

# Installation Instructions

## Conversion Kit TT Allegro to AMI

Tools needed:

Drill Driver, #42 (3/32") drill bit, Philips screw driver, 1/4" & 5/16" nut drivers

Part included in this kit (see page 9 for a picture of the parts in this kit)

Item	Part #	Description	Quan	Item	Part #	Description	Quan
1	61197004	Computer Core	1	19	80443005	#8-32x5/16 Hex WHS (SF)	2
2	22321701	Bracket - Mounting computer	1	20	86662708	#6x1/2" Hex WRHS (Type 17)	22
3	22321601	Bracket - Mounting computer	1	21	87842300	#6-32 Keps Nut	6
4	21581801	Switch - Pushbutton	1	22	21958306	Transmitter - IR	1
5	22320601	Bracket - ATX Reset	1	23	70093402	Clamp - Cable 3/4"	4
6	30934235	Cable - Audio 3.5mm Splitter	1	24	21965501	Velcro - Hook	2
7	30934234	Cable - Audio 3.5mm to RCA 6"	1	25	21965502	Velcro - Loop	2
8	34038701	Cable - DB9 Serial	1	26	70093401	Clamp - Cable 1/2"	4
9	21121240	Cable - Power Cord	3	27	34037905	Cable - IR Receiver	1
10				28	40846302	Receiver Assy - IR	1
11	34102011	Cable - Rowelink Amplifier	1	29	70350070	Data Plate TT-AL2	2
12	41024301	Harness - TT Allegro Convert	1	30	34116101	Bckt - Mounting LED Controller	1
13	30934231	Cable - Audio 3.5mm to RCA	1	31	40978402	Controller - LED	1
14	34103004	Cable - (red) 6 button remote	1	32	41020003	PreAmplifier Assy	1
15	34022359	Cable - Bill Acceptor ICT	1	33	61192902	Graphic	1
16	28290706	Power Brick - 24V	2	34	22219001	Hard Drive	1
17	34113401	Bracket - Mounting 6 button	1	35	26723053	These Instructions	1
18	70004-1A	Volume Control - 6 button					

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
  - TouchTunes Control Board (retain the two mounting screws)
  - Control Board Power Supply
  - Touch Tunes volume control and wood spacer
  - Tune Central (if installed)
  - Tune Central power supply (if installed)
  - Zone 2 and/or Zone 3 DI boxes (if installed)
3. Remove all the left over 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
  - Speaker Connections to Zone 1 Amplifier
  - CAT5 cable from the amplifier – will connect the AMI Preamplifier

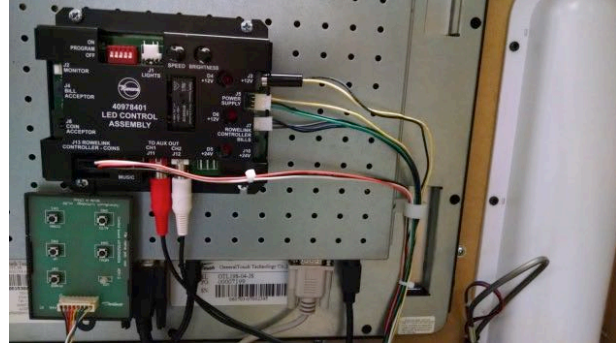
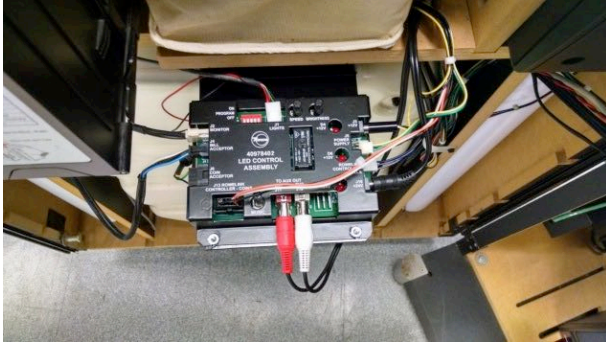




