

# Signal Splitters

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Hardware Reference



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# Splitters

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## S-BOX\_PZ5 - Amplifier Input Splitter

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The S-BOX\_PZ5 is a 32-channel passive signal splitter for use with the PZ5 Amplifier or PZA (Subject Interface) Amplifier. The splitter provides a simple and effective means of routing low impedance biological signals to both a TDT acquisition system and a parallel recording system.

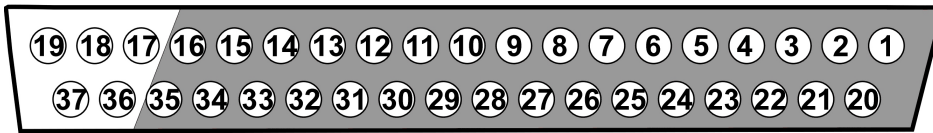
Two DB26 connectors provide direct connection to a PZ5 amplifier and a single DB37 provides a parallel output connection. Bank letters as well as channel number ranges are labeled on all the DB26 connectors (i.e. Bank A Channels 1-16).

### Important


The S-BOX\_PZ5 is NOT FDA approved and is intended for use with the PZ5 Amplifier.

The S-BOX\_PZ5 uses standard 1.5 mm safety connectors for electrode input. Front panel numbering of these inputs corresponds to TDT amplifier channels.

## DB37 Pinout

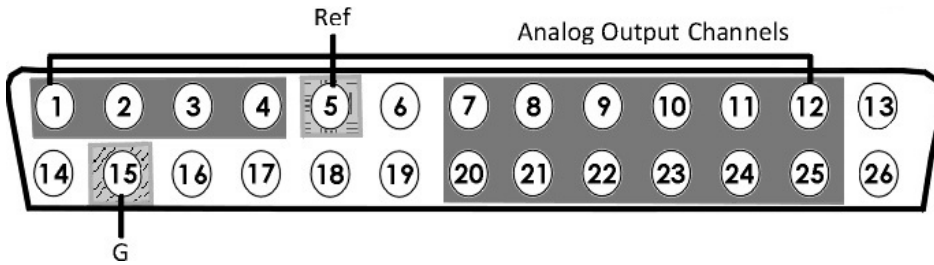


Pin	Name	Description	Pin	Name	Description
1	A1	Analog input channels	20	A2	Analog input channels
2	A3		21	A4	
3	A5		22	A6	
4	A7		23	A8	
5	A9		24	A10	
6	A11		25	A12	
7	A13		26	A14	
8	A15		27	A16	
9	A17		28	A18	
10	A19		29	A20	
11	A21		30	A22	
12	A23		31	A24	
13	A25		32	A26	
14	A27		33	A28	
15	A29		34	A30	
16	A31		35	A32	
17	NA	Not Used	36	NA	Not Used
18	NA		37	REF	Reference
19	GND	Ground			

 **Note**

No connections should be made to pins 17, 18, and 36.

## DB26 Pinout



Pin	Name	Description	Pin	Name	Description
1	A1	Analog Input Channels	14	NA	Not Used
2	A2		15	GND	Ground
3	A3		16	GND	Ground
4	A4		17	NA	Not Used
5	Ref	Reference	18	HSD	Headstage Detect
6	HSD	Headstage Detect	19	HSD	
7	A5	Analog Input Channels	20	A6	Analog Input Channels
8	A7		21	A8	
9	A9		22	A10	
10	A11		23	A12	
11	A13		24	A14	
12	A15		25	A16	
13	NA	Not Used	26	NA	Not Used

## S-BOX16 - 16 Channel Input Splitter



The S-BOX16 is a 16-channel passive signal splitter for use with the PZ5 Amplifier or PZA (Subject Interface) Amplifier. It has a physical switch to optionally short ground and reference together.

The S-BOX16 uses standard 1.5 mm safety connectors for input from electrodes. Front panel numbering of these inputs corresponds to TDT amplifier channels.

It has the same pinout as the [S-BOX\\_PZ5](#).

#### Important

If using with the IZ2 or IZV stimulator, make sure the switch is in the OPEN position.

#### Important

The S-BOX16 is NOT FDA approved

## S-BOX64 - 64 Channel Input Splitter

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The SBOX64 is a 64-channel passive signal splitter for use with the PZ5 Amplifier or PZA (Subject Interface) Amplifier. It has a physical switch to optionally short ground and reference together.



The S-BOX64 uses standard 1.5 mm safety connectors for input from electrodes. Front panel numbering of these inputs corresponds to TDT amplifier channels.

Each DB26 has the same pinout as the [S-BOX\\_PZ5](#).

- Bank A Ch 1-16
- Bank B Ch 17-32
- Bank C Ch 33-48
- Bank D Ch 49-64

All GND pins on Banks A-D are shared, and all Ref pins are shared.





Front and back pinout of S-BOX64

#### Important

If using with the IZ2 or IZV stimulator, make sure the switch is in the OPEN position.

#### Important

The S-BOX64 is NOT FDA approved