CUSTOMIZING YOUR LED DISPLAY

The PBR TT LIT LED display can be edited several different ways. The PBR TT LIT's LED display supports up to six characters per connection; three per line.

CONNECTING A KEYBOARD TO THE USB PORT

1. Connect your keyboard to the PBR TT LIT using a USB cable or wireless/Bluetooth receiver. Once connected, the PBR TT LIT's first cell will begin blinking to indicate the patchbay is in edit mode.
2. The arrow keys can be used to quickly select the desired cell for editing. The currently selected cell will continuously blink. Press enter to begin editing the currently selected cell.
3. Type the text you would like to see using the keyboard. Press TAB or ENTER to cycle to the next cell.
4. When finished, unplug the keyboard and press Update.

USING PATCHCAD BLA EDITION SOFTWARE

1. Register your hardware at register.blacklionaudio.com/login
2. You'll receive a download link and activation code for PatchCad.
3. Download, install, and run PatchCad.
4. Enter your license key to activate.
5. Choose File >> New Project. Enter a name for your project and any other details you like.
6. Choose View >> Templates to display a list of templates on the right.
7. Double-click the PBR TT LIT patchbay to choose it.
8. Click any cell to activate text entry.
9. Enter the desired text. You get up to three characters per cell.
10. When done, choose Patchbays >> Export Black Lion Audio PBR Labels CSV
11. Save the file as pbr_tt96.csv. Do not use any other filename.
12. Save or copy this file to a USB drive.
13. Safely eject the USB drive and remove it from your computer.
14. Place the USB drive in the USB port of your patchbay.
15. The patchbay text will import automatically. If it doesn't, the LED display will read "Error" to indicate an error; Check your filename and try again.

NOTES

USB PORT

The PBR TT LIT's USB port does not support connection directly to a computer.

PHANTOM POWER

We advise against running phantom power through your patchbay, as this makes it possible to send phantom power to a device not designed to handle it; expensive damage could result!
If you decide to route phantom power through your patchbay, **always** ensure that your phantom power source is turned off before changing any connections.
Failure to do so can cause unbalanced shorts when a plug is inserted or removed, damaging input transistors of hardware processors, or damaging the transformer or ribbon of a ribbon mic.

DB25 WIRING CONVENTION

The PBR TT LIT Patchbay uses the Tascam DB25 wiring convention. Some audio equipment uses the Yamaha convention. Check the documentation for your other DB25 hardware to ensure compatibility.

AUDIO CABLE CHOICE

We've tested the following brands of audio cables for a secure, reliable connection: Hosa, Mogami, Rean, Neutrik, and RedCo. We advise against using cables from other manufacturers.

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 dry cloth.
7. 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 that produce heat.
9. Use only attachments/accessories specified by the manufacturer
10. Use only with a cart, stand, tripod, bracket or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
11. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as 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.
12. This apparatus shall not be exposed to dripping or splashing, and no object filled with liquids, such as vases, shall be placed on the apparatus.
13. Any changes or modifications not expressly approved in this manual could void your authority to operate this apparatus.

Do not attempt to service this unit yourself, as it will void your warranty. Please check your unit carefully upon receipt and return to place of purchase immediately if there are any problems with the product. After that, the standard Black Lion Audio 3 YEAR warranty will apply to defects in materials and workmanship.

U.S.A.

Should your Black Lion Audio product require service, please contact us on our customer service site: https://www.blacklionaudio.com/contact. **You must obtain an RA # (Return Authorization number) from us before shipping a unit back to us. This RA # must be clearly written on the outside of the box.**

Please safely pack the units...It is best to use the original packing materials. Black Lion Audio cannot be responsible for any damages incurred in shipping to us due to poor packaging. PLEASE PACK CAREFULLY and FULLY INSURE THE SHIPMENT.

INTERNATIONAL

For service or warranty assistance, please contact the Black Lion Audio distributor in your country through the dealer from whom you purchased this product.

LIMITED 3 YEAR WARRANTY

Black Lion Audio's PBR TT LIT Patchbays are warranted by Black Lion Audio to be free from defects in materials and workmanship for the period of THREE (3) YEARS to the original purchaser. In the event of such defects, the product will be repaired without charge or, at our option, replaced with a new one if delivered to Black Lion Audio prepaid, together with a copy of the sales slip or other proof of purchase date. The warranty excludes problems due to normal wear, abuse, shipping damage or failure to use the product in accordance with the specifications.

All parts and labor are covered under this Limited Warranty.
However, if it is determined by Black Lion Audio that the device was damaged or made defective through abuse, we reserve the right to charge the customer for the cost of the repair.

