Quick Start Guide Radarcape

Art. 66006 Art. 66066 Art. 66077















Box Contains (Art. 66006):

- Radarcape
- Wall plug power supply
- 5 m network cable
- GPS antenna (cable length 5 m)
- Quick Start Guide

Optional Accessory (Art. 66066):

- "A3 ADS-B" Antenna
- Antenna cable (cable length 10 m)
- Antenna mount

Optional Accessory (Art. 66077):

- "Active Diapason" Antenna
- Antenna cable (cable length 20 m)
- Antenna mount
- Bias Tee
- USB power supply cable

Requirements:

- AC power supply 110 V or 230 V
- Internet router providing DHCP and DNS Visit our Wiki for further information: http://wiki.modesbeast.com/Radarcape:Installation_Guide

Connections

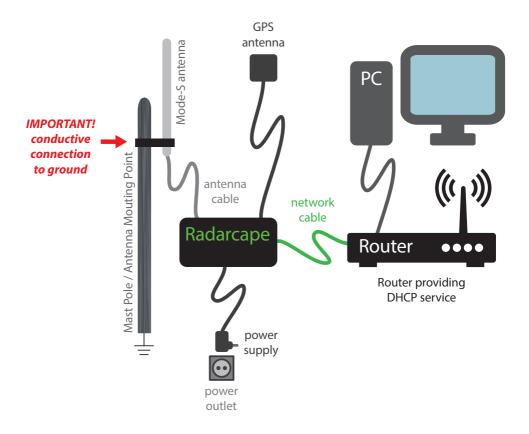
- Connect the Mode-S antenna with the antenna cable to the Radarcape, place the antenna as free and as high as possible.
 Make sure that the antenna has a conductive connection to ground to avoid damage of Radarcape or Internet router!
- Connect the GPS antenna to the Radarcape.
 Place the GPS antenna to a location with at least half of sky view, e.g. a window sill.
- 3. Connect the network cable to your Internet router and the Radarcape.
- 4. Connect the power supply to the Radarcape and your power outlet.



Hardware Installation

Caution:

Static electricity around the antenna can damage your Radarcape or Internet router if there is no ground connection! Do <u>NOT</u> mount the antenna on isolated ground, e.g. wooden stick or plastic or without any connection to ground!



LED Description

Power LED

The power LED is green when power is applied to the device.

Mode-S LED

The Mode-S LED is flashing on each data frame that has been received from aircraft.

If no frames are received (e.g. no antenna connected), it flashes once per second in order to indicate working state.

GPS LED

The GPS LED is flashing green once each second exactly when the second changes.



Startup

- 1. Wait a few minutes to make sure the network is connected.
- 2. Open an Internet browser on your PC. We recommend to use always the latest version of one of the following Internet browsers:
 - Internet Explorer
 - Firefox
 - Chrome
 - Safari
- 3. Enter http://radarcape to open the **Radarcape user interface**. In rare cases, http://radarcape.local must be used as some router models use a non-standard configuration.

