

# Installation Instructions

## Kit #26723005 – Conversion Kit TT Ovation to AMI

Tools needed:

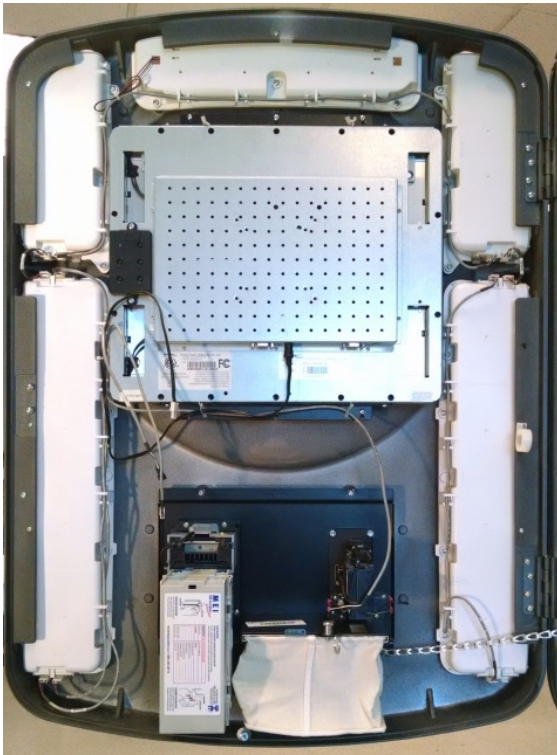
Philips screw driver, 1/4" & 5/16" nut drivers

Part included in this kit (see page 10 for a picture of the parts in this kit)

Item	Part #	Description	Quan	Item	Part #	Description	Quan
1	61197004	Computer Core	1	20	21121240	Cable – Power Cord	2
2	22219001	Hard Drive	1	21	21121242	Cable – Power Cord	1
3	22321701	Bracket – Mounting computer	1	22	70800107	Wire Tie	6
4	21581801	Switch – ATX Reset	1	23	87843000	#8-32 KEPS Hex Nut	6
5	22321601	Bracket – Mounting computer	1	24	21965501	Velcro – Hook	4
6	30934235	Cable – Stereo Y Splitter	1	25	21965502	Velcro – Loop	4
7	30934234	Cable – Audio Y Adaptor 6"	1	26	70093403	Clamp – Cable 1"	1
8	30934232	Cable – Audio Y Adaptor 36"	1	27	70093402	Clamp – Cable 3/4"	3
9	34109403	Audio Interface Assembly	1	28	40846302	Receiver Assy – IR	1
10	30934230	Cable – Audio 12"	1	29	21958306	Transmitter – IR	1
11	40978402	Controller – LED	1	30	34117301	CBA – Volume Ctrl Ovation	1
12	34038701	Cable – DB9 Serial	1	31	70350071	Data Plate TT-OV2	2
13	61210701	Plate – Computer/Preamp	1	32	28290706	Power Supply – 24V	2
14	34022359	Cable – Bill Acceptor ICT	1	33	41020004	PreAmplifier Assy	1
15	41024302	Harness – TT Ovation Convert	1	34	22188403	Card-Trigger Code (not shown)	1
16	22132275	Harness – DI Box Power	1	35	22132289	Harness – Ovation Lighting	1
17	34102011	Cable – Modular(Green) Amplifier	1	36	22167728	Label – AMI Digital (not shown)	1
18	34103005	Cable – Modular(red) 24"	1	37	26723055	These Instructions	1
19	34037905	Cable – IR Receiver	1				

1. Move the jukebox to a suitable work space. Be sure it is unplugged from the wall.
2. Open the jukebox and remove the following components:
  - TouchTunes MJS (retain the mounting screws)
  - TouchTunes Control Board (retain the mounting screws)
  - Control Board Power Supply
  - Touch Tunes volume control board (retain the mounting screws)
  - Tune Central (if installed)
  - Tune Central power supply (if installed)
3. Remove all the wiring leaving only the following wires in place:
  - Monitor VGA cable – will connect to the AMI core computer
  - Monitor Power cable – will connect to the AMI LED Controller
  - Monitor OSD pushbutton board and cable
  - LED Lighting harness – will connect to the AMI LED Controller
  - Coin Acceptor harness – will connect to the AMI LED Controller
  - CAT5 cables from the amplifier – will connect the AMI Preamplifier and Audio Interface
  - Amplifier power cord





