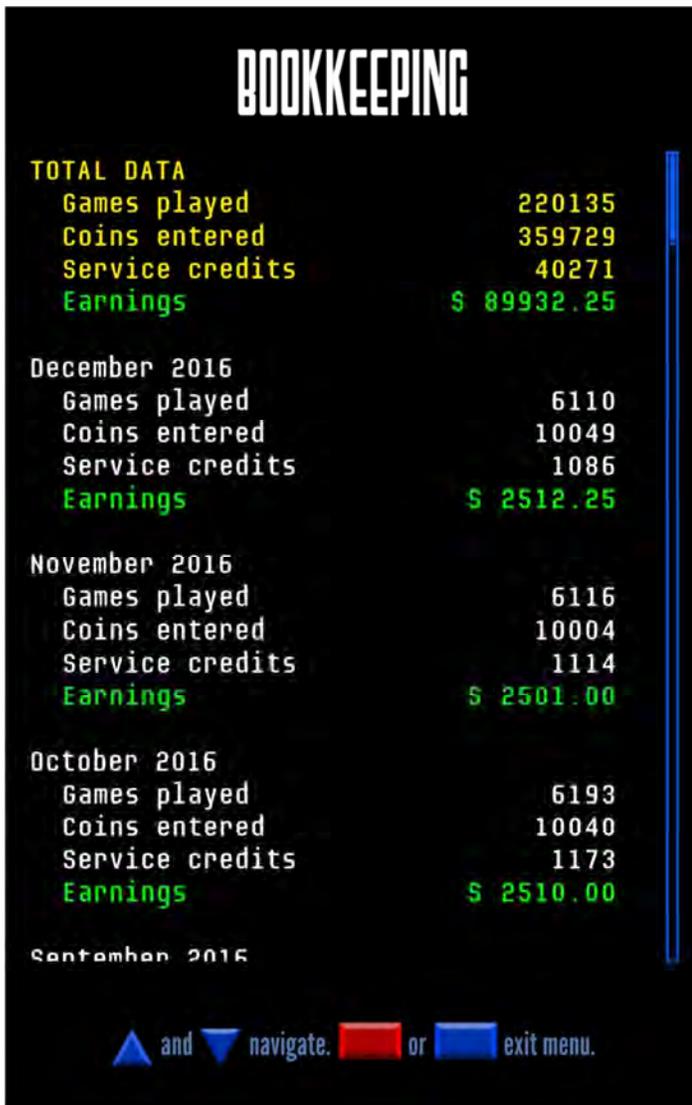
Play menu theme: Decide whether the song selection menu will play a generic track when no tracks are sampled.

Attract volume: Set the volume of the machine when the game is inactive for 60 seconds or longer. Percent volume is relative to main volume.

Main volume: Set the volume of the machine when the game is active. (Values range from 0 to 100)

Reset credits: Shows the current number of credits in the machine. Selecting this option will reset them to 0.

4-2. BOOKKEEPING



The screenshot shows a 'BOOKKEEPING' menu with a dark background and white and green text. A blue vertical scroll bar is on the right side. At the bottom, there are four colored buttons: a blue triangle pointing up, a blue triangle pointing down, a red rectangle, and a blue rectangle. Below these buttons is the text 'and navigate. or exit menu.'

TOTAL DATA	
Games played	220135
Coins entered	359729
Service credits	40271
Earnings	\$ 89932.25
December 2016	
Games played	6110
Coins entered	10049
Service credits	1086
Earnings	\$ 2512.25
November 2016	
Games played	6116
Coins entered	10004
Service credits	1114
Earnings	\$ 2501.00
October 2016	
Games played	6193
Coins entered	10040
Service credits	1173
Earnings	\$ 2510.00
September 2016	

Video Test menu

The **Bookkeeping menu** allows operators to see how many games have been played, how many coins have been entered, how many service (“free”) coins were granted by the operator’s associates, and how much the machine has earned. This data is presented with a summary and a monthly breakdown.

The “**earnings**” value is dependent on the “**Value per coin**” option set in **Coin Options** (Section 6-5), and this value is recorded each time coins were entered. This enables operators to change the value of payments without changing their earnings data for prior recorded periods (for example: upgrading from a coin mechanism that required 4 coins valued at \$0.25 each to a swipe card system that requires 1 swipe valued at \$1.00 each).

