



# **MS-MBA-8**

## **RET Operation Manual**



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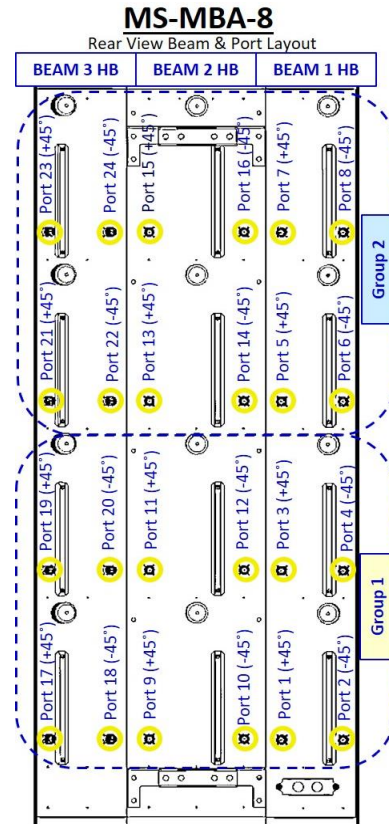
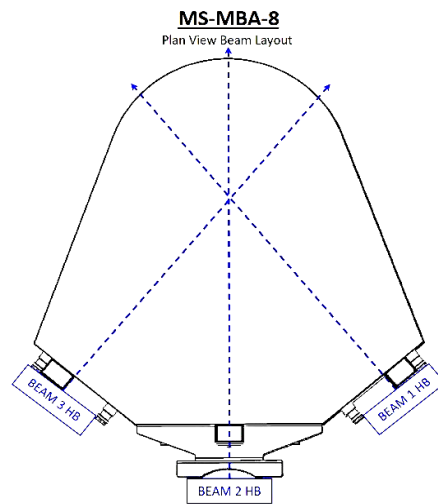
The **MS-MBA-8** antenna comes standard with an MDCU Controller and 12 motorized RET elements. Each motorized RET element control 2 ports +45/-45 of the respected beam.

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

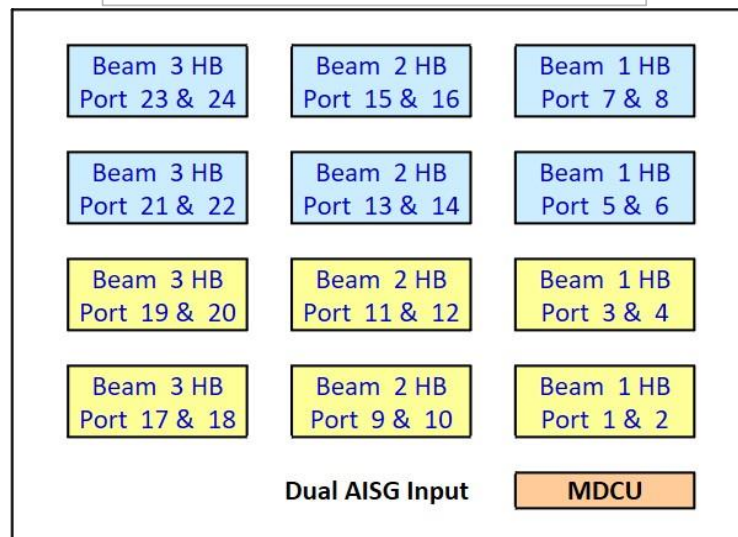


**Dual AISG Input**

**IN-1 Controls HB Beams 1-3 (Group 1)**  
**IN-2 Controls HB Beams 1-3 (Group 2)**



**MDCU Controller RET Element mapping for MS-MBA-8**



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-8** RET Elements.

**RET CONNECTION**

AISG IN-1: "Group1" (HB) Serial End with "AMM"

AISG IN-2: "Group2" (HB) Serial End with "BMM"

NO	HDLC	Vendor	Serial Number	Product Number	FW Version	S/W Version	3GPP	Device	AISG	Connect	Link
1	1	MS	MBASP00000001AMM	ACS-RMC20	1.00	1.13	6	Multi...	2	Con...	L...
2	2	MS	MBASP00000001BMM	ACS-RMC20	1.00	1.13	6	Multi...	2	Con...	L...

