

ROCK-STAR Lx™



Installation & Owner's Manual

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Important Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use the attachments/accessories specified by the manufacturer.
12. Use only with the bracket specified by the manufacturer or sold with the apparatus.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when the power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance servicing instructions in the literature accompanying the jukebox.



The lightning flash with arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



WARNING

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. No objects filled with liquid, such as vases, shall be placed on the apparatus.



CAUTION!

RISK OF ELECTRIC SHOCK. DO NOT OPEN

DO NOT REMOVE ANY COVERS, GUARDS, OR SHIELDS.
NO USER SERVICEABLE PARTS ARE INSIDE THIS JUKEBOX.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



*Section A -
Jukebox Specifications*
Rock-Star Lx

Rock-Star Lx	
Dimensions: Uncrated: Height Width Depth Crated: Height Width Depth	 48" 25.75" 10.75" 52" 31" 24"
Weight: Uncrated Crated	 185 lbs. 200 lbs.
Amplifier: Output Power: (Standard) (Optional) Protection:	 900Wrms 1500Wrms, 2600Wrms Speaker overload High temperature Over voltage Under voltage Automatic, self resetting
Voltage: Frequency: Maximum Power Consumption:	 115VAC 60Hz 900 max watts / 320 standby watts 7.75 max amps / 2.75 standby amps
LCD:	32" vertical LCD flat screen
Speakers:	none

ROCK-STAR Lx™

Section B - Placing the Rock-Star Lx Wall-Mounted Jukebox on Location

- Location Power and Warnings
- Jukebox Power and Reset Switches
- Wall Mounting Instructions
- IR Remote Installation Instructions
- Hard Drive Installation Instructions
- Testing the Unit
- LED Lighting Controller

Location Power and Warnings



The jukebox must have a clean source of properly-phased and grounded 115VAC power at 10 amps max. This **MUST** be provided 24 hours a day, 7 days a week. The outlet the jukebox is connected to must **NOT** be controlled by a switch, nor can the circuit breaker feeding it be shut off at night.



If the outlet is not properly phased, grounded, or is connected to an overloaded circuit, it must be corrected by a qualified electrician before using.

Refer to the diagram below, along with the power supply diagram on the next page. The main power distribution unit is the power supply. This device contains the main circuit breaker along with surge protection.

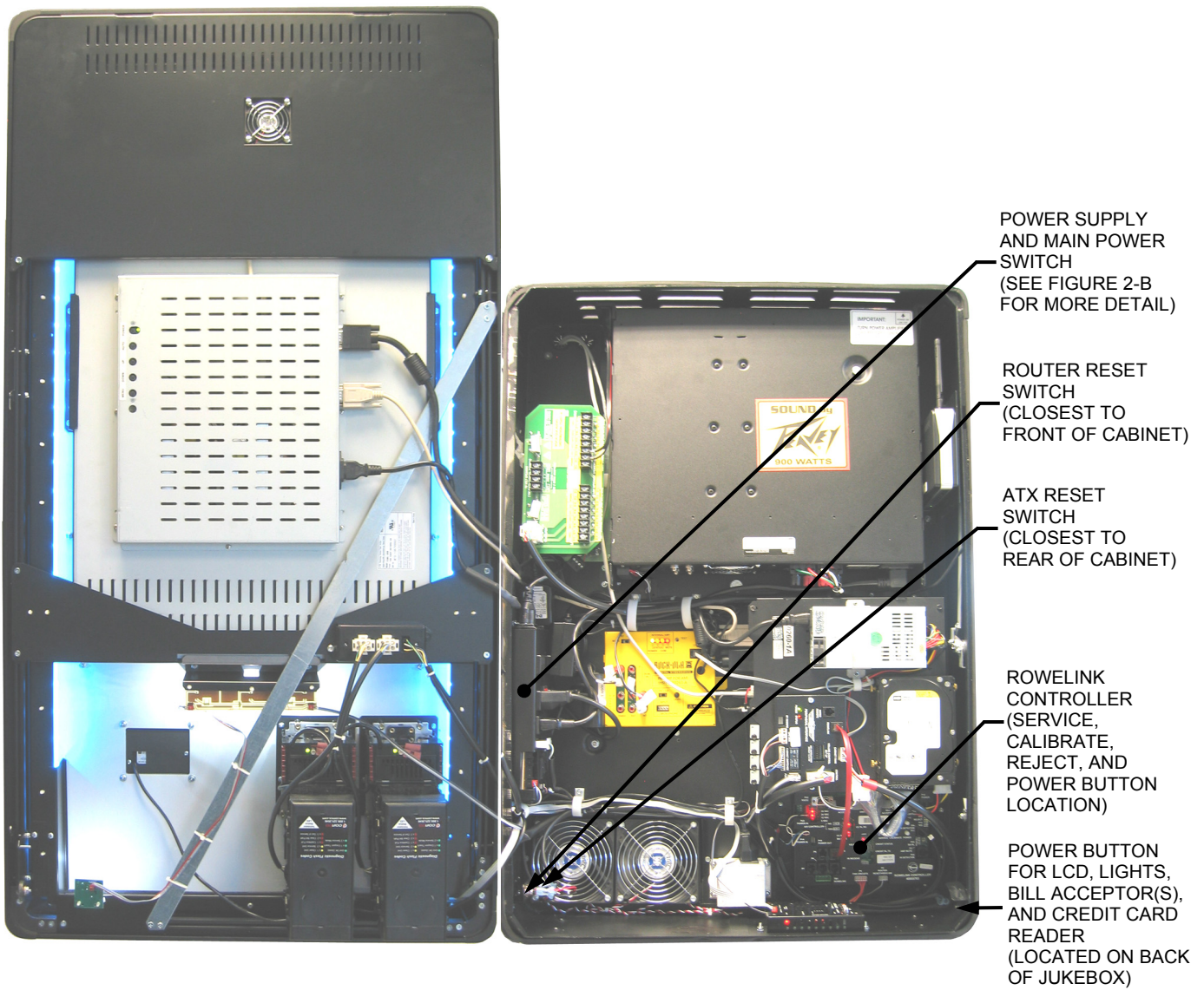


Figure 1-B – Inside View of Jukebox

Jukebox Power and Reset Switches

The Rock-Star Lx is powered from a standard 115VAC wall plug using the provided power cord. Inside the jukebox, power is routed to a Power Supply assembly located on the left-hand side of the cabinet (see *Figure 2-B*). This power supply includes a 15A circuit breaker and the Main Power ON/OFF switch. All other components in the jukebox are powered by plugging them into this power supply.

Soft Power Down

The core computer and other components in the jukebox should remain powered up at all times. However, there may be times when the jukebox needs to be turned off so that customers cannot insert money or make selections. The Soft Power Down mode will give every outward appearance that the jukebox is off by turning off the lights, the LCD display, the bill acceptor(s), and the credit card reader; however, the core computer and other internal components remain powered up. There are multiple ways to enter and exit this soft power down mode:

- **Power Button** – The Power Button is located on the outside lower-right corner on the back of the cabinet (see *Figure 1-B*). Push this button to enter the soft power down mode, push it again to exit the soft power down mode.
- **Rowelink Controller Power Button** – The button labeled “POWER” on the Rowelink Controller inside the jukebox (see *Figure 1-B*) works in the same way as the Power Button located on the back of the cabinet.
- **IR Remote Control** – The button labeled “POWER” on the IR remote control transmitter will also toggle the soft power state just like the two buttons described above.

Core Computer Power

The jukebox core computer can be powered off by pressing the “SERVICE” button on the Rowelink Controller (see *Figure 1-B*), and then touching “Shutdown Jukebox” on the touchscreen. This will turn off the core computer and other components that get their power from the ATX power supply on the core computer. To restore power after turning off the ATX power supply, the jukebox must be rebooted. Reboot the jukebox by toggling the Main Power ON/OFF switch (see *Figure 2-B*), and then back on, or by pushing the ATX Reset Switch (see “Reset Switches”).

Hard Power Down

When the jukebox power cord is unplugged or the Main Power ON/OFF switch is turned off, the jukebox is in the hard power down state. All power is removed from all other components in the jukebox.

Reset Switches

There are also hidden reset switches located inside the cabinet on the lower left side (see *Figure 1-B*). These are accessible by either opening the jukebox door, or by inserting a paper clip, toothpick, or other long, thin object through the access holes on the left side of the jukebox.

- The **ATX Reset Switch** resets the computer core. It is the push-button located closest to the rear of the jukebox (see *Figure 1-B*). This is like the Reset Switch on a PC. Pressing and releasing this switch will cause the computer mainboard to completely reboot. Use this switch only if the jukebox is completely non-responsive.
- The **Router Reset Switch** resets the router and, if wired for it, your modem. It is the push-button located closest to the front of the jukebox (see *Figure 1-B*). If the Internet connection is lost for any reason, pressing and releasing this push-button switch may restore normal operation.

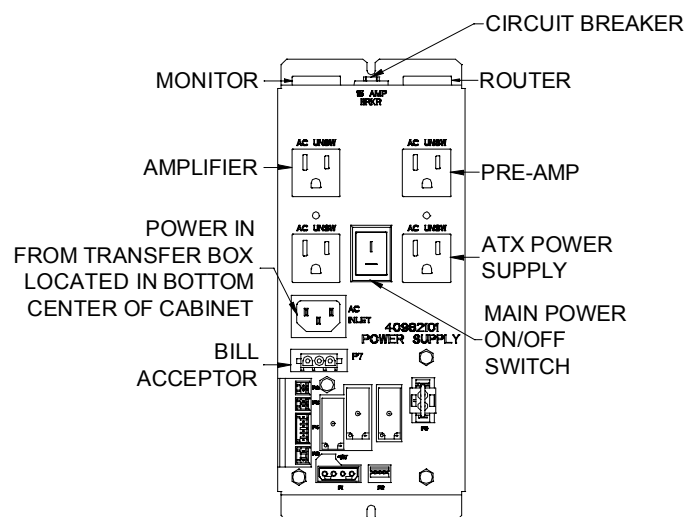


Figure 2-B – Detail View of Power Supply

Wall Mounting Instructions

Choosing the Location

It is recommended that the jukebox be mounted to a wall with the bottom approximately 35" to 36" up from the floor. The wall must be strong and flat. The jukebox should be visible and convenient to use. Do NOT install directly above a radiator or other source of heat. Be sure the speaker wires can be easily run to the unit.

WARNING



The mounting of the jukebox on the wall should be done by a qualified installer familiar with wall construction and loading. The wall and installation hardware **MUST** be capable of supporting a 200 lb. load. Failure to follow these instructions could result in serious injury.

For easier installation, the Rock-Star Lx is shipped with the front door detached from the cabinet. After mounting the cabinet, the front door is easily attached to the cabinet.

Tools and hardware required for normal installation into wood wall studs:

- Socket wrench with 7/16" and 3/4" sockets.
 - Level
 - Pencil
 - Punch or Awl (to start the lag screws)
 - (4) 1/4" x 1-1/2" Lag screws provided
 - Masking Tape
1. Remove the mounting bracket locking bolt from inside the jukebox (Figure 3-B) to release the mounting bracket from the back of the jukebox.

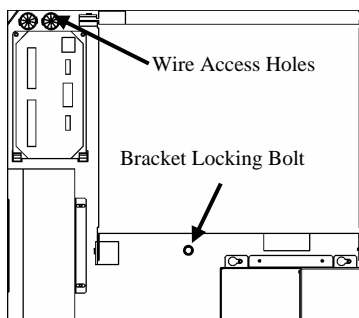


Figure 3-B – Inside View of the Top of Cabinet

2. Mount the bracket to the wall with the lower edge 43" to 44" up from the floor using 1/4" x 1-1/2" lag screws that attach to wooden wall studs as shown in Figure 4-B. Be sure the bracket is level.

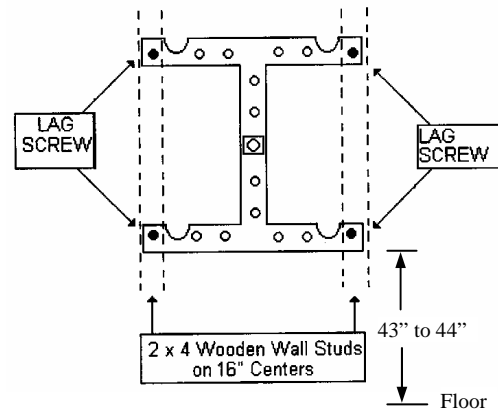


Figure 4-B – Mounting Bracket on Wall

NOTE: If the wall is concrete, cinder block, brick, or uses metal wall studs, then the appropriate fasteners must be used. At least 4" heavy duty fasteners (one in each corner) must be employed. The fasteners must be able to support a 200 lb. object. Do NOT use "press-in" anchors or any other "light" or "medium" duty fasteners. Consult a contractor experienced in the type of construction used if there is any doubt about the strength of the mounting devices.

3. Prepare the wiring. The power cord should be attached to the back of the jukebox near the bottom before mounting. The speaker and other wiring enter the back of the jukebox near the top of the hinge side (see Figure 3-B).
4. Place masking tape on the wall where the sides of the jukebox will be when the unit is hung from the bracket. The outside of the jukebox is 3-1/16" from the edges of the wall bracket. (See Figure 5-B).

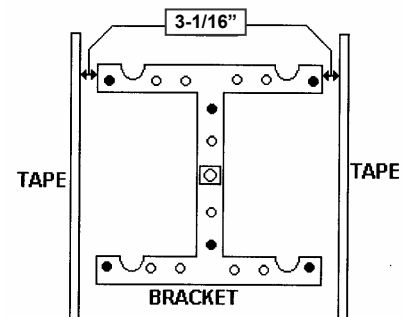


Figure 5-B – Mounting Bracket



WARNING

The next step requires two people who can safely lift 200 lbs.

5. Lift the cabinet onto the wall bracket. It will have to be lifted about 2" higher than its intended height. Keep it centered within the tape lines and keep the back flat against the wall, while slowly lowering it onto the bracket. When it has dropped into the slots, replace the bracket locking bolt (see *Figure 3-B*). This prevents the unit from being lifted back off of the wall bracket.
6. Remove the masking tape from the wall.
7. The front door is secured using slide hinges, which require no tools to attach. To attach the front door, carefully lift the door and line up the hinge pins on the cabinet with the mating hinge barrels on the front door (see *Figure 6-B*). Then carefully lower the front door.

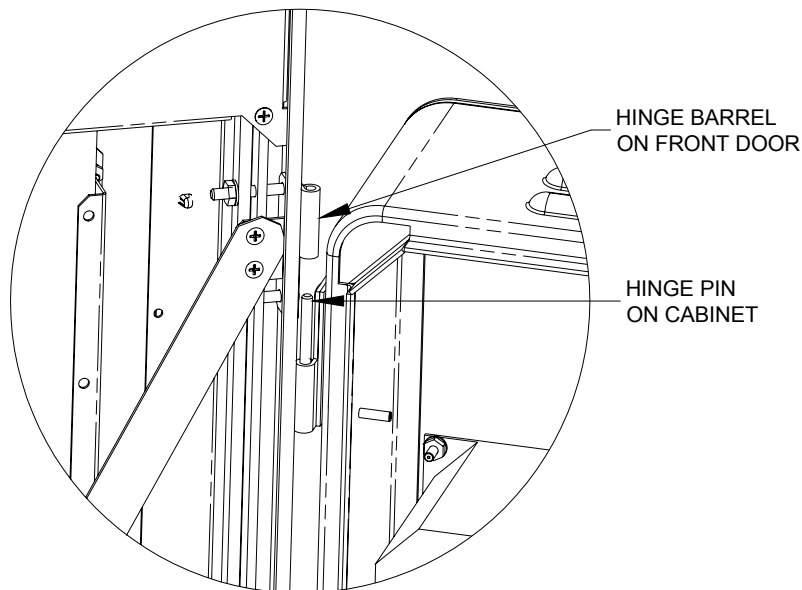


Figure 6-B – Detail View of Top Cabinet Hinge with Front Door Opened

8. Using *Figure 7-B*, locate the free ends of the 3 LCD cables, 2 LED cables and bill acceptor cable inside the cabinet. Connect these cables from the cabinet to the front door as shown in *Figure 7-B*.
9. Using *Figure 7-B*, locate the free ends of the credit card reader and ground wire cables on the door. Connect these cables from the front door to the cabinet as shown in *Figure 7-B*.
10. Make sure all cables are dressed properly. Use the cable clamps in the jukebox to keep cables in place. Make sure nothing interferes with opening and closing the door.

