CHAPTER

Setup

NOTICE: Information in this manual may change without notice. Midway Amusement Games, LLC reserves the right to make improvements in equipment function, design, or components as progress in engineering or manufacturing methods may warrant.
Safety Instructions

Read the safety instructions before preparing The Grid for play, performing maintenance, or beginning service procedures. These instructions apply to all operators and service personnel. Specific notes, cautions, and warnings appear in the manual where applicable.

DEFINITIONS OF SAFETY TERMS

- **DANGER** indicates an imminent hazard. If you fail to avoid this hazard, it WILL cause death or serious injury.
- **WARNING** indicates a potential hazard. If you fail to avoid this hazard, it COULD cause death or serious injury.
- **CAUTION** indicates a potential hazard. If you fail to avoid this hazard, it MAY cause minor or moderate injury. **CAUTION** also alerts you about unsafe practices.
- **NOTICE** indicates information of special importance.

| **CAUTION:** The hard disk drive must be packed in an anti-static bag and in an approved shipping container (P/N 08-8068) in order to be sent in for repair or replacement. Do not stack or drop hard disk drives during installation or removal. |
| **CAUTION.** Transport machine securely, as it contains glass and fragile electronic devices. Avoid rough handling and never move cabinet while power is on. |
| **CAUTION.** Verify switch on the power supply is set for 110VAC or 220VAC according to local line voltage. Verify fluorescent lamp is correct for local voltage. |
| **WARNING.** Avoid electrical shocks. Do not plug in line cord until you have inspected and properly grounded the machine. Use only a fixed-location grounded 3-wire outlet. Do not use a "cheater" plug or cut off ground pin on line cord. |
| **WARNING.** This video game machine has no isolation transformer. There is no isolation between the internal cabinet AC system and the external AC line. |
| **WARNING.** To avoid electrical shock, turn off power switch and disconnect from AC power source before removing or repairing any component. After servicing, ensure all ground wires are secure before restoring power. |
| **CAUTION.** Ensure proper mating of all connectors. If a connector does not slip on easily, do not force. Reversed connectors may damage your machine and void the warranty. Connectors are keyed to fit specific pins on each board. |
| **WARNING.** To avoid electrical shock, all replacement fuses must match the type, voltage rating, and current rating of the original fuse. |
| **WARNING.** A dropped fluorescent tube or CRT can break and explode, shattering glass eight feet or more from the point of impact. Handle all glass parts carefully. |
WARNING. HAZARD TO EPILEPTICS. A very small portion of the population has a condition that may cause them to experience epileptic seizures or have momentary loss of consciousness when viewing certain kinds of flashing lights or patterns present in our daily environment. These persons may experience seizures while watching some kinds of television pictures or playing certain video games. People who have not had any previous seizures may nonetheless have an undetected epileptic condition.

If you or a family member experiences symptoms linked to an epileptic condition (e.g., seizures or loss of awareness), consult a physician at once before playing video games.

We recommend that parents observe their children while they play video games. If you or your child experience the following symptoms: dizziness, altered vision, eye or muscle twitching, involuntary movements, loss of awareness, disorientation, or convulsions, DISCONTINUE USE IMMEDIATELY and consult a physician.

Product Specifications

Operating Requirements

<table>
<thead>
<tr>
<th>Electrical Power</th>
<th>Temperature</th>
<th>Humidity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic 120 V AC @ 60Hz 4.0 Amps</td>
<td>32 degrees F to 100 F (0C to 38C)</td>
<td>Not to exceed 95% relative</td>
</tr>
<tr>
<td>Foreign 230 V AC @ 50Hz 2.0 Amps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan 100 V AC @ 50Hz 4.0 Amps</td>
<td></td>
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</tbody>
</table>

Cabinet Statistics

<table>
<thead>
<tr>
<th>Shipping Dimensions (without header)</th>
<th>Shipping Weight</th>
<th>Design Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Width 36.0” (91.0 cm)</td>
<td>372 lbs. (152 kgs.)</td>
<td>Stand-up dedicated video game with linking capability</td>
</tr>
<tr>
<td>Depth 46.0” (116.8 cm)</td>
<td></td>
<td></td>
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<tr>
<td>Height 67.5” (171.3 cm)</td>
<td></td>
<td></td>
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</tbody>
</table>

Equipment Characteristics

<table>
<thead>
<tr>
<th>Video Display Monitor</th>
<th>Audio System</th>
<th>Currency Acceptors</th>
</tr>
</thead>
<tbody>
<tr>
<td>25” (64 cm) CRT Medium Resolution RGB</td>
<td>2 Upper speakers provide 2 Channel Audio 1 Lower Woofer provides 1 Channel Audio</td>
<td>2 Coin Mechanisms, DBV ready. 1 Coin Counter.</td>
</tr>
</tbody>
</table>

Game Characteristics

<table>
<thead>
<tr>
<th>Player Variables</th>
<th>Operator Variables</th>
<th>Diagnostics</th>
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</thead>
</table>
**Game Play**

The Grid is a contest of athletic prowess, sophisticated weaponry, merciless sneak attacks, come-from-behind underdog victories, and revenge served piping hot. Best when played in a group of friends (or enemies), The Grid offers fast-action, first-person, arena-style fury and firepower.

