

# MAXX<sup>™</sup> Mega-Link<sub>®</sub> Upgrade Kit

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PM0245-08

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#### **Software Requirements:**

In order to install this kit, you must be running MAXX 2K software (V4.00) or greater.

All MAXX<sup>™</sup> games that are connected using the Mega-Link® system must have the same level of software for proper operation. Linked games will not function if they are not running the same version of software.

In order to determine what version of software your game is running, push the set-up button inside the cabinet. The program information will be displayed in the upper left corner of the first screen that appears. Following the "PG3002" will be the version number running on your game.

# **TouchTunes® Operation Requirements:**

**WARNING:** Operation with TouchTunes® Jukeboxes requires that all linked games are running Diamond 2 software (V7.02) or greater.

Operation with MegaTunes™ or Megatouch Combo Jukebox™ requires that all linked games are running Ruby software (V11.00) or greater.

In order to determine what version of software your game is running, push the set-up button inside the cabinet. The program information will be displayed in the upper left corner of the first screen that appears. Following the "PG3002" will be the version number running on your game.

# MAXX<sup>™</sup> Mega-Link® Installation Instructions

For each MAXX<sup>™</sup> game that you want to link, you will need a separate Mega-Link® kit. The kit will link any type of MAXX<sup>™</sup> games together and can link up to 8 games.

#### CONTENTS:

QTY	PART#	DESCRIPTION			
1	PA3005-01-01	MAXX ETHERNET PROGRAM ASSY			
1	CN4451-01	RJ45 COUPLER, 8POSN, R/A, PNL MTG			
1	MW0388-01	BRACKET, UNIVERSAL, ETR I/O RISER			
3	HW3151	#6-32 NYLON THUMBNUT			
3	HW8811	TIE WRAP, .68BDL, LOOSE			
1	EC0072-04	5FT,UTP, CAT 5 LINE/PATCH CORD			
1	HW8812-01	HANKING TIE WRAP, 1.1 BDL DIA.			
1	HW6026-02	PLASTIC STANDOFF, PCB, 9/16,MALE,#6-32			
1	MW0358-01	COUPLER RETENTION BRACKET			
1	MW0375-01	COUPLER BLOCKOUT PLATE			
1	HW8087	FOAM TAPE .18T x .38W			
PARTS IN KUV-108-004-02 ONLY					
1	CN4453-01	COUPLER, CROSSOVER, RJ45, 10BT			
1	EC0072-XX	UTP, CAT 5 LINE/PATCH CORD			

## **Hardware Installation**

- 1. Turn off the game and unplug it from its power source.
- 2. Access the CPU board assembly.
- Using Figure 1, determine the type of CPU board used in your game (either Telco or Mitsubishi/Itox).
  - If your game uses the Telco motherboard, snap off the leg of the included bracket (MW0388-01) at the perforated holes.
- Remove the exsting bracket securing the riser card to the motherboard. Note the location of the bracket in relation to the connectors on the motherboard. See Figure 2.
- 5. Place the new bracket (MW0388-01) in position as shown in Figure 3.

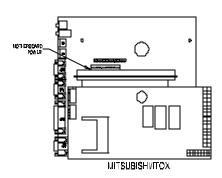
- 6. Secure the bracket to the riser card using the existing #6-32 screw as shown in Figure 4.
- MITSUBISHI/ITOX MOTHERBOARDS
   ONLY (Telco boards skip to Step 8):
   Secure the bracket to the motherboard
   using the existing hardware.
- 8. Secure the Ethernet card to the bracket using the supplied threaded standoff and thumbnut. Carefully snap the Ethernet card onto the top of the standoff. Then, insert the threaded end of the standoff through the slot in the bracket and secure it with the thumbnut. See Figure 4.
- Insert the Ethernet card into the riser card slot (solder side up) until it is firmly in place, as shown in Figure 3.

1

<sup>\*</sup>The installation of this kit may require some basic hand tools.

- Connect the 5' Ethernet patch cable to the connector on the Ethernet board.
   See Figure 4.
- 11. Route the patch cable toward the power entry area of the game.
- Determine which type of MAXX<sup>™</sup> game you have and follow the instructions for that game.