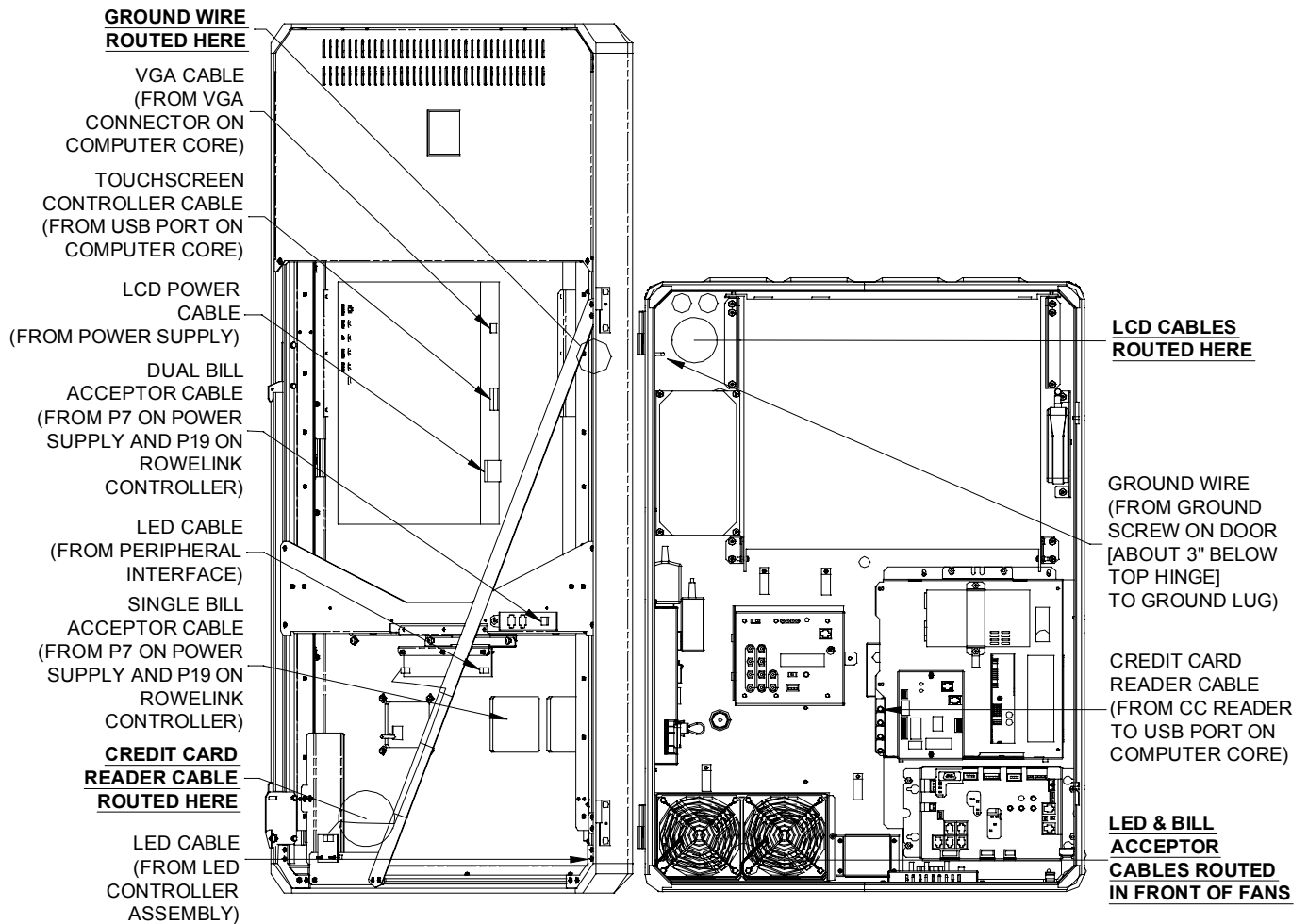


Figure 7-B – Inside View of Jukebox with Front Door Opened

IR Remote Installation Instructions

The Rock-Star Lx comes with an IR remote (located in the Handy Pack). To install, plug the provided cable into the provided IR remote receiver (see *Figure 8-B*) and route the other end of the cable through one of the wire access holes in the upper left corner of the cabinet. Connect the end of the cable into the port labeled “P11 IR Detector” on the Rowelink Controller. Install the IR remote receiver above the jukebox, with a clear line of sight between the receiver and the handheld transmitter. Plug in and turn on the jukebox and test the remote (after installing the hard drive).

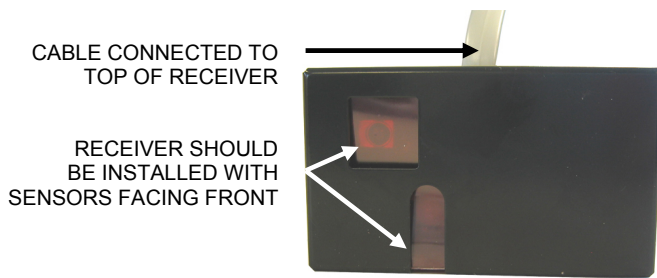


Figure 8-B – IR Remote Receiver

Button Functionality on the IR Remote Transmitter

To enable or disable options on the IR remote, see “IR Remote Setup” in the *Network Setup, Jukebox Operation, Operator Setup Screens Manual*.

The **REJECT** button is used to cancel (or “Reject”) the selection currently playing and cancels all (Rejects all) selections in the queue if held down for 4 seconds. This functionality can be enabled/disabled through the software.

The **POWER** button turns the lights, the LCD display, the bill acceptor(s), and the credit card reader ON/OFF. To turn them back on and resume normal operation, press the “POWER” button again.

VOLUME

The **CH1+ and CH2+** buttons raise the volume.
The **CH1– and CH2–** buttons lower the volume.

The **PLAY** button puts the jukebox in play mode.

The **PAUSE** button puts the jukebox in pause mode for a programmed amount of minutes or until the **PLAY** button is pushed.

The **AP OFF** and **AP ON** buttons turn any programmed Autoplay mode on/off.

The **FUTURE** button is used to give a remote credit.

The **VID SEL** button is reserved for future use.

Hard Drive Installation Instructions



CAUTION

Hard drives are extremely sensitive to physical mishandling. Always keep the hard drives protected from accidental falls, banging, dust, or liquids.



WARNING

Never install or remove a hard drive when the unit is powered on. As an extra precaution, always unplug the power cord at the power supply before removing or installing the hard drive.

1. Unlock and open the front door.
2. Make sure the jukebox is turned off and unplugged.
3. Partially install the 2 provided thumbscrews in the mounting holes on each side of the hard drive (see *Figure 9-B*), leaving about 1/16 of an inch between the hard drive and the thumbscrew.
4. Install the hard drive into the bracket in the lower right-side of the jukebox (as shown in *Figure 9-B*) and tighten the thumbscrews on the left side of the hard drive, leaving the thumbscrews on the right side of the drive loose.
5. Locate the free ends of the 4-pin hard drive power cable and the 2 x 20-pin IDE cable. These cables will be routed out of the bottom of the computer core near the hard drive. Connect these cables to the hard drive as shown in *Figure 9-B*.
6. Plug in the power cord and turn on the jukebox by flipping the toggle switch on the power supply (see *Figures 1-B and 2-B*) to the ON position.

Connection Rules

The first time you boot up the jukebox with your hard drive, a 30-day grace period will begin. If at the end of these 30 days your jukebox has not connected to the AMI Entertainment® Network to validate its licenses, the jukebox will cease to play selections.

In order to properly connect to the network, a valid trigger code must be entered in the software. To enter your trigger code, press the SERVICE button on the Rowelink Controller (see *Figure 9-B*). On the touchscreen, touch **System Setup** and then touch **Enable/Extend Features**. Enter the trigger code provided to you with your hard drive and then press the **Send Code** button. The jukebox will display “Valid trigger code entered” if it accepted your entry.

After the jukebox has made its initial connection to the AMI Entertainment Network, it must continue to connect at least once every 7 days to validate its licenses or the jukebox will cease to play selections.

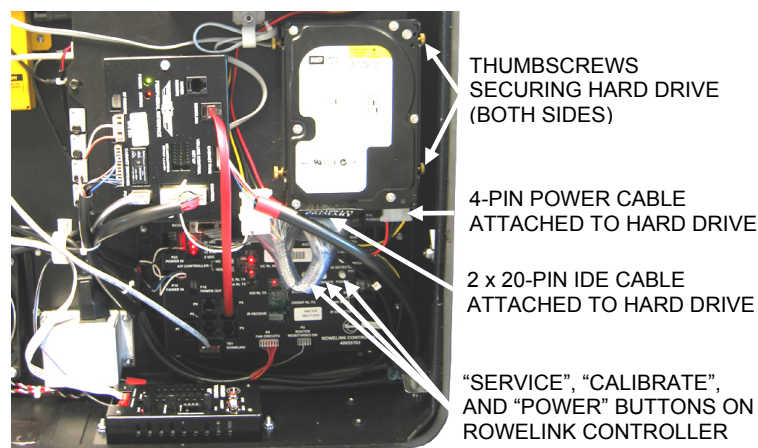


Figure 9-B – Inside View of Lower-Right Side of Cabinet

Testing the Unit

Testing the Network

When all of the network connections have been made, boot up the jukebox. Enter the service mode by pressing and releasing the "SERVICE" button on the Rowelink Controller Assembly. To test the network:

1. Touch the **System Setup** button and then touch **Advanced Administration**.
2. On the Advanced Administration Screen, touch **Configure Server**. Then touch the **Test Connection** button. This test confirms the jukebox can connect to AMI's server ("Server Found"), and authenticate a connection with AMI's server ("Connected").
3. If the connection is successful, you will see "Yes" next to "Server Found" and "Connected". If the connection fails, you will see "No". If the connection fails, check the settings on the Network Information screen (**Diagnostics** → **Network Information**). This screen will allow you to check the IP Configuration and run LAN and WAN tests.
4. Touch **OK** and continue with "Testing the Touchscreen...".

Testing the Touchscreen, Bill Acceptor(s), and Credit Card Reader

Touchscreen – Every time a new hard drive is installed, the touchscreen should be calibrated. Follow these steps to calibrate.

1. Press the "CALIBRATE" button on the Rowelink Controller (see *Figure 1-B*) to launch the calibration program. This will override the application while the program runs.
2. Close the jukebox door and make sure it is locked.
3. Follow the directions on the screen, touching the center of the targets, and then touching "YES".

Follow the directions to touch different areas on the screen to make sure the cursor follows your movement.

Bill Acceptor(s) and Credit Card Reader –

(NOTE: Credit Card functionality requires a broadband Internet connection).

1. Press the "SERVICE" button on the Rowelink Controller to enter service mode.
2. Touch the **Diagnostics** button.

3. Touch **Credit Device Tests**.

4. Touch the box next to "Bill Acceptor" and "Credit Card" (if applicable) to put a check in the box and enable the test.
5. To test the bill acceptor(s), insert a \$1, \$5, \$10, and \$20 bill (into each bill acceptor, if the jukebox has two) and check the screen to make sure proper credit is awarded.
6. To test the credit card reader, swipe a valid credit card and check that the screen displays the last 5 digits of the card.
7. When finished, touch the **Back** button to return to the Main Menu.

Testing the Audio

NOTE: For operators pre-testing the jukebox in their own facility, any features in the application associated with the network (such as the "Music On Demand" feature, which accesses all songs in the AMI Entertainment® music library), will not work unless the jukebox is connected to the Internet.

1. If the jukebox is not in service mode, press the "SERVICE" button on the Rowelink Controller to enter service mode.
2. To add one (or more) credit(s) in order to play a song and test the audio, touch **Cash Management** and then touch **Credit Management**.
3. Touch the box under "Credits" and a pop-up box will display.
4. Touch **Clear** to remove the 0 from the box.
5. Touch **1** (or more) and then touch **Update**.
6. Touch **Save** on the Credit Management Screen.
7. Touch **Exit Service Mode**.
8. After connecting speakers to the jukebox (see section C), play a local music selection to test the audio.

LED Lighting Controller

The LED Control Assembly (see *Figure 10-B*) controls all of the decorative lighting for the jukebox. It controls 56 separate ultra-bright RGB LEDs.

The LED Control Assembly provides adjustments for the following features:

1. Choice of 10 different color and pattern settings.
2. Music Beat Sensitivity (audio cable needed for operation)
3. Flashing Rate (Speed)
4. Brightness

Speed (Flash Rate)

The Speed (flash rate) can be adjusted from very rapid to approximately once every 2 seconds.

This Speed control affects the Rainbow Effect, Color Cycle, and Beat to the Music Modes, but none of the Single Color Modes.

To adjust the flash rate, turn the Speed dial counterclockwise to make the flash rate slower, and clockwise to make it faster.

Brightness

Turn the Brightness control counterclockwise to make the LEDs dimmer, and clockwise to make them brighter.

Music Beat Sensitivity for LEDs

(an audio cable is needed for this operation)

The MUSIC control sets the Music Beat Sensitivity. The Speed control also has an effect on this adjustment; generally the faster the Speed control is set, the less influence the music will have on the LEDs. It is recommended to have a relatively slow speed setting so the music will have a greater influence on the LEDs.

To adjust the Music Beat Sensitivity, make a selection. When it starts playing and you hear the music, rotate the SPEED control completely counterclockwise and the MUSIC control completely clockwise. Slowly turn the MUSIC control counterclockwise to adjust the Music Beat Pattern. Then adjust the SPEED control clockwise until you achieve the desired effect.

If you do not want the LEDs to flash to the music, rotate the MUSIC control fully counterclockwise.

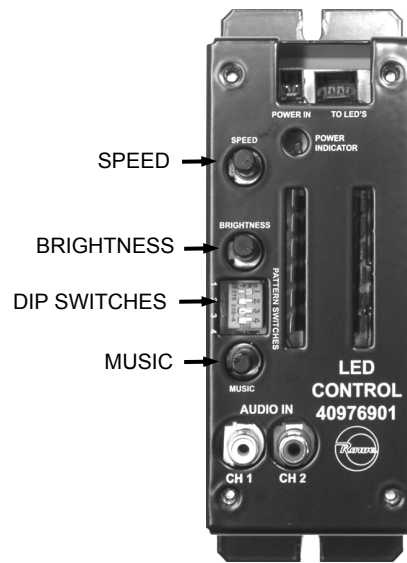


Figure 10-B – LED Control Assembly

Color and Light Pattern Settings

When the jukebox is in standby, the perimeter lighting can operate in one of 10 different patterns as outlined on the following page.

Four DIP Switches are used to set the various lighting patterns. This will set the pattern that is seen when the jukebox is muted (in standby) or if music is playing but the MUSIC control is set to its fully counterclockwise position. See the chart on the next page for DIP switch settings.

Note: When changing from one pattern to another, the new pattern will be start only after the old pattern has finished its complete cycle and is about to restart at the beginning.

DIP Switches on LED Lighting Controller for Color and Light Pattern Settings

SW1	SW2	SW3	SW4	Pattern
Off	Off	Off	Off	Rainbow Effect (fades from one color to the next)
Off	Off	Off	On	Color Cycle (Aqua, Purple, Blue, Yellow, Green, Red) This pattern is used when 'Beat to the Music' is active and a song is playing.
Off	Off	On	Off	Single Color Blue/Green (Aqua)
Off	Off	On	On	Single Color Red/Blue (Purple)
Off	On	Off	Off	Single Color Blue
Off	On	Off	On	Single Color Red/Green (Yellow)
Off	On	On	Off	Single Color Green
Off	On	On	On	Single Color Red
On	Off	Off	Off	Dimmed White
On	Off	Off	On	Flashing White

ROCK-STAR Lx™

Section C - Audio Description & Operation

- Audio System Description
- Audio System Features and Settings
- Sound & Speaker Set Up
- Connecting to Additional Power Amplifiers
- Connecting a Paging Microphone
- Connecting Speakers to an Audio Transformer
- Setting Volume Zones
- Indicator LEDs
- Signal Inputs & Outputs

Audio System Description

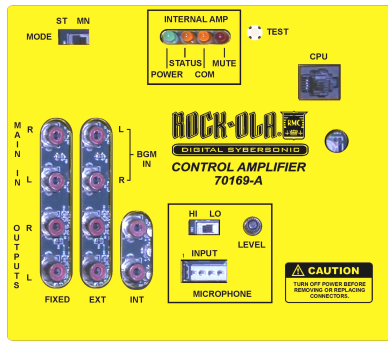


Figure 1-C – Rock-Ola® / Peavey® Sound System for Rock-Star Lx

The audio system in the Rock-Star Lx jukebox is a result of collaboration with one of the best commercial and musical instrument amplifier manufacturers in the world—**Peavey Electronics®**.