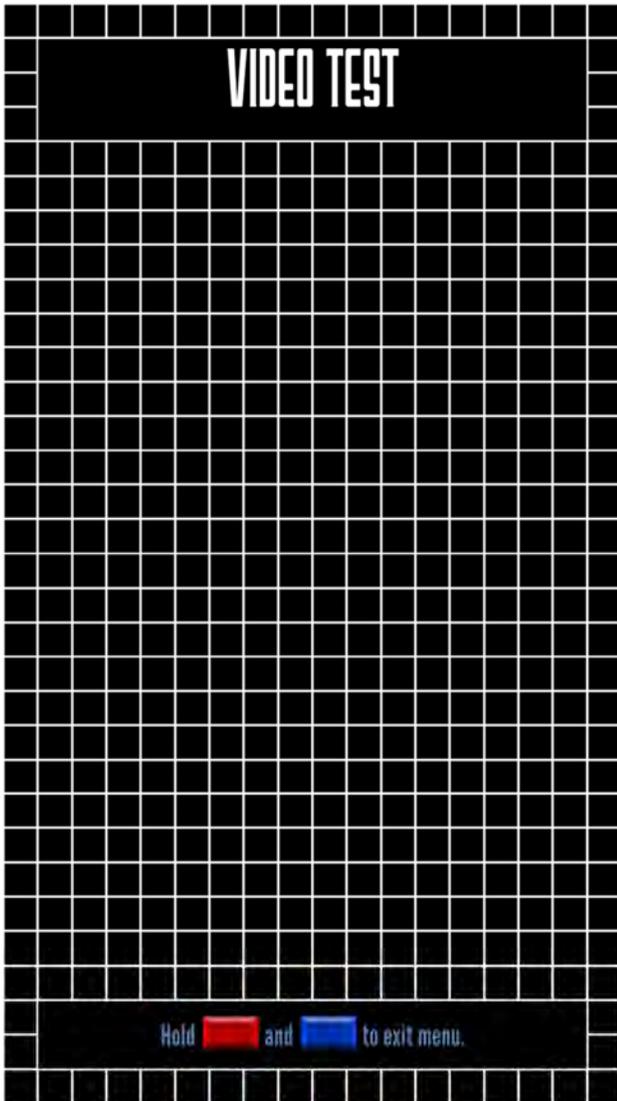
To scroll through the list of data, press and hold the blue ▲ or ▼ buttons. A blue scroll bar on the side of the screen shows your current position in the list.

To exit the Bookkeeping menu, press either the RED or BLUE rectangular buttons.

Operators who wish to see their bookkeeping records online may scan the QR code in the lower-right of the game display with a smartphone to access a login page and their profile, or may log in with a computer at NeonFM.com. Once in their profile, operators who are associated with the venue operating the machine(s) can view online bookkeeping data.

Should you log in and not see your venue below your account settings, please contact Unit-e support at unitetechno@gmail.com with identifying information to have your account associated with your venue.

4-3. VIDEO TEST



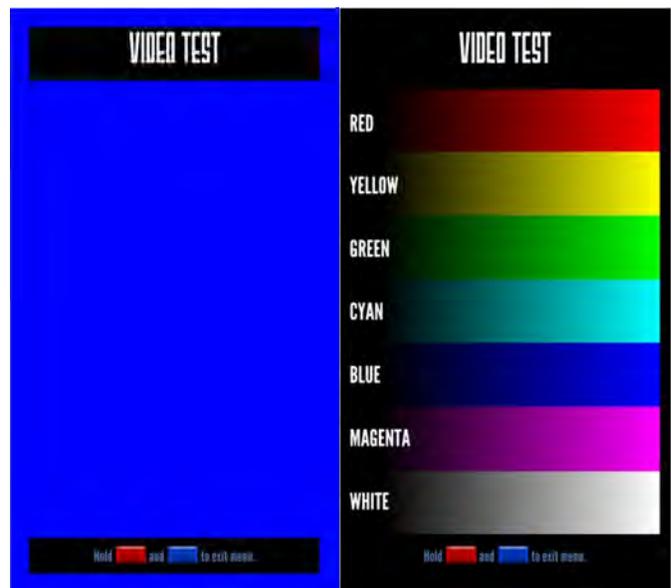
Video Test menu

The **Video Test menu** allows operators and industry specialists to ensure that the monitor is displaying images correctly.

Pressing each button/switch will cause the corresponding item to illuminate when pressed, and disilluminate when released.