MAXX Classic & Blue MAXX: pgs. 4-6 MAXX Select & Slim MAXX: pgs. 7-8 MAXX Elite & EZ MAXX: pgs. 9-10 Upright games: pgs. 11-13 Full MAXX games: pgs. 14-15



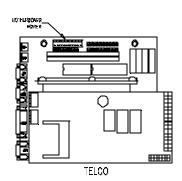


FIGURE 1 - DETERMINING BOARD TYPE

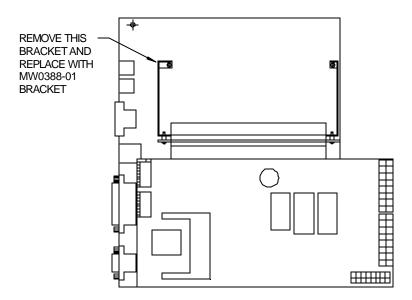


FIGURE 2 - EXISTING BRACKET LOCATION

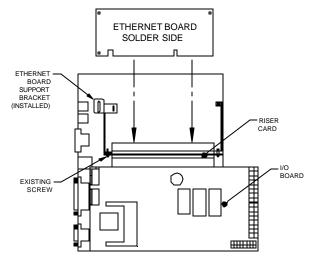


FIGURE 3 - BRACKET/BOARD INSTALLATION

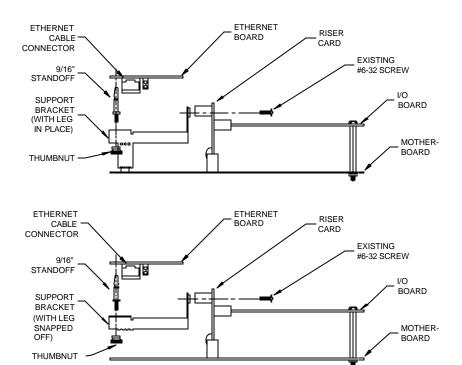


FIGURE 4 - BRACKET/BOARD INSTALLATION (SIDE VIEW)
MITSUBISHI CONFIGURATION AT TOP- TELCO CONFIGURATION AT BOTTOM

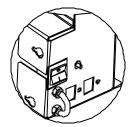
#### MAXX CLASSIC™ AND BLUE MAXX™ GAMES



FIGURE 5- POWER ENTRY ASSEMBLIES



MAXX A - THE COUPLER RETENTION BRACKET IS REQUIRED FOR THIS ASSEMBLY



MAXX B - THIS ASSEMBLY DOES NOT REQUIRE THE COUPLER RETENTION BRACKET

- 13. If you already have couplers installed in your game, continue with step 20.
- Using Figure 5, determine the type of MAXX<sup>™</sup> game that you have.

If the power entry assembly on your game looks like MAXX A with the U-bolt horizontally oriented, your game requires the use of the coupler retention bracket supplied in this kit. Follow instructions for MAXX A games.

If the power entry assembly on your game looks like MAXX B, with the U-bolt vertically oriented and the circuit breaker on the back, your game does not require the bracket. Follow instructions for MAXX B games.

 Unlock and open the rear door of the game to gain access to the power entry assembly.

- Remove the power cord retention bracket. Loosen the hexnuts securing the power entry assembly and remove the power entry assembly.
- Locate the metal cover plate covering the two access holes on the inside of the power entry assembly (secured to the assembly by the nylon thumbnuts).

Some of these models do not have the metal cover plate. If you have a model that was previously set up for linking games you will have an RS 485 com board instead.

18. Remove the thumbnuts securing the cover plate or the RS 485 com board. If you have the com board you must also remove the two cables plugged into the board and disconnect the gray

ribbon cable from the com 2 serial port on the motherboard assembly.

#### MAXX A:

Replace the existing cover plate with the coupler blockout plate included in this kit (MW0375-01) in order to cover one open access hole. Secure the coupler retention bracket (MW0358-01) over the coupler blockout plate with the thumbnuts. See Figure 6.

#### MAXX B:

Rotate the cover plate 180° (to reveal one access hole), replace the plate and replace the thumbnuts to secure it. See Figure 7.

19. Orient the supplied, snap-in coupler and insert it into the open access hole.

MAXX A: See Figure 6. MAXX B: See Figure 7.

- 20. Connect the free end of the 5' patch cable from the Ethernet board to the coupler on the inside of the power entry. You may need to take the coupler out in order to connect the cable. (If your game already had couplers installed, the Ethernet coupler is the one on the left if you are facing the back of the game.)
- 21. Coil any excess cable and tie wrap the coil to keep it in place.
- Reconnect the power entry assembly to the game with the hexnuts and reconnect the power cord retention bracket.
- 23. Continue with step 1 of Linking Your Games on page 16.

