





- **Programmable Audio Bantam (TT) Patchbay**
- **Normals and Grounds can be easily reprogrammed by the end-user**
- **Allows Switched Grounds – for a more stable signal structure**
- **High-density 2 x 48 jack configuration; 1.5 or 2 RU size**
- **Rear interface options include E-3, E-90, ID (punchdown) and D25**
- **1-48 numbering on patchbay front for easy circuit identification**

Our 969-S Series features our innovative Programmable audio patchbays in a 2 x 48 1.5 or 2 RU size, with the added capability of programming switched grounds.

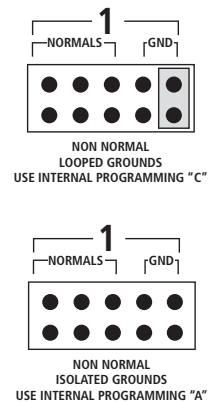
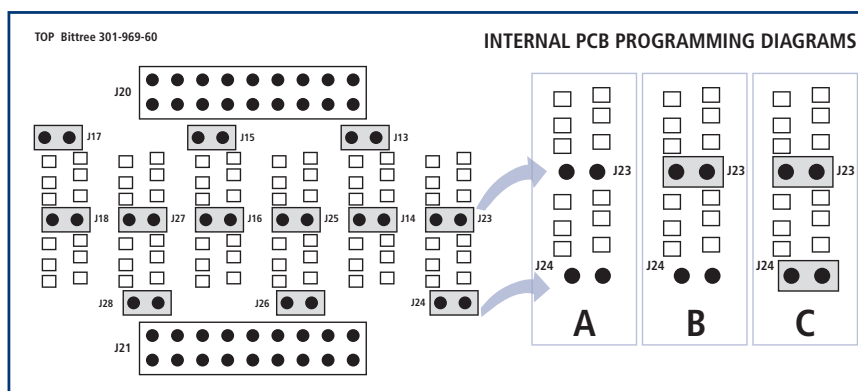
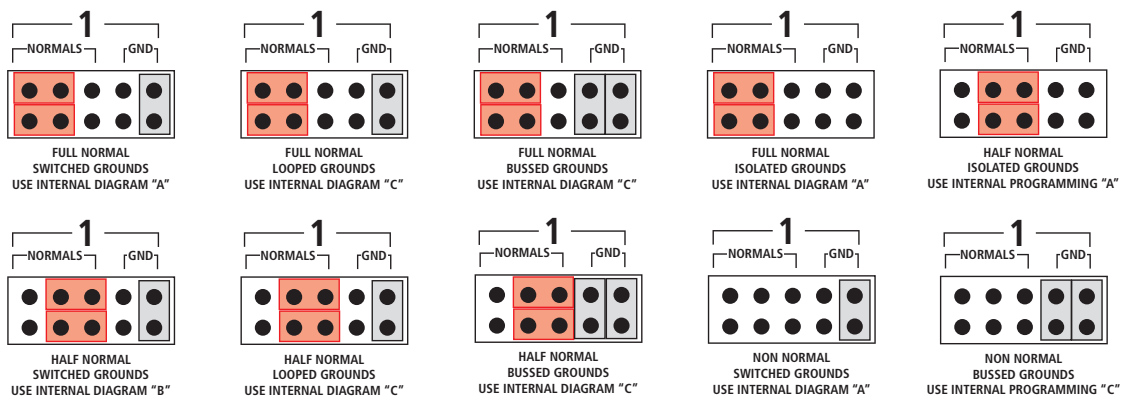
Switched grounds can help eliminate hard-to-find ground loops, and because it provides a more stable signal grounding structure, it's ideal for systems with audio signals coming from numerous locations.

The 969-S programmable patchbay allow users to quickly and easily change the normals and grounding of individual circuits. Normals can be changed to full-normal, half-normal or non-normal. Grounding can be changed to switched, bussed, isolated or looped.

Because it's programmable, the 969-S Series can serve as the foundation for virtually any new, reconfigured or legacy installation. The end result is a patchbay that allows integrators and installers to quickly re-configure patching systems, accommodate customer change-orders, and speed service-calls.

