

Date	Prepared by	Approved by	Document nos	Rev
1 Mar 2024	Ray Ling	Pavel	MS-MBA-2-L4A2-001	1

## INSTRUCTION MANUAL MS-MBA-2-L4A2

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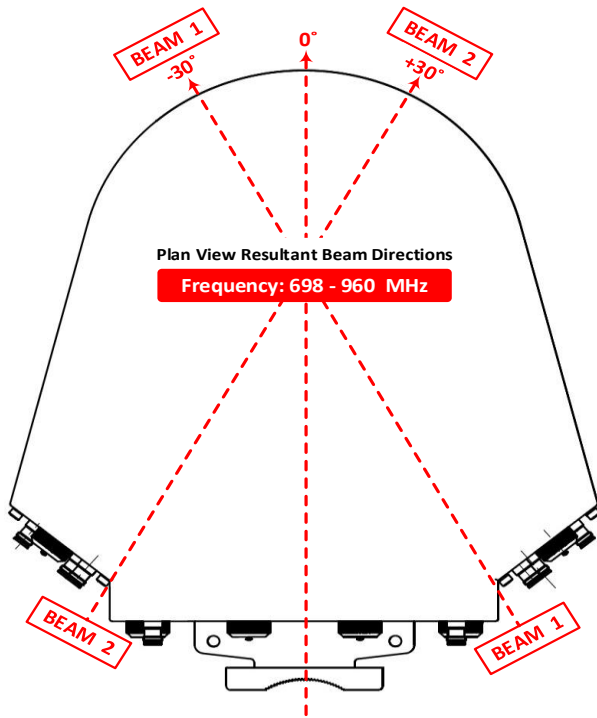
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**Revision History:**

Date	Description	Revised by	Revision nos.
01-Mar-24	Add RET Serial no Sticker & Operations Information	Ray Ling	1

# 1.00 BEAMS & CONNECTORS:

## 1.10 Plan View Resultant Beam Layout



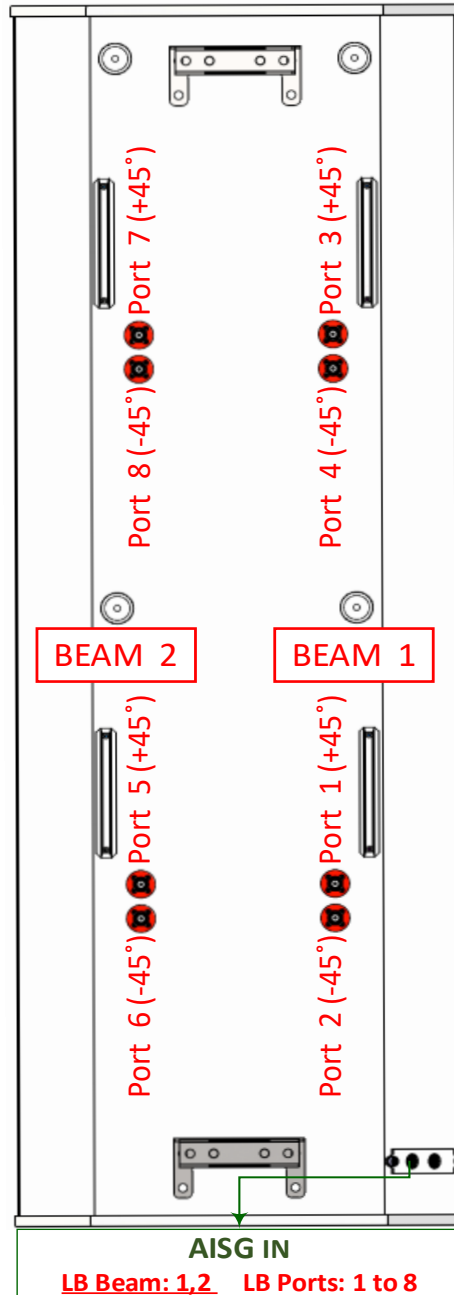
## 1.20 Connector Ports Table

Connector Port Table	
BEAM 2	BEAM 1
Port 7 (+45°)	Port 3 (+45°)
Port 8 (-45°)	Port 4 (-45°)
Port 5 (+45°)	Port 1 (+45°)
Port 6 (-45°)	Port 2 (-45°)

