

A white plastic electronic device with a grey dome-shaped top and a speaker grille. It has two gold-colored connectors on the sides. The device is centered over a background of a technical wiring diagram with various labels like 'W-X2 BUSS BAR', 'Fuselink 24AWG', 'Ma.', 'B.', 'PC', 'W-X', 'GFW', 'F3 FUS.', 'K3 RELAY.', 'V2 2WG', '18A', '16AW', 'W-U', 'W-V8', 'tor', 'BU', 'P1', 'GND', 'EG', 'ALT1'.

Vx Aviation ASX-2B

Stereo Music
& Cellphone Adapter

Installation Guide

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ASX-2B

Stereo Music & Cellphone Adapter

Description

The ASX-2B device is a stereo headphone music amplifier and cellphone interface for aircraft applications. It connects to portable music players or panel-mounted music sources and adds high-fidelity stereo music to existing audio installations. It also connects to cellular telephones, thus allowing aviation headsets to be used for telephone communications.

Music audio is automatically muted to a low level when communications audio is detected. This allows normal radio communications, alarms and intercom audio to be heard normally without interference from the music source. Automatic muting may be disabled with an external switch, if desired. Audio on the cellphone inputs is not automatically muted in any configuration.

The ASX-2B device is contained in a small 25-pin D-subminiature connector shell that takes no valuable panel space and is adaptable to portable use. It is powered from the aircraft electrical system, and provides about double the power of 9 volt battery powered amplifiers.

The device will drive headphones with a minimum of 32 Ω impedance, making it compatible with portable music player headphones as well as standard 300 Ω aircraft headphones.

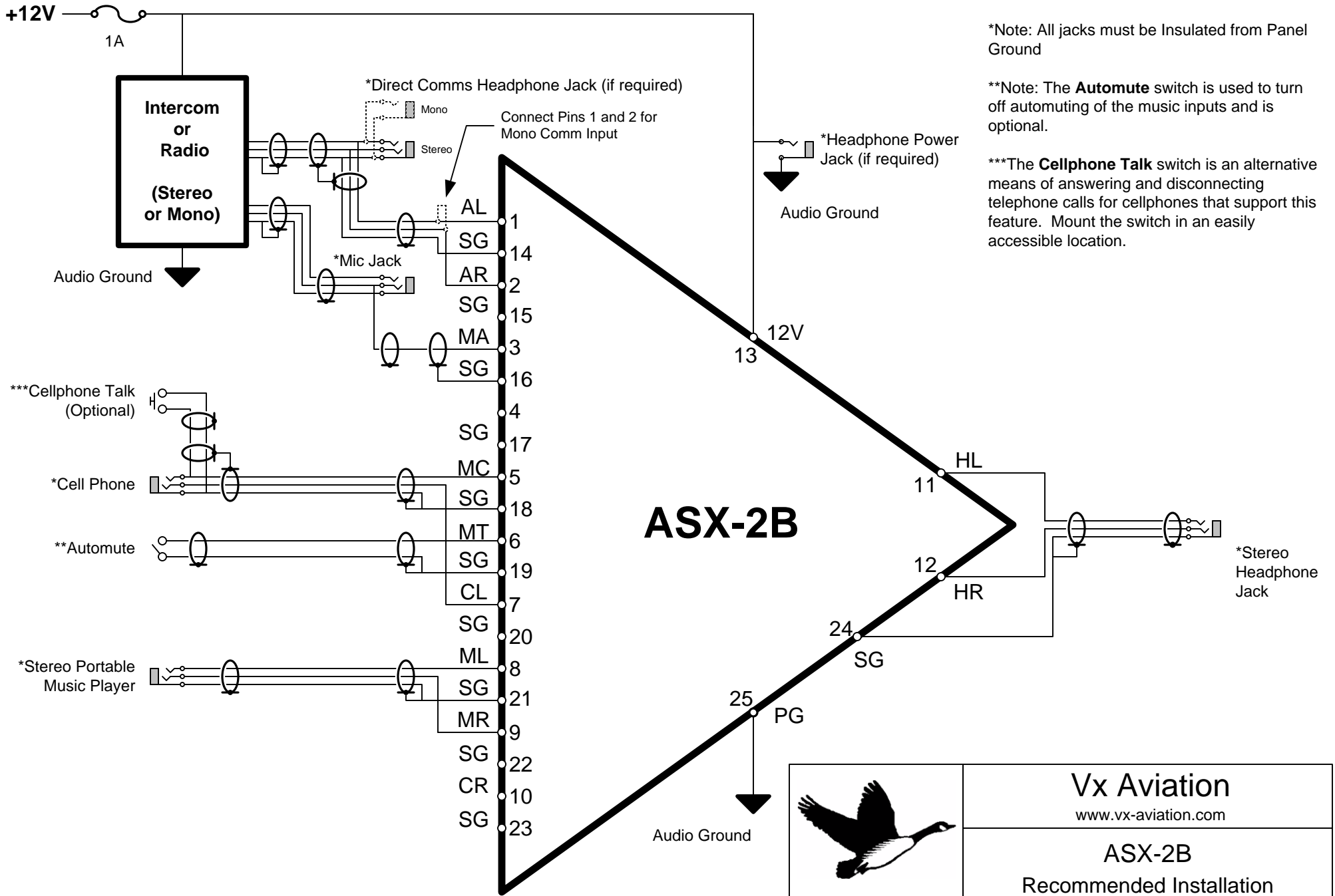
The amplifier has a nominal gain of 2 for the communication audio inputs, a nominal gain of 5 for the stereo music and cellphone inputs. When connected to 300 Ω impedance loads, the amplifier provides rated power over the frequency range of 40 Hz to 15 KHz.