**RET Tilt Window**

RET ID : MSMBASP00000001AMM

RET Status and Control

Antenna Information List

NO	Sector ID	Ant Model	Ant Serial	Current Tilt	Status
1/6	Beam 1 (P1,2)	MBA-8	MS-MBA-8-00001	0.0	Normal
2/6	Beam 2 (P9,10)	MBA-8	MS-MBA-8-00001	0.0	Normal
3/6	Beam 3 (P17,18)	MBA-8	MS-MBA-8-00001	0.0	Normal
4/6	Beam 1 (P3,4)	MBA-8	MS-MBA-8-00001	0.0	Normal
5/6	Beam 2 (P11,12)	MBA-8	MS-MBA-8-00001	0.0	Normal
6/6	Beam 3 (P19,20)	MBA-8	MS-MBA-8-00001	0.0	Normal

RET HB Element to Group 1 Beam & Port Assigned

RET ID : MSMBASP00000001AMM

RET Additional Device Data

Antenna Number Sub Unit : 1/6

Additional Data	Devide Data
ANT NO	1
ANT Model	MBA-8
ANT Serial	MS-MBA-8-00001
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	18.5
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	Beam 1 (P1,2)
Ant Bearing	0.0
Mechanical Tilt	0.0

Device Data Management for HB Group 1

RET ID : MSMBASP00000001BMM

RET Additional Device Data

Antenna Number Sub Unit : 1/6

Additional Data	Devide Data
ANT NO	1
ANT Model	MBA-8
ANT Serial	MS-MBA-8-00001
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	18.5
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	Beam 1 (P5,6)
Ant Bearing	0.0
Mechanical Tilt	0.0

Device Data Management for HB Group 2

**RET Tilt Window**

RET ID : MSMBASP00000001BMM

RET Status and Control

Antenna Information List

NO	Sector ID	Ant Model	Ant Serial	Current Tilt	Status
1/6	Beam 1 (P5,6)	MBA-8	MS-MBA-8-00001	0.0	Normal
2/6	Beam 2 (P13,14)	MBA-8	MS-MBA-8-00001	0.0	Normal
3/6	Beam 3 (P21,22)	MBA-8	MS-MBA-8-00001	0.0	Normal
4/6	Beam 1 (P7,8)	MBA-8	MS-MBA-8-00001	0.0	Normal
5/6	Beam 2 (P15,16)	MBA-8	MS-MBA-8-00001	0.0	Normal
6/6	Beam 3 (P23,24)	MBA-8	MS-MBA-8-00001	0.0	Normal

RET HB Element to Group 2 Beam & Port Assigned

**Calibration:**

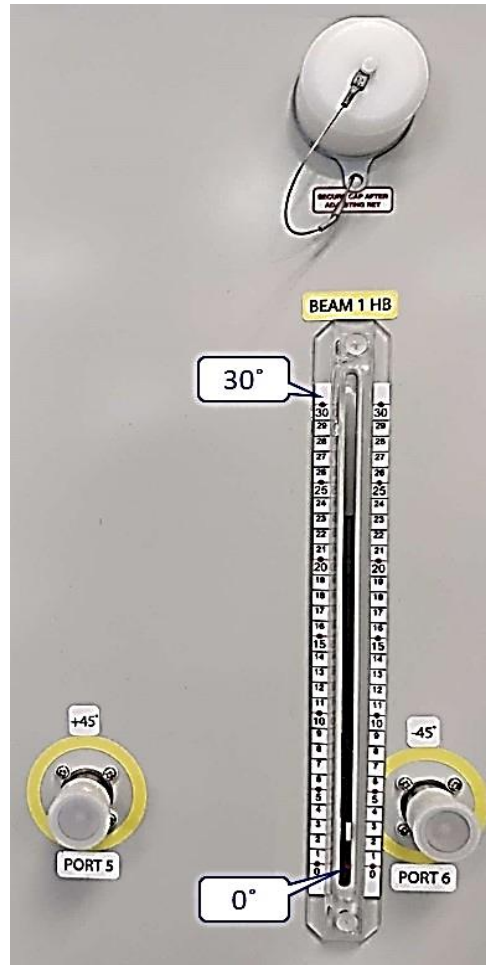
Prior to use, RET Element calibration is required.

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)** 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  
independantly.



**Manual Mode**

The **MS-MBA-8** 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 handle out to disengaged RET for tilt adjustment