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8:30:52.522153984	899107	CAL 5441	12.122650	50.789749	Α	A	36000	-64	453	297	A0			CAL	8744	B-18721	1000	таім	228.7	326	14/0
8:30:52.567295000	89620F	UAE149	12.992149	50.472820	A	۸	36000	0	466	298	A0	OMDB	EHAM	UAE	877W	A6-EGN	1000	Arab	218.4	201	13/0
8:30:31.790470031	89617F	UAE85	13.873329	47.207016	Α	A	34000	0	453	286	A0	OMDB	LSZH	UAE	877W	A6-EGG	7371	Anab	250.8	40	5/0
8:30:52.541424812	8960F3	UAE9		50.172188	A	A	40000	0	466	288	A5	OMDB	EGKK	UAE	A388	A6-EDR	0540	Anab	184.2	3561	60/0
8:30:45.044835421	8960EC		0.000000	0.000000	А	Α	0	-64	473	291				UAE	A388	A6-EDK	3235	Anab	0.0	2	0/0
8:30:30.473441500	895053	RBA98	13.787769	49.461914	Α	Α	38975	0	525	107	A5	EGLL	OMDB	RBA	8788	V8-DLA	4775	Brun	185.9	5979	60/0
8:30:52.479034562	88001E	THA916	9.327176	50.602661	A	A	36000	0	464	292	AO	VTBS	EGLL	THA	B744	HS-TGR	4744	Thai	254.2	4348	60/0
18:30:52.325135593	7808A8	CCA936	10.129989	51.003067	Α	Α	35000	-128	517	63	A0	EDDF	ZSPD	CCA	A332	8-6549	0136	chin	265.0	41	2/0
18:30:52.556880328	7802D3	CCA861	10.255087	49.198036	A	A	38000	0	420	233	A0			CCA	A332	B-6080	1000	Chin	99.3	3377	60/0
18:30:52.534665921	76CEE4	5IA326	10.225814	49.441910	Α	A	20700	-1152	363	308	A0	WS55	EDDF	SIA	877W	9V-5WD	1000	Sing	116.0	4914	60/0
18:30:52.399299828	740737	RJA149	9.889456	47.283993	۸	۸	35025	128	482	87	A3	OJAI	LSZH	RJA	A320	3Y-AYW	5776	Jord	203.1	1592	60/0
18:30:51.214337984	728668	IAW253	8.338407	50.135742	Α	Α	37975	0	437	293	A0						4740	Iraq	271.3	6422	60/0
18:30:52.583328718	60183D	TUA402	12.083975	47.359875	A	Α	35000	0	477	96	A0			TUA	8738	EZ-A015	7626	Turk	164.6	4300	60/0
18:30:01.079677703	5948EE		0.000000	0.000000	А	Α	0	0	0	0								тајі	0.0	1	0/0
18:30:52.469664734	506C07	ADR108	12.552011	48.195343	м	Α	9850	0	1223	255		DD	EDOM	ADR	CRJZ	SS-AAG	1000	slve	103.6	154	0/55
18:30:52.563571281	503c73			48.422195	A	A	36000	0	483	43		LIME	EXAI	LLC	A320		7607	Lith	105.4	2718	60/0
18:30:52.326940484	502C9C	ART415		47.595657	Α	A	27225	-1472	399	283	A0			ART	A320		3556	Latv	199.2	2224	60/0
18:30:52.492088500	502C2B	BTI4HE	9.165121	50.691742	A	A	37000	64	470	63	A0	LFPG		BTI	B735	YL-BBD	0647	Latv	269.0	445	32/0
18:30:52.554746250	501DC5			48.341763		A	7425	0	273	323		LDZA	EDOM	CTN	DH8D	9A-CQD	1000	croa	76.4	330	0/155
18:30:52.220697750	501DC4	CTN465		47.142162	м	۸	25000	0	704	58		LSZH	LDZA	CTN	DH8D		3034	Croa	182.7	190	0/25
18:27:01.083859671	501DB3		0.000000	0.000000	A	A	0	0	0	0					C25A	9A-DWA		croa	0.0	1	0/0
18:30:42.798935406	501D21			47.152313	Α	A	39000	64	464	122	A0	EGLL	LDZA	CTN	A319	9A-CTL	4762	croa	236.6	6995	60/0
18:26:01.145019359	4CAA58	RYR4197		49.192402	Α	Α	38000	0	427	314		LIME	EGSS	RYR	B738	EI-EVW	2763	Irel	315.0	3253	60/0
18:28:29.155147390	4CA915	RYR191E	8.526627	46.475941	Α	A	36000	0	423	308	A0			RYR	8738	EI-EPG	2770	Irel	337.4	59	2/0
						A	39000	64	436	150			LIPY	RYR	6738	EI-ENS	0101	Irel	224.4	4997	60/0