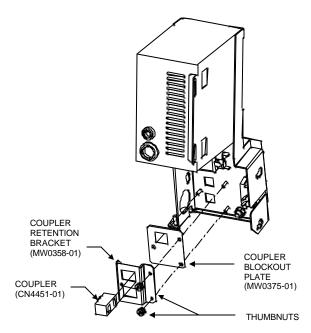


FIGURE 6 - POWER ENTRY ASSEMBLY COUPLER RETENTION BRACKET INSTALLATION (MAXX A GAMES)

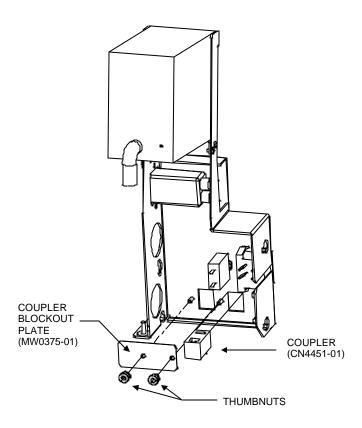


FIGURE 7 - POWER ENTRY ASSEMBLY COUPLER RETENTION BRACKET IS NOT REQUIRED (MAXX B GAMES)

### MAXX SELECT™ AND SLIM MAXX™ GAMES

The entire back of the game is black and there are two access holes on the power entry assembly.



- 13. If you already have couplers installed in your game, continue with step 20.
- Unlock and open the rear door of game to gain access to the power entry assembly.
- 15. Remove the coin mech/coinbox assembly from the game.
- 16. Locate the metal cover plate covering the two access holes on the inside of the power entry assembly (secured to the assembly by the nylon thumbnuts).
- 17. Remove the thumbnuts securing the cover plate.
- Rotate the metal cover plate 180° (to reveal one access hole), replace the plate and replace the thumbnuts to secure it.

- Orient the supplied, snap-in coupler and insert it into the open access hole. For vertical oriented access holes see Figure 8. For horizontally oriented access holes see Figure 9.
- 20. Connect the free end of the 5' patch cable from the Ethernet board to the coupler on the inside of the power entry. You may need to take the coupler out in order to connect the cable. (If your game already had couplers installed, the Ethernet coupler is the one on the left if you are facing the back of the game.)
- 21. Coil any excess cable and tie wrap the coil to keep it in place.
- 22. Continue with step 1 of Linking Your Games on page 16.

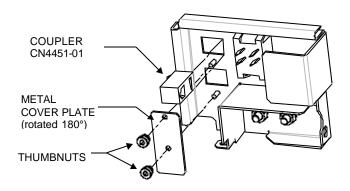


FIGURE 8 - MAXX SELECT<sup>TM</sup> AND SLIM MAXX<sup>TM</sup> COUPLER INSTALLATION (VERTICAL ORIENTATION OF ACCESS HOLES)

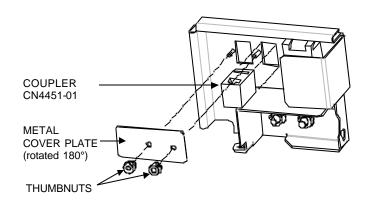


FIGURE 9 - MAXX SELECTTM AND SLIM MAXXTM COUPLER INSTALLATION (HORIZONTAL ORIENTATION OF ACCESS HOLES)

#### MAXX ELITE™ AND EZ MAXX™ GAMES



- 13. If you already have couplers installed in your game, continue with step 19.
- Unlock and open the rear door of the game to gain access to the power entry assembly.
- 15. Locate the metal cover plate covering the two access holes on the inside of the power entry assembly (secured to the assembly by the nylon thumbnuts).
- 16. Remove the thumbnuts securing the cover plate (see Figure 10).
- 17. Rotate the cover plate 180° (to reveal one access hole), replace the plate and replace the thumbnuts to secure it.
- 18. Orient the supplied, snap-in coupler and

- insert it into the open access hole. Some models may require the coupler to be installed at an angle. See Figure
- 19. Connect the free end of the 5' patch cable from the Ethernet board to the coupler on the inside of the power entry. You may need to take the coupler out in order to connect the cable. (If your game already had couplers installed, the Ethernet coupler is the one on the left if you are facing the back of the game.)
- 20. Coil any excess cable and tie wrap the coil to keep it in place.
- 21. Continue with step 1 of Linking Your Games on page 16.

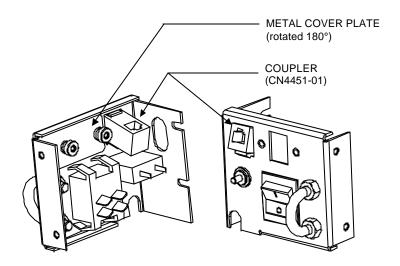
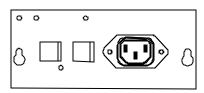


FIGURE 10 - ANGULAR COUPLER ORIENTATION (MAXX ELITE™ AND EZ MAXX™ GAMES)

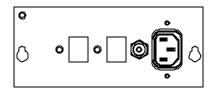
#### **UPRIGHT GAMES**



FIGURE 11- POWER ENTRY ASSEMBLIES



MAXX A - THE COUPLER RETENTION BRACKET IS REQUIRED FOR THIS ASSEMBLY



MAXX B - THIS ASSEMBLY DOES NOT REQUIRE THE COUPLER RETENTION BRACKET

- 13. If you already have couplers installed in your game, continue with step 19.
- Using Figure 11, determine the type of MAXX™ game that you have.