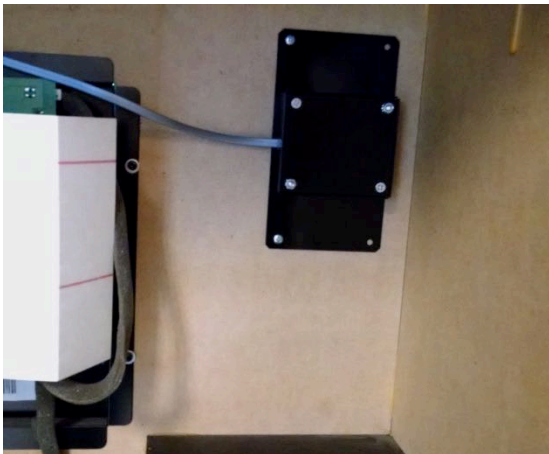
4. Locate and mount Items 2 & 3 Core Computer mounting brackets and Item 32 Preamplifier to the left inside wall of the jukebox cabinet. Be sure to drill 3/8" deep pilot holes with a #42 drill bit before driving the #6x1/2" Type 17 mounting screws.  
**Caution:** Do not drill so deep as to break through the outside of the cabinet.



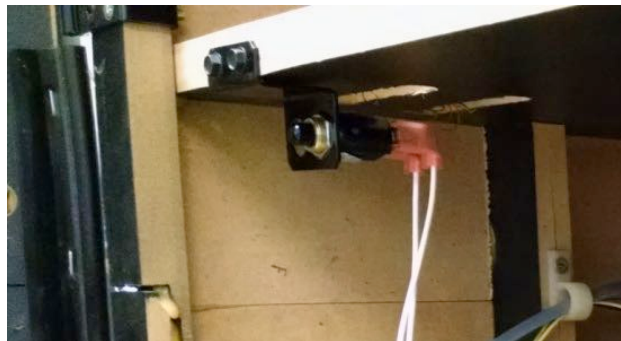
5. Using the mounting screws from the TT Control Board, mount Item 30 LED Controller bracket to the back of the door in the same position where the old Control Board was mounted. **Note:** some Allegro's have the LED Controller mounted to the back of the monitor. The new Rowe/AMI Controller can be mounted on the back of the monitor as well.



6. Mount Item 18 AMI Volume Control and Item 17 bracket to the back of the Allegro cabinet using (2) #8-32x5/16" screws. Drill pilot holes in the other two mounting locations then install (2) #6x1/2" Type 17 wood screws.



7. Drill two pilot holes on the front edge of the horizontal zone 2 amplifier shelf near the left hand side. Install Item 4 ATX Reset switch and Item 5 bracket using (2) #6x1/2" Type 17 screws.



8. The ICT bill acceptor(s) must be reconfigured to run in pulse mode.
  - a. Remove the bill acceptor(s) from the jukebox.
  - b. Slide open the front cover to expose the 4 position DIP switch.
  - c. Set the switches – S1, S2 ON, S3, S4 OFF. Replace the front cover.
  - d. 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.
  - e. Reinstall the bill acceptor(s) into the jukebox.