- Normals and Grounding for individual circuits can be easily changed by the end-user
- Normals can be programmed to full-normal, half-normal or non-normal; Grounding can be programmed to switched, bussed, isolated or looped
- Rear interface options include E-3, E-90, ID (punchdown) and D25
- Gold-plated contacts used in E3 and E90 rear interface
- Jacks rated to 30,000 minimum insertion cycles
- Precision-stamped reinforced steel jack frame
- Copper-nickel-silver alloy leaf springs with gold-plated cross bar switching contacts and nickel-plated sleeve bushings
- Wired with low-capacitance, AES/EBU-rated shielded, twisted pair
- Panels made from 3/16" solid aluminum with a durable powder-coat finish, with 1-48 left-to-right numbering for easy circuit ID
- Large user-friendly designation strips
- Mating connectors, contacts and normals (where applicable) are included with all standard rear interfaces

FRONT PORT EXTERNAL PROGRAMMING (under designation strips)

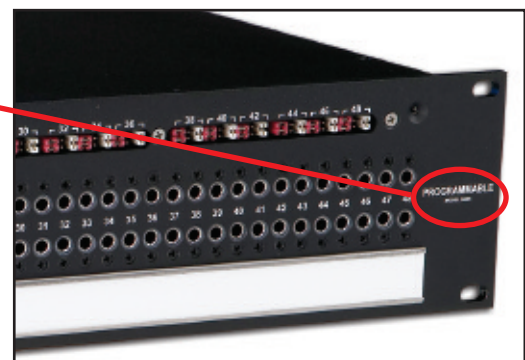


**How to Identify a 969-S Series Programmable Patchbay:**

969-S Series programmable patchbays can be identified by the word “Programmable” and “Model 969S” on the far right edge of the patchbay.

**How to Change the Programming for a Circuit:**

1. Remove the two designation strips.
2. Find your desired configuration in the diagram above.
3. Arrange the programming shunts to match the appropriate diagram. Note: Each circuit can be programmed independently.
4. Ample shunts are provided with every patchbay. Red shunts are placed horizontally and are used for normalizing. White shunts (shown as light gray above) are placed vertically and are used for grounding.
5. The circuits are numbered 1–48 and correspond to vertical jack pairs reading left to right, with the even-numbered circuits on the top row, and the odd-numbered circuits on the bottom row.
6. For the internal programming, unscrew the screws along the top edges and take off the patchbay dust cover. Locate the Internal PCB Boards inside, which are right behind the back of the jacks (for a better view, turn the rear of the patchbay toward you). There are eight PCB Boards; each one holds six circuits.
7. Depending on the Normal/Grounding configuration you want for each circuit, choose Internal Programming Diagram A, B or C from the blue box above and program accordingly, using the same red and white shunts.
8. Replace the patchbay dust cover and designation strips



969-S Series Programmable patchbay shown with top designation strip removed, exposing red and white external programming shunts.