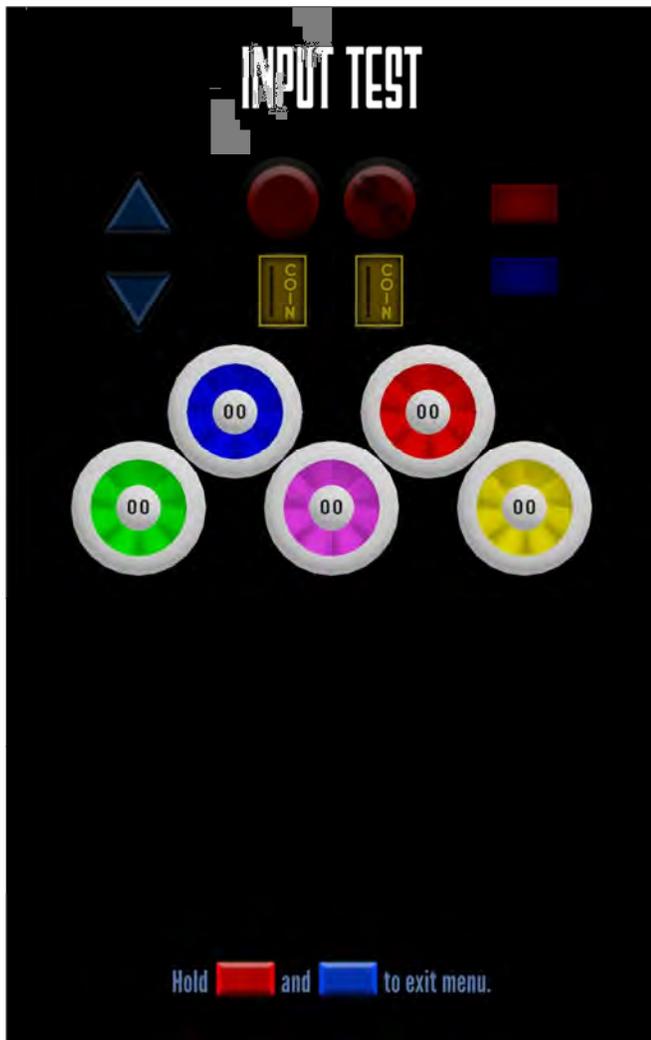
To proceed through the various test screens, press the BLUE button.

To exit the input test menu, hold both the RED and BLUE rectangular buttons on the panel simultaneously.



Two of the other test screens in the Video Test menu

4-4. INPUT TEST



Input Test menu

The **Input Test menu** allows operators and industry specialists to ensure that the game machine buttons are operating well.

Pressing each button/switch will cause the corresponding item to illuminate when pressed, and disilluminate when released.

DRUM BUTTONS

The drum buttons have additional functionality in this menu. When pressed, each drum button will illuminate and display a number and one or more white dots.

- The number in the center of the drum button represents the number of milliseconds between the button press in hardware and the electrical response from the machine (which is then accounted for in gameplay). Should this value remain at 00 or be in excess of 100, the button circuit board may be in need of repair as per **section 7-2**.
- The white pie slices represent the response from the switches (3 per drum button). When the drum button is firmly pressed, all 3 slices should appear. Should a slice not appear, maintenance should be performed on the switches that fail to appear as per **section 7-2**.

To exit the input test menu, hold both the RED and BLUE rectangular buttons on the panel simultaneously.

