



MS-MBA-3.2-H4-L4

RET Operation Manual



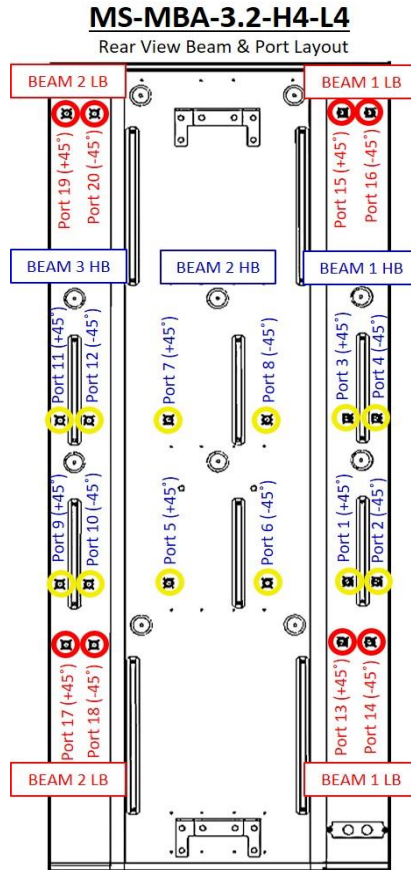
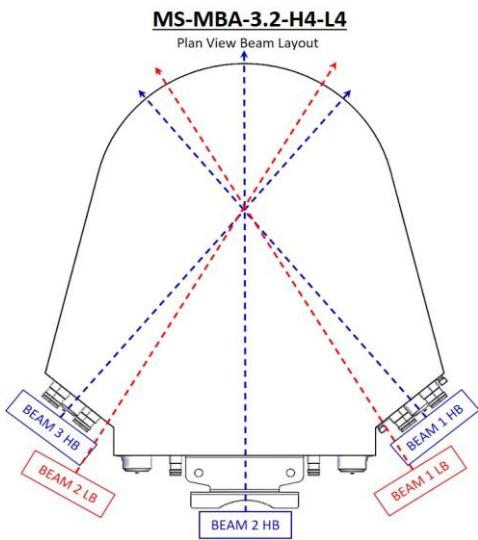
The **MS-MBA-3.2-H4-L4** antenna comes standard with an MDCU Controller and 10 motorized RET elements. Each motorized RET element control 2 ports +45/-45 of the respected beam.

Factory default firmware for the MDCU Controller is MRET (Type 17), however SRET (Type 1) is available upon request.

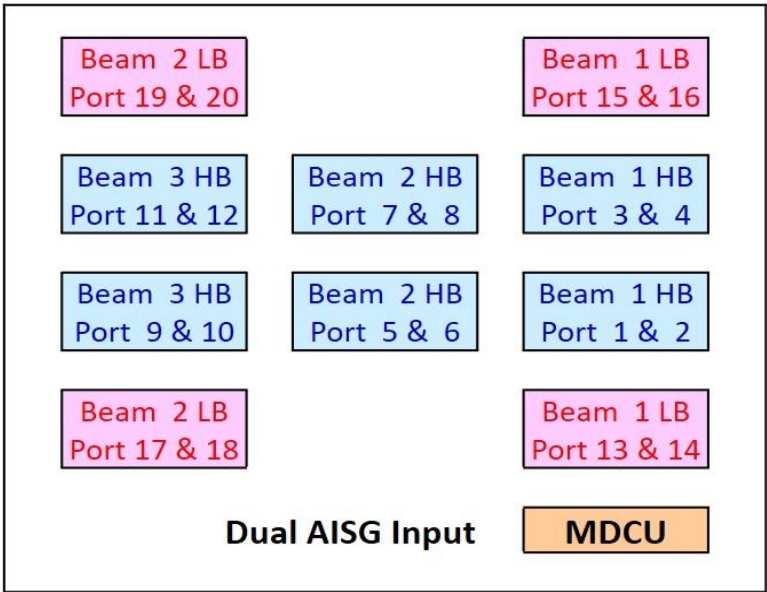


Dual AISG Input

IN-1 Controls HB Beams 1 - 3
IN-2 Controls LB Beams 1 - 2



MDCU Controller RET Element mapping for MS-MBA-3.2-H4-L4



A standard **AISG 2.0** compliant cable (not included) is used to connect the **MDCU to the AISG interface control**. Once connected, use an **AISG 2.0** compliant Control software to perform a **Sub Unit SCAN** to identify the **MS-MBA-3.2-H4-L4** RET Elements.

RET CONNECTION

AISG IN-1: "A" (HB) Serial End with "AMM"

AISG IN-2: "B" (LB) Serial End with "BMM"

NO	HDLC	Vendor	Serial Number	Product Number	Version	S/W Version	3GPP	Device	AISG	Connect	Link
1	2	MS	MBA32H4L4-0001AMM	ACS-RMC20	1.00	1.13	6	Multi...	2	Con...	L...
2	1	MS	MBA32H4L4-0001BMM	ACS-RMC20	1.00	1.13a	6	Multi...	2	Con...	L...