Stripped out Door and Cabinet

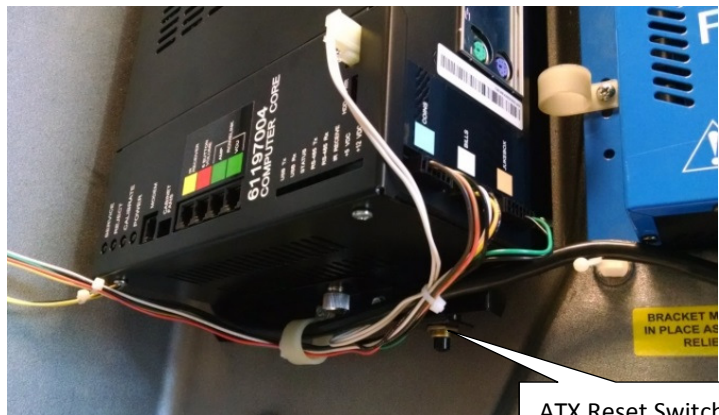
4. Locate the Computer/Preamplifier Mounting Plate (item 13), the Preamplifier (item 33), and the two Computer Mounting Brackets (items 3 & 5). Install the Computer Mounting Brackets onto the Computer/Preamplifier Mounting Plate using #8-32 KEPS Hex nuts (item 23). Install the Preamplifier onto the Computer Mounting Plate, oriented as shown, using #8-32 KEPS Hex nuts (item 23).



5. Install the Computer/Preamplifier Mounting Plate from step 4 into the cabinet using the mounting screws that were used to hold the TouchTunes MJS.
6. Using the Velcro Pads (item 24, 25), install the AMI Audio Interface (item 9) above the amplifier approximately where shown.
7. Install two Cable Clamps (item 27) under two of the amplifier mounting screws as shown.



8. Plug the Power Cord (item 21) and the ATX Power Connector from the Main Harness (item 15) into the back of the Core Computer (item 1). Mount the Core Computer onto the Computer/Preamplifier Mounting Plate. Secure the Core Computer with the knurled thumb nut on the bottom Computer Mounting Bracket.
9. Connect the Faston terminals in the Main Harness to the ATX Reset Switch (item 4). Install the ATX Reset Switch in the hole provided at the bottom of the Mounting Plate.



10. Connect the "JUKEBOX", "BILLS", "COINS", and ATX Reset connectors to the Core Computer. The connector with the orange wire goes in the COINS location. Install a Cable Clamp (item 27) under one of the fasteners holding the bottom Computer Mounting Bracket. Route the wiring through this Cable Clamp.