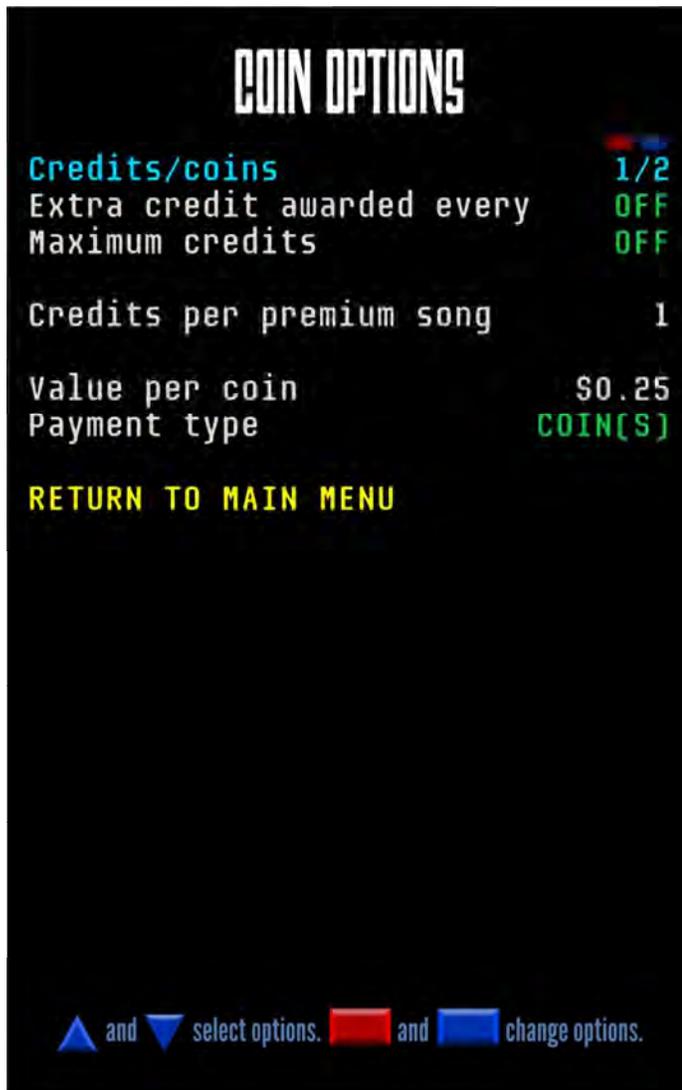


Detail view of a button with 1 sensor active



Detail view of a button with all 3 sensors active

4-5. COIN OPTIONS



Coin Options menu

The **Coin Options menu** allows operators to set the price per game, change the terminology used when describing payment, and configure the data that will be used by bookkeeping to determine game machine income.

Should you wish to charge no fee to play the game, enable the "FREE PLAY" option on the Main Service Menu (5-1) instead.

Credits/coin: Determines how many credits each player should receive per coin(s) entered. Each regular game played consumes 1 credit (default: 1/2, 2 coins for 1 credit).

Extra credit awarded every: Designates a number of credits that, when entered consecutively, awards an additional credit (default: OFF). This allows the operator to incentivize players to spend additional coins to receive each credit at a lower bundle price.

Maximum credits: Determines the maximum number of credits the machine will accept. On models with participating hardware, the coin mechanisms will also disable when this limit is reached to prevent players from wasting coins (default: OFF).

Credits per premium song: Determines how many credits a "premium" song will charge the player (default: 2).
Currently no songs in the game are designated "premium."

Value per coin: The value of each coin in USD. This is used to determine machine income in bookkeeping (default: \$0.25).

Payment type: Changes the word used to describe payment (default: COIN).

Available options: COIN, QUARTER, DOLLAR, SWIPE, TAP, TOKEN

RETURN TO MAIN MENU

Navigates to the Main Service Menu (5-1).

Additional information

The first 2 options allow arcade operators to customize their pricing to a variety of scenarios.

Example: 1 song for 2 coins. (Default)

Credits/coin: 1/2, Extra credit: 0

Example: 1 song for 2 coins and 3 songs for 4 coins.

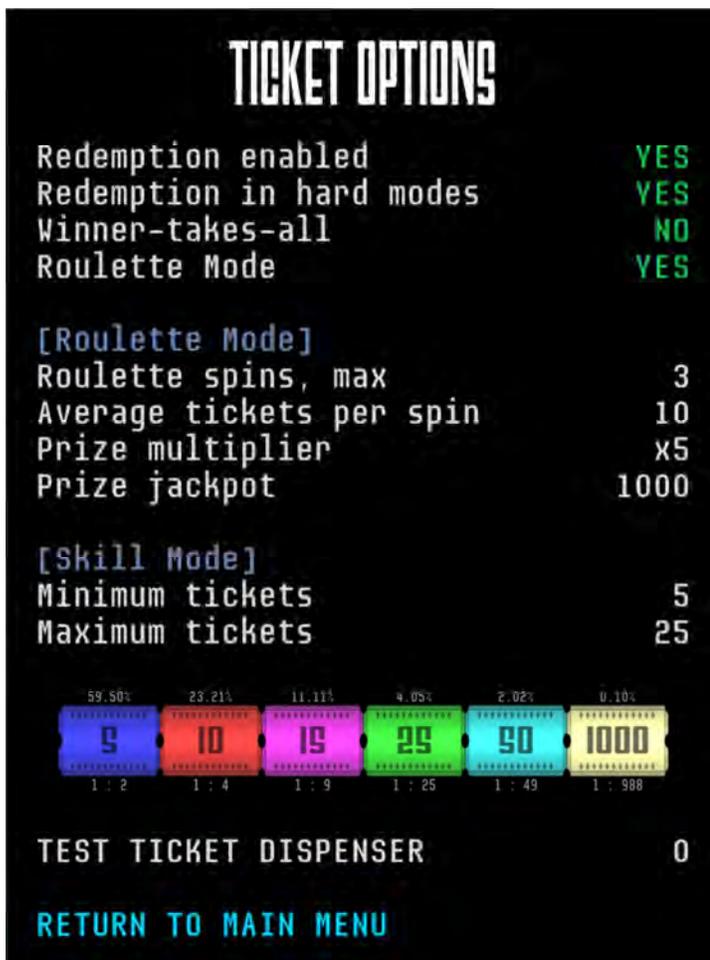
Credits/coin: 1/2, Extra credit: 2

Example: 3 songs for 4 coins.