Technical Summary

- ❑ Stereo Music and Cellphone Inputs:
 - ❑ 200 K Ω input impedance
 - ❑ Fixed voltage gain of 5
 - ❑ Music inputs have selectable automute.
 - ❑ Cellphone inputs not mutable.
- ❑ Avionics Input:
 - ❑ 560 Ω input impedance
 - ❑ Fixed voltage gain of 2
- ❑ Audio outputs capable of driving 50 mW x 2 into 150 Ω or 40 mW x 2 into 300 Ω loads (14.2 volt supply)
- ❑ Wide frequency range 40 Hz to 15 KHz (-3dB) into 300 Ω loads.
- ❑ Less than 100 mA current drain, 10 to 16 volt operation

ASX-2A and ASX-2B Comparison

ASX-2A	ASX-2B
Mono Avionics input	Stereo or Mono Avionics input
No Cellphone interface	Cellphone interface
Auto Mute	Auto Mute with external disable



*Note: All jacks must be Insulated from Panel Ground

Note: The **Automute switch is used to turn off automuting of the music inputs and is optional.

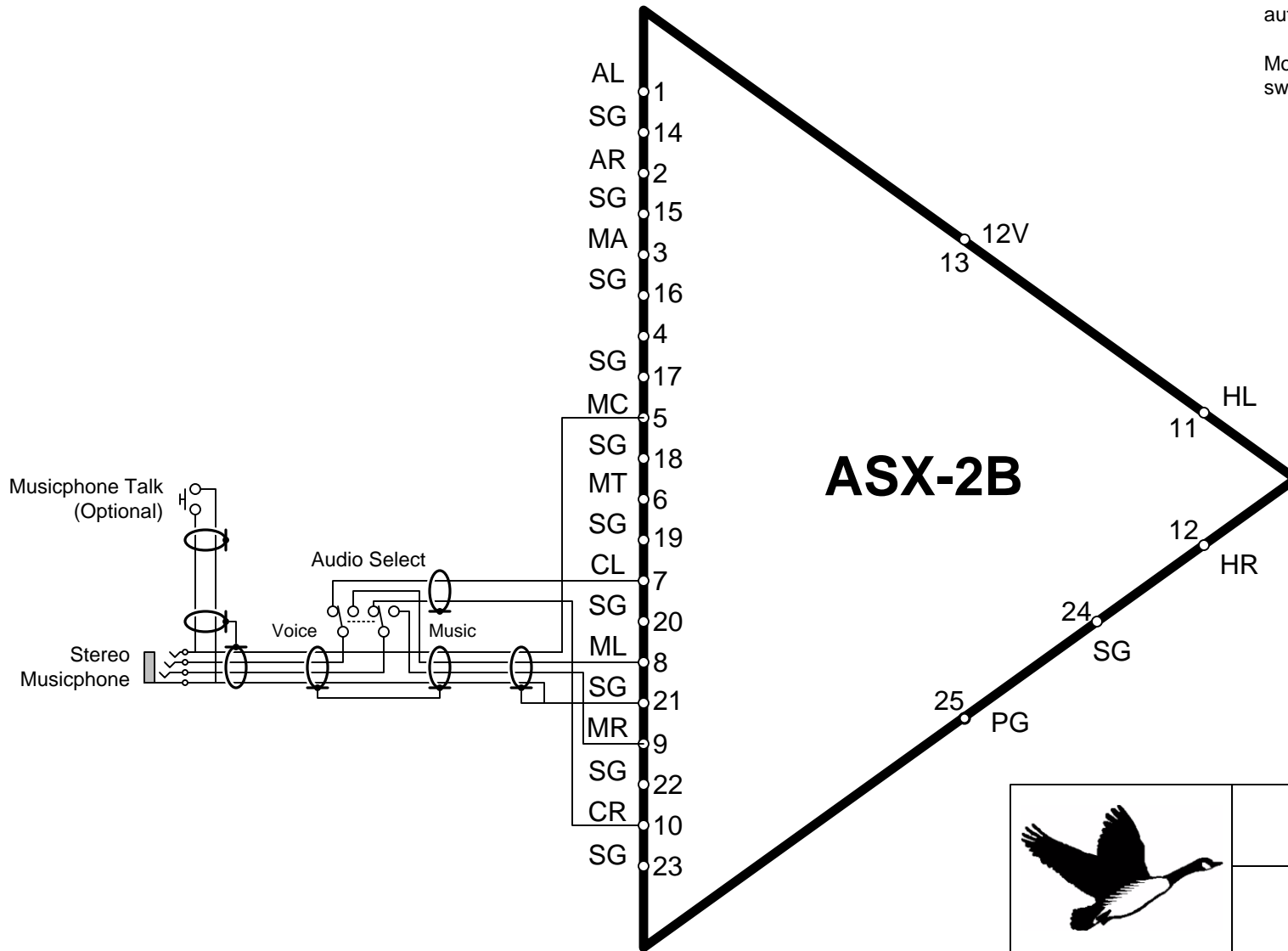
***The **Cellphone Talk** switch is an alternative means of answering and disconnecting telephone calls for cellphones that support this feature. Mount the switch in an easily accessible location.

Recommended Installation
 ASX-2B With Aircraft Intercom, Portable Music Player
 and Cellphone Inputs


		Vx Aviation www.vx-aviation.com		
		ASX-2B Recommended Installation		
Drawn	V. Little	VX-08004	DWG NO	REV
Date	2008.08.01		VXD-0804004	A1
SCALE	None	SHEET	3 OF 5	

The **Audio Select** switch is used to choose between phone voice conversation and music listening mode. For phone conversations, this switch must be selected to Voice to bypass internal automuting. For listening to music, this switch should be selected to Music to allow for automuting.

Mount the **Musicphone Talk** and **Audio Select** switches in easily accessible locations.



