

# Splitters

## S-BOX - Amplifier Input Splitter

The S-BOX is a 32-channel passive signal splitter for use with the PZ3 Low Impedance 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.

Four DB26 output connectors provide direct connection to a PZ3 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 1-8).

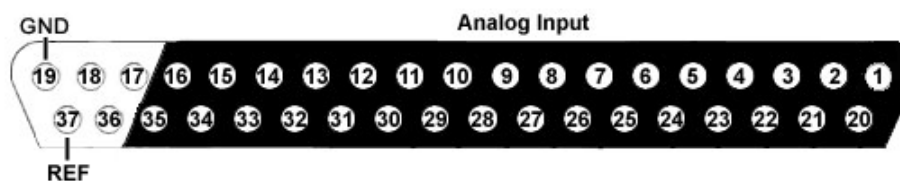


**Important!** The S-BOX is NOT FDA approved.

The splitter uses standard 1.5 mm safety connectors for input from electrodes. Front panel numbering of these inputs corresponds to TDT amplifier channels in Shared Differential mode.

**Important!** The S-BOX DOES NOT support Individual (True) Differential mode. Contact TDT if differential recording is required.

## DB37 Pinout



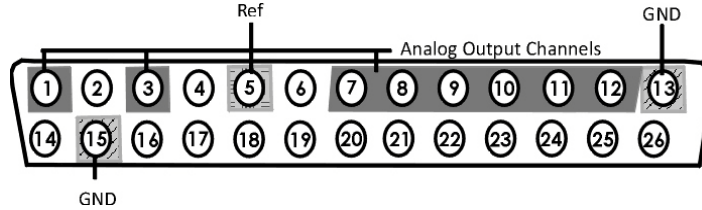
Pin	Name	Description	Pin	Name	Description
1	A1	Analog input channels 1,3,5,7,9,11,13,15,17,19, ,21,23,25,27,29,31	20	A2	Analog input channels 2,4,6,8,10,12,14,16,18, 20,22,24,26,28,30,32
2	A3		21	A4	
3	A5		22	A6	
4	A7		23	A8	
5	A9		24	A10	
6	A11		25	A12	
7	A13		26	A14	
8	A15		27	A16	
9	A17		28	A18	
10	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				
19	GND	Ground	37	REF	Reference

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

## DB26 Pinout

PZ3 amplifiers have up to 16 26-pin headstage connectors on the back of the unit. The PZ3 channels are marked next to the respective connector on the amplifier. Match S-BOX DB26 Output connectors to the matching connectors on the PZ3.

### Pinout Diagram



**Note:** There are 8 channels per DB26 connector. Bank A is shown. Subsequent banks are indexed by an additional 8 channels.

Pin	Name	Description	Pin	Name	Description
1	A1	Analog Output Channel	14	NA	Not Used
2	NA	Not Used	15	GND	Ground
3	A2	Analog Output Channel	16	NA	Not Used
4	NA	Not Used	17	NA	
5	Ref	Shared Reference	18	NA	
6	NA	Not Used	19	NA	
7	A3	Analog Output Channels	20	NA	
8	A4		21	NA	
9	A5		22	NA	
10	A6		23	NA	
11	A7		24	NA	
12	A8		25	NA	
13	GND	Ground	26	NA	

## S-BOX\_PZ5 - Amplifier Input Splitter for the PZ5

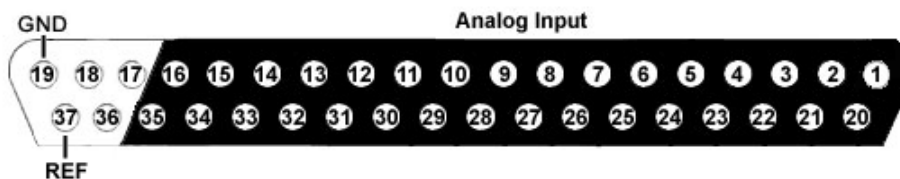
The S-BOX\_PZ5 is a 32-channel passive signal splitter for use with the PZ5 Amplifier. The splitter provides a simple and effective means of routing low impedance biological signals to both a TDT acquisition system and a parallel recording system.

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 input from electrodes. Front panel numbering of these inputs corresponds to TDT amplifier channels.

## DB37 Pinout



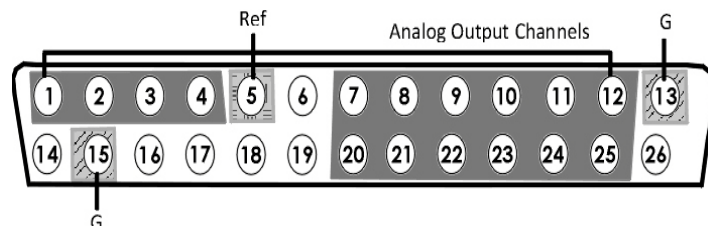
Pin	Name	Description	Pin	Name	Description
1	A1	Analog input channels 1,3,5,7,9,11,13,15,17,19, ,21,23,25,27,29,31	20	A2	Analog input channels 2,4,6,8,10,12,14,16,18, 20,22,24,26,28,30,32
2	A3		21	A4	
3	A5		22	A6	
4	A7		23	A8	
5	A9		24	A10	
6	A11		25	A12	
7	A13		26	A14	
8	A15		27	A16	
9	A17		28	A18	
10	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	
19	GND	Ground			

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

## DB26 Pinout

PZ5 NeuroDigitizers have up to eight 26-pin headstage connectors on the back of the unit. The connectors are labeled alphabetically from bottom to top. The PZ5 can be operated in four different modes. The pinout reflects numbering when using None or Shared Reference Mode. Contact TDT if differential recording is required.

### Local, None or Shared Reference Mode



**Note:** There are 16 channels per DB26 connector. Bank A is shown. Channels in Bank B are incremented by an additional 16 channels.

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