Credits/coin: 3/4, Extra credit: 0

Refer to the window at the bottom of the screen for a list of options available under the current pricing scheme.

4-6. TICKET OPTIONS



Ticket Options menu

The **Ticket Options menu** allows operators to enable the redemption (ticket) mode, change the type of redemption offered, and set prize amounts. Please note that your machine will need the optional redemption circuit board and ticket hardware to use these features.

Some governments prohibit chance-based redemption and will require their arcade operators to use Skill Mode exclusively.



Redemption enabled: Whether the game will award tickets (default: NO).

Redemption in hard modes: Whether the game will award tickets after games played on Medium or higher difficulty (default: NO).

Skilled players are often uninterested in tickets.

Winner-takes-all: Whether the winner of a multiplayer match between two or more eligible players at the same venue will receive all of the tickets originally due to each player (default: NO).

Roulette mode: Players earn spins on a prize wheel by playing well. The alternative is Skill Mode, where players earn tickets directly in proportion to their performance (default: YES).

Roulette spins, max: The maximum amount of prize wheel spins that can be earned by achieving high scores (default: 2). *Minimum award is 1 spin.*

Average tickets per spin: The average amount of tickets that will be dispensed per prize wheel spin (default: 10).

Prize multiplier: The amount of the regular ticket rewards will be multiplied by this amount and shown on the ticket graphics below (default: x5).

Prize jackpot: The amount of the highest and rarest ticket award (default: 1000).

Minimum tickets: The minimum number of tickets that will be awarded in skill mode, for performances at or below 50% (default: 5).

Maximum tickets: The maximum number of tickets that will be awarded in Skill Mode, for performances at 100% (default: 20).

TEST TICKET DISPENSER: Attempts to dispense 5 tickets, and will display the number of tickets remaining to be dispensed. Values above 5 are error codes.

RETURN TO MAIN MENU

Navigates to the Main Service Menu (5-1).

Additional information

ROULETTE MODE: The average tickets per spin, prize multiplier, and prize jackpot are entered into a calculation that automatically sets the probability for each result, which is shown above (as a percentage) and below (as a ratio) the ticket graphics. Should the probability for a reward be at or below 0%, that ticket reward will never occur.

SKILL MODE: Most performances will be in the 60-70% range and will reward approximately 8 to 11 tickets on default settings.

4-7. GAME OPTIONS



Game Options menu

The **Game Options menu** allows the operator to customize gameplay behavior.

We recommend using default values whenever possible, but customer requests or corporate policy may demand operators modify these settings.

Lower difficulty on fail: Enables the feature that makes the game easier when players quickly lose their life in gameplay (default: YES). *This option greatly improves the experience for new players.*

Can change colors on easy: Allows players on Beginner and Easy modes to change the drum button colors (default: YES). *This option can potentially confuse new players.*

Can change speed on easy: Allows players on Beginner and Easy modes to change the speed of the notes (default: YES). *This option can potentially confuse new players.*

Can quit songs: Allows players to hold the red rectangular button to abort gameplay (default: YES).

Grace period (seconds): The number of seconds after the first note has passed during which a player can quit without losing their credit (default: 15).

Graces per credit: The number of times per credit entered that a player can quit a song within the grace period without losing their credit (default: 1).

Quit after abandoned for: The number of seconds that the game will wait for player input before automatically quitting a song (default: 30).

Allow unpaid song search: Allows players to listen to song samples without entering credits (default: YES).

Time to select music: Number of seconds after entering credits before a player is forced to make a song selection (default: OFF – infinite time).

Time to view replay: Number of seconds upon completing a song that a player can view their results and the replay before they are forced to return to song selection (default: 30).

Show only popular songs in attract: Only show the most popular songs in the demo reel that plays when the machine is inactive. If disabled, the demo reel can play any song (default: YES).

Show mascots: Determines whether the mascots will appear on loading screens and in other game art. If disabled, they will be removed and usually replaced with other graphics (default: YES).

RETURN TO MAIN MENU

Navigates to the Main Service Menu (5-1).

4-8. NETWORK OPTIONS



Ticket Options menu

The **Network Options** menu gives operators the tools to connect their game machine to the internet.

