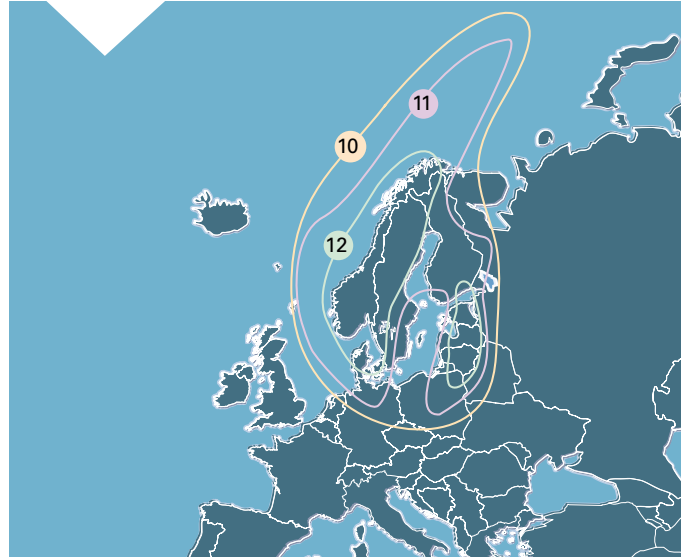


OCCASIONAL BROADCAST SERVICES ON

Astra 4a at 5°East



*Formerly Sirius 4 *Cross-Pol Check required at Line-up on Astra 4a *Downlink EIRP stated is without Comms

Astra 4a (Nordic Beam) 3MHz

BEACON FREQUENCIES: 11702.5 V / 12498.5 H

Service	Uplink center frequency [MHz]	Pol	Downlink center frequency [MHz]	Pol	Txp	Band-width	Downlink EIRP Beam Centre	Cross Pol Check	Comm 1 U/L Pol	Comm 1 D/L Pol	Comm 2 U/L Pol	Comm 2 D/L Pol
S1a	14090.50	H	12590.50	V	G4	3MHz	37	14167.25 12667.25	14089.05	12589.05	14089.15	12589.15
S1b	14093.50	H	12593.50	V	G4	3MHz	37	14167.25 12667.25	14092.05	12592.05	14092.15	12592.15
S1c	14096.50	H	12596.50	V	G4	3MHz	37	14167.25 12667.25	14095.05	12595.05	14095.15	12595.15
S2a	14099.50	H	12599.50	V	G4	3MHz	37	14167.25 12667.25	14098.05	12598.05	14098.15	12598.15
S2b	14102.50	H	12602.50	V	G4	3MHz	37	14167.25 12667.25	14101.05	12601.05	14101.15	12601.15
S2c	14105.50	H	12605.50	V	G4	3MHz	37	14167.25 12667.25	14104.05	12604.05	14104.15	12604.15
S3a	14108.50	H	12608.50	V	G4	3MHz	37	14167.25 12667.25	14107.05	12607.05	14107.15	12607.15
S3b	14111.50	H	12611.50	V	G4	3MHz	37	14167.25 12667.25	14110.05	12610.05	14110.15	12610.15
S3c	14114.50	H	12614.50	V	G4	3MHz	37	14167.25 12667.25	14113.05	12613.05	14113.15	12613.15
S4a	14117.50	H	12617.50	V	G4	3MHz	37	14167.25 12667.25	14116.05	12616.05	14116.15	12616.15
S4b	14120.50	H	12620.50	V	G4	3MHz	37	14167.25 12667.25	14119.05	12619.05	14119.15	12619.15
S. 4c	14123.50	H	12623.50	V	G4	3MHz	37	14167.25 12667.25	14122.05	12622.05	14122.15	12622.15

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Astra 4a (Nordic Beam) 4.5 MHz

BEACON FREQUENCIES: 11702.5 V / 12498.5 H

Service	Uplink center frequency [MHz]	Pol	Downlink center frequency [MHz]	Pol	Transponder	Bandwidth	Downlink EIRP Beam Centre dBW	Cross pol check	Comms 1 U/L Pol	Comms 1 D/L Pol	Comms 2 U/L Pol	Comms 2 D/L Pol
S. 1 Lower	14091.25	H	12591.25	V	G4	4.5 MHz	38.4	UL:14167.25 H DL: 12667.25 V	14089.05	12589.05	14089.15	12589.15
S. 1 Upper	14095.75	H	12595.75	V	G4	4.5 MHz	38.4	UL: 14167.25 H DL: 12667.25 V	14097.85	12597.85	14097.95	12597.95
S. 2 Lower	14100.25	H	12600.25	V	G4	4.5 MHz	38.4	UL: 14167.25 H DL: 12667.25 V	14098.05	12598.05	14098.15	12598.15
S. 2 Upper	14104.75	H	12604.75	V	G4	4.5 MHz	38.4	UL: 14167.25 H DL: 12667.25 V	14106.85	12606.85	14106.95	12606.95
S. 3 Lower	14109.25	H	12609.25	V	G4	4.5 MHz	38.4	UL: 14167.25 H DL: 12667.25 V	14107.05	12607.05	14107.15	12607.15
S. 3 Upper	14113.75	H	12613.75	V	G4	4.5 MHz	38.4	UL: 14167.25 H DL: 12667.25 V	14115.85	12615.85	14115.95	12615.95
S. 4 Lower	14118.25	H	12618.25	V	G4	4.5 MHz	38.4	UL: 14167.25 H DL: 12667.25 V	14116.05	12616.05	14116.15	12616.15
S. 4 Upper	14122.75	H	12622.75	V	G4	4.5 MHz	38.4	UL: 14167.25 H DL: 12667.25 V	14124.85	12624.85	14124.95	12624.95