If the power entry assembly on your game looks like MAXX A, with the line filter horizontally oriented and without the circuit breaker, your game requires the use of the coupler retention bracket supplied in this kit. Follow instructions for MAXX A games.

If the power entry assembly on your game looks like MAXX B, with the line filter vertically oriented and the circuit breaker on the back, your game does not require the bracket. Follow instructions for MAXX B games.

 Unlock and open the rear door of the game to gain access to the power entry assembly.

- 16. Locate the metal cover plate covering the two access holes on the inside of the power entry assembly (secured to the assembly by the nylon thumbnuts).
  - Some of these models do not have the metal cover plate. If you have a model that was previously set up for linking games you will have an RS 485 comboard instead.
- 17. Remove the thumbnuts securing the cover plate or the RS 485 com board. If you have the com board you must also remove the two cables plugged into the board and disconnect the gray ribbon cable from the com 2 serial port on the motherboard assembly.

#### MAXX A:

Replace the existing cover plate with the coupler blockout plate included in this kit (MW0375-01) in order to cover

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one open access hole. Secure the coupler retention bracket (MW0358-01) over the coupler blockout plate with the thumbnuts. See Figure 12.

#### MAXX B:

If you have a cover plate, rotate the cover plate 180° (to reveal one access hole), replace the plate and replace the thumbnuts to secure it. See Figure 13.

18. Orient the supplied, snap-in coupler and insert it into the open access hole.

MAXX A:

See Figure 12.

MAXX B:

See Figure 13.

- 19. Connect the free end of the 5' patch cable from the Ethernet board to the coupler on the inside of the power entry. You may need to take the coupler out in order to connect the cable. (If your game already had couplers installed, the Ethernet coupler is the one on the left if you are facing the back of the game.)
- 20. Coil any excess cable and tie wrap the coil to keep it in place.
- 21. Continue with step 1 of Linking Your Games on page 16.

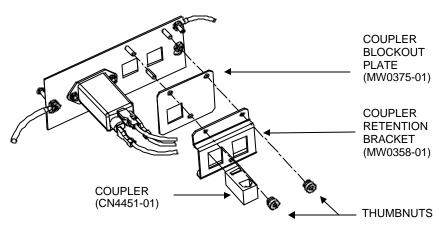


FIGURE 12 - POWER ENTRY ASSEMBLY COUPLER RETENTION BRACKET INSTALLATION (MAXX A GAMES)

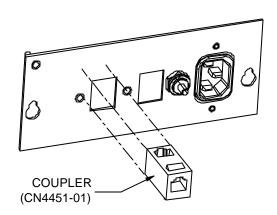


FIGURE 13 - POWER ENTRY ASSEMBLY COUPLER RETENTION BRACKET IS NOT REQUIRED (MAXX B GAMES)

### **FULL MAXX™ GAMES**

The entire hood of the game lifts off and there are no access holes in the back of the game.



- 13. Unlock the lid of the game, tilt it back and remove it from the game.
- Remove the bracket (MW0192-01) next to the power entry bracket and note the orientation of the bracket (see Figure 14).
  - If you have a model that was previously set up for linking games you will have an RS 485 com board. If you have the com board, you must remove the two cables plugged into the board and disconnect the gray ribbon cable from the com 2 serial port on the motherboard assembly.
- Adhere the foam tape (HW8087) to the notched surface that adjoins the power entry bracket (being careful not to cover the notches). See Figure 14.

- 16. Connect the free end of the 5' patch cable from the Ethernet board to the coupler and place the coupler in a location near the power entry.
- 17. Coil any excess cable and tie wrap the coil to keep it in place.
- 19. Route the 50' cable next to the power entry assembly and connect it to the coupler inside the game. Use the thumbnuts to secure the 50' cable between the bracket with the foam tape and the power entry bracket. See Figures 14 and 15.
- Continue with step 1 of Linking Your Games on page 16.