Link up to 6 cabinets with a fast, easily configured, and reliable network. Linked cabinets automatically run multi-player games when several customers play. Unlinked cabinets—or cabinet arrays with only one customer—supply drones in an increasingly difficult moving-target challenge. Drone play difficulty is operator-adjustable (See “Game Difficulty” on page 36.), which can encourage players to hone their skills before facing human opponents.

Once credits are accepted and the Start button is pressed, gladiators may enter passwords to retrieve stored personalities. These names are held in memory on the CPU Board Assembly, along with accumulated scores, total kills, cash accumulated, total first-place wins, and other statistics. Anonymous play is also an option.

Contestants choose from a lineup of eight motley characters (and an alternate crew of secret characters earned after frequent play), each of whom boasts a unique special weapon or defense (i.e., super-stomp, karate kick, temporary invisibility), but generally operate on equal playing fields. Special moves take a few seconds to replenish after each time the player hits the button on the control panel.

As the battle begins, contestants are trapped in one of many spacious arenas with death lurking around every corner. They must grab from an unlimited supply of weapons and ammo packs strewn about. These goodies float above the ground awaiting the first gunner to retrieve one without getting maimed by an opponent. Some weapons deal a single killing blow; others wound slowly and require repeated shots. The deadliest weapons reload slowly and require more practice to aim well. Limited ammunition can leave a player suddenly unarmed. A daring weaponless player can judo-flip an enemy to the mat, but this is usually a last resort.

Armed players must run, shoot, jump, and use special moves to avoid being wounded, while eliminating others to accumulate points as well as piles of cash. Violence is adjustable (See “Game Blood Level” on page 38.). Scoring players can then retrieve a victim’s weapon, along with a health-replenishing first-aid kit and a pile of cash—if another player doesn’t scavenge them first. Expired players see a message revealing the killer, and the frenetic emcee frequently announces the high scorer, making special notes of winning streaks. Shortly after death, a player regenerates in the arena with a light weapon in hand—just enough for some self-defense while seeking better weapon.

Player health is tallied at the top of each monitor, cash at the bottom. Earning enough cash “supercharges” a player, increasing speed and fire rate. Even more cash endows the player with “da bomb,” which annihilates all players simultaneously. Games last two-and-a-half minutes (See page 37 for adjustment.), after which the announcer offers his sympathies to the losers and grants the winner a free game (See page 37 for adjustment.). In a first-place tie, the player who won the most cash that round wins.

Contestants whose scores fall too far behind the leader are granted easy-to-aim golden shotguns, which kill with a single shot. This assists weaker players and prevents stronger players from totally dominating every round. This is offset by the ability to collect cash and points to buy secret characters—an incentive to play frequently with the same personality.
**Maintenance**

**VIEWING GLASS.** It is not necessary to switch off power to clean cabinet. Apply mild glass cleaner to a clean cloth or sponge. Use this to wipe viewing glass. Do not apply cleaner directly on glass. Liquid could drip into cabinet and cause erratic operation.

**CONTROLS AND CABINET.** Use plastic-safe and non-abrasive cleaners to avoid damage. Apply cleaner to clean cloth or sponge. Use this to wipe controls or cabinet. Do not apply cleaner directly on controls or cabinet.

**Installation**

1. Remove all items from shipping container, set them aside, and inspect them for damage.
2. Remove key from joystick and insert into upper cash door. Turn 90 degrees clockwise and open door. Locate keys to rear door and lower cash door on hook inside upper cash chamber.
3. Reach up through upper cash chamber and unlock latches at far left and right to release control panel.
4. Use additional keys to open lower cash door. Remove cash box and empty contents.
5. Insert key into rear door. Turn keys 90 degrees clockwise. Lift door off cabinet and set aside.
6. Swing control panel open. Support viewing glass as you loosen, but do not remove, screws holding retaining strip on front of cabinet. Remove glass when strip is free. Set aside strip and glass.
7. Remove bezel and set aside.
8. Remove nuts and bolts from each side of cabinet unless side panel will not touch a neighboring cabinet. (Now is a good time to decide which cabinets will be on the ends.)
9. Repeat for each cabinet to be installed. For more details, see “MONITOR MOUNTING” on page 46.

**REMOVAL OF VIEWING GLASS, BEZEL, SIDE BOLTS**

**Relocate Cabinets**

Move cabinet near final location. Note that up to 6 cabinets can be linked on a single network. Arrange cabinets facing outward in an arc. This leaves players enough space to play comfortably.
Modify Rear Door (Optional)

For additional security, install extra padlock to secure rear door. Locate hasp in spare parts bag. Remove two lock bracket nuts from inside cabinet above rear door opening. Slide hasp onto bolts so it protrudes from hole in back of cabinet, then reinstall nuts. Modify lock plate at top of rear door. Remove bolts and nuts from lock plate, then rotate plate so slot is above door. Reinstall bolts and nuts and tighten firmly. See "REAR DOOR LOCK ASSEMBLY" on page 48 for details.