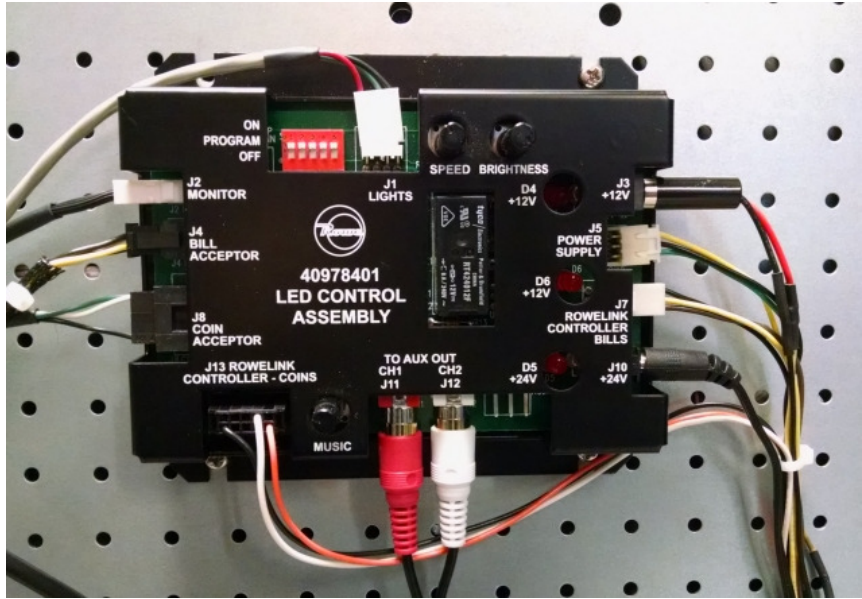




11. Using the mounting screws from the TT Control Board, mount the LED Controller (item 11) to the back of the monitor in the same position where the old Control Board was mounted.

12. Connect the free ends of the Main Harness to the LED Control Board at J3, J5, J7 and J13.

13. Connect the original LED Lighting harness to J1, connect the Monitor Power harness to J2, plug the Coin Acceptor harness into J8. **Note:** if your Ovation had the TouchTunes JCB computer installed and used the large 44 pin interface connector, then you will need to use the Ovation Lighting harness (item 35) to connect J1 of the LED Control to the LED lighting in the door (label end of harness to LED lighting). Otherwise harness item 35 is not used.



14. Install the Bill Acceptor Harness (item 14) from the kit connecting it from the LED Control Board J4 to the Bill Acceptor(s).

15. If using ICT bill acceptors, they must be reconfigured to run in pulse mode.

- a. Remove the bill acceptor(s) from the jukebox. Slide the front cover open to expose the 4 position DIP switch. Set the switches – S1, S2 ON, S3, S4 OFF. Replace the front cover.
- b. On the side of the bill acceptor, on the 4 position switch, ensure all switches are OFF. On the 8 position switch, ensure S6 and S7 are ON, all the rest are OFF.
- c. Reinstall the bill acceptor(s) into the jukebox.



16. If using MEI (24V) bill acceptors, set the DIP switches as follows:

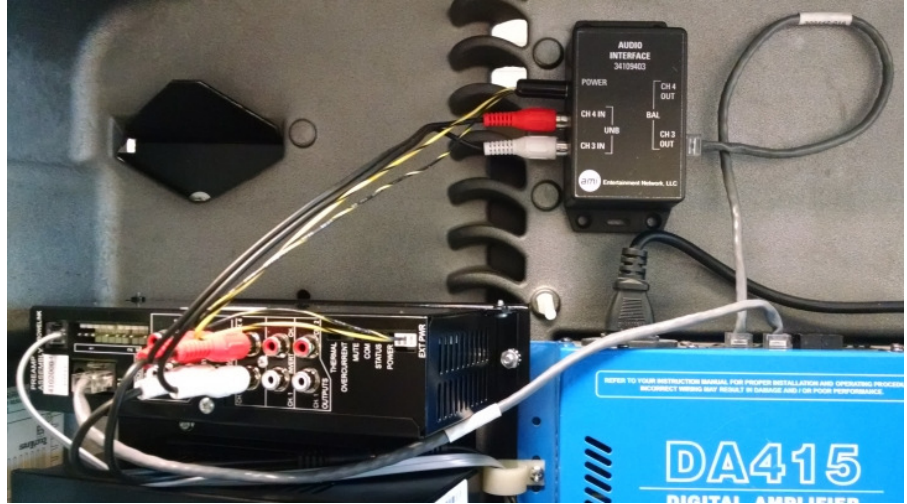
- a. Switches 1, 2, 3, 6 – ON and switches 4, 5, 7, 8 – OFF

17. Locate the Stereo 'Y' Splitter (item 6). Plug the two Audio 'Y' Adaptors (item 7, 6" and item 8, 36") into the Stereo 'Y' Splitter. Plug the Stereo 'Y' Splitter into the Green Audio jack on the core computer. Route the 36" cable to the front door and connect the RCA plugs to J11 and J12 on the LED Control Board. Route the 6" cable to the Preamplifier and connect the RCA plugs into Main Ch1 and Ch2.