Many features of the game machine require an internet connection; such as software updates, song updates, online high scores, online bookkeeping, player logins, and both local and online multiplayer.

If the game machine is not online, you will not receive updates, which may cause players to play the game at another venue instead and negatively impact your game income. Our ability to service the unit remotely is also greatly diminished when we cannot access it online. We therefore strongly recommend you connect your game machine to an internet connection.



Network mode: The method that will be used to connect the game machine to the internet (default: WIRED).
A wired internet connection is recommended for best performance.

Refresh wireless networks list: The game machine will seek available wireless networks and update the list of access points.

RETURN TO MAIN MENU
Navigates to the Main Service Menu (5-1).

6-8-1. Connect to a wireless network

1. Select a network and press the blue rectangular CONFIRM button.
2. Use the ▲ and ▼ buttons to select characters and press the CONFIRM button to enter each character.



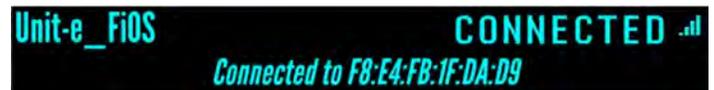
3. When complete, navigate to the CHECK symbol and press the CONFIRM button.
Shortcut: Press the red rectangular CANCEL button to navigate to the CHECK symbol instantly.



If a character is mistakenly entered at any point in the process, navigate to the ABORT symbol and repeat the process from the beginning.



Please wait for the connection to complete. If the access point is accessible and the password is correct, you will receive information similar to the following:



Should the access point be inaccessible or the password be incorrect, you will instead receive the information similar to the following:



5. REPLACING PARTS

Always ensure the machine is powered off and unplugged when maintaining or replacing components.

5-1. MARQUEE

As per **section 4-1**.

5-2. BUTTON PANEL

1. Open the coin door.
2. Twist the two latches at the top and lift the lid.

5-2-1. MENU BUTTONS

1. Twist the microswitch assembly and pull to remove it from the button assembly.
2. Unscrew the plastic button nut.
3. Lightly hammer the plastic button screw to dislodge the button from the panel.
4. Reverse this procedure to replace the menu buttons

5-2-2. DRUM BUTTONS

1. Remove the microswitch assembly from the menu buttons as per step 1 of section 7-2-1.
2. Hold the lid at a 45-degree angle and unscrew the 12 covered screws on the underside of the panel.

The leather button panel lid is supported by these screws and will fall if not supported. Hold the panel from the bottom before completing this process to prevent damage to the lid and/or other components.



3. Remove and replace the plastic drum buttons.
4. Reverse this procedure to complete the process.

5-2-3. DRUM SPRINGS

1. Follow the directions as per **section 7-2-2** to remove the button panel lid.
2. Remove the drum button covering the springs.
3. Remove and replace the damaged springs.
4. Reverse this procedure to complete the process.

5-2-4. DRUM SWITCHES

1. Follow the directions as per **section 7-2-2** to remove the button panel lid.
2. Disconnect the 2 quick-disconnect terminals from the underside of the switch.
3. Lift the top of the switch from above to remove and replace the switch.
4. Reverse this procedure to complete the process.

5-2-5. DRUM CIRCUIT BOARD

1. Disconnect the ribbon cable from the back of the drum circuit board.
2. Disconnect the 3 white connectors from the underside of the circuit board.
3. Unscrew the drum circuit board from the back of the button panel top.
4. Replace the board and reverse this procedure to complete the process.

5-2-6. DRUM WIRING

1. Disconnect the 2 quick-disconnect terminals from the underside of the drum switch.
2. Disconnect the white connector from the underside of the drum circuit board.
3. Replace the cable and reverse this procedure to complete the process.