Astra 4a (Nordic Beam) 6 MHz

BEACON FREQUENCIES: 11702.5 V / 12498.5 H

Service	Uplink center frequency [MHz]	Pol	Downlink center frequency [MHz]	Pol	Transponder	Bandwidth	Downlink EIRP Beam Centre dBW	Cross pol check	Comms 1 U/L Pol	Comms 1 D/L Pol	Comms 2 U/L Pol	Comms 2 D/L Pol
S. 1/2a	14092.00	H	12592.00	V	G4	6 MHz	39.7	UL:14167.25 H DL: 12667.25 V	14094.85	12594.85	14094.95	12594.95
S. 1/2b	14098.00	H	12598.00	V	G4	6 MHz	39.7	UL: 14167.25 H DL: 12667.25 V	14100.85	12600.85	14100.95	12600.95
S. 1/2c	14104.00	H	12604.00	V	G4	6 MHz	39.7	UL: 14167.25 H DL: 12667.25 V	14106.85	12606.85	14106.95	12606.95
S. 3/4a	14110.00	H	12610.00	V	G4	6 MHz	39.7	UL: 14167.25 H DL: 12667.25 V	14112.85	12612.85	14112.95	12612.95
S. 3/4b	14116.00	H	12616.00	V	G4	6 MHz	39.7	UL: 14167.25 H DL: 12667.25 V	14118.85	12618.85	14118.95	12618.95
S. 3/4c	14122.00	H	12622.00	V	G4	6 MHz	39.7	UL: 14167.25 H DL: 12667.25 V	14124.85	12624.85	14124.95	12624.95

Astra 4a (Nordic Beam) 9MHz

BEACON FREQUENCIES: 11702.5 V / 12498.5 H

Service	Uplink center frequency [MHz]	Pol	Downlink center frequency [MHz]	Pol	Transponder	Bandwidth	Downlink EIRP Beam Centre dBW	Cross pol check	Comms 1 U/L Pol	Comms 1 D/L Pol	Comms 2 U/L Pol	Comms 2 D/L Pol
S. 1	14093.50	H	12593.50	V	G4	9 MHz	41.5	UL:14167.25 H DL: 12667.25 V	14097.85	12597.85	14097.95	12597.95
S. 2	14102.50	H	12602.50	V	G4	9 MHz	41.5	UL: 14167.25 H DL: 12667.25 V	14106.85	12606.85	14106.95	12606.95
S. 3	14111.50	H	12611.50	V	G4	9 MHz	41.5	UL: 14167.25 H DL: 12667.25 V	14115.85	12615.85	14115.95	12615.95
S. 4	14120.50	H	12620.50	V	G4	9 MHz	41.5	UL: 14167.25 H DL: 12667.25 V	14124.85	12624.85	14124.95	12624.95

Astra 4a (Nordic Beam) 18 MHz

BEACON FREQUENCIES: 11702.5 V / 12498.5 H

Service	Uplink center frequency [MHz]	Pol	Downlink center frequency [MHz]	Pol	Transponder	Bandwidth	Downlink EIRP Beam Centre dBW	Cross pol check	Comms 1 U/L Pol	Comms 1 D/L Pol	Comms 2 U/L Pol	Comms 2 D/L Pol
S. 1/2	14098.00	H	12598.00	V	G4	18 MHz	44.2	UL:14167.25 H DL: 12667.25 V	14106.85	12606.85	14106.95	12606.95
S. 2/3	14107.00	H	12607.00	V	G4	18 MHz	44.2	UL: 14167.25 H DL: 12667.25 V	14115.85	12615.85	14115.95	12615.95
S. 3/4	14116.00	H	12616.00	V	G4	18 MHz	44.2	UL: 14167.25 H DL: 12667.25 V	14124.85	12624.85	14124.95	12624.95

Astra 4a (Nordic Beam) 27MHz

BEACON FREQUENCIES: 11702.5 V / 12498.5 H

Service	Uplink center frequency [MHz]	Pol	Downlink center frequency [MHz]	Pol	Transponder	Bandwidth	Downlink EIRP Beam Centre dBW	Cross pol check	Comms 1 U/L Pol	Comms 1 D/L Pol	Comms 2 U/L Pol	Comms 2 D/L Pol
S. 1/2/3	14102.50	H	12602.50	V	G4	27 MHz	46.2	UL:14167.25 H DL: 12667.25 V	14115.85	12615.85	14115.95	12615.95
S. 2/3	14111.50	H	12611.50	V	G4	27 MHz	46.2	UL: 14167.25 H DL: 12667.25 V	14124.85	12624.85	14124.95	12624.95

Astra 4a (Nordic Beam) 36 MHz

BEACON FREQUENCIES: 11702.5 V / 12498.5 H

Service	Uplink center frequency [MHz]	Pol	Downlink center frequency [MHz]	Pol	Transponder	Bandwidth	Downlink EIRP Beam Centre dBW	Cross pol check	Comms 1 U/L Pol	Comms 1 D/L Pol	Comms 2 U/L Pol	Comms 2 D/L Pol
S. 1/2/3/4	14107.00	H	12607.00	V	G4	36 MHz	47.4	UL:14167.25 H DL: 12667.25 V	14124.85	12624.85	14124.95	12624.95