Install Leg Levelers

Install a nut onto each leg leveler. Tilt cabinet and install leveler into each of corner hole at bottom of cabinet. Do not tighten nuts. Repeat for each cabinet. See "LEVELERS" on page 49 for details.

Lock Cabinets Together

Adjust cabinets to eliminate space between neighboring panels. If necessary, adjust leg levelers so cabinet heights are equal. Insert bolts through holes in neighboring side panels. Once all bolts are in place, thread nuts and tighten. Replace bezels and viewing glass. Close and latch control panels.

Linking Cabinets

Locate all network cables in cash boxes. Remove three screws holding access panels of electronics cages on each cabinet. See "CABINET REAR VIEW" on page 47 for details. Set panels and screws aside.

Start at one end of cabinet array and plug one end of network cable into one network port on CPU Board. Plug remaining end of cable into available network port of neighboring cabinet. Plug second network cable into remaining network port of second cabinet, and plug the remaining end in a network port of third cabinet, and so on. Cabinet at each end of array should each have an empty port.

When last cabinet is connected, replace access panels and screws while routing cables through notches. Route cables through notches in center of rear door rests.
**Header Installation**

Before installing any header, all cabinets must be stable and level and in their final location.

Turn off AC power and unplug line cords. Lay out all header components before installation to ensure you know what each part is. Seek assistance when lifting headers atop cabinets. Observe grounding precautions.

As an alternative to the instructions on the following pages, you may wish to assemble the header on top of the cabinet to avoid lifting after assembly.

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**SINGLE HEADER ASSEMBLY**

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**TRIPLE HEADER ASSEMBLY**
Single Header Installation

1. Remove all items from carton. Inspect for damage. Align Retainer holes with holes in at bottom of Header Housing. Fasten with tamper proof screws. Align Fluorescent Lamp Assembly with posts in rear of Header Housing. Fasten with ESN nuts.

2. Run Extender Cable through hole in bottom of Header Housing and attach to Lamp Assembly. Rest Header Housing atop cabinet. Align with holes on top of cabinet and fasten with tamper resistant screws.

3. Fasten left and right Walls to sides of Header Housing using tamper resistant screws. Fasten Walls to top of cabinet with tamper resistant screws. Remove backing from decals and carefully place on Walls. Smooth out from center. Smooth or pop out any bubbles with knife or pin.

4. Bend artwork and Plexiglas to conform to shape of Header Housing. Slide into Housing. Align top Retainer with top panel of Header Housing and fasten with tamper resistant screws.
Triple Header Installation

1
Remove all items from cartons and inspect for damage.
Note that you may wish to install this directly on top of the cabinets, rather than lifting the assembly in step 2.
Otherwise, align Bases on flat surface.
Align Retainer holes with holes in front of Bases. Fasten with Torx screws from beneath.
Align Center Braces on Base posts where Bases meet. Align Side Panels on far ends of Bases. Fasten with nylon inserted nuts.

2
Align Top Panel holes over Side Panels and Center Braces. Fasten with Torx screws from above.
Lift assembled header atop aligned cabinets with open side facing front.
Align lower retainer to cabinet front.
Attach Base to cabinet with wood screws.
Connect Lamp Cable Extenders to AC cable through holes in front tops of cabinets.

3
Bend artwork and Plexiglas slightly to conform to shape of header. Slide into front of assembly.
Align Retainer holes with Top Panel holes and fasten with Torx screws from above.
Smooth out artwork from behind.
Hold Fluorescent Lamp Assemblies in position above headers to attach Extenders to Lamp connectors.
Place ground lugs over studs on Light Boxes and Base panels. Fasten with KEPS nuts.
Place Fluorescent Lamp Assemblies on Top Panels with bulbs inside header assembly. Fasten with Torx screws.
**Startup and Testing**

Refer to "Cabinet Wiring Diagram" on page 64 to ensure all cable connectors are securely connected. Do not force connectors. Avoid reversing connections. Replace and lock rear door.

Line cord is with spare parts. Plug line cord into receptacle at bottom of cabinet rear. Plug line cord into grounded AC wall outlet. See “AC POWER PLUG WITH BRACKET ASSEMBLY (A-23089)” on page 50 for more details. Turn AC power on at on/off switch in upper rear of cabinet.

Each cabinet will run through a series of self-diagnostic tests, after which they will look through the network to see what other cabinets are available for multiple-player games.

Open upper coin door and press TEST switch button, the furthest right of the four buttons. In Menu System, use joystick to access Switch Tests. Verify operation of all switches and controls. Set custom pricing, game variables, volume, etc.

Play games, insert coins and bills into mechanisms to test.

Close and lock rear door. The Grid is ready for customers.