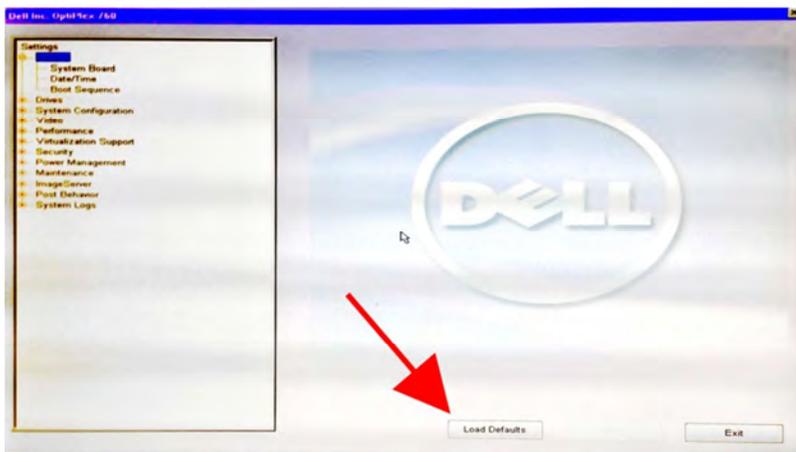
X. TROUBLESHOOTING

X-1. INITIAL BIOS SETUP

A few system issues can be caused by incorrect BIOS settings. All game machines are shipped from the manufacturer with BIOS settings configured correctly. However, machines that have been dormant for extended periods of time or which need their CMOS battery replaced can revert to settings that are incompatible with this game machine. Use this information to return your BIOS to manufacturer settings that are compatible with your game machine.

To access the BIOS menu, plug a keyboard into an available USB port on the machine's computer and press F2 repeatedly upon boot until the BIOS settings screen appears. Use the keyboard's TAB, enter, arrow keys, and numbers to change settings. A mouse may also be used for ease of access. *Should the machine request a password that you do not know, proceed to **section X-2**.*

X-1-1. LOAD SYSTEM DEFAULTS



Click the “**Load Defaults**” button at the bottom of the screen.



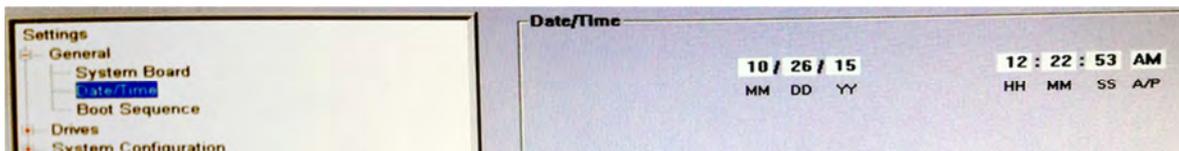
Confirm “**OK**” on the dialog box that appears.

Next, apply the following settings to ensure compatibility with the game machine:

X-1-2. SETTINGS SUMMARY

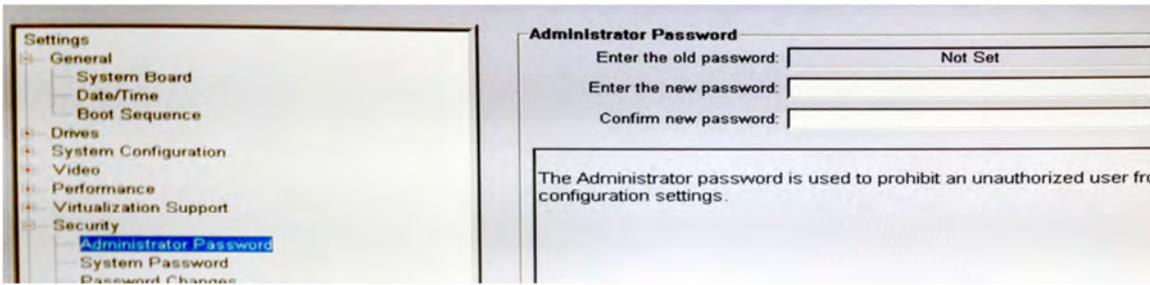
- General ► Date/Time: Set to **current date and time**.
- Security ► Administrator Password: Set to **no password** or to a password of your choice.
- Security ► System Password: Set to **no password**.
- Security ► TPM Security: **Check “TPM Security” box** and set to “**Activate.**”
- Power Management ► AC Recovery: Set to “**Power On.**”

X-1-3. DATE/TIME



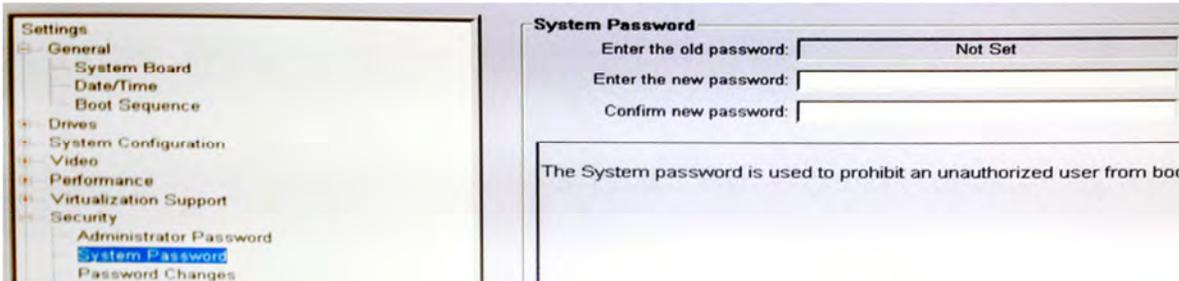
The **General ► Date/Time** setting should be set to the **current date and time**.