A 900 Watt* Power Amplifier is used to drive the speakers. This power can be matched so that full power can be sent to virtually any number of external speakers.

* Watts RMS @ 2 Ohms, 1000 Hz, FTC method

The system consists of a dual stereo (4-channel) pre-amplifier, combined with a two channel power amplifier. One pre-amplifier output is designated as “Internal Output”, the other is designated “External Output”.

The system may be operated as a single zone or a dual zone system with separate volume controls for each zone. Optionally, the system may be configured to operate up to 4 mono zones. From the factory, the **internal output** is sent to the Peavey power amplifier. Extension speakers are connected directly through an audio distribution transformer.

Please Note: This section mentions Internal and External Pre-Amplifier Outputs. With factory default pre-amplifier and volume control settings, “Internal” refers to the two channels controlled by the “INT” volume buttons and normally regulate the extension speakers’ volume. “External” refers to the 2 channels controlled by the “EXT” volume buttons. This audio signal may be used to feed an auxiliary power

amplifier. The standard IR remote control may be configured to operate the internal and external channels separately. If an optional Multi-Zone Volume Control is used, or if you wish to assign your own zones, the outputs are designated:

Internal Left = Channel 1
 Internal Right = Channel 2
 External Left = Channel 3
 External Right = Channel 4

Specifications and Operating Features

- Separate volume levels for Paid Play and AutoPlay/Background Play
- Switchable Stereo/Mono Modes
- Separate 5-band equalizers for each channel
- Multiple volume control configurations
- Built-in Paging System input
- Switch setting for microphone gain. Dial control for maximum microphone volume
- Music Level While Paging settings. Settings are split to provide separate channel control
- “Always On” amplifier for special event audio and background music functions. Only if jukebox is turned off with IR, RF, or optional Multi-Zone Remote Volume Control.
- Always On Automatic Volume Control (AVC)

Audio System Features and Settings

The SyberSonic audio system is preset at the factory for optimum operation; however, some adjustment may be required to achieve the best sound or operating features for your particular environment. Some audio system settings are in the software and are easily set using the jukebox touchscreen. Others are set on the hardware.

The audio system features and adjustments are described below. Hardware setting instructions are included here. Instructions for Setting the Pre-Amplifier Software are in the *Network Setup, Jukebox Operation, Operator Setup Screen Manual*.

Volume Control/Zone Settings and Linking – These are software settings that control the behavior of the various remote volume controls.

The software is capable of addressing four volume controls. Rock-Ola's optional 4-channel volume control has a fixed address of VCU4 that cannot be changed. Rock-Ola's optional 2-channel volume control is factory set to VCU1, but it may be changed with DIP switches on the Peripheral Interface. Rowe's Volume Control Units may be connected as long as their address is configured to either VCU2 or VCU3. (Refer to Rowe's documentation for setting specifics.) The default address designations are as follows:

VCU1 = Rock-Ola 2-zone volume control*
VCU2 = Open
VCU3 = Open
VCU4 = Rock-Ola 4-channel volume control

* Both the Rock-Ola 6-Button and Rock-Ola RF Volume Controls may be connected simultaneously; however, the button functions cannot be set differently for each.

Stereo/Mono Switch – Sets the audio system to operate in Stereo or Mono modes. This switch is preset at the factory to Mono. We recommend leaving it set this way, as it is necessary for multi-zone operation.

Equalizer – This is a software setting that changes speaker tone by increasing or decreasing the response (gain) of a particular frequency range. Each of the 4 possible zones/channels has separate settings.

Balance – Set the channel balance by increasing or decreasing the power amplifier's gain controls.

Audio Volume During Paging - Mic Routing – These software settings establish a fixed volume level for any music playing during a page. Each of the 4 channels has separate settings. Mic Routing allows you to set which channel(s) will have the paging signal allowed/disallowed. This may be used to create a zoned paging system.

Paging Microphone Volume – Establishes the maximum paging volume. Set the maximum microphone volume using the Level knob on the Pre-Amplifier. A gain switch is also provided to match the input impedance of the microphone. Instructions to connect a paging mic can be found on page 19.

Volume Limit – Maximum volume for each channel may be limited by decreasing the power amplifier's gain controls.

Default Volume Level – A preset volume level set in the software that the jukebox will use upon power up. This feature can be turned Off or On.

Audio Modes – These are software settings that control how the jukebox handles normal play, autoplay, background play, and auxiliary audio. See the *Network Setup, Jukebox Operation, Operator Setup Screen Manual* for details.

Sound & Speaker Set Up

The Rock-Star Lx incorporates a 900 Wrms Power Amplifier for the speakers. In its default configuration, the Power Amplifier is connected to the Pre-Amplifier INT outputs, and volume is adjusted by using the IR Transmitter. The output of the Power Amplifier is connected to the 70251-A Audio Transformer unit which matches power output from the amplifier to speaker loads. In addition, outputs for 70-volt CV systems are provided. Note: The 70-volt CV Taps are rated 150W max per channel.

If more power is required for an installation, the 900 Wrms amplifier may be replaced with a 1,500 Wrms (or even a 2,600 Wrms) Power Amplifier. These optional amplifiers may NOT be used with the 70251-A Audio Distribution Transformer.

The figure below is a representation of the Audio Transformer Assembly. Its purpose is to match the external speaker load to the Peavey Power Amplifier output so that the optimum amount of power is delivered to the extension speakers.

For best performance, speakers should be connected to the highest tap that will not result in an overload. An overload is defined as any connection scheme that will cause higher power consumption than the amplifier is capable of delivering.

The rest of this section assumes that standard equipment – the PV-900 Power Amplifier and Audio Transformer Assembly – is used. It is also assumed that you are familiar with the Amplifier Description and Operation section.

WARNING: Do NOT use the 70251-A Audio Transformer Assembly with a PV-1500 or PV-2600 Power Amplifier.

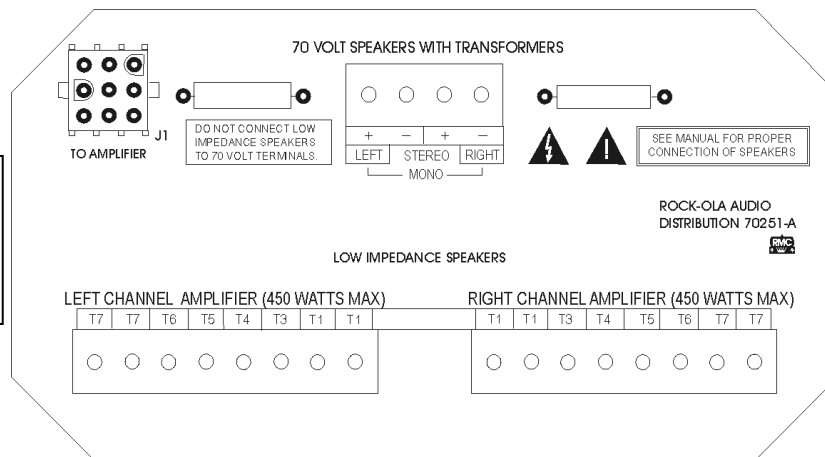


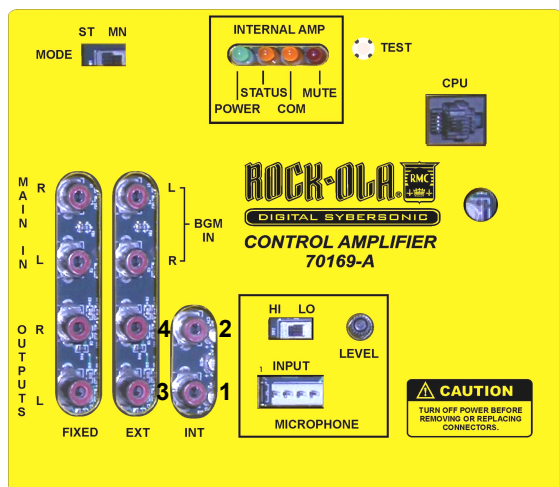
Figure 2-C – Audio Transformer Assembly 70251-A

Connecting to Additional Power Amplifiers or “House” Systems

To yield 3 or 4-zone mono or 2-zone stereo, the jukebox may be connected to an additional power amplifier. To do so, leave the amplifier inside the jukebox connected to channels 1 and 2. The additional amplifier should be connected to channels 3 and 4, powered by the signal available at the EXT output RCA jacks. Volume will be controlled via the IR Transmitter.

If the jukebox is to be connected to a House system that will provide all of the amplification *and* volume control, the House system may be fed with either the INT or EXT output RCA jacks. After connecting to the house system, set the Pre-Amp output to the desired maximum level via the jukebox volume control. Then, disable the jukebox volume control by accessing VCU Setup in the Service Mode and unchecking the appropriate channel(s). See the *Network Setup, Jukebox Operation, Operator Setup Screens Manual* for details.

NOTE: It is highly recommended that the “Fixed” output or the direct output of the Core NOT be used to drive the House system, unless that system contains ground loop elimination circuitry and audio processing that will compensate for a variation of signal level from one selection to the next (AVC). These features are built into the Pre-Amplifier, and they appear at the “INT” and “EXT” outputs.

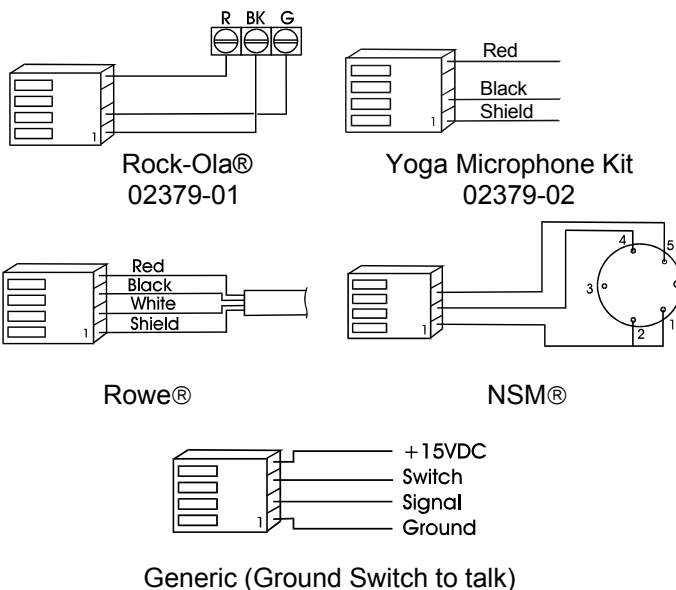


Pre-Amplifier Channel Assignments

- INT Left = Channel 1
- INT Right = Channel 2
- EXT Left = Channel 3
- EXT Right = Channel 4

Connecting a Paging Microphone

The Advanced SyberSonic Pre-Amplifier can accept virtually any paging microphone. Pictured below are wiring diagrams for the most common paging kits. The necessary connector is included with a paging kit. To use other paging kits, you will need to acquire one (1) Amp part number 640250-4 housing (RMC P/N ST-11244) and four (4) Amp part number 640252-1 contacts (RMC P/N ST-11245) or equivalent.



Connecting a Paging Microphone

The paging system works by either sensing audio on the signal line, or by grounding pin 3 (switch). Whatever microphone is used, it must have some kind of switch to mute the audio when not in use.

Set the microphone gain switch to “LOW” and the gain control at midpoint. Press the talk button on the microphone and speak into it. The “Status” LED on the amplifier should blink and the microphone signal should be heard in the speakers. Adjust the microphone gain control to the loudest level you want the location to be able to use. If more gain is necessary, turn the microphone gain switch to “HIGH”.

CAUTION: Be sure the gain control is turned down to avoid speaker damage from acoustical feedback.

Refer to the amplifier settings for adjusting which channels hear paging, the music level while paging, and the length of time before the music comes back up.

Connecting Speakers to an Audio Transformer

Determining which tap(s) of the Audio Transformer to use may be accomplished two ways: impedance matching, or distributing power.

In the case of **impedance matching**, calculate the impedance load for each channel, and then connect to the appropriate tap. To calculate the load (assuming like-impedance speakers are connected in parallel) divide the number of speakers into the Ohms value of one speaker. For instance, if you have two 8-Ohm speakers per channel, the impedance is 4 Ohms. (2 divided into 8 equals 4.) Once the impedance is calculated, connect the extension speakers to the tap that is equal to or lower in value than the calculated impedance. In this case, you will connect to the T7 tap. Note: When using impedance matching, only one transformer tap may be used. If you wish to use multiple taps, you must use the power distributing method.

If **distributing power**, simply add the amount of power consumed for each connected speaker and make sure the total is 450 Watts or less. For example, 3 MTX® speakers connected to T7 will result in a power consumption of 450 Watts. If a 4th MTX speaker is connected to any other tap of that channel, it will result in an overload because the maximum amplifier power is already being used. Connect speakers to a lower tap.

The chart below shows the number of speakers that may be connected to a particular tap of the Audio Distribution Transformer, along with the amount of power each speaker may consume when connected to that tap. It also indicates the minimum impedance for each tap.

Number of Speakers / Power (Wrms) per Speaker per Tap*

Transformer Tap Spkr(s) connected T1 to Tx	Allowable # of Peavey® PR or Other 8-Ohm System @ Power Consumed	Allowable # of MTX®, Bose® or Other 6-Ohm System @ Power Consumed	Allowable # of Peavey® 652S or Other 4-Ohm System @ Power Consumed	Minimum Impedance
T7	1 to 4 @ 112W ea	1 to 3 @ 150W ea	1 to 2 @ 225W ea	2 Ohms
T6	1 to 8 @ 56W ea	1 to 6 @ 75W ea	1 to 4 @ 112W ea	1 Ohm
T5	1 to 16 @ 28W ea	1 to 12 @ 37W ea	1 to 8 @ 56W ea	0.5 Ohms
T4	1 to 32 @ 14W ea	1 to 24 @ 19W ea	1 to 16 @ 28W ea	0.25 Ohms
T3	1 to 64 @ 7W ea	1 to 48 @ 9W ea	1 to 32 @ 14W ea	0.13 Ohms


NOTE: Be sure the speakers you use match the power rating for the tap to which they are connected. For instance, 8-Ohm speakers connected to T7 must be able to handle 112 watts.

IMPORTANT: The Amplifier will automatically limit if there is an overload. If the red DDT LEDs on the front of the amplifier are illuminated most of the time, then an overload condition exists and must be corrected. Turn down the gain controls on the front of the amplifier, or limit the maximum volume in the operator console, until the DDT LEDs are out or until they just flash briefly with music peaks. Operating the unit with the DDT LEDs fully lit may result in an overheat condition, which may damage the amplifier and/or the speakers.

***WARNING:** Connecting more than the indicated maximum number of speakers to a particular transformer tap will result in an overload, which will likely damage the amplifier and void its warranty.