RET Tilt Window

RET ID : MSMBA32H4L4-0001AMM

RET Status and Control

Antenna Information List

NO	Sector ID	Ant Model	Ant Serial	Current Tilt	Status
1/6	HB 1 (P1,2)	MBA-3.2-H4-L4	MBA3.2H4L4-001	0.0	Normal
2/6	HB 2 (P5,6)	MBA-3.2-H4-L4	MBA3.2H4L4-001	0.0	Normal
3/6	HB 3 (P9,10)	MBA-3.2-H4-L4	MBA3.2H4L4-001	0.0	Normal
4/6	HB 1 (P3,4)	MBA-3.2-H4-L4	MBA3.2H4L4-001	0.0	Normal
5/6	HB 2 (P7,8)	MBA-3.2-H4-L4	MBA3.2H4L4-001	0.0	Normal
6/6	HB 3 (P11,12)	MBA-3.2-H4-L4	MBA3.2H4L4-001	0.0	Normal

RET HB Element to Beam & Port Assigned

Device Data Management for HB

RET ID : MSMBA32H4L4-0001AMM

RET Additional Device Data

Antenna Number Sub Unit : 1/6

Additional Data	Devide Data
ANT NO	1
ANT Model	MBA-3.2-H4-L4
ANT Serial	MBA3.2H4L4-001
Band	UL(1920~1980),DL(2110~2170)...
Band Ext8	
Band Ext9	
Beamwidth #1	22
Beamwidth #2	0
Beamwidth #3	0
Beamwidth #4	0
Gain #1	17.0
Gain #2	0.0
Gain #3	0.0
Gain #4	0.0
Max Tilt	30.0
Min Tilt	0.0
Installation Date	
Installer's ID	
Base Station ID	
Sector ID	HB 1 (P1,2)
Ant Bearing	0.0
Mechanical Tilt	0.0

Device Data Management for LB

RET ID : MSMBA32H4L4-0001BMM

RET Additional Device Data

Antenna Number Sub Unit : 1/4

Additional Data	Devide Data
ANT NO	1
ANT Model	MBA-3.2-H4-L4
ANT Serial	MBA3.2H4L4-001
Band	UL(824~849),DL(869~894)/UL(...)
Band Ext8	
Band Ext9	
Beamwidth #1	34
Beamwidth #2	0
Beamwidth #3	0
Beamwidth #4	0
Gain #1	14.5
Gain #2	0.0
Gain #3	0.0
Gain #4	0.0
Max Tilt	40.0
Min Tilt	0.0
Installation Date	
Installer's ID	
Base Station ID	
Sector ID	LB 1 (P13,14)
Ant Bearing	0.0
Mechanical Tilt	0.0

RET Tilt Window

RET ID : MSMBA32H4L4-0001BMM

RET Status and Control

Antenna Information List

NO	Sector ID	Ant Model	Ant Serial	Current Tilt	Status
1/4	LB 1 (P13,14)	MBA-3.2-H4-L4	MBA3.2H4L4-001	0.0	Normal
2/4	LB 2 (P17,18)	MBA-3.2-H4-L4	MBA3.2H4L4-001	0.0	Normal
3/4	LB 1 (P15,16)	MBA-3.2-H4-L4	MBA3.2H4L4-001	0.0	Normal
4/4	LB 2 (P19,20)	MBA-3.2-H4-L4	MBA3.2H4L4-001	0.0	Normal

RET LB Element to Beam & Port Assigned

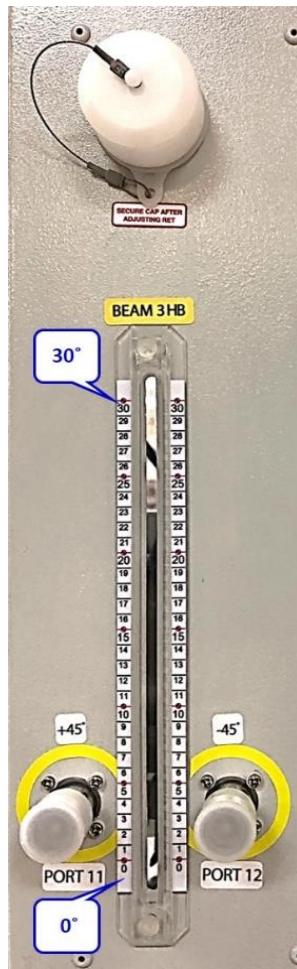
Calibration:

Prior to use, RET Element calibration is required.

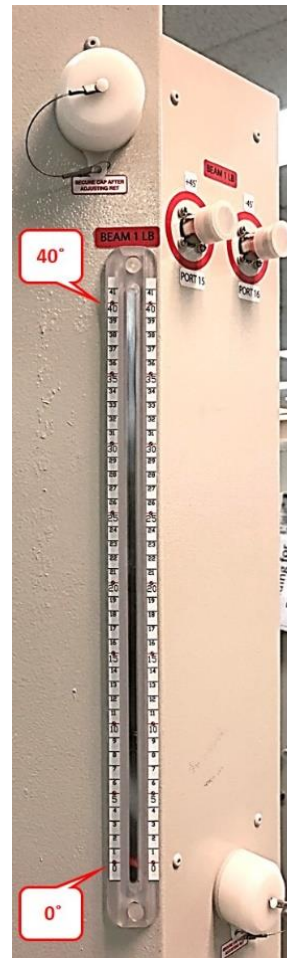
Re-Calibration is also required if manual mode was used at any point to adjust tilt

During calibration, the RET Element will use an Upper & Lower har-stop to calibrate 0°-30° (HB) and 0°-40° (LB) Degree range.

The current degree of tilt is indicated by the movable **RED MARKER TIP**.



6 Beam / RET HB Elements offer a tilt range from 0° - 30° degree independently.



4 Beam / RET LB Elements offer a tilt range from 0° - 40° degree independently.

Manual Mode

The MS-MBA-3.2-H4-L4 antenna offers a manual override option.

Step 1:

Unscrew/Screw the cap for tilt adjustment process



Step 2:

Engaged with internal RET Motor position



Step 3:

Pull knob out to disengaged RET for tilt adjustment