X-1-4. ADMINISTRATOR PASSWORD



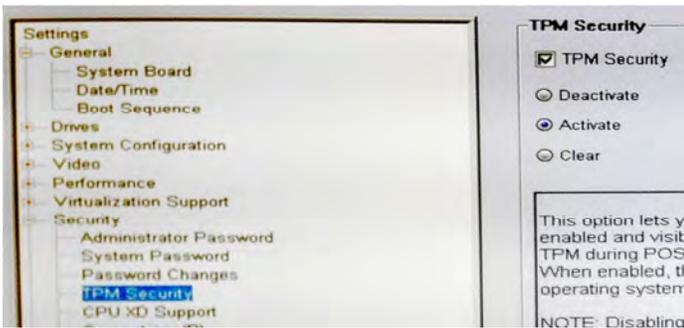
The Security ► Administrator Password setting should be set to **no password** or to a password of your choice.

X-1-5. SYSTEM PASSWORD



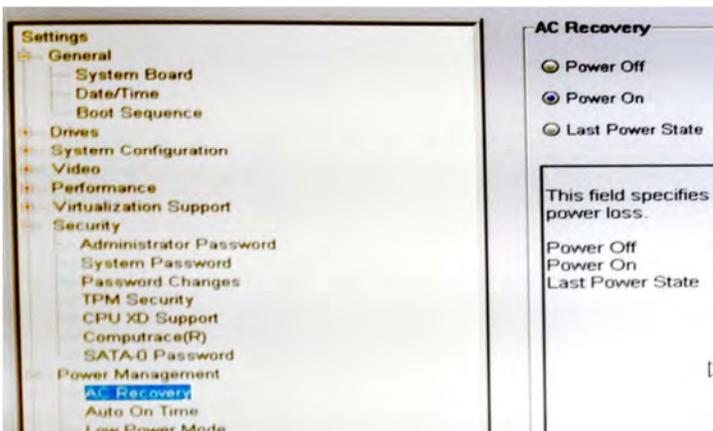
The Security ► System Password setting should be set to **no password**.

X-1-6. TPM SECURITY



The Security ► TPM Security setting should have **“TPM Security”** checked and the **“Activate”** bubble filled.

X-1-7. AC RECOVERY



The Power Management ► AC Recovery setting should have the **“Power On”** bubble filled.

X-2. ISSUE: System Requests Password

Type the system password and press <ENTER>
Enter password: _

This issue is caused by the BIOS having a system password set. This can happen if someone with access to the machine sets a system password, but sometimes happens when the machine is unplugged and left dormant for an extended period of time, which can cause the BIOS settings to become corrupted. This issue can be resolved by clearing the BIOS password and restoring settings.

STEPS:

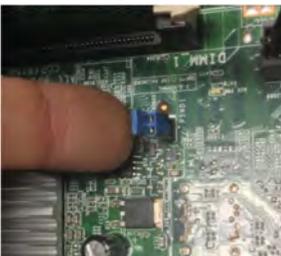
1. Power down the computer.
2. Open the computer and locate the “password reset” jumper.



3. Remove the “password reset” jumper.



4. Start the computer and enter BIOS as per **section X-1**.
5. Reset default settings as per **section X-1-1**.
6. Change the Administrator Password and System Password as per **sections X-1-4** and **X-1-5**.
7. Save and exit BIOS settings.
8. Power down the computer.
9. Replace the “password reset” jumper.



10. Start the computer and enter BIOS as per **section X-1**.
11. Configure initial settings as per **sections X-1-1** through **X-1-7**.
12. Save and exit BIOS settings.

X-3. ISSUE: No Key Available / Hard Disk Fault

```
Trusted GRUB now booting 'NeonFM'  
  
Progress: ████ Loading, please wait...  
Stage 1  
No key available with this passphrase.  
mount: mounting /dev/mapper/b2 on /root failed: No such file or directory  
Hard Disk Fault.  
-
```

This issue will occur if TPM Security is disabled on the system. This happens if the BIOS settings have reverted to system defaults and/or are not using game manufacturer settings, and is usually caused by the CMOS battery losing its charge due to the machine being unplugged and left dormant for extended periods of time. This issue can be resolved by restoring the BIOS configuration.

STEPS:

1. Start the computer and enter BIOS as per **section X-1**.
2. Configure initial settings as per **sections X-1-1 through X-1-7**.
3. Save and exit BIOS settings.