AMX-2B Recommended Connection for Musicphone

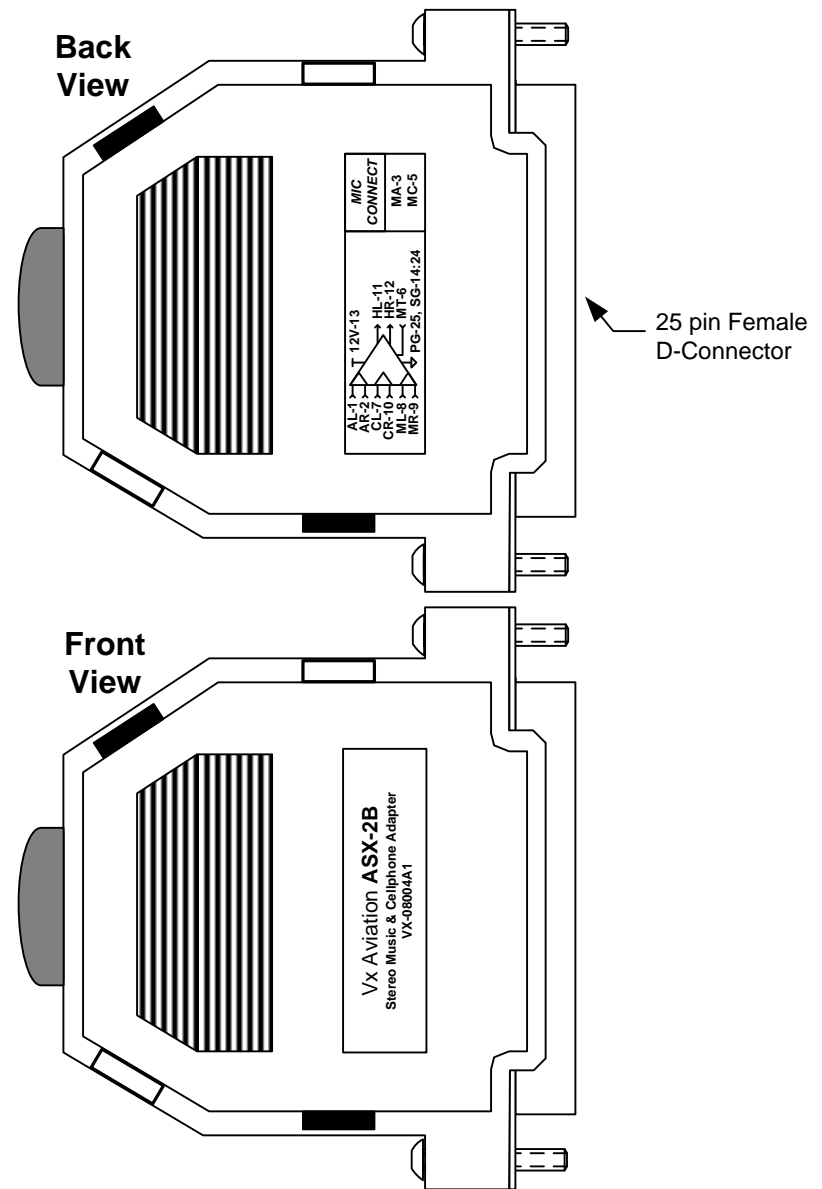
	Vx Aviation www.vx-aviation.com		
	ASX-2B Musicphone Installation		
Drawn	V. Little	DWG NO	REV
	VX-08004	VXD-0804004	A1
Date	2008.08.01	SCALE	None
		SHEET	4 OF 5

ASX-2B Device Pin Description

DB 25F Pin	Pin Name	Function	Connect To
1	AL	Stereo Avionics Bus Left and Right Inputs. 560 Ω nominal input impedance.	Avionics radio or intercom communications output. 560 Ω input impedance is compatible with most certified avionics sources. <i>Connect to AL and AR together for mono applications.</i> Communications activity on these inputs will automute Music audio unless automuting is disabled by grounding the MT input.
2	AR		
3	MA	Aviation Mic.	Aviation headset microphone jack.
4			Reserved, do not connect.
5	MC	Cellphone Mic	Cellphone jack microphone input.
6	MT	Mute Disable.	Leave open for automuting of Music audio. Connect to SG to disable.
7	CL	Cellphone Left or Mono Audio Input. Non-mutable.	Cellphone jack audio Left or Mono output. Connect CL using shielded wire, with shield connected to SG, ASX-2B end only.
8	ML	Left and Right Music Inputs. Mutable.	Music input Jack left and right channels. Connect ML and MR using shielded wire pair, with shield connected to SG, ASX-2B end only.
