## ACARS Receiver

SBS-3

## SBS-3 works as ACARS receiver

SBS-3 is an ACARS/AIS/ADS-B 3 in 1 receiver. It integrates an ACARS receiver module, an AIS receiver module and an ADS-B receiver module into one box. We'll introduce its ACARS receiver function here.

The SBS-3, described as being a little bigger than a card, suggests a compact and portable device, likely catering to the needs of enthusiasts or professionals in ACARS tracking who require ACARS receiver functionality without the burden of installing heavy or cumbersome equipment.



SBS-3 is delivered with 1x SBS-3 receiver unit, 1x ADS-B antenna, 1x VHF antenna for ACARS and AIS, 1x USB cable and 1x disc of ADS-B display software BaseStation.



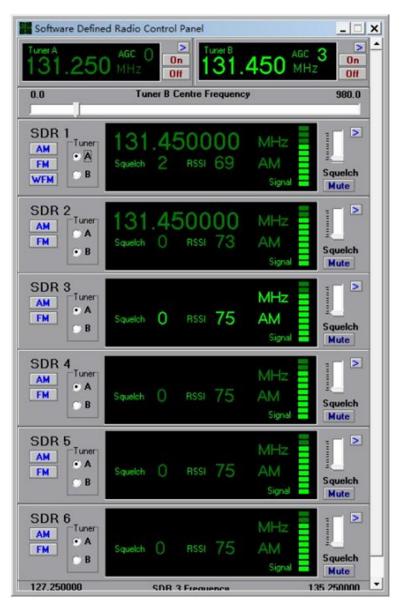
It's quite easy to connect all these, just see the connectors on the back panel of SBS-3, every connector is clearly marked.



Simple start is to connect SBS-3 with computer via the USB cable and install the BaseStation software on computer. No need for any further configuration, you'll see aircrafts ADS-B information immediately. Computer would power SBS-3 via the USB cable.



You may be aware that ACARS frequencies are different from country to country. It's not like ADS-B. ADS-B has a global frequency 1090MHz, and U.S.A. general aviation special UAT frequency 978MHz. Let's take ACARS frequency 131.45MHz as an example for showing how to configure SBS-3 to work as an ACARS receiver. In BaseStation software, enter Software Defined Radio Control Panel.



SBS-3 has two tuner, tuner A and turner B. Frequency range from 27MHz to 980MHz. There're six SDR. Four of them are useable and the other two are reserved for future use.

For example, you need to receive four frequencies, 131.5MHz, 139.5MHz, 901.0MHz and 909.0MHz.

First, 131.5MHz and 139.5MHz are 8MHz different and hence can use the same tuner. Configure tuner A as 135.5MHz, SDR 1 as 131.5MHz and SDR 2 as 139.5. Same configuration for 901.0MHz and 909.0MHz.

One tuner can support 8MHz most. So, you can't use the same tuner if you need to receive 131.5MHz and 139.8MHz.

Come back to our example of setting just one frequency 131.45MHz, we just need to set one tuner and one SDR. Make sure we choose AM and we choose the right tuner with SDR, it would work.

In BaseStation build-in SDR, open ACARS window, wait a while, data would show up.

40	Time	Frequency	Mode	Registration	Message Type	Block ID	Sequer	Flight Num	Message Test
	1210.01	1.12.450		5178004		0	E MA		am terophan significant providentings, provide second of the active active active
		132.400		143691	Ht.	U	0129		#\$4%0 000000000 00001
	12.35.00	131.450		NEGE		1	MERA		0.525/A2N/
	12.22.75	131.450		(0,72)a	40.	0	14,354		2010/01/02/294031449110/1996/550102005/2001.758-244015:0E116515/10005/92007
	121154	131.450	2	OFFICE	Q0	4	501A	\$6.0995	
4410-25	124522	115.455	2	8 Stat	Q1	3	SEGA	( NOSCO	
	1242.03	13:460	2	6-5183	11	0	14,7553		POSCAS 28821AF N 40-251.091 (T16-220ALE 2010) POB VESSUUT C 644/54
	1243.99	111.69	2	15 50 C k	5A	0	5435	CA2307	REVERTIV
LC11/25	11.00 27	131-450	2	0.6158	00	£		C21603	
14/11/25	1102.05	101.460	3	0.6253	Q()	1	\$504		
	12.34 52	1.11.450	2	6052610	49	4	1244	110220	
44/11/25	13 43 04	131.450	2	HC 8224	60	7	3464	1,50901	
0.0711.25	1142.09	t)t ea	2	H18225	+1	1	0.040	I E GREST	107811 105.2010310.001010100.201224157.01402347234256601961034034504517462E794466.00660106
10/11/25	10,05:00	131.050	3	14129.04	01	0	1014	0.0005	084184058400508 116442 AUR 200852 321 SAVE 301500 81 0 M 96 30025 540 80 / 1 5000552,2511143825
04/11/25	14/03/16	131.450	2	9120.04	19	4	102535	044005	INTERNATIONNESPERCES
14/11/25	14/09/21		2	110283.04	22	5	17254	1944925	/C3.0HDPv6
	14.05.29	12 450	2	111,202,64	1	¢	3.5.8		
014/11/255	14 17 20	131.453	2	ALLERIA	1	1	5324	ULLIGION -	
014/11/25	14,18,03	131.450	2	113346.05	J	6	1104	1000320	
014/17/25	14,29,24	1.01 (Fild)	2	HE, 7765	¢0	3	3.844	0.0201	
014/11/25	104742	1.11.450	2	0-56-22	1.4	1	16630	200725	POSSITE 0645322.47 N-4055812.09 ET1N-740.CAS 2552%0 142303%1 1933421 20100700 63741 024340142 025103145 0433
054/11/25	144350	125.400	2	0.5432	69	3	5354	260725	
	14 44 13	101.450		9.5229	12	1	Martine.		
14/11/25	14 63 33	141.450	2	0.6628	1	0	3-05A	020102	
14/11/25	12(62.16	1.11.400	2	8.6314	54	7	3.714	MU2210	BLH3/0409/5
014/11/25	19.62.55	111.450	2	0-1012	11	3	CBGA	0102112	REPERTENTIAL ESONOMISSION CONSIDERENDA EN CONTRACTORIA EN CONTRACTOR EN CONTRACTOR EN CONTRACTOR EN CONTRACTOR
640.55	15 51 09	101.450	2	53405	97	1	5734	16) Annie	
44/11/25	1912.05	131.450	1	64.00	HT	5	(CLEER)	0220162	ACTE LA LA VALLET L'ALTANDARES 1
14/11/25	間段は	131-450	2	0-5713	00		1233	HU2107	
14/11/25	29.42.14	111.450	2	0.5711	90		1258		
01011025	15,43,49	121-450	2	0.6711	14	9	16720	HU2307	PES 29497-0745-0991000-291009-40-429-110-303-2016
	12(4)45	115 455		0.5773	52	3	11774	+672903	POS 294/3V 0745 - 0691000 29100 H 45 429 E 116 762 - 2076 146/80

I believe many people are sorry that this good product SBS-3 is EOL. We hope our ACARS, AIS and ADS-B receiver modules could be an applicable replacement of this once famous SBS-3.