18. Locate the 12" Audio Cable (item 10) Plug one end into the CH3 and CH4 RCA jacks on the Audio Interface. Plug the other end into the CH3 and CH4 outputs on the Preamplifier.

19. Locate the DI Box Power Harness (item 16). Plug one end into the Audio Interface and plug the other end into the EXT PWR connector on the Preamplifier.



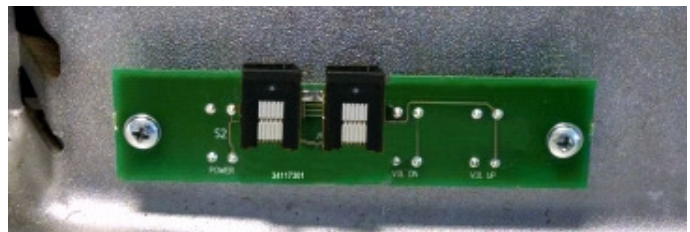
20. Locate the Modular Cable with the green band (item 17) Connect one end to the green AMP jack on the Core Computer. Connect the other end to the Rowelink jack on the preamplifier.

21. Reusing the CAT5 cables from the amplifier, route the cable from Input A to the Preamplifier and plug it into the AMP1 jack. Route the cable from Input B to the Audio Interface and plug it into either CH3 or CH4 output.

22. Using Velco pads (item 24, 25) attach the two 24 Volt Power Supplies to the power supply bracket in the cabinet. Plug the power cords into the power strip. Route the 24 volt connector from one of the power supplies to the POWER jack on the Preamplifier. Route the other 24 volt connector to the door and plug it into J10 on the LED Control Board.



23. Install the Volume Control Board (item 30) in the same position and using the same fasteners as the original volume control board. Locate the Modular Cable with the red band (item 18). Connect one end to the red 6 BUTTON VOLUME jack on the Core Computer. Connect the other end to the Volume Control Board.



24. Connect the original VGA cable from the monitor to the VGA plug on the Core Computer.
  25. Connect the Serial Cable (item 12) from the monitor to the COM plug on the Core Computer.
  26. Connect speaker wiring.
  27. Mount IR Receiver (item 28) in a convenient location within line-of-site of where the transmitter will normally be kept. Connect the IR Receiver to the jukebox core computer using the IR Receiver Cable with the yellow band (item 19).
  28. Use the assorted cable clamps to neatly route wiring in the cabinet and across to the door.
  29. Ensure all wiring is secure and correct then power up the jukebox. It may take up to 20 minutes and multiple reboots to complete the automated hardware detection and initialization process.
- If the jukebox software fails to detect the touch controller, a special screen will appear allowing manual configuration of the touch controller. Be sure to calibrate the touch screen.

30. The TouchTunes Logo on the top light diffuser can be removed following these steps.

- a. Pour a small amount of Acetone on a clean cotton rag.
- b. Wipe the TouchTunes logo on the diffuser until the ink starts to soften.
- c. Alternately switch between a cloth containing Acetone and a clean cloth until all remnants of ink have been removed.
- d. The Acetone will attack the plastic of the diffuser. Do not use too much Acetone, just enough to remove the ink.
- e. Use 400 grit sand paper to smooth the surface of the plastic diffuser. Follow with 600 grit sand paper to further smooth the surface. The surface should be clean and smooth after using the 600 grit paper.

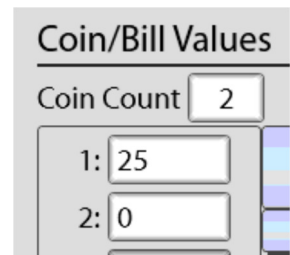


31. Apply the AMI (item 36) to the upper diffuser after the TouchTunes logo is removed.

32. Affix the Data Plate label (item 31) with the Windows license to the right hand inside wall of the jukebox. Affix the remaining Data Plate label to the back of the jukebox just above the TouchTunes data plate.