Power delivered to each speaker

WARNING

 **Be sure the maximum power rating of the speaker used is higher than the maximum power delivered.**

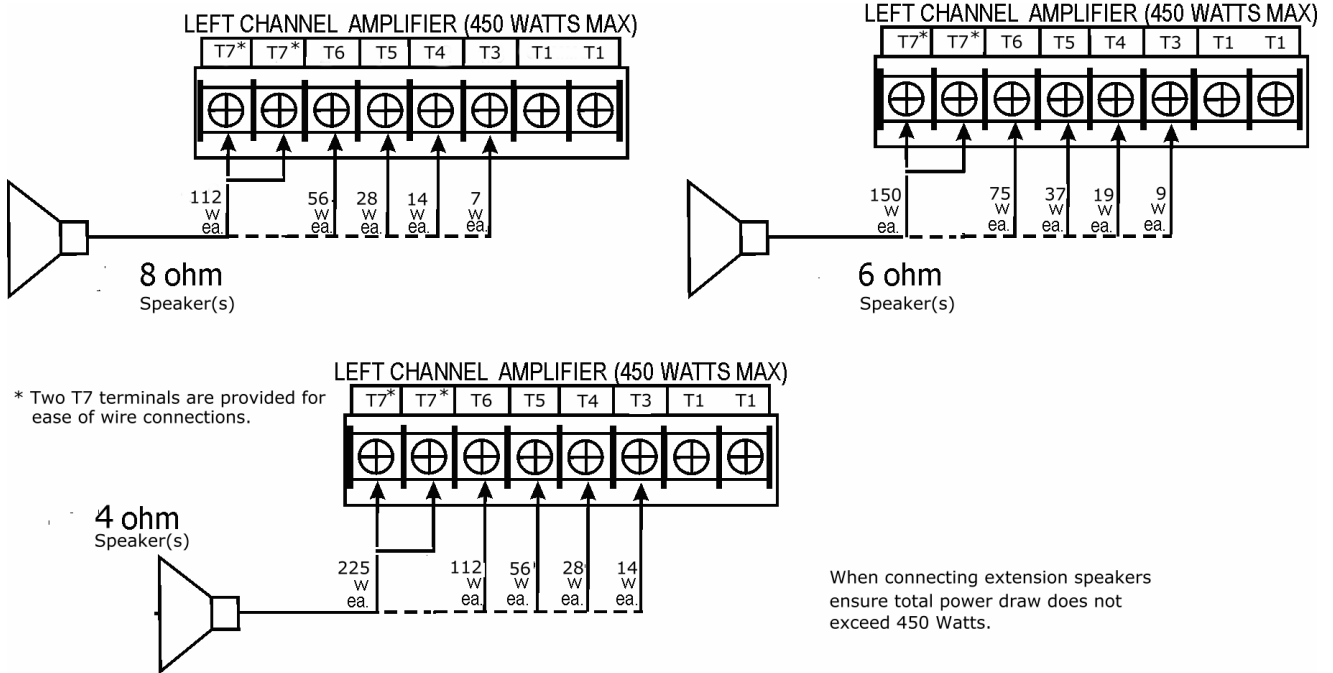


Figure 3-C

Setting Volume Zones

The Rock-Star Lx Digital Downloading Jukeboxes have the capability of controlling up to four independent volume zones when using Rowe's IR Remote, Rock-Ola's Multi-Zone Volume Control, or Rowe's Digital Volume Control Unit (VCU). An optional power amplifier may be required for some situations.

Volume Control (Zone) Linking

There may be times when you do not want a location to have separate control of the internal and external amplifiers. Or perhaps you want two or more areas to have separate volume control. SyberSonic's advanced electronic system allows "linking" of its volume controls.

When linked, pressing either the Internal or External (1 and 2 on remote) buttons will cause the linked channels volume to change.

Indicator LEDs

The Digital SyberSonic Pre-Amplifier has LEDs to give a visual indication of its operating condition and status. The LEDs and their functions are as follows:

Power - When lit it indicates the amplifier has power.

Status - Indicates when the paging system (microphone) is active.

Steady On – Normal operation. Paging system is available.

Flashing – Paging system is in use.

COM – Indicates when the pre-amplifier receives instructions from the jukebox's Core Computer.

Always Off – Indicates a communication fault between the pre-amplifier and Core Computer.

Single One Second Flash on Power Up – Pre-Amplifier Processor is running.

Steady Heartbeat – Normal operation communicating with the Core. Setup instructions received and installed.

Steady On – Communication fault. Pre-Amplifier initially received computer commands, but then lost communication.

Flickering or Intermittent Flashing – Pre-Amplifier is receiving instructions from Jukebox Core Unit.

Mute – When lit it indicates the control amp outputs are muted.

Signal Inputs and Outputs

The Digital SyberSonic Pre-Amplifier has five (5) sets of RCA type jacks.

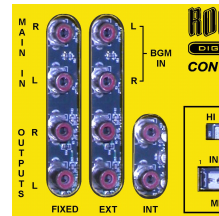


Figure 4-C – RCA Jacks

Each set of RCA jacks has separate functions:

Main In – This connection is the audio signal that is being fed directly from the Sound Card in the Core Unit Audio Output into the pre-amplifier.

Fixed Out – This connection is an unconditioned analog audio output from the Core unit.

BGM In – This connection allows the input of a line level signal (maximum 1 volt RMS) from another audio source (such as a tape player, TV, or FM tuner) to be fed into the pre-amplifier for auxiliary background music amplification. The BGM volume level may be set separately, or linked to change along with the normal play volume. The background music inputs have level trim controls. These are small screw-driver adjustable potentiometers located between the two RCA jacks. Carefully adjust them to set the level of the background music as desired. The AVC will act on this signal to try and maintain it even if the location changes the level externally.

Note: *If enabled, this input is designed to automatically switch between the AUX BGM and Main inputs, where the Main input always takes priority.*

WARNING



Do not connect the AUX BGM Inputs to the speaker outputs of a receiver or power amp, as this will damage the jukebox amplifier and void its warranty. Use a line converter with an actuator if necessary.

Int. Out - Left & Right – These connections are a variable-level output signal directly from the pre-amp. In the default configuration, the signal level follows the internal volume control. If the optional Multi-Zone Volume Control is used, channels 1 and 2 control these signal levels respectively.

Ext. Out - Left & Right – These connections are a variable-level output signal directly from the pre-amp. In the default configuration, the signal level follows the external volume control. If the optional Multi-Zone Volume Control is used, channels 3 and 4 control these signal levels respectively.

ROCK-STAR Lx™

Section D - Service & Maintenance

- Routine Maintenance Schedule

Recommended Routine Maintenance

Heat is the biggest enemy of electronic components. Proper maintenance is essential for maximum earnings and reliability.

It is very important to keep all cooling fans clean. Once dust and dirt is visible on a cooling fan, the airflow is reduced by at least 25%. There are several cooling fans in the Rock-Star Lx jukebox (see *Figure 1-D*, next page).

Recommended preventative maintenance

Routine Service

The following steps take about 3 minutes and should be performed at each collection.

1. Check that the cabinet cooling fans are not blocked.
2. Check the CPU fan from the "Health Status" Screen.
3. Visually inspect the Power Supply Fan for operation. It should be spinning at a high speed at all times.
4. Visually inspect the amplifier fan for operation. It should be spinning at a low speed if not playing, and a higher speed if playing.
5. Visually inspect the fan at the top of the inside of the front door. Ensure that air is blowing out and the fan looks clean.
6. Be sure that nothing is resting on top of a wall unit or otherwise blocking the airflow around any machine.

Collecting from the Bill Acceptor

1. Unlock and open the front door.
2. To remove the bill stacker, slide the tab on the bottom of the bill acceptor towards the front door and pull the stacker down.
3. Open the side door on the bill stacker to remove the cash.
4. Slide the bill stacker back on the bill acceptor. Be sure the green light is on (for MEI, make sure the green lights/arrows are flashing).
5. Close and lock the front door.

Minor Service

Perform a minimum of every 3 months if operating more than 14 hours per day, operating where smoking is allowed, or is otherwise in a dusty environment. Perform a minimum of every 6 months if operated less than 14 hours per day and in a very clean environment. You will need a new, soft 2" paintbrush*.

1. Gently brush* dirt from the cabinet cooling fans. Verify fan operation.
2. Brush* dirt from the power supply fan. Verify fan operation.
3. Brush* dirt from the amplifier fan. Verify fan operation.
4. Brush* dirt from the fan located inside the front door at the top of the door. Verify fan operation.
5. Check the operation of the CPU fan from the "Health Status" Screen.
6. Listen to the power supply fan and CPU fan for excessive noise or vibration.
7. Clean the bill acceptor with an approved cleaning card.
8. Clean the Credit Card Reader with an approved cleaning card.
9. Clean and calibrate the touchscreen.

Cleaning the Touchscreen

Any standard glass cleaner can be used to clean the touchscreen. Always spray the glass cleaner on the cloth or towel and not directly on the touchscreen. Glass cleaner sprayed directly on the screen could possibly leak inside and cause damage.

Cleaning the Door Panel

The door panel is made of polycarbonate. We recommend cleaning with a mild cleaner and a soft cloth to avoid scratching the surface.

Annual Service

The following steps should be performed every year in addition to everything in the minor service section.

1. Vacuum the interior of the cabinet and fans.
2. Inspect the power cord for fraying or damage.
3. Check the power ground.
4. Check all LAN connections and wiring.
5. Listen to all speakers to make sure they are operating correctly.

Scheduled maintenance always costs less time and money than an unscheduled breakdown.

Fan Locations

NOTE: The fan at the top of the front door is not shown in diagram below.