DESCRIPTION	PRODUCT NUMBER
<b>E3, 1.5 RU, Black</b>	
E3, 2x48, 1.5 RU, Black, 7" Chassis, Full-Normal, Switched	B96DC-FNSSH/E3 M2OU7B
E3, 2x48, 1.5 RU, Black, 7" Chassis, Half-Normal, Switched	B96DC-HNSSH/E3 M2OU7B
E3, 2x48, 1.5 RU, Black, 7" Chassis, Non-Normal, Switched	B96DC-NNSSH/E3 M2OU7B
E3, 2x48, 1.5 RU, Black, 12" Chassis, Full-Normal, Switched	B96DC-FNSSH/E3 M2OU12B
E3, 2x48, 1.5 RU, Black, 12" Chassis, Half-Normal, Switched	B96DC-HNSSH/E3 M2OU12B
E3, 2x48, 1.5 RU, Black, 12" Chassis, Non-Normal, Switched	B96DC-NNSSH/E3 M2OU12B
<b>E3, 2 RU, Black</b>	
E3, 2x48, 2 RU, Black, 7" Chassis, Full-Normal, Switched	B96DC-FNSST/E3 M2OU7B
E3, 2x48, 2 RU, Black, 7" Chassis, Half-Normal, Switched	B96DC-HNSST/E3 M2OU7B
E3, 2x48, 2 RU, Black, 7" Chassis, Non-Normal, Switched	B96DC-NNSST/E3 M2OU7B
E3, 2x48, 2 RU, Black, 12" Chassis, Full-Normal, Switched	B96DC-FNSST/E3 M2OU12B
E3, 2x48, 2 RU, Black, 12" Chassis, Half-Normal, Switched	B96DC-HNSST/E3 M2OU12B
E3, 2x48, 2 RU, Black, 12" Chassis, Non-Normal, Switched	B96DC-NNSST/E3 M2OU12B
<b>E90, 1.5 RU, Black</b>	
E90, 2x48, 1.5 RU, Black, 7" Chassis, Full-Normal, Switched	B96DC-FNSSH/E90 M2OU7B
E90, 2x48, 1.5 RU, Black, 7" Chassis, Half-Normal, Switched	B96DC-HNSSH/E90 M2OU7B
E90, 2x48, 1.5 RU, Black, 7" Chassis, Non-Normal, Switched	B96DC-NNSSH/E90 M2OU7B
E90, 2x48, 1.5 RU, Black, 12" Chassis, Full-Normal, Switched	B96DC-FNSSH/E90 M2OU12B
E90, 2x48, 1.5 RU, Black, 12" Chassis, Half-Normal, Switched	B96DC-HNSSH/E90 M2OU12B
E90, 2x48, 1.5 RU, Black, 12" Chassis, Non-Normal, Switched	B96DC-NNSSH/E90 M2OU12B
<b>E90, 2 RU, Black</b>	
E90, 2x48, 2 RU, Black, 7" Chassis, Full-Normal, Switched	B96DC-FNSST/E90 M2OU7B
E90, 2x48, 2 RU, Black, 7" Chassis, Half-Normal, Switched	B96DC-HNSST/E90 M2OU7B
E90, 2x48, 2 RU, Black, 7" Chassis, Non-Normal, Switched	B96DC-NNSST/E90 M2OU7B
E90, 2x48, 2 RU, Black, 12" Chassis, Full-Normal, Switched	B96DC-FNSST/E90 M2OU12B
E90, 2x48, 2 RU, Black, 12" Chassis, Half-Normal, Switched	B96DC-HNSST/E90 M2OU12B
E90, 2x48, 2 RU, Black, 12" Chassis, Non-Normal, Switched	B96DC-NNSST/E90 M2OU12B
<b>ID, 1.5 RU, Black</b>	
ID, 2x48, 1.5 RU, Black, 7" Chassis, Full-Normal, Switched	B96DC-FNSSH/ID M2OU7B
ID, 2x48, 1.5 RU, Black, 7" Chassis, Half-Normal, Switched	B96DC-HNSSH/ID M2OU7B
ID, 2x48, 1.5 RU, Black, 7" Chassis, Non-Normal, Switched	B96DC-NNSSH/ID M2OU7B
ID, 2x48, 1.5 RU, Black, 12" Chassis, Full-Normal, Switched	B96DC-FNSSH/ID M2OU12B
ID, 2x48, 1.5 RU, Black, 12" Chassis, Half-Normal, Switched	B96DC-HNSSH/ID M2OU12B
ID, 2x48, 1.5 RU, Black, 12" Chassis, Non-Normal, Switched	B96DC-NNSSH/ID M2OU12B
<b>ID, 2 RU, Black</b>	
ID, 2x48, 2 RU, Black, 7" Chassis, Full-Normal, Switched	B96DC-FNSST/ID M2OU7B
ID, 2x48, 2 RU, Black, 7" Chassis, Half-Normal, Switched	B96DC-HNSST/ID M2OU7B
ID, 2x48, 2 RU, Black, 7" Chassis, Non-Normal, Switched	B96DC-NNSST/ID M2OU7B
ID, 2x48, 2 RU, Black, 12" Chassis, Full-Normal, Switched	B96DC-FNSST/ID M2OU12B
ID, 2x48, 2 RU, Black, 12" Chassis, Half-Normal, Switched	B96DC-HNSST/ID M2OU12B
ID, 2x48, 2 RU, Black, 12" Chassis, Non-Normal, Switched	B96DC-NNSST/ID M2OU12B
<b>D25, 1.5 RU, Black</b>	
D25, 2x48, 1.5 RU, Black, 7" Chassis, Full-Normal, Switched	B96DC-FNSSH/D25 M2OU7B
D25, 2x48, 1.5 RU, Black, 7" Chassis, Half-Normal, Switched	B96DC-HNSSH/D25 M2OU7B
D25, 2x48, 1.5 RU, Black, 7" Chassis, Non-Normal, Switched	B96DC-NNSSH/D25 M2OU7B
D25, 2x48, 1.5 RU, Black, 12" Chassis, Full-Normal, Switched	B96DC-FNSSH/D25 M2OU12B
D25, 2x48, 1.5 RU, Black, 12" Chassis, Half-Normal, Switched	B96DC-HNSSH/D25 M2OU12B
D25, 2x48, 1.5 RU, Black, 12" Chassis, Non-Normal, Switched	B96DC-NNSSH/D25 M2OU12B
<b>D25, 2 RU, Black</b>	
D25, 2x48, 2 RU, Black, 7" Chassis, Full-Normal, Switched	B96DC-FNSST/D25 M2OU7B
D25, 2x48, 2 RU, Black, 7" Chassis, Half-Normal, Switched	B96DC-HNSST/D25 M2OU7B
D25, 2x48, 2 RU, Black, 7" Chassis, Non-Normal, Switched	B96DC-NNSST/D25 M2OU7B
D25, 2x48, 2 RU, Black, 12" Chassis, Full-Normal, Switched	B96DC-FNSST/D25 M2OU12B
D25, 2x48, 2 RU, Black, 12" Chassis, Half-Normal, Switched	B96DC-HNSST/D25 M2OU12B
D25, 2x48, 2 RU, Black, 12" Chassis, Non-Normal, Switched	B96DC-NNSST/D25 M2OU12B