Black Lion Audio shall not be liable for damages based upon inconvenience, loss of use of the product, loss of time, interrupted operation or commercial loss or any other damages, whether incidental, consequential or otherwise. This warranty gives you specific legal rights, and you may have other rights, which will vary from state to state.

This warranty is not transferable.

NOTICE

This manual provides general information, preparation for use, installation and operating instructions for the Black Lion Audio PBR TT LIT Patchbay.

The information contained in this manual is subject to change without notice. Black Lion Audio makes no warranties of any kind with regard to this manual, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Black Lion Audio shall not be liable for errors contained herein or direct, indirect, special, incidental, or consequential damages in connection with the furnishing, performance, or use of this material.

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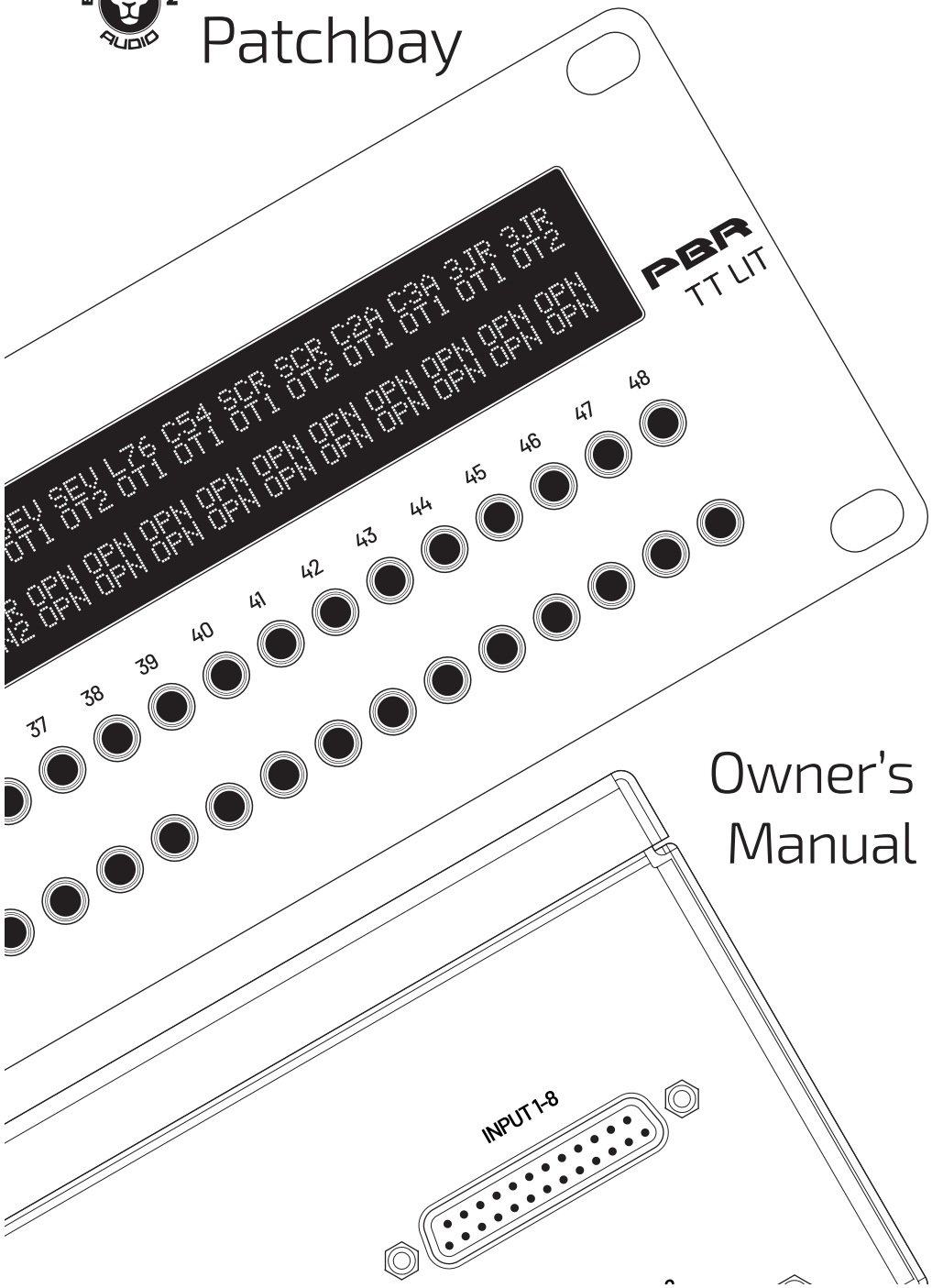
Middletown, New York, 10940
USA

Revised 12-15-25

PBR TT LIT Patchbay



Owner's Manual

SIGNAL FLOW IN YOUR TT PATCHBAY

The flow of signal through a patchbay module is affected by both physical connections and mode setting (Normalled, Non-normalled, or Half-Normalled.) The most common configuration for a patchbay is for signals to come in to the patchbay from the top rear connections, and out of the patchbay from the bottom rear connections. Conversely, on the front of the patchbay, the top row connections are outputs and the bottom row connections are inputs.