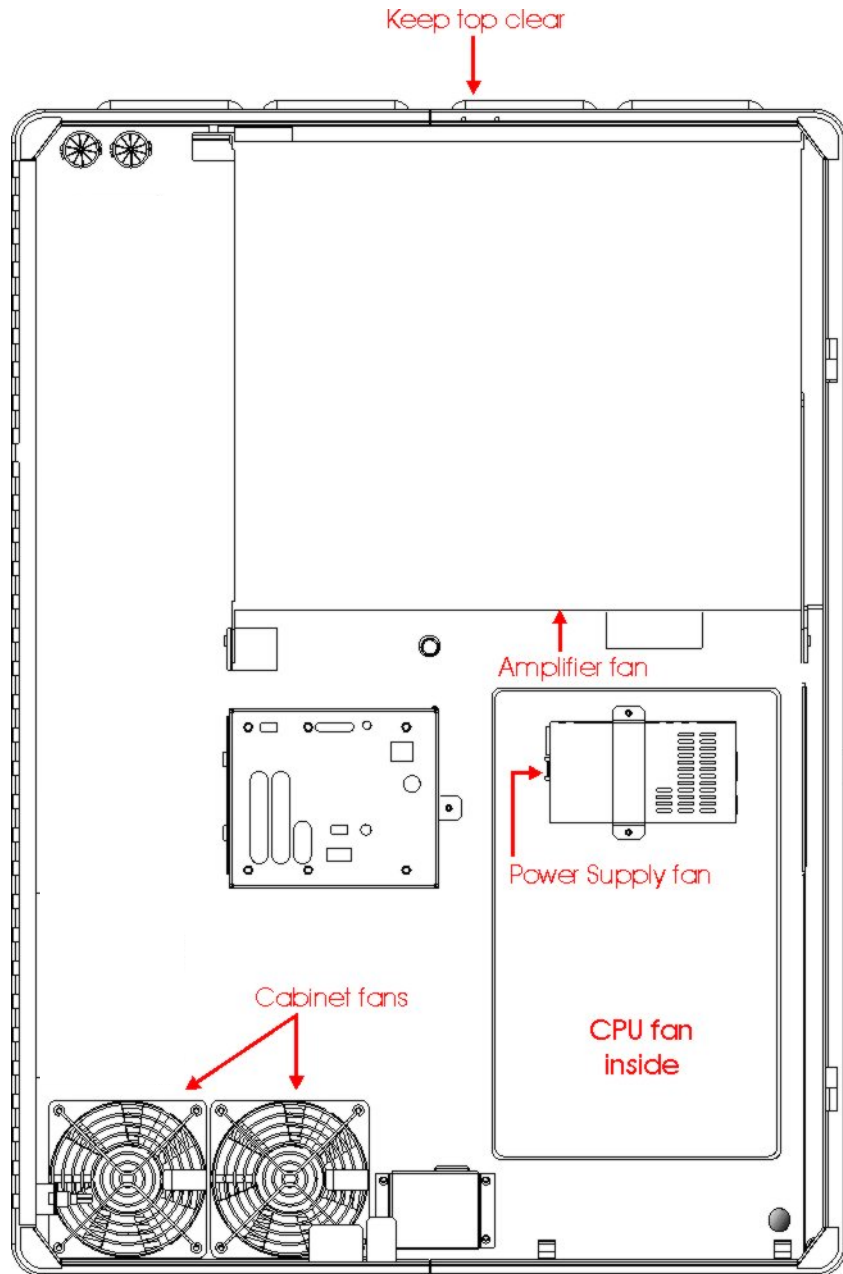


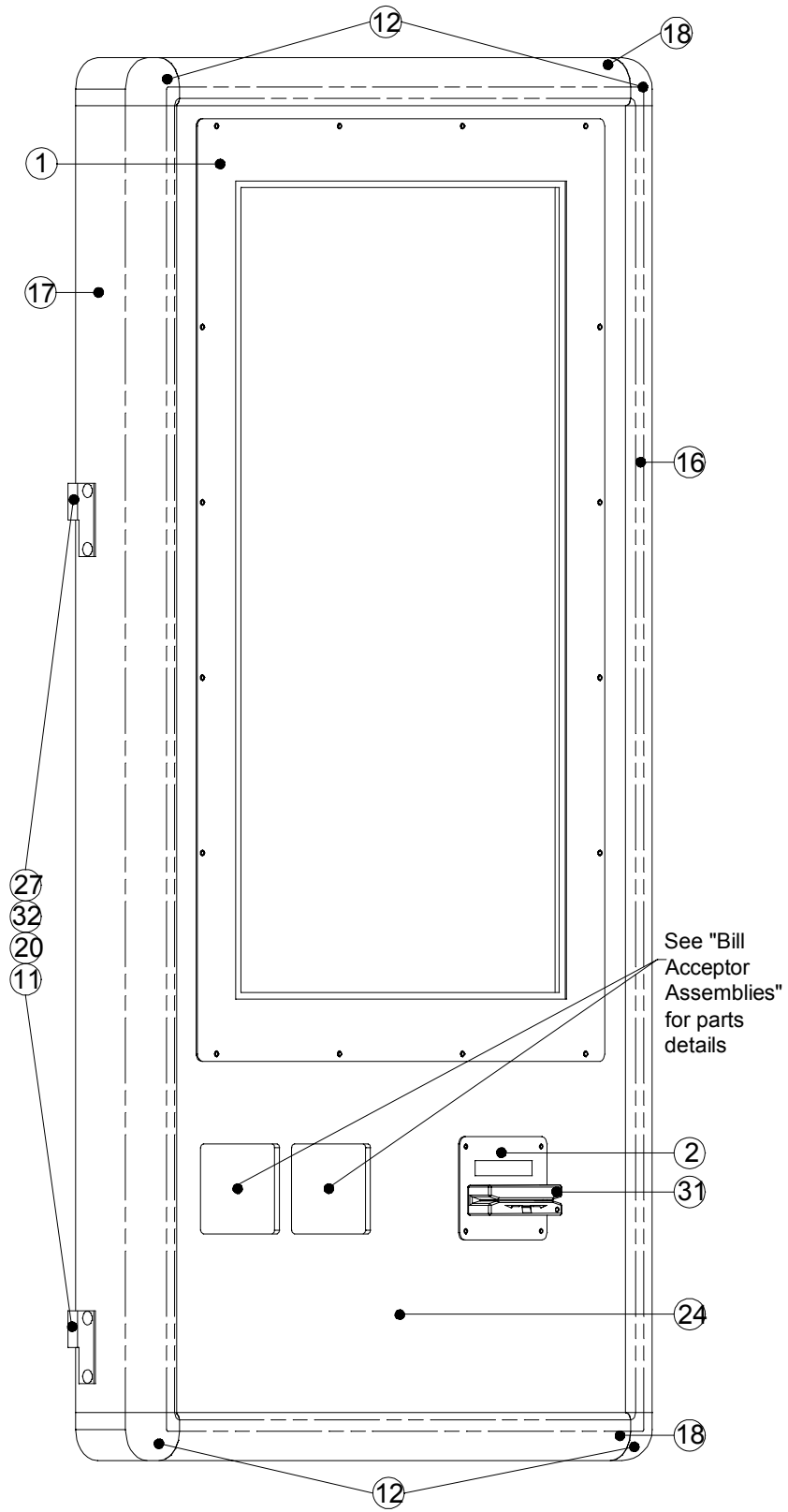
Figure 1-D – Inside View of Cabinet

ROCK-STAR Lx™

Section E - Parts Catalog

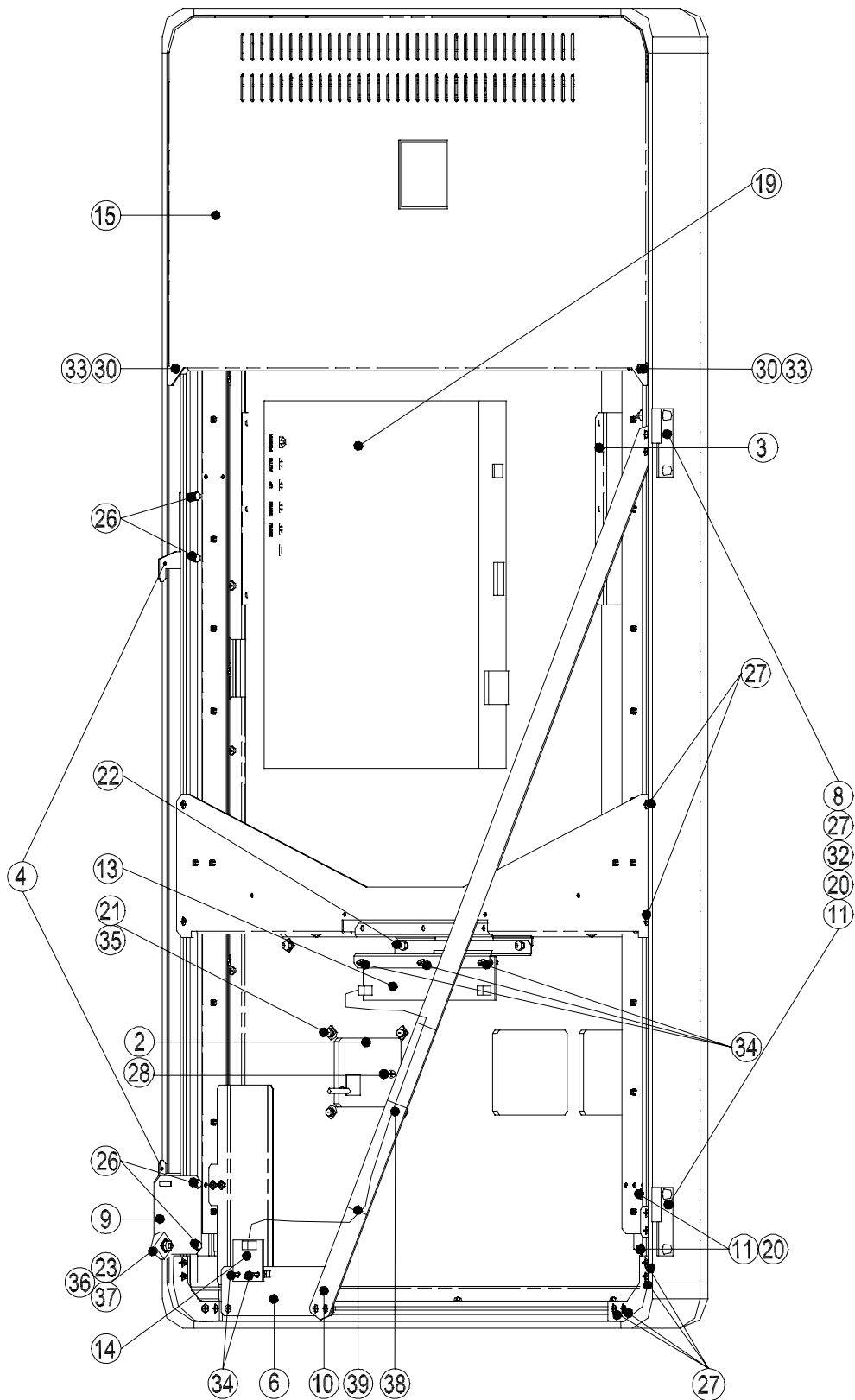
- Front Door
- Bill Acceptor Assemblies
- Inside and Outside Cabinet
- LCD Assembly
- Electronic Components
- Harnesses
- Accessories

Front Door



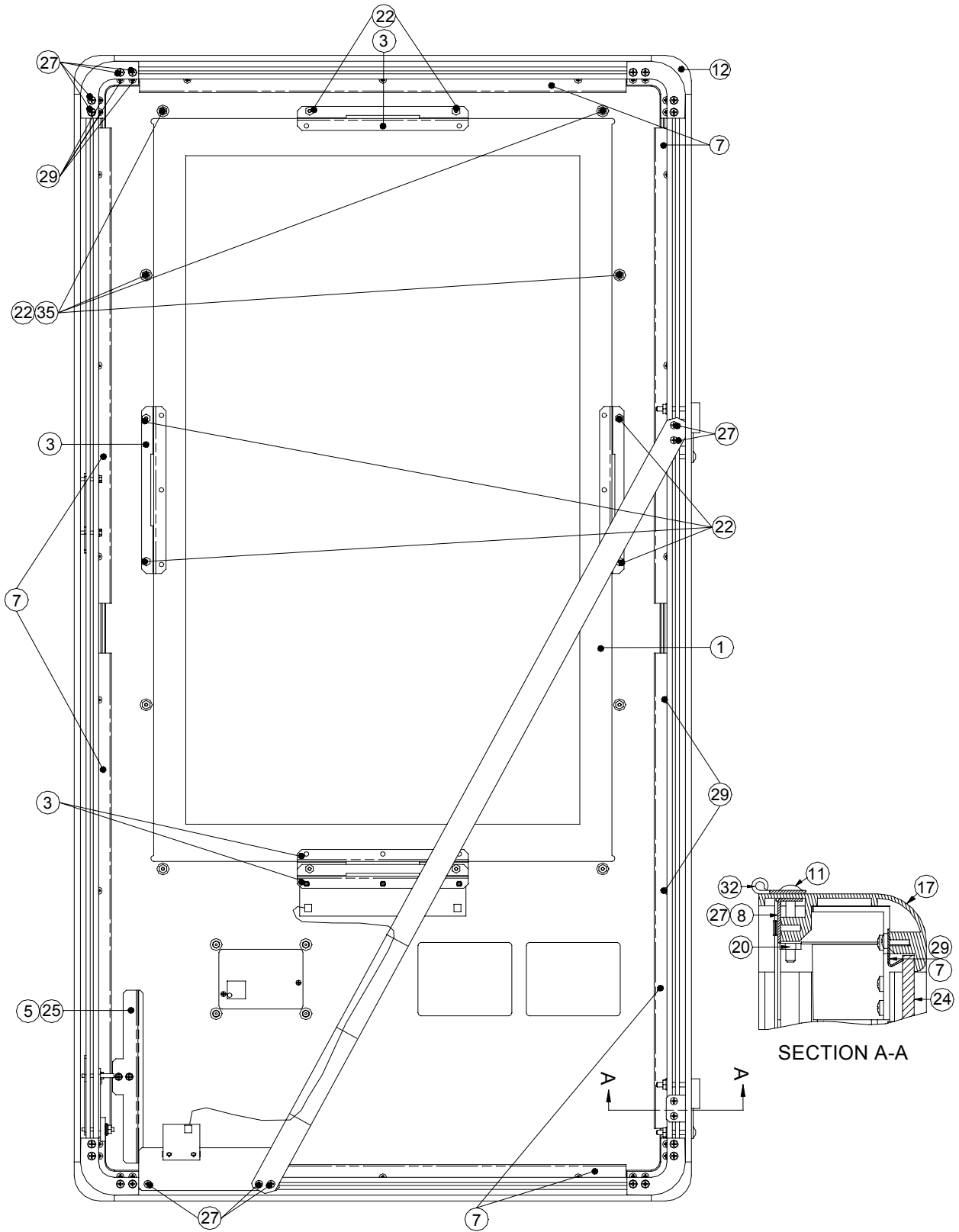
OUTSIDE VIEW

Front Door



INSIDE VIEW

Front Door



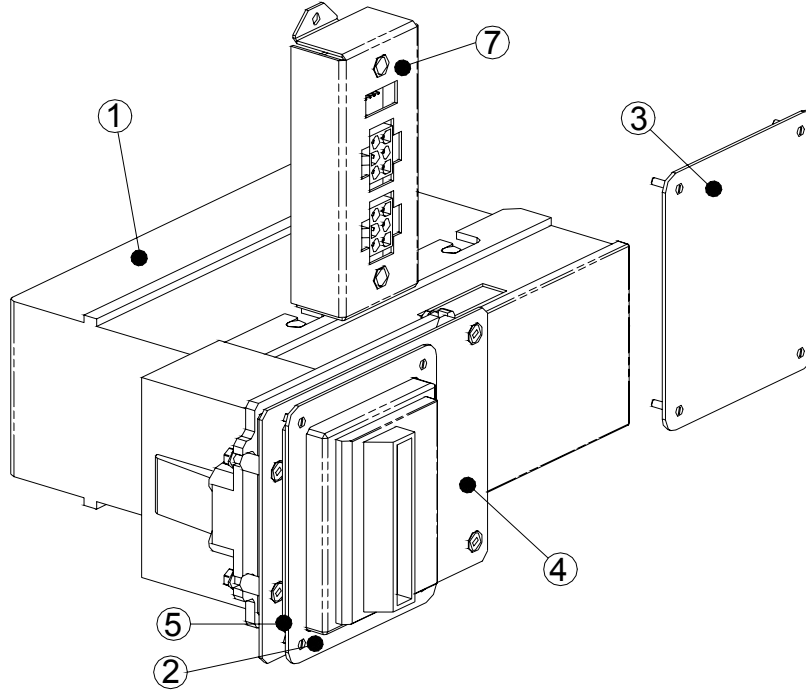
INSIDE VIEW – SHOWN WITHOUT BACK COVER, LCD & BRACKET ASSEMBLY

Front Door

Ref.	Qty.	Part #	Description
1	1	61194001	Bezel – 32" Display
2	1	34099501	Bezel – Card Reader
3	5	34098501	Bracket – Display Clamp
4	2	22312001	Bracket – Latch Hook
5	1	34098901	Bracket – Light Block
6	1	22317001	Bracket – LED Mounting
7	6	22314001	Bracket – Panel Retainer
8	2	22315001	Bracket – Hinge Reinforcement
9	1	22311001	Bracket – Roller
10	1	22318001	Bracket – Front Door Strut
11	4	89974824	Carriage Bolt #10-32 x 1 - 1/2
12	4	61333	Casting – Corner
13	1	34099101	CBA Triple LED 200MA
14	1	22164607	CBA White LED
15	1	61194401	Cover – Back
16	1	40981102	EXT. – Right Side
17	1	40981101	Extrusion – Left Side
18	2	61297	Extrusion – Top/Bottom
19	1	61195401	LCD & Bracket Assembly
20*	4	87844400	Nut – #10-32 Keps Hex*
21*	4	87841600	Nut – #4-40 Keps Hex*
22*	16	87842300	Nut – #6-32 Keps Hex MS*
23*	1	87843000	Nut – #8-32 Hex MS, Keps*
24	1	61194601	Panel – Front Door
25*	2	80403003	Screw – #8-32 X 3/16 PH PHMS S.F.*
26*	4	80443012	Screw – #8-32 X 3/4 Hex WHM*
27*	31	80393007	Screw – #8-32 X 7/16 FHPS*
28*	2	28277901	Screw – M3 X 6 Phil/Pan Head*
29*	34	80493008	Screw #8-32 X 1/2 Phil/Pan Head*
30*	2	80443012	Screw -#8-32 X 5/8 Phillips FH SF*
31	1	22185301	Credit Card Reader
32	2	22309002	Slip Hinge – Female
33	2	70121724	Spacer
34	5	70500004	Support – Circuit Board
35	12	70120019	Washer – Heavy
36	1	25156910	Washer – Shoulder
37	1	22213801	Wheel
38	1	22140920	Ribbon Cable Assembly
39	3	70800101	Tie Wrap

*Components not shown in drawing.

Bill Acceptor Assemblies



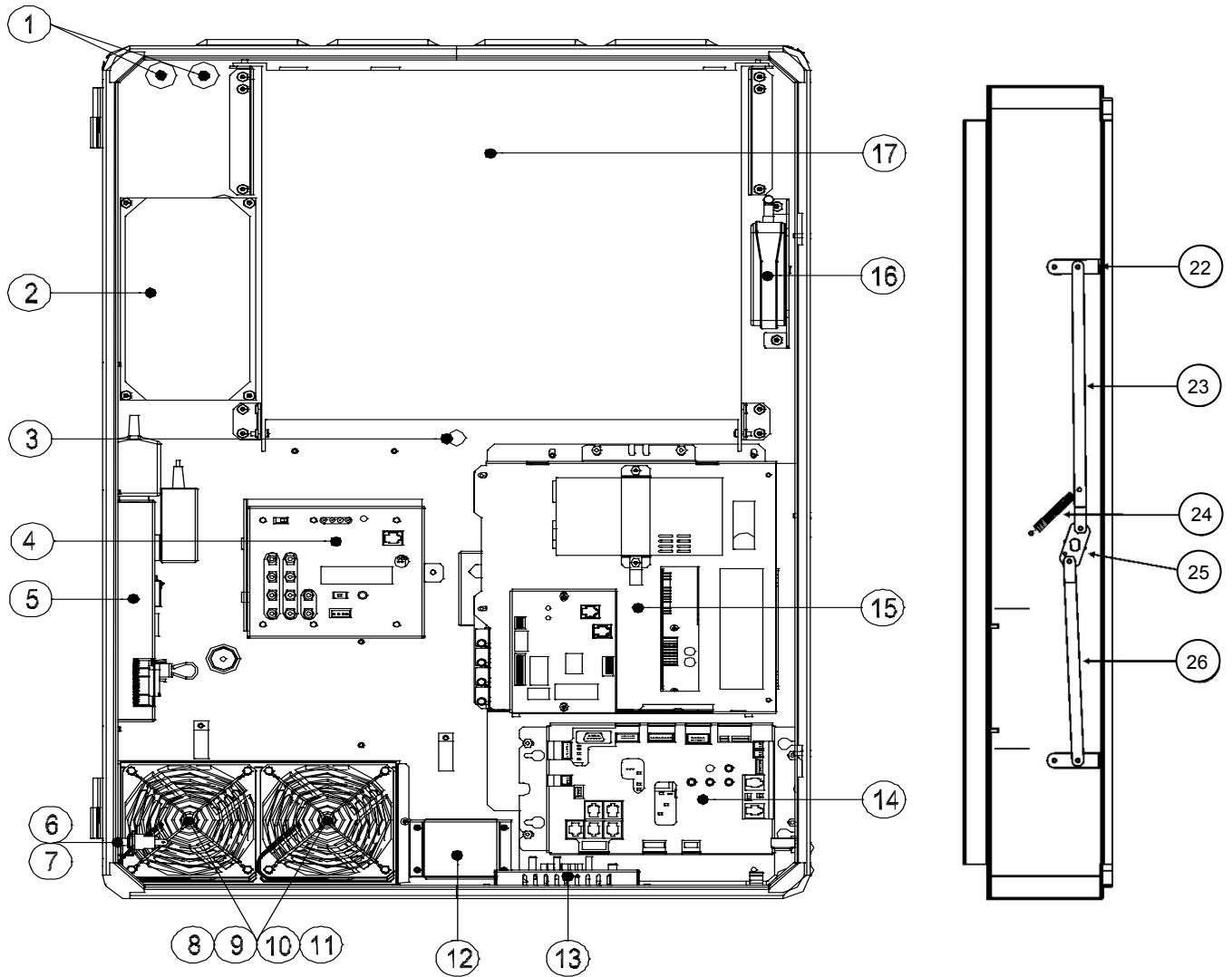
22316001 – Single MEI Bill Acceptor (700 bill)			
Ref.	Qty.	Part #	Description
1	1	22135613	B/A – MEI Downstack
2	1	34098701	Bezel – MEI B/A
3	1	34098801	Blockout B/A
4	2	40981201	Bracket – B/A Mounting
5	1	22320202	Gasket – MEI B/A

22316003 – Single Coinco Bill Acceptor (700 bill)			
Ref.	Qty.	Part #	Description
1	1	22135614	B/A – Coinco Downstack
2	1	34098601	Bezel – Coinco B/A
3	1	34098801	Blockout B/A
4	2	40981201	Bracket – B/A Mounting
5	1	22320201	Gasket – Coinco B/A

22316002 – Dual MEI Bill Acceptors (700 bill)			
Ref.	Qty.	Part #	Description
1	2	22135613	B/A – MEI Downstack
2	2	34098701	Bezel – MEI B/A
3	1	34098801	B/A – Blockout
4	2	40981201	Bracket – B/A Mounting
5	2	22320202	Gasket – MEI B/A
6	2	34022338	Dual B/A Harness (not shown)
7	1	34100001	CBA & Cover Assembly

22316004 – Dual Coinco Bill Acceptors (700 bill)			
Ref.	Qty.	Part #	Description
1	2	22135614	B/A – Coinco Downstack
2	2	34098601	Bezel – Coinco B/A
3	1	34098801	B/A – Blockout
4	2	40981201	Bracket – B/A Mounting
5	2	22320201	Gasket – Coinco B/A
6	2	34022338	Dual B/A Harness (not shown)
7	1	34100001	CBA & Cover Assembly