4. Go to Configuration > Software Maintenance to **update** the flight routes database and the basestation database.

Radarcape - Your Airspace Observer Online Help Version 150115.20											5.20.15											
Aircraft Data Feeder								Status Configuration														
Aircraft List Software Maintenance										-	-											
Time ▲ ▼	ICAO	Flight	Lon	Lat	Snc	Gnd	Alt A	VRate	Speed	True Track	: c	_	e Pas	-	d 👎	Reg	Squark	Country	Dist(km)	Trust	Track Size	
18:54:12.062639906	A4F6A5	ETD901	11.158351	49.105209	A	A	28900	-1984	410	304	A0	OMAA	EDFH	GTI	B744	N419MC	1000	USA	42.3	3293	60/0	L
18:54:12.505680171	89617F	UAE85	9.631136	47.642494	A	A	17425	-1088	279	236	A0	OMDB	LSZH	UAE	877W	A6-EGG	1000	Anab	185.2	3884	60/0	L
18:54:12.499259859	8960F8	UAE75	11.912701	48.945328	Α	A	40000	64	465	289	A5	OMDB	LFPG	UAE	A388	A6-EDW	1000	Anab	38.1	2455	60/0	Ĺ
18:54:12.630161234	8960EC	UAE3	11.120188	50.086716	Α	A	38000	-192	463	290	AS	OMDB	EGLL	UAE	A388	A6-EDK	3235	Anab	147.4	2305	60/0	L
18:49:59.682992437	780203	CCA861	8.320015	47.833740	Α	A	29000	-960	358	223	A0			CCA	A332	8-6080	1000	Chin	254.8	5337	60/0	L
18:53:37.928819156	740737	RJA149	12.354813	47.291061	Α	A	35000	0	467	102	A3	OJAI	LSZH	RJA	A320	JY-AYW	\$776	Jord	178.5	4131	60/0	l
18:54:12.507495187	71001A	SVA918	10.673868	48.673298	Α	Α	35000	0	477	132	A5	EBBR	OEJN	SVA	B748	HZ-AI3	2101	Saud	58.7	2864	60/0	Ĺ
18:54:12.520103000	600854	AHY007	12.012212	49.095016	Α	A	35975	-64	415	294	A0	UBBB	EGLL	AHY	A320	4K-AZ84	4743	Azer	\$3.7	2035	60/0	Ĺ
18:51:53.065871984	5081A0		0.000000	0.000000	A	A	0	-64	410	247				WAU	A320	UR-WUA		ukra	0.0	2	0/0	L

Radarcape - Your Airspace Observer	Online Help Version 150219.18.30
Aircraft Data Feeder Status Configura	ation
Software Maintenance	
Update flight routes database (zip file link, not short link)	
Get the latest link from the PP Routes Yahoo Forum.	
Update	
Update basestation database (zip file link, not short link) Get the latest link from Mantma pages.	
http://pp-sqb.mantma.co.uk/basestation_latest.zip	
Update	
Upgrade Radarcape Software	
Default is latest available version	
radarcaped-150219.18.30	
Update	

The basestation database contains the **registration** and the **type** of an aircraft.

The flightroutes database contains the **origin** and the **destination** of a flight.

It is necessary to update these databases because otherwise this information will not be shown on the **Aircraft Data** pages.

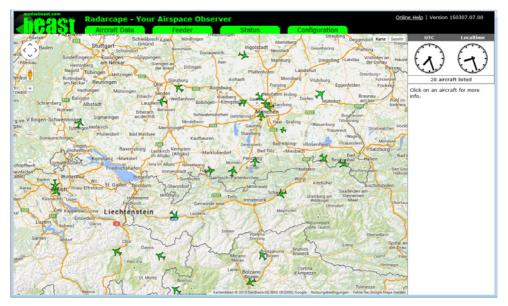
As we try to improve the Radarcape software continuously, the **latest software version** can be found here:

http://wiki.modesbeast.com/Radarcape:Installation_Guide

5. Go to Aircraft Data > Live 2D Output to see the received aircraft on a 2D map.

modesbeast.com	Radarcape - Y	our Airspace Obser	ver		Online Help Version 150307.07.00
altast	Aircraft Data	Feeder	Status	Configuration	
	Aircraft List				
Software Mainte	(dynamic)				
	Aircraft List	<u> </u>			1
Update flight routes data	(static)	short link)			
Get the latest link from the PP	Live 2D Output				
	Live 3D Output				
Update	(ADS-B Tracks)				
Update					

6. Enjoy your Radarcape!



Visit our **Wiki** for more details about the Radarcape system software: http://wiki.modesbeast.com/Radarcape:Contents

Distribution

Günter Köllner Embedded Development GmbH 85256 Vierkirchen, Germany