With jacks connected to the top rear and bottom rear of a single patchbay module, signals coming into a top rear connection are passed directly through to the output on the bottom rear, as shown here. This connection style should be used for your hardware's "default" configuration - the way you want your signals to flow on a day-to-day basis.

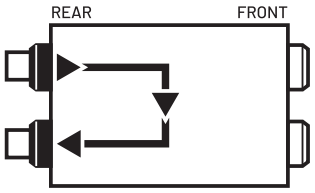


Fig. 1

When no jacks are connected to the top connections of a module, a signal from the front bottom input is passed through to the rear bottom output.

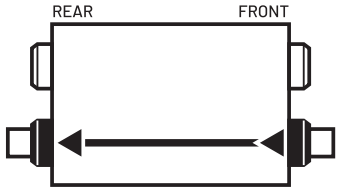


Fig. 2

When all four jacks are connected to a patchbay module, a signal connected to a rear top input of the patchbay is passed to the front top output, while signal from the front bottom input is passed to the rear bottom output.

NORMALLED OPERATION

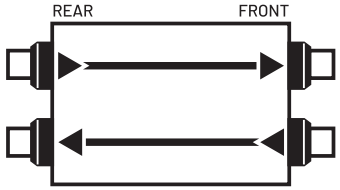


Fig. 3

When a module is set to Normalled and connections are made to the top rear and top front jacks, the signal is passed through from the top rear to the top front - *breaking the connection shown in figure 1.*

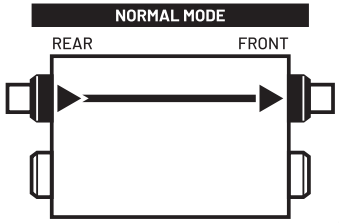


Fig. 4

A Normalled configuration allows you to run several devices in series by using patch cables on the front of the patchbay to interconnect several of your devices. For example, you could run a signal from a preamp, to a compressor, and finally to a reverb. A cable inserted into the bottom rear will have its connection broken when a cable is inserted into the top front.

HALF-NORMALLED OPERATION

When a module is set to Half-Normalled and connections are made to the rear top, rear bottom, and front top jacks, the signal is passed through from the top rear to the top front - ***without*** *breaking the connection shown in figure 1.*

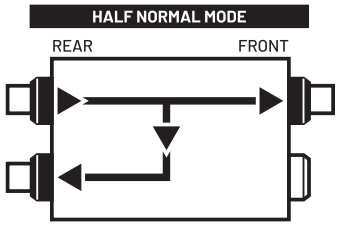


Fig. 5

This allows you to use the patchbay as a mult (splitter), sending the signal coming into the patchbay to two different destinations; very useful for parallel processing of your signal and monitoring applications. Inserting a cable in to the front bottom jack of a half-normalled module will break the connection between the rear jacks.

NON-NORMALLED OPERATION

AKA "open." In non-normalled configuration, the top and bottom rows of jacks are not connected *at all*. Modules set to non-normalled operation will pass signal straight through from front-to-back or back-to-front, but not vertically. Useful for setups where you do not want your devices to automatically route anywhere.

FORMATTING A USB DRIVE

PBR-LIT Patchbays require a USB drive of 8 GB or less in size.

Mac

1. Insert USB drive to computer.
2. Run Disk Utilities. (Press CMD+Space to open Spotlight and type "Disk Utilities")
3. Right click on your USB drive. It will be listed in the "external" section.
4. Click "Erase."
5. Name the drive whatever you like. Make sure format type is set to "FAT32."
6. Click "Erase."
7. Your USB drive is now ready for use with your PBR LIT Patchbay.