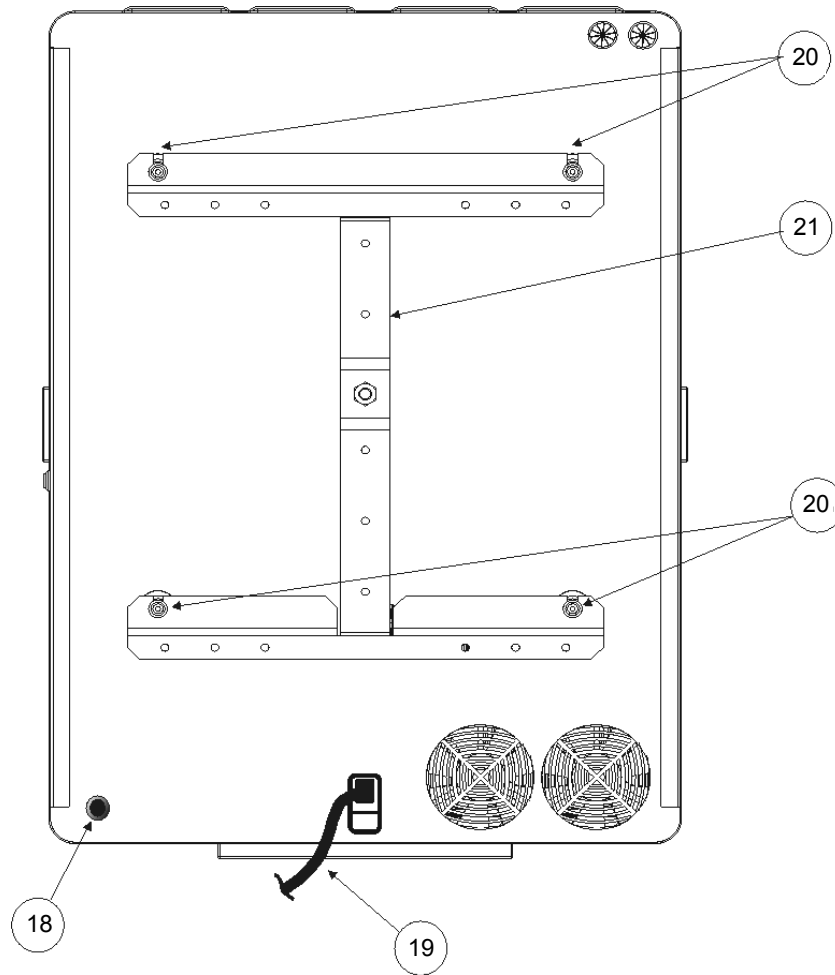
Inside and Outside Cabinet



INSIDE CABINET

LOCK PARTS

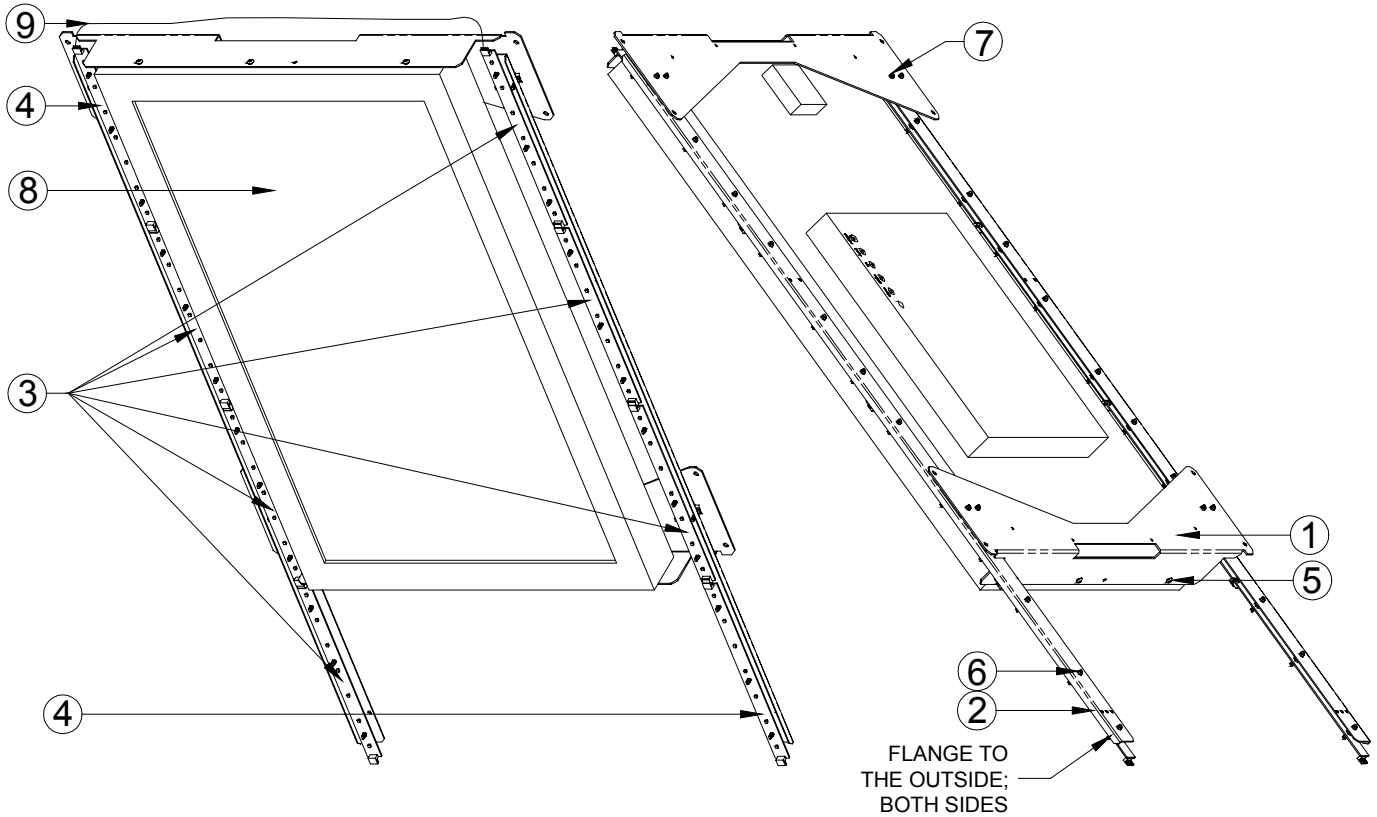
Inside and Outside Cabinet



OUTSIDE CABINET

Ref.	Part #	Description	Ref.	Part #	Description
1	ST-11530	Bushing, Wire Access Holes	14	40955703	Rowelink Controller
2	70251-A	Audio Distribution Assembly	15	70260-1A	Core Assembly
3	ST-11527	Hex Bolt 1/2-13 x 3/4	16	28280004	Router
4	70261-A	Pre- Amplifier Assembly	17	61084-A	Peavey Amp 900 Watt
5	40982101	Power Supply	18	58679	Push-Button (Power)
6	21581801	ATX Reset Button	19	58620-LF	Power Cord
7	21581801	Router Reset Button	20	59953-LF	Spool, Aluminum (4 places)
8	60820-LF	Fan (2 places)	21	59944-LF	Wall Bracket
9	60809-A-LF	Fan Filter Housing (2 places)	22	22321201	Lock Catch (2 pl)
10	21895504	Fan Grill (2 places)	23	34100601	Lock Arm
11	40982401	Fan Bracket	24	59363	Spring
12	22320701	Power In Transfer Box Assy	25	22321101	Lock Cam
13	40976901	Lighting Controller	26	34100501	Lock Arm Short

LCD Assembly



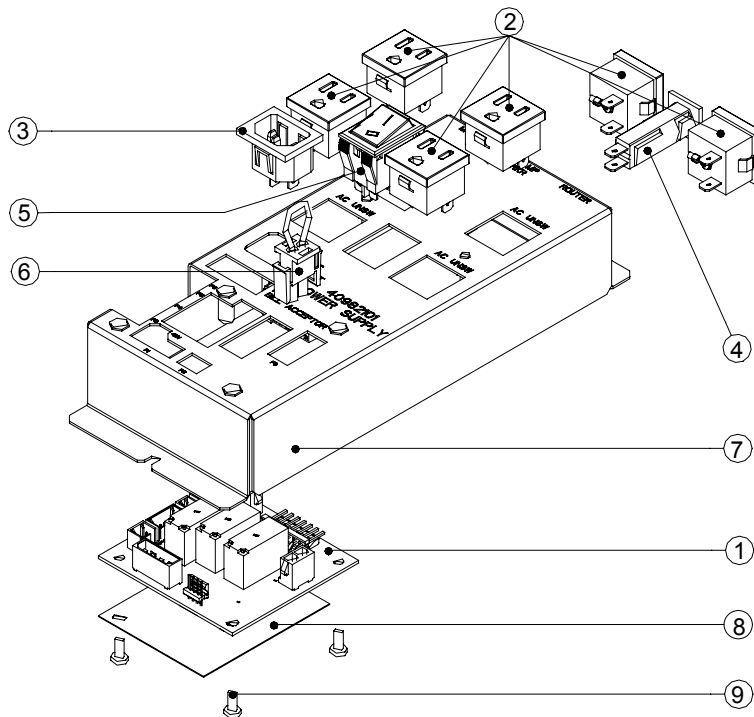
OUTSIDE VIEW

INSIDE VIEW

Ref.	Qty.	Part #	Description
1	2	61194201	Display Mounting Bracket
2	2	61194301	LED CBA Mounting Bracket
3	6	40976601	Inner LED Lights Circuit Board Assembly
4	2	40976602	Outer LED Lights Circuit Board Assembly
5	6	28254502	M4 X 10 Phil Pan Head Screw
6	24	70500004	Circuit Board Support
7	8	70500006	Circuit Board Support
8	1	61194701	32" Touchscreen Display
9	1	22212820	Ribbon Cable Assembly

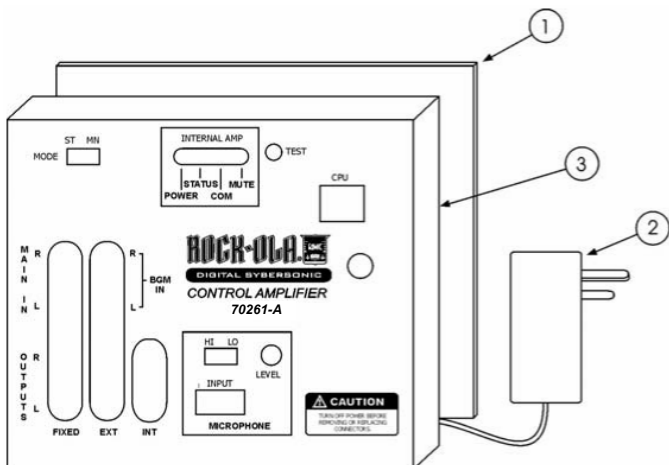
Electronic Components

Power Supply Assembly 40982101



Ref.	Qty.	Part #	Description	Ref.	Qty.	Part #	Description
1	1	34099701	Circuit Board Assembly	8	1	25241206	Circuit Board Insulator
2	6	21375903	Convenience Outlet - 3 Wire	9	4	80403006	#8-32 X 3/8 Phillips Screw
3	1	22118703	Power Inlet – IEC 320 C-14	Components not shown above:			
4	1	70073618	Circuit Breaker – 15 AMP	10	1	34099801	Power Supply Harness
5	1	30785704	Rocker Switch (DPST)	11	2	87843000	#8-32 Keps Hex MS Nut
6	1	22135405	Jumper Plug	12	1	21963846	Wire & Terminal Assembly
7	1	61195601	Power Supply Cover	13	2	21963845	Wire & Terminal Assembly

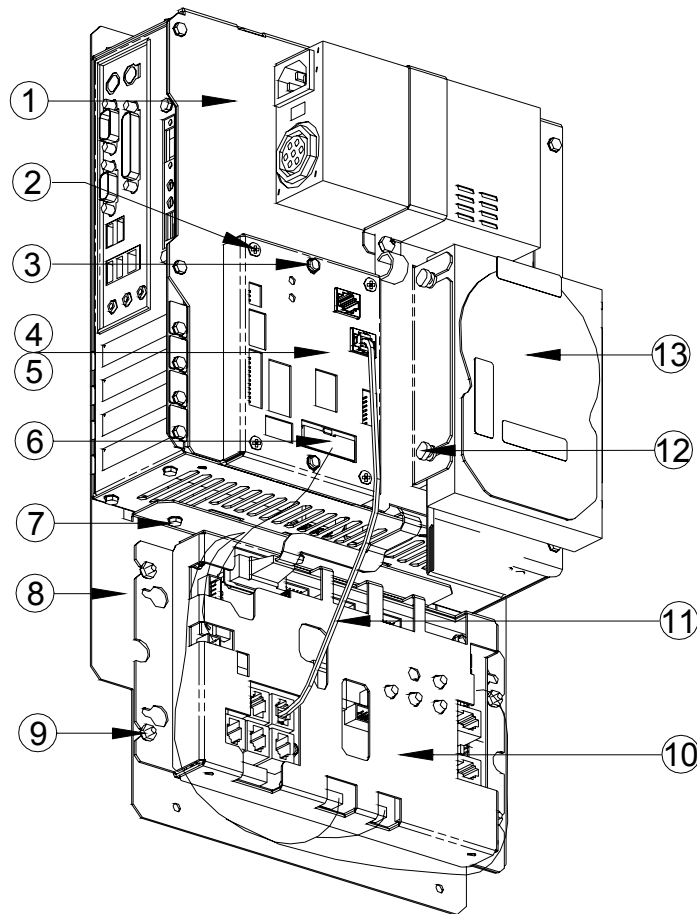
Pre-Amplifier Assembly 70261-A, AMI System



Ref.	Part #	Description
1	62004-A	PCB, Pre-Amplifier
2	61184-LF	Power Cube, 18VDC, 1Amp
3	61080-A-LF	Cover, Pre-Amplifier

Electronic Components

Core Assembly w/ AMI System Interface 70260-1A



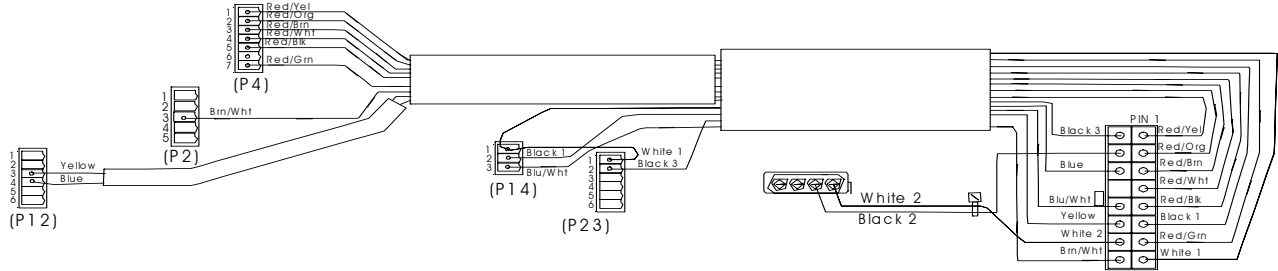
Ref.	Qty.	Part Number	Description	Ref.	Qty.	Part Number	Description
1	1	61176513	Computer Core Assembly	8	1	61188002	Core and Rowelink Bracket
2	4	ST-06348	Screw - #6-32 X 1/4" Phil Pan Head (inside cover)	9	6	87842300	Keps Nut - #6-32
3	2	80442304	Screw - #6-32 X 1/4" Hex WHS	10	1	40955703	Rowelink Controller Assembly
4	1	61992-LF	Peripheral Interface Cover	11	1	58902-A-LF	Volume Control Harness
5	1	40981401	Peripheral Interface CBA	12	4	ST-11572	Thumbscrew (for reference only—not part of assembly)
6	1	61973-A-LF	Rowelink Harness	13	1		AMI Hard Drive (Contact your authorized Rock-Ola distributor for replacement)
7	2	80742304	Screw - #6-32 X 1/4" Sems Hex WHMS				