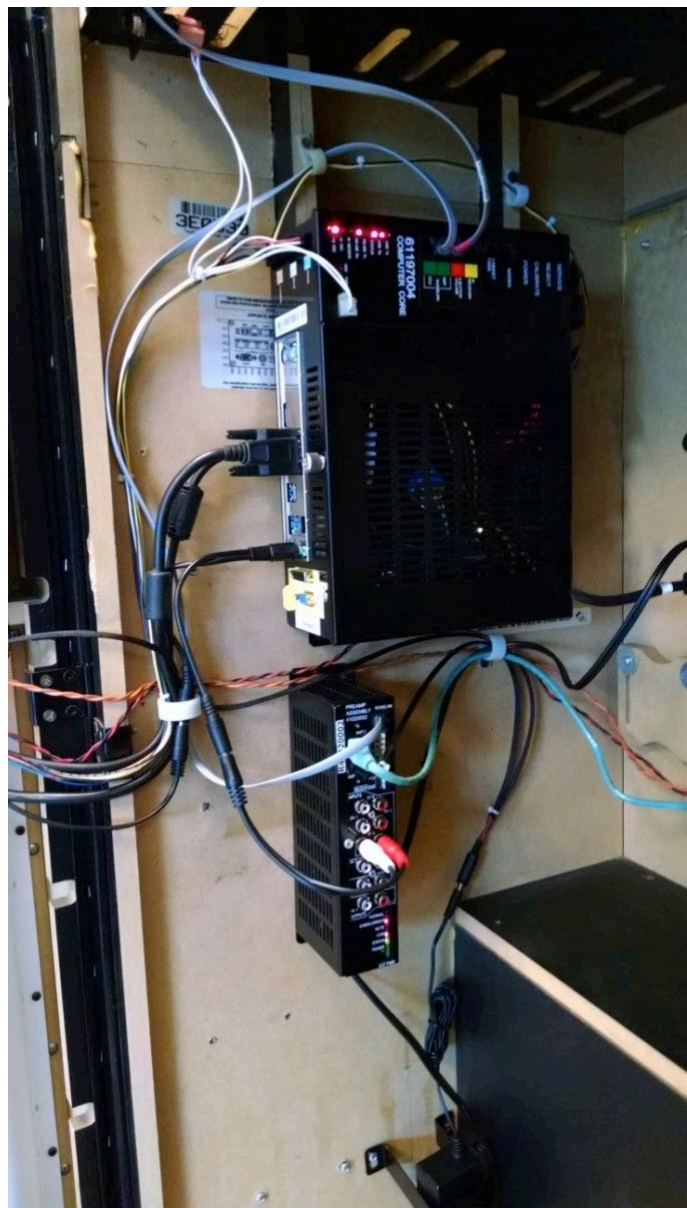
9. Connect the original wiring left in the jukebox as follows:
  - a. 12V power plug from monitor to LED Control board (J2)
  - b. LED Lighting harness to LED Control Board (J1)
  - c. Coin acceptor harness to LED Control Board (J8)
  - d. VGA cable from monitor to VGA plug on the new core computer
10. Connect new wiring as follows:
  - a. Item 8 – Serial Cable from monitor to core computer.
  - b. Item 12 – Main harness, connect 5 plugs to the core computer (COINS, BILLS, JUKEBOX, ATX RESET, ATX POWER), connect 4 plugs to the LED Control board (J3, J5, J7, J13), connect the two fast-on terminals to the ATX Reset Switch.
  - c. Item 11 – Green modular cable from Rowelink AMP plug to the Rowelink plug on the Preamplifier.
  - d. Item 7 and Item 13 both plug into Item 6, splitter cable. Plug the 3.5mm jack of the splitter into the GREEN plug on the core computer. Route the short RCA jacks to the Preamplifier and plug them into the MAIN input plugs. Route the long RCA jacks to the LED Controller and plug them into J11 and J12.
  - e. Item 9 (1<sup>st</sup> of two) – Plug one end into the core computer power inlet and the other end into the power strip in the back of the cabinet.





- f. Item 9 (2<sup>nd</sup> and 3<sup>rd</sup> of three) – Plug one end into each of two Item 16 Power Supplies and the other end into the power strip. Use Item 24 & 25, Velcro, to fix the power bricks to a suitable place in the cabinet. We suggest below the position of the Preamplifier on one of the unused mounting brackets. Route one of the 24 volt connectors to the door and plug it into J10 on the LED Control board. Plug the other 24 volt connector from the other power supply into the POWER jack on the preamp assembly.
  - g. Item 15 – Plug the 30 pin connector into the bill acceptor, plug the other end into J4 of the LED Control board. If there are two bill acceptors, plug the other 30 pin connector into the second bill acceptor.
  - h. Item 14 – Red modular cable, plug one end into the 6 Button Volume plug on the core computer, plug the other end into the Volume Control box.
11. Plug the CAT5 cable from the TT amplifier into the AMP 1 plug on the Preamplifier.
  12. Mount Item 28 IR Receiver 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 Item 27, Yellow modular cable.
  13. Use the assorted cable clamps to neatly route wiring in the cabinet and across to the door.
  14. 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.
  15. While the jukebox is booting up, replace the lower graphic on the front of the jukebox with Item 33.



16. 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.



17. Affix the Data Plate label 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.



### 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.

