

## The PB28 Patch System

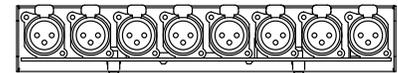
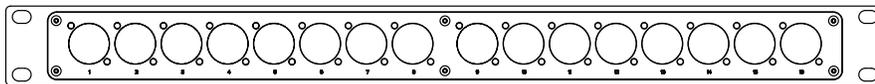
Aviom's PB28 Patch Bay System is a universal modular patching system that allows the user to configure custom patch panels. PB28 patch bays can be used in any audio or data environment. Each PB28 Patch Panel accepts two eight-channel modules in any order.

A Phillips screwdriver is required to mount the PB28 Series modules to the PB28 Patch Panel.

## PB28 Modules

These modules are currently available for the PB28:

- 28-XF-DB XLR female (f) to DB25 (r)
- 28-XM-DB XLR male (f) to DB25 (r)
- 28-EC-EC EtherCon on both sides
- 28-XM-XF XLR male (f) to XLR female (r)
- 28-XF-XM XLR female (f) to XLR male (r)
- 28-AES-DB XLR male/female (f) to DB25 (r) for AES/EBU digital data



## Assembly

The basis of the PB28 system is the PB28 Patch Panel, a blank, 1U-high unit that accepts up to two PB28 Series modules. Secure the optional modules to the PB28 Patch Panel before mounting the product in an equipment rack.

To attach a PB28 Series module to the PB28 Patch Panel:

1. Orient the blank PB28 Patch Panel with the channel numbers facing down.
2. Align the jacks on the front of the PB28 Series module with the holes numbered 1-8 or 9-16 in the front panel of the PB28 Patch panel.
3. PB28 Series modules that have release tabs on the front (such as the EtherCon jack) should be angled slightly downward before being passed through the patch panel opening. Always mount the module with the release tabs facing upward.

4. Attach the module to the patch panel. Each PB28 Series module comes with 16 screws that are used to secure it to the front of the PB28 Patch Panel. Always install all 16 screws.

Avoid excess force when attaching modules to the PB28 Patch Panel. Hand-tighten the Phillips screws to avoid stripping the threads on the PB28 Series module.

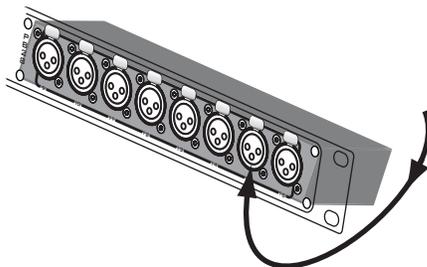
**Note:** Using a power screwdriver can damage the panel-mounted jacks on the PB28 Series module.

## Replacing a Module

To change the configuration of a patch bay or exchange a PB28 Series module, first remove the PB28 from the equipment rack. Remove any modules with a Phillips screwdriver. Exchange or replace modules by repeating the steps above.

## Mounting the PB28 in a Rack

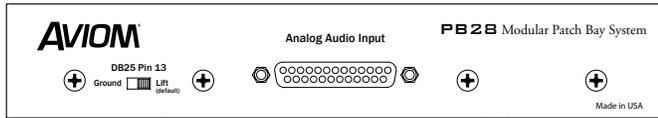
When rack mounting, be sure to use four screws—one in each mounting hole—to ensure that the PB28 does not flex in the equipment rack.



## Configuring PB28 Modules

### Ground Switches on DB25 Connectors

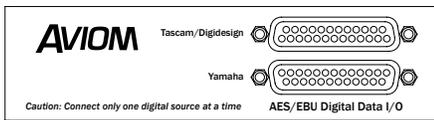
A ground (earth) lift switch is provided on analog modules using the DB25 connector. This switch is provided to help troubleshoot ground problems. Always start with the switch in the default location as noted on the module's rear panel art.



The switch on the left side of the module will ground Pin 13 of the DB25. In a standard DB25 audio pinout, for example, this pin is not connected to ground.

### Digital DB25 Connectors

The 28-AES-DB module provides eight channels of AES/EBU digital I/O in stereo pairs, per the AES specification. It is equipped with two DB25 connectors to accommodate the different AES wiring pinouts currently in use by major manufacturers of digital gear. *Only one DB25 connector can be used at a time.*



The following tables describe the pinout configurations used on the 28-AES-DB module.

Yamaha AES Pinout			
	Hot	Cold	Gnd
Data In (stereo pairs)	1	14	22
	2	15	10
	3	16	23
	4	17	24
Data Out (stereo pairs)	5	18	12
	6	19	25
	7	20	13
	8	21	13
Unused	9, 11		

Tascam/Digidesign AES Pinout			
	Hot	Cold	Gnd
Data In (stereo pairs)	24	12	25
	10	23	11
	21	9	22
	7	20	8
Data Out (stereo pairs)	18	6	19
	4	17	5
	15	3	16
	1	14	2
Unused	13		

## PB28 Cat-5 Modules

The 28-EC-EC is an eight-channel EtherCon RJ45 module featuring Neutrik EtherCon connectors on both sides. It allows Cat-5 network connections from multiple devices to be brought to a convenient central location in any patch bay. The 28-EC-EC module can be used with Aviom A-Net™ products or with any Cat-5 based data system.

### About the EtherCon Connector

The Neutrik EtherCon connector is a dual RJ45 type connector. It can receive a standard Category 5e cable or a cable fitted with the special heavy-duty locking EtherCon connector.

When using a standard Cat-5e cable, plug the cable into the center of the jack; release the cable by pressing on the small plastic tab built into the cable connector.

Insert an EtherCon equipped cable into the jack until it clicks and locks in place. To remove the cable, press on the metal release tab at the top of the panel-mounted EtherCon jack and pull the connector outward.

## Aviom, Inc. Limited Warranty

Aviom, Inc. warrants this product against defects in materials and workmanship for a period of one year from the date of the original retail purchase.

This warranty does not apply if the equipment has been damaged due to misuse, abuse, accident, or problems with electrical power. The warranty also does not apply if the product has been modified in any way, or if the product serial number has been damaged, modified, or removed.

If a defect is discovered, first write or call Aviom, Inc. to obtain a Return Authorization number. No service will be performed on any product returned without prior authorization. Aviom, Inc. will, at its option, repair or replace the product at no charge to you. The product must be returned during the warranty period, with transportation charges prepaid, to Aviom, Inc., 1157 Phoenixville Pike, Suite 201, West Chester, PA 19380, USA. You must use the product's original packing materials for shipment. Shipments should be insured for the value of the product. Include your name, address, phone number, description of the problem, and copy of the original bill of sale with the shipment. The Return Authorization number should be written on the outside of the box.

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