Harnesses

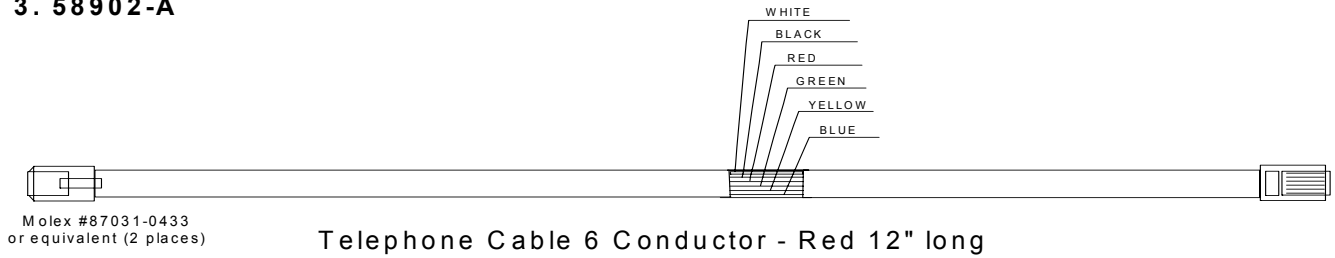
1. 61972-A-LF



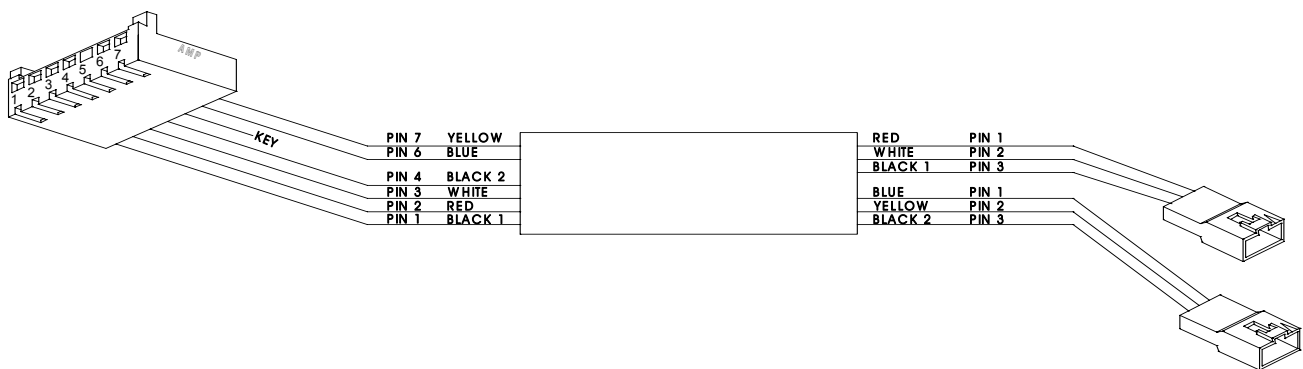
2. 61973-A-LF



3. 58902-A

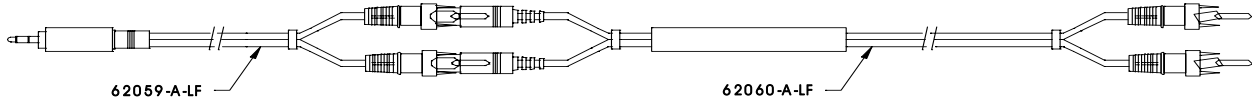


4. 60842-2A-LF

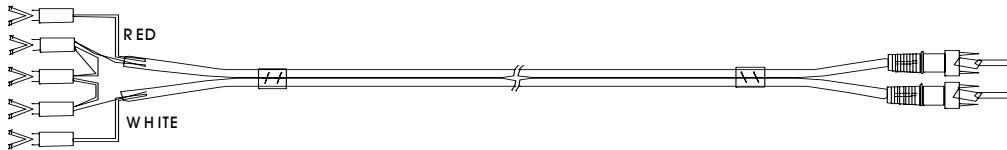


Harnesses

5. 62060-A-LF
62059-A-LF

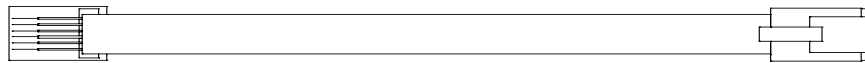


6. 61239-A-LF



7. 62009-A-LF

Blue
Yellow
Green
Red
Black
White

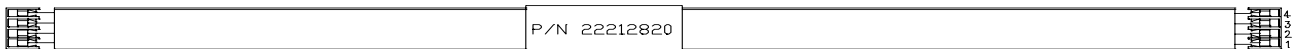


8. 58923-A-LF

Green/Yellow, 16 AWG, UL AWM 300V Stranded, 7.0' Lg

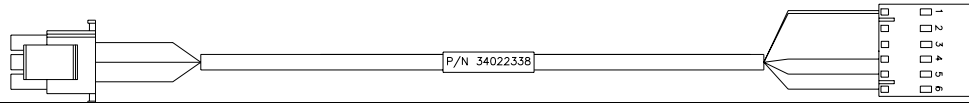


9. 22212820

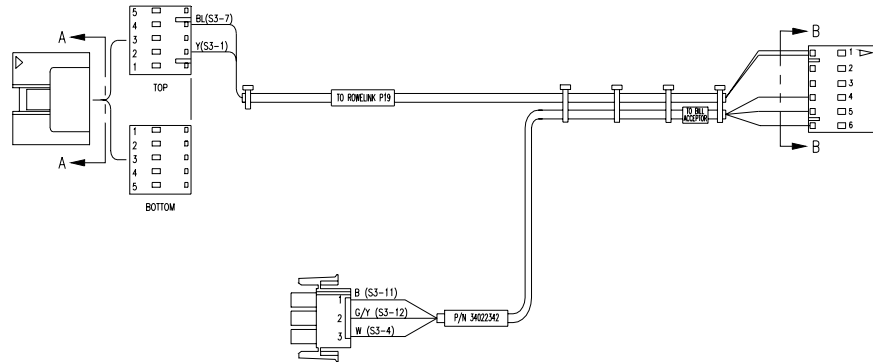


Harnesses

10. 34022338



11. 34022342



12. 34033235



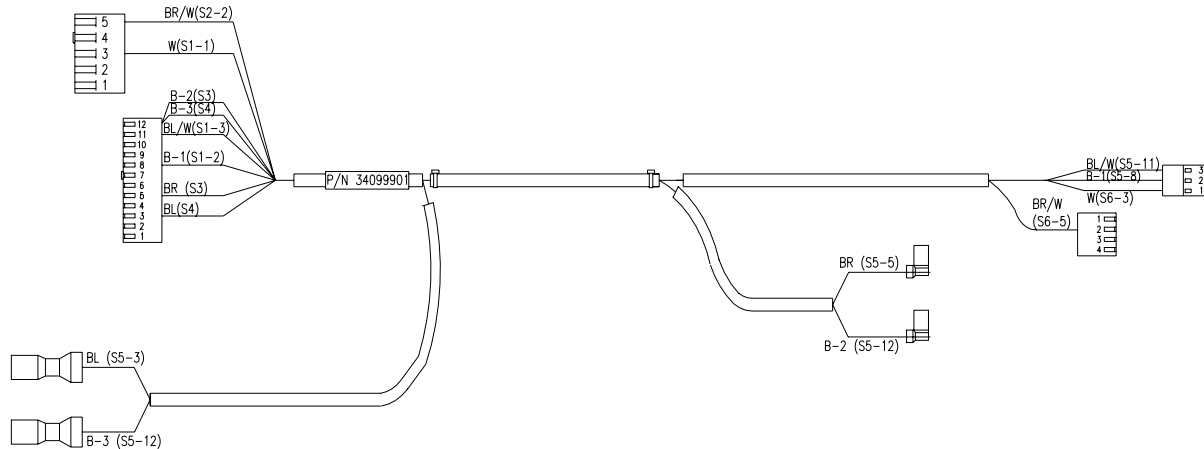
13. 34037940



14. 34100301



15. 34099901



Harnesses

Item	Part number	Description
1	61972-A-LF	Rowelink Serial Harness
2	61973-A-LF	Rowelink Harness
3	58902-A	Communication Harness, 12"
4	60842-2A-LF	Cabinet Fans Harness
5	62059-A-LF and 62060-A-LF	Audio Harness, Dual RCA, 6" and Audio Isolator Harness, 24"
6	61239-A-LF	Peavey Audio Input Harness
7	62009-A-LF	Wired Volume Control Harness, 24"
8	58923-A-LF	Ground Strap, 7"
9	22212820	LED Board Interconnect Harness
10	34022338	Dual Bill Acceptor Harness
11	34022342	Single Bill Acceptor Harness
12	34033235	Ribbon Lighting Harness
13	34037940	ATX Reset Harness
14	34100301	Audio Output Assembly Harness
15	34099901	Peripheral Cabinet Harness
16	62002-A-LF	Ctrl On / Reset / LED Harness (<i>not shown</i>)
17	61122-LF	Power Cord, right-angle, 3 feet (<i>not shown</i>)

Accessories

Part Number	Description
22118911	Handy Pack (contains the following)
21958306	IR Transmitter
40846302	IR Receiver
34037905	IR Receiver Cable
22310001	Cabinet Feet
58620-LF	Power Cord
22022611	Installation and Owner's Manual
70004-1A	2-Channel Remote Control
62009-A-LF	Remote Control Cable
ST-11327 (2)	#8 x 1 1/2" Phillips Pan Head Screws for 2-Channel Remote
60608-A	Lock Cam (Ace Lock)
62021-A	Service Envelope (contains the following)
62022	Warranty Card
ST-11149	Spade Connector
ST-11572 (4)	Thumbscrew, 6-32 x 1/4", Hard Drive Mounting
22200861	Small Parts Kit (contains the following)
ST-11526 (4)	Screw, Lag 1/4 x 1-1/2" Hex Head
ST-04565-D	8-32 x 1" Phillips Head Screw
86663614	#8 x 7/8 Type 17 Screw

Optional Kits	
02468	Wireless, RF Remote Control Kit
02476	4-Channel Wired Remote Control Kit

ROCK-STAR Lx™

Section F - Troubleshooting

- LED Indicators
- Troubleshooting Chart
- Connection Diagrams
- Contact Information

LED Indicators

The LEDs are described below and can help you isolate a problem. For Rock-Ola's Digital SyberSonic Pre-Amp LED indicators, see page 22.

ROWELINK CONTROLLER

5 VDC, 12 VDC, 24 VDC, and 24 VAC LED's

Should be on. On when there is power to the ROWELINK CONTROLLER.

IR RCV LED

Flashes whenever any IR signal is seen by the IR RECEIVER. May flash due to ambient light.

KID RL TX LED

Should be flashing **. Flashes when the ROWELINK CONTROLLER sends an RL signal back to CORE COMPUTER. Rate is approximately ten times per second.

CC RL RX LED

Should be flashing **. Flashes when ROWELINK CONTROLLER receives a RL signal from one of the RS-485 bus devices. Appears almost continuously on (rate is more than 20 times per second).

CC RL TX LED

Should be flashing **. Flashes when Rowelink Master Commands are sent from the Computer Core. Appears almost continuously on (rate is more than 20 times per second).

CRDT RL TX LED

Should be flashing **. Flashes when the ROWELINK CONTROLLER sends a RL signal back to the CORE COMPUTER. Rate is approximately once per second.

CRDT STATUS LED

Will flash when a coin is inserted and the CRDT RL TX LED is flashing. May or may not flash when a coin is inserted if the CRDT RL TX LED is not flashing.

** When the COMPUTER CORE ASSEMBLY is powered up, then it may take several minutes for the LED's to start flashing.

COMPUTER CORE ASSEMBLY

+5 V LED (GREEN)

This should be lit whenever the jukebox is connected to 120 VAC service.

HDD LED (RED)

This LED should be lit only when the hard drive is being accessed by the computer.

POWER SUPPLY ASSEMBLY

+12 VDC (RED)

Troubleshooting Charts

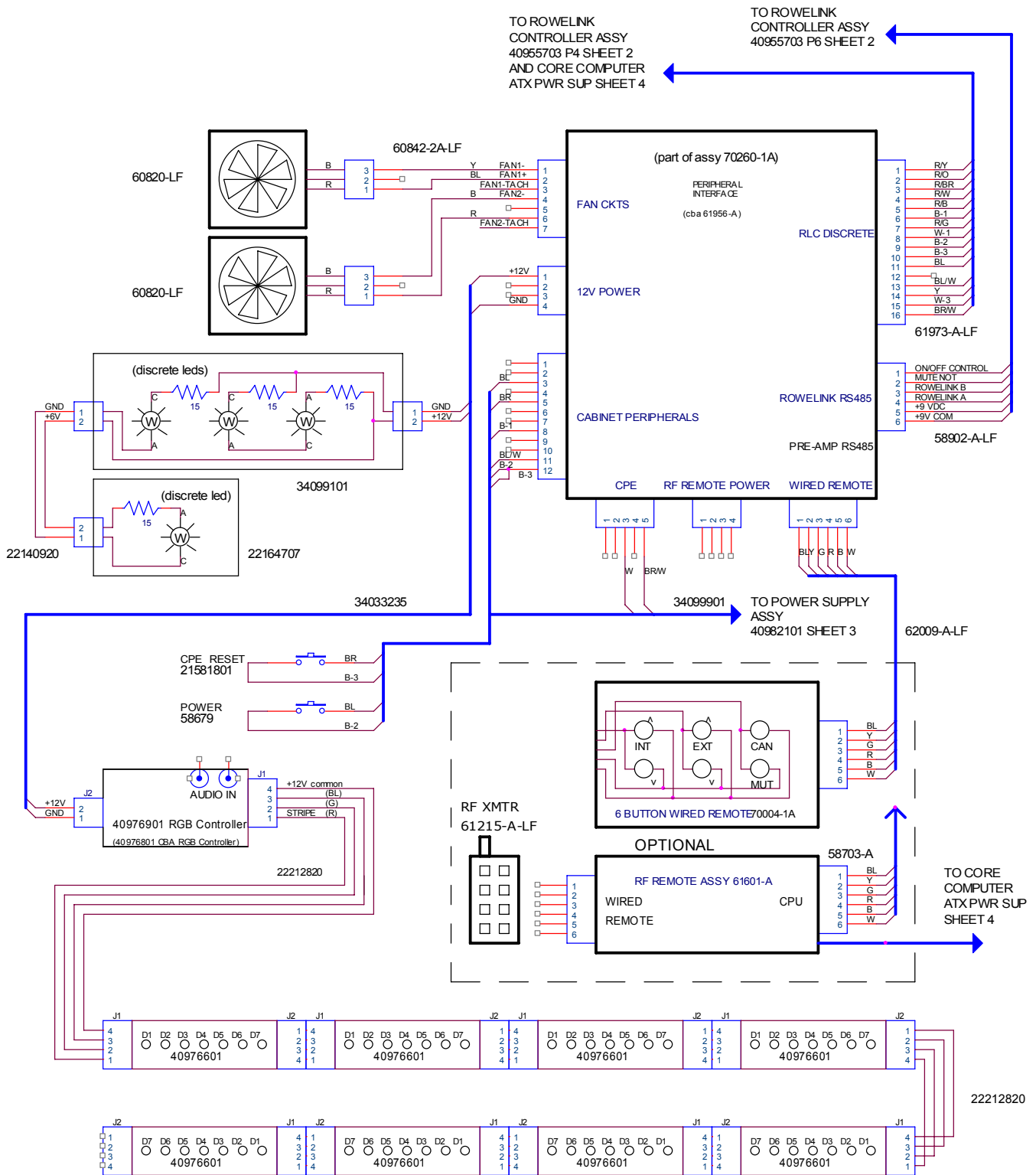
The best way to isolate a problem is to determine its cause. The following charts should help to narrow down which module is failing and whether it can be fixed or it needs to be replaced.

Start with finding the “Problem” column that relates the closest to the problem you are experiencing and then match it to the closest “Symptom”. There can be many “Probable Causes” listed for each Symptom. The Probable Causes are listed in decreasing order of probability.

PROBLEM	SYMPTOM	PROBABLE CAUSE
Application does not boot up.	At the first boot up screen, “Detecting IDE Primary Master” reports “None”.	<ol style="list-style-type: none"> 1. There is no hard drive in the computer. 2. The plugs are not completely seated in the hard drive. 3. The data cable or power cable has come loose from the motherboard or hard drive.
	The boot up process stops at “DISK BOOT FAILURE, INSERT SYSTEM DISK AND PRESS ENTER.”	<ol style="list-style-type: none"> 1. There is no hard drive in the computer. 2. The data cable or power cable has come loose from the motherboard or hard drive. 3. The hard drive is dead.
Jukebox will not operate when powered ON.	The Bill Acceptor LED’s on the front door fail to light.	<ol style="list-style-type: none"> 1. The plug is not completely inserted into the outlet. 2. The wall circuit is not “hot”. 3. The ON/OFF switch on the power supply is in the OFF position. 4. The circuit breaker in power supply is open.
	The Bill Acceptor LED’s come on, but the application will not boot.	The system power supply or the LCD is defective or unplugged.
The LCD does not work.	The computer fan is on and all systems LEDs and lights are normal.	<ol style="list-style-type: none"> 1. The power plug, video cable, or LCD power supply wiring is not seated completely. 2. The system power supply is defective. 3. The LCD is dead.
The touchscreen does not work.	The application boots up, but the touchscreen does not respond to touch.	<ol style="list-style-type: none"> 1. The USB cable is not seated completely at the LCD or at the Core Computer. 2. The touchscreen is not calibrated. 3. The touchscreen is dead.
The touchscreen will not calibrate.	Nothing happens after pressing the calibration button.	<ol style="list-style-type: none"> 1. The USB cable plug is not fully seated at the LCD or at the Core Computer. 2. The touchscreen is dead. 3. The motherboard in the Core Computer has failed.
	The calibration program runs, but will not respond to touch.	<ol style="list-style-type: none"> 1. The USB cable plug is not fully seated at the LCD or at the Core Computer. 2. The touchscreen is dead. 3. The motherboard in the Core Computer has failed.
No music from jukebox.	No sound from jukebox, although the application reports “Now Playing...a New Song.”	<ol style="list-style-type: none"> 1. Volume control is turned all the way down. 2. Volume control is broken. 3. Audio cables are disconnected or loose from the Core Computer or the pre-amp. 4. The amplifier is overloaded and shutdown. 5. The audio mode input routing or muting is configured incorrectly.
	No sound from jukebox and the application doesn’t appear to be playing the song selected.	<ol style="list-style-type: none"> 1. There are no more credits available for play. 2. Reject song was activated.