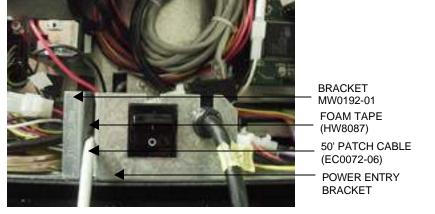


FIGURE 14 - FULL MAXX<sup>TM</sup> WITH COMPLETE INSTALLATION (CLOSE-UP OF POWER ENTRY BRACKET)

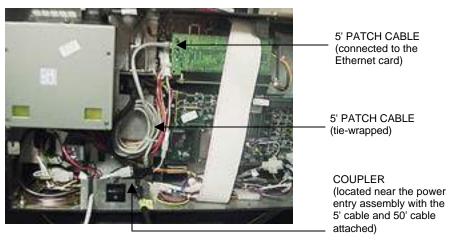


FIGURE 15 - FULL MAXX $^{\text{TM}}$  WITH COMPLETE INSTALLATION

# **Linking Your Games**

NOTE: Megatouch games that are connected using the Mega-Link™ system must have the same level of software for proper operation. If a different software level is detected, you will receive a screen that says, "MEGALINK MISMATCH CALL ATTENDANT." This screen will be displayed approximately 5 minutes after you turn the games on. To clear the screen and continue playing the games, you must turn the power off, unlink the games, and turn the power back on again. If you want to link these games, you must upgrade all games to the same software level.

**NOTE:** A hub is required if you are linking more than 2 games together. Hubs are available from your distributor (part number EC0030-01) or at your local computer store.

### Linking two games:

- 1. Turn off and unplug the games.
- Connect one end of the Ethernet cable
  to the Ethernet coupler on the outside
  of the game. If your game already had
  couplers installed, the Ethernet coupler
  is the one on the left if you are facing
  the back of the game. Connect the
  second Ethernet cable (from the second kit) to the coupler on the outside of
  the second game.
- Secure each cable to the U-bolt on the back of each game. (This will prevent unnecessary strain on the connector if the game is turned or moved.)
- 4. Plug the free ends of both the Ethernet cables into the coupler crossover. See Figure 16. If you are linking a game to a TouchTunes® jukebox, plug the free end of the jukebox patch cable into the coupler crossover. See Figure 18.
- 5. Turn on power to the game. If installation was successful, you will see a Mega-Link® button displayed on the screen. (If you are linking a game to a TouchTunes® jukebox, once both devices are turned on, the initial download will occur. The initial download may take 20-30 minutes depending on the amount of music content on the jukebox. NOTE: Any changes that occur to the content on the jukebox will prompt the game to download this new information.)

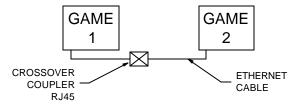


FIGURE 16 - LINKING TWO MEGATOUCH GAMES

# Linking more than two games:

- Turn off and unplug the games.
- Connect one end of each Ethernet cable to the Ethernet coupler on the outside of each game. If your game already had couplers installed, the Ethernet coupler is the one on the left if you are facing the back of the game.
- Secure each cable to the U-bolt on the back of each game. (This will prevent unnecessary strain on the connector if the game is turned or moved.)
- 4. Plug the free ends of the Ethernet cables into a 10 BASE-T Ethernet hub (available from your distributor as a separate part, EC0030-01, or at your local computer store). See Figure 17. If you are linking a game to a TouchTunes® jukebox, plug the free end of the jukebox patch cable into the hub. See Figure 19.
- Itin on power to the games. If installation was successful, you will see a Mega-Link® button displayed on the screen. (If you are linking a game to a TouchTunes® jukebox, once both devices are turned on, the initial download will occur. The initial download may take 20-30 minutes depending on the amount of music content on the jukebox. NOTE: Any changes that occur to the content on the jukebox will prompt the game to download this new information.)

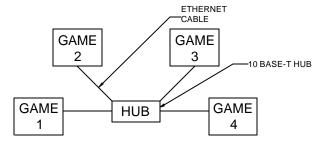


FIGURE 17 - LINKING THREE OR MORE MEGATOUCH GAMES

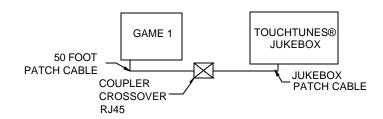


FIGURE 18 - LINKING A MEGATOUCH GAME AND A JUKEBOX

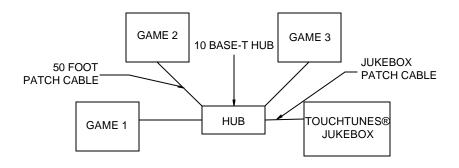


FIGURE 19 - LINKING MORE THAN ONE MEGATOUCH GAME AND A JUKEBOX