33. The 25c coin switch is routed to COIN 1 input. Go into the Service Mode and navigate to Cash Management → Song Pricing and touch the Cash Values tab. Change the Coin 1 value to 25. If your coin acceptor takes two coins, set Coin 2 to the value of the second coin. Save and exit Service Mode.





## Preamplifier

### Preamplifier STATUS – normal operation

The STATUS LED is used to indicate the status of the preamplifier. Under normal conditions the STATUS LED will flash once on power up, stay off for a second, and then turn back on and stay on. If either of the two microphone inputs become active, either by activation of the SENSE line or by the Voice Activation Circuits, the STATUS LED will blink on and off at a 150ms rate until the microphone circuits become inactive.

### Preamplifier STATUS – error conditions

The STATUS LED is used to indicate possible faults on the preamplifier board. During power up, the preamplifier runs a self test. If a fault is detected, the STATUS LED is used to indicate what may be wrong. The LED will repeat a pattern of a specific number of blinks.

The blink pattern is 500ms on, 500ms off and then one to seven quick 100ms on blinks, three seconds off. The blinking pattern will repeat until the preamplifier is reset or power is turned off.

Number of Blinks	Problem Description
1	Digital Audio Processor did not come out of RESET
2	Digital Audio Processor COM error
3	EEPROM COM error
4	Digital Audio Processor memory load error
5	EEPROM data error
6	Digital Potentiometer COM error in Mic circuit
7	I <sup>2</sup> C SDA line is stuck low

If the DAP (Digital Audio Processor) fails during normal operation, after power up the STATUS led will start to blink one second on, two seconds off, continuously until power is cycled or until the DAP failure goes away.

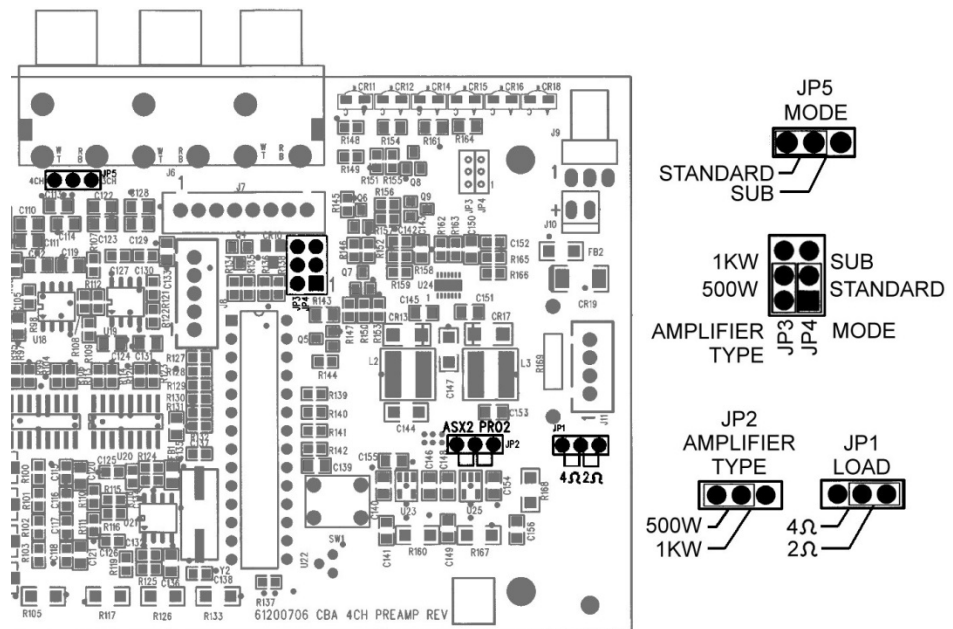
### Preamplifier Jumpers

There are 5 jumpers on the preamplifier. They are preset at the factory and should not have to be reconfigured.

**JP1: LOAD** – used to set the speaker load. This jumper is not used in this kit.

**JP2, JP3: AMPLIFIER TYPE** – used to configure the preamplifier power supply. The preamplifier is powered by a separate 24 volt power supply. In this case, both jumpers must be set to the 500 Watt amplifier position.