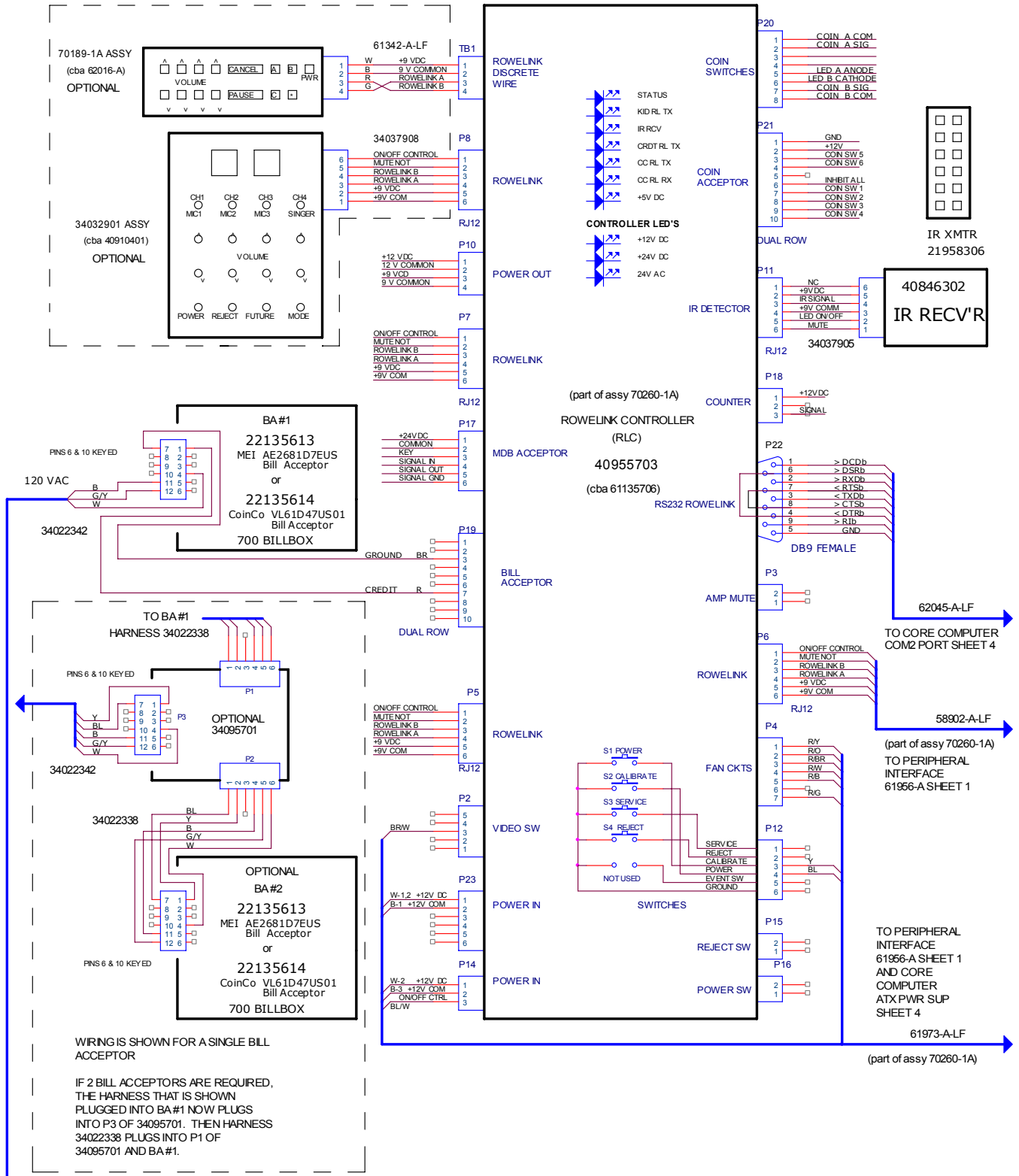
PROBLEM	SYMPTOM	PROBABLE CAUSE
Machine is locked up during normal runtime.	Bill acceptor is taking money but credits are not accumulating and the touchscreen is not responsive.	The Core Computer is locked up. Reboot it by pressing and releasing the ATX Reset Switch.
The bill acceptor does not work.	The bill acceptor will not accept a bill.	<ol style="list-style-type: none"> 1. The bill acceptor is full. 2. The bill box was not re-installed on the bill acceptor correctly. 3. There is a jammed bill in the device. 4. The plugs are not inserted securely at the acceptor. 5. The bill acceptor is defective.
	The green lights on the bill acceptor are not flashing.	<ol style="list-style-type: none"> 1. The cable is damaged at the acceptor. 2. The jukebox has disabled the bill acceptor. Put the jukebox into normal operating mode. 3. The bill acceptor is defective.
Location network line not installed in the location.	There is no designated broadband line installed in the location.	<ol style="list-style-type: none"> 1. The inside wiring installation appointment was not scheduled. 2. The inside wiring installation has not occurred. 3. The line was not installed in the pre-selected location. 4. The line (jack) was not labeled by the technician.
Router does not work.	When the power supply is connected to the router, nothing happens.	<ol style="list-style-type: none"> 1. The AC power plug is not fully inserted in the receptacle on the back of the router. 2. The wall plug is not "hot".
	The "Link/Act #" light (on the front of the router) does not light up when an Ethernet cable is plugged in the respective port.	<ol style="list-style-type: none"> 1. The Ethernet port is defective. 2. The jukebox is not powered on. 3. The cable is loose at the Core Computer in the jukebox.
	The WAN light does not light up.	<ol style="list-style-type: none"> 1. The broadband connection is not plugged into the WAN port. 2. The cable modem or DSL modem is not powered on.
The "Music On Demand" feature does not work.	The feature has never been available in the location.	<ol style="list-style-type: none"> 1. There is no Ethernet cable connection between the router and the jukebox. 2. The Ethernet cable is not fully seated in the port on the Core Computer or in the back of the router. 3. The connection is loose between the installed line and the router. 4. The cable is bad. 5. The Internet line is down. 6. The hard drive trigger code was not entered.
	The feature was available, but is no longer available.	<ol style="list-style-type: none"> 1. The connection has become loose between the router and the jukebox. 2. The connection has become loose between the installed line (jack) and the router. 3. All the lights on the front of the router are ON. 4. The router was shut off or lost power. 5. The Internet service provider (ISP) is down. 6. The AMI Entertainment server is down.

Connection Diagrams



WIRING DIAGRAM - PERIPHERAL INTERFACE ASSEMBLY, LED LIGHTING, RF REMOTE, AND 2 CH VOLUME CONTROL

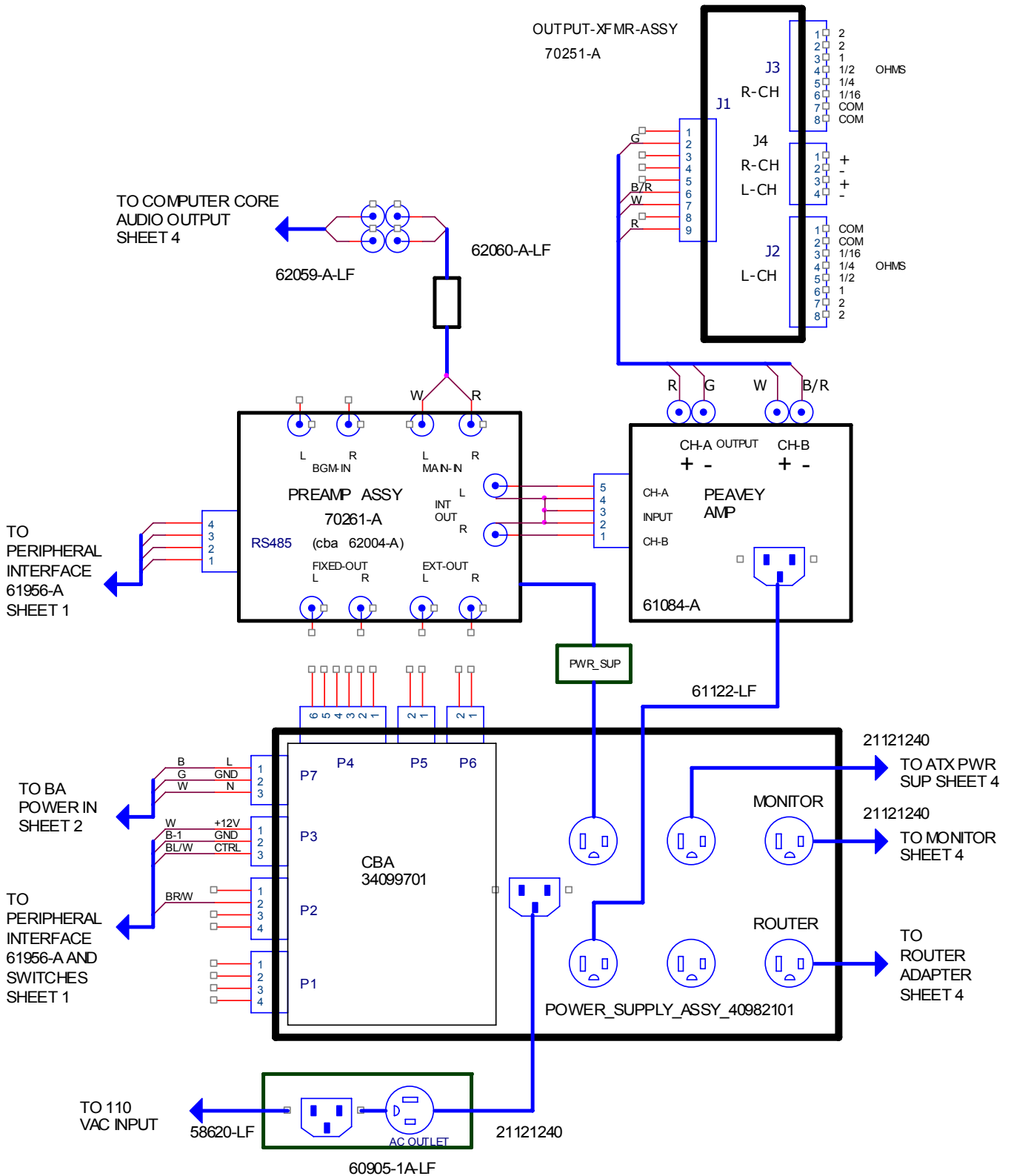
SHEET 1



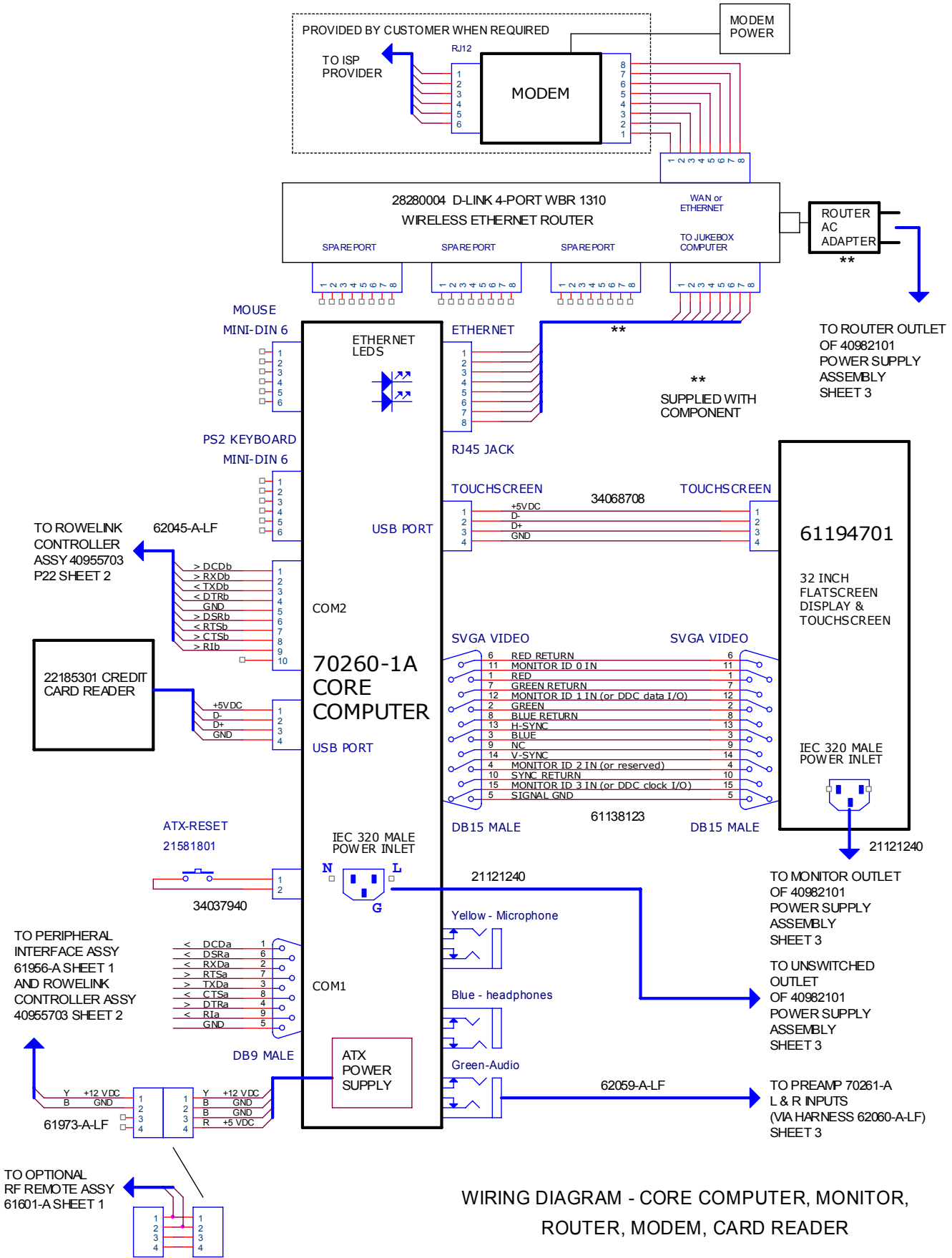
WIRING IS SHOWN FOR A SINGLE BILL ACCEPTOR
 IF 2 BILL ACCEPTORS ARE REQUIRED,
 THE HARNESS THAT IS SHOWN
 PLUGGED INTO BA#1 NOW PLUGS
 INTO P3 OF 34095701. THEN HARNESS
 34022338 PLUGS INTO P1 OF
 34095701 AND BA#1.

TO P7 OF
 POWER SUPPLY ASSY
 40982101 SHEET 3

WIRING DIAGRAM - ROWELINK CONTROLLER ASSEMBLY,
 BILL ACCEPTOR, 4 CH VOLUME CONTROLS



WIRING DIAGRAM - PREAMP, PEAVEY AMP,
OUTPUT TRANSFORMER ASSEMBLY



WIRING DIAGRAM - CORE COMPUTER, MONITOR, ROUTER, MODEM, CARD READER

Contact Information

For additional assistance, after contacting your distributor, contact:

AMI Entertainment Network, Inc.

USA and Canada call toll-free:

1-877-762-6765

(1-877-ROC-N-ROL)

Outside the USA and Canada call:

(616) 243-3633

E-mail: support@amientertainment.net

www.amientertainment.com