Windows

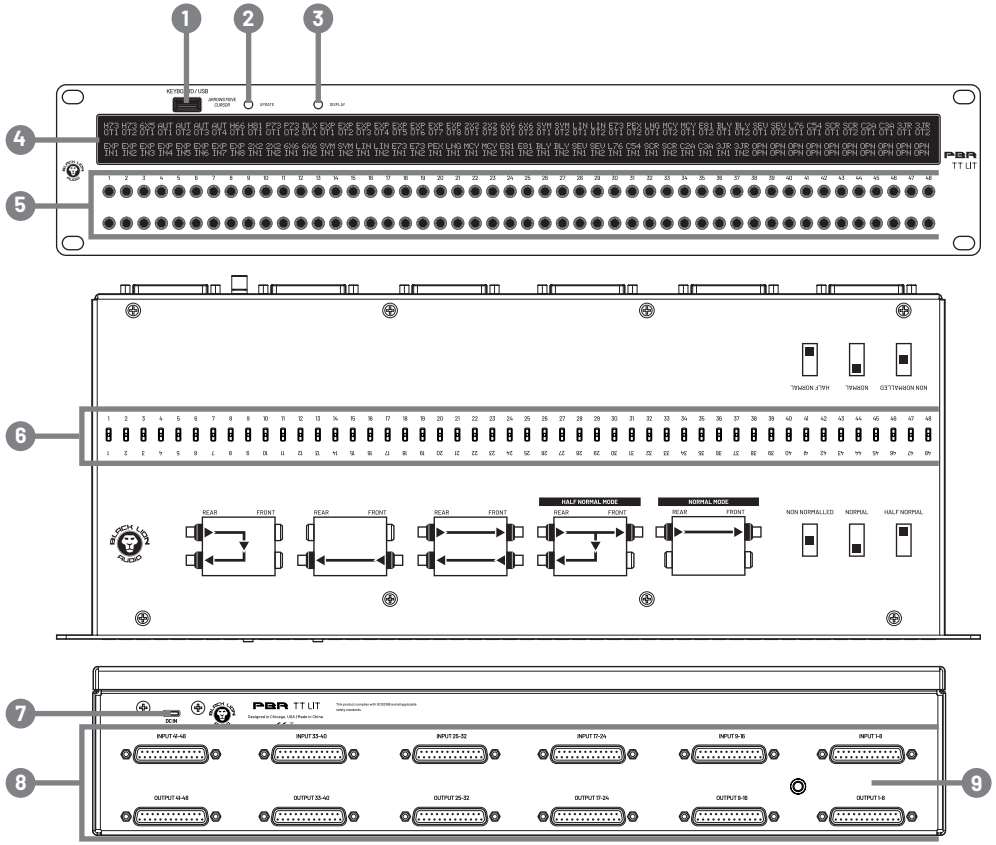
1. Insert USB drive to computer
2. Open File Explorer
3. Find your USB drive on the left side of File Explorer.
4. Right click your USB drive and click "Format."
5. Click restore device defaults and make sure file system is set to FAT32.
6. Click "Start."
7. Click "OK."
8. Click "OK" when the process is complete.
9. Your USB drive is now ready for use with your PBR LIT Patchbay.

CONNECTIONS

The PBR TT LIT offers 96 points of connectivity for your studio gear, allowing for permanent installation and routing of your favorite hardware while still allowing for flexible and creative patching.

The PBR TT LIT Patchbay offers Normalled, Non-Normalled, and Half-Normalled operation, switchable from the top of the unit on a per-module basis. A module, in this context, is any set of vertically-aligned jacks on the patchbay; TT on the front and DB25 on the back.

A typical patchbay configuration will have device outputs sent to the top rear row of patch points with device Inputs connected to the rear bottom row. For example, you would connect the Input of a delay unit or compressor to a DB25 output connection on the rear of the patchbay, and connect the delay's output to a DB25 Input connection, also on the rear.



1. **USB Port:** Connection for a USB keyboard or thumb drive for updating the LED display. See "Customizing your LED display" for details.
2. **Update button:** Press to confirm changes to the LED display.
3. **Display button:** Press to toggle the LED display on/off.
4. **LED display**: Shows your custom text.
5. **Balanced TT connections**: Accepts TT (Bantam) jacks for connecting and routing your audio gear. Accepts balanced connections.
6. **Normal/Non-Normalled/Half-Normalled Switches:** Switches the routing for its respective module between Normal, Non-Normal, and Half Normalled operation. **Switch up = Half-Normal, Switch mid = Non-normal. Switch down = Normal**
7. **Power connection**: 5v USB-C connector for power only.
8. **DB25 connections.** Accepts DB25 connections (eight channels in a breakout cable) for connecting to the inputs and outputs of your outboard equipment. Common convention is to connect the top row of connections to device outputs and the bottom row to device inputs.
9. **Grounding lug.** Connect this to your outboard equipment using a ground wire to prevent noise from ground loops.