For fast, easy ordering visit [bittree.com](http://bittree.com)



**AUDIO BANTAM (TT)**  
BPC 24 00 - 110

- Color**  
00= Black  
02= Red  
04= Yellow  
05= Green  
06= Blue  
07= Purple
- Length in Inches (cm)**  
24 (61)  
36 (92)  
48 (122)  
60 (153)  
72 (184)

**DUAL BANTAM (TT)**  
DPC 24 00

- Color**  
00= Black  
02= Red  
04= Yellow  
05= Green  
06= Blue  
07= Purple
- Length in Inches ( )**  
24 (61)  
36 (92)  
48 (122)  
60 (153)  
72 (184)



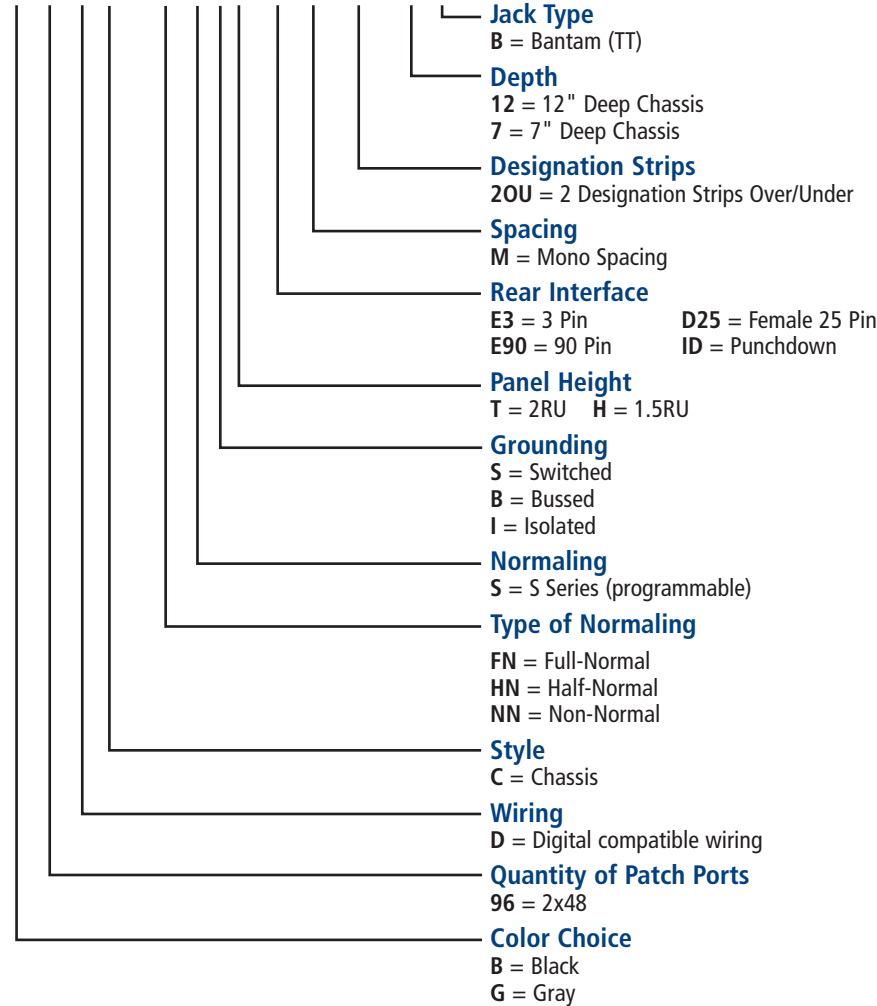
BPC PATCH CORDS



DPC PATCH CORDS

Our easy-to-use Ordering Codes let you order the exact patching system you need. As shown in the chart below, simply choose the option you want for each specification.

**B 96 D C - FN S S T / E3 M 20U 12 B**



Mating connectors, contacts and normals (where applicable) are included with standard rear interface audio patchbays. Lacing bars are included with all audio patchbays.