**JP4, JP5: MODE** – set these jumpers to the STANDARD position for normal operation.



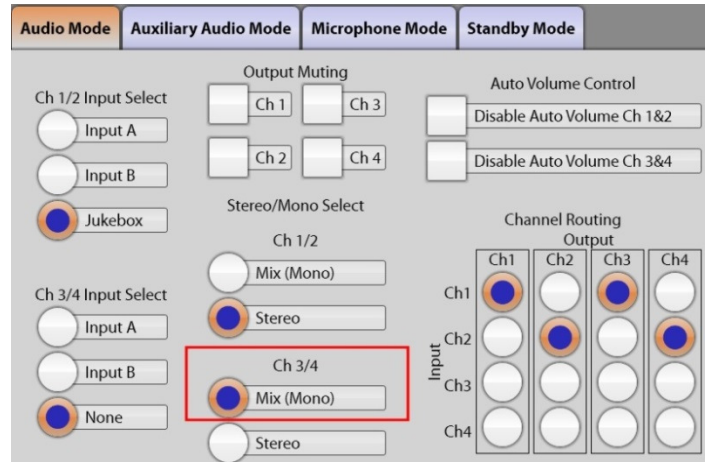
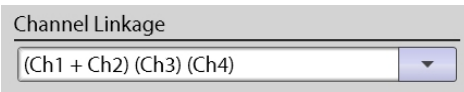
**Preamplifier Jumpers**



## AMI Audio Interface

The AMI Audio Interface Box is configured such that Channel 3 Audio routes to Output A and Output B Right, Channel 4 Audio routes to Output A and Output B Left. In this configuration, channels 3 and 4 are both available on Output A and Output B.

To use Channels 3 and 4 as independent zones, use the Service Mode to change the Ch 3/4 Stereo/Mono Select to Mono. Additionally, configure the Channel Linkage as shown below. Using this independent three zone configuration, the IR Transmitter must be used to control volume in the three separate zones.



## LED Lighting

### Color and Light Pattern Settings

The lighting patterns are determined by the five DIP switches. When selecting the light pattern, set the first switch (SW1), then the second switch (SW2) and finally the last three switches (SW3-SW5).

SW1: The first switch determines if the lighting is in COLOR (OFF) or MUSIC (ON) mode. When in MUSIC mode the lights will beat with the music, in COLOR mode they will not. When COLOR mode is selected OR MUSIC mode is selected but no music is playing for ~8 seconds, the lights will show a pattern determined by the rest of the switches.

SW2: The second switch determines if the lighting is in FADE/SOLID (OFF) or RAINBOW (ON) mode. When in FADE/SOLID mode the whole jukebox fades from one color to another or is a solid color. When RAINBOW mode is selected each color board will produce a different color and the colors will rotate from one board to the next showing a rainbow pattern on the jukebox.

SW3-SW5: The remaining three switches can be set to display a solid color if FADE/SOLID (SW2 OFF) mode is selected. The color settings are shown in the following table:

SW3	SW4	SW5	EFFECT
OFF	OFF	OFF	FADE colors
OFF	OFF	ON	Solid Red
OFF	ON	OFF	Solid Yellow
OFF	ON	ON	Solid Green
ON	OFF	OFF	Solid Cyan
ON	OFF	ON	Solid Blue
ON	ON	OFF	Solid Magenta
ON	ON	ON	Solid White

### Speed (Flash Rate)

The Speed (flash rate) can be adjusted by turning the SPEED knob. The speed can be changed from very rapid to slow. The speed will only effect the lights when in COLOR mode or when no music is playing in MUSIC mode.

### Brightness

The Brightness control will dim the lights when in COLOR mode. If the jukebox is in MUSIC mode, the dimming only effects the lights when there isn't any music.

### Sensitivity

The Sensitivity control sets the music beat sensitivity when in MUSIC mode. When a song is playing the sensitivity knob can be adjusted so the lights flash a lot or a little. If FADE mode is selected the sensitivity knob will determine how often the color changes, or if RAINBOW mode is selected it will determine how often the colors rotate. If a solid color is chosen the intensity will be affected.