9	MR		
10	CR	Cellphone Right Audio Input. Non-mutable.	Cellphone jack audio Right output. No connection required for mono cellphones. Connect CR using shielded wire, with shield connected to SG, ASX-2B end only.
11	HL	Left and Right Headphone Audio Outputs.	Stereo headphone jack left and right channels. Connect using shielded wire pair, with shield connected to SG, ASX-2B end only.
12	HR		
13	12V	Power Input.	10-14 volt power. DO NOT EXCEED 16 Volts.
14-24	SG	Signal Ground.	Shield and Audio grounds.
25	PG	Power Ground.	Power Ground. Internally connected to SG.

Electrical Specifications Over Ambient Temperature Range

Parameter	Function	Min	Typ	Max	Units	Notes
T _A	Ambient Operating Temperature	-40	25	50	Degrees Celcius	Non-condensing
V _{CC}	Operating Voltage on 12V input	10	14.2	16	Volts DC	Protect V _{CC} with 1 Amp Fuse or Breaker
I _{CC}	Current Drain		10	100	mA DC	
a _v	Voltage Gain (per input)		6-Comm 14-Music 14-Cell		dBV	Outputs unloaded
P _{OUT}	Power Output		40		mW x 2	300 Ω load
f _c	Frequency Response		40- 15,000		Hz, -3 dB	300 Ω load



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