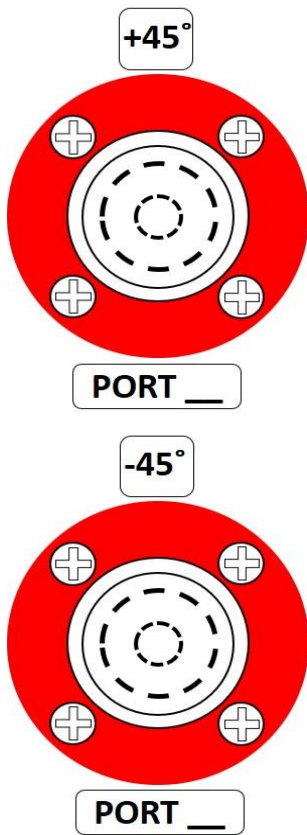
## 1.40 Connector Layout

**MS-MBA-2-L4A2**

REAR VIEW CONNECTOR LAYOUT

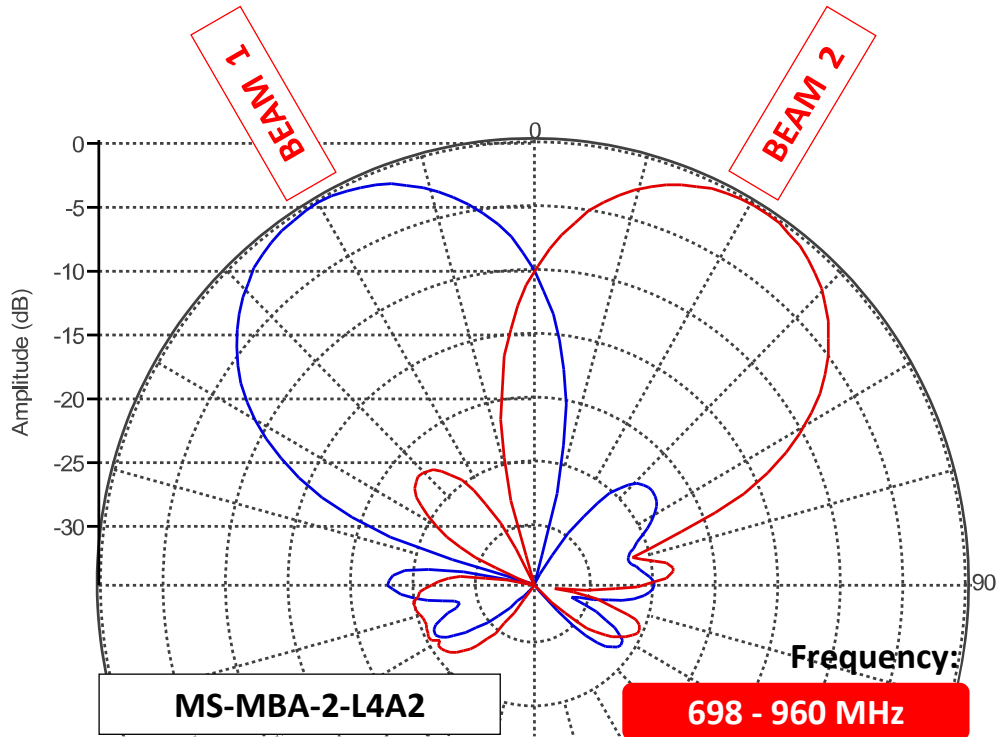


## 1.30 Connector Detail

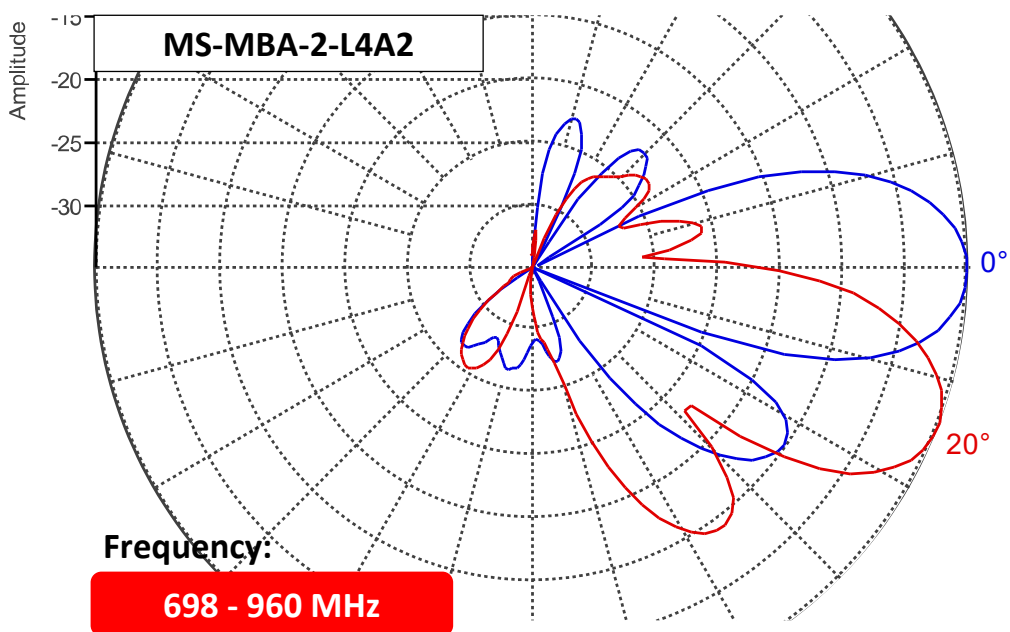


## 2.00 PATTERN DIAGRAM

### 2.10 Horizontal Pattern



### 2.20 Vertical Pattern



### 3.00 RET Operations / Information

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 RET Elements.

### 3.10 Display & Information Reference

(Example of Antenna Unit s/n 1)

ALD List

NO	HDLC	Vendor	Serial Number	Product Number	H/W Version	S/W Version	3GPP	Device	AISG	Connect	Link
1	1	MS	MBA2L4A20000001MM	ACS-RMC00	1.00	1.17	6	Multi RET	2	Connect	Link

MBA2L4A20000001MM } LB1,2 ACS-RMC00\_IN  
 Model Serial no. (7 Digits)

### 3.20 Model & S/N Reference From Label

**MATSING**  
LENS TECHNOLOGY ENABLED

Model No. : MS-MBA-2-L4A2  
 Serial No. : MS-MBA-2-L4A200001  
 Frequency: 698 - 960 MHz

RET Controller Serial #  
MBA2L4A20000001MM

Antenna s/nos Sticker

RET Controller s/nos Sticker

**Reminder:** If Information Has Been Edited, Remember to Perform "Radio Hard Reset" for Changes to take Place

Add Zero in front if the serial nos is shorter than 7 digits

### 3.30 Beam Nos & Port Nos Display

RET ID : MSMB2L4A20000001MM      LB1,2 ACS-RMC00\_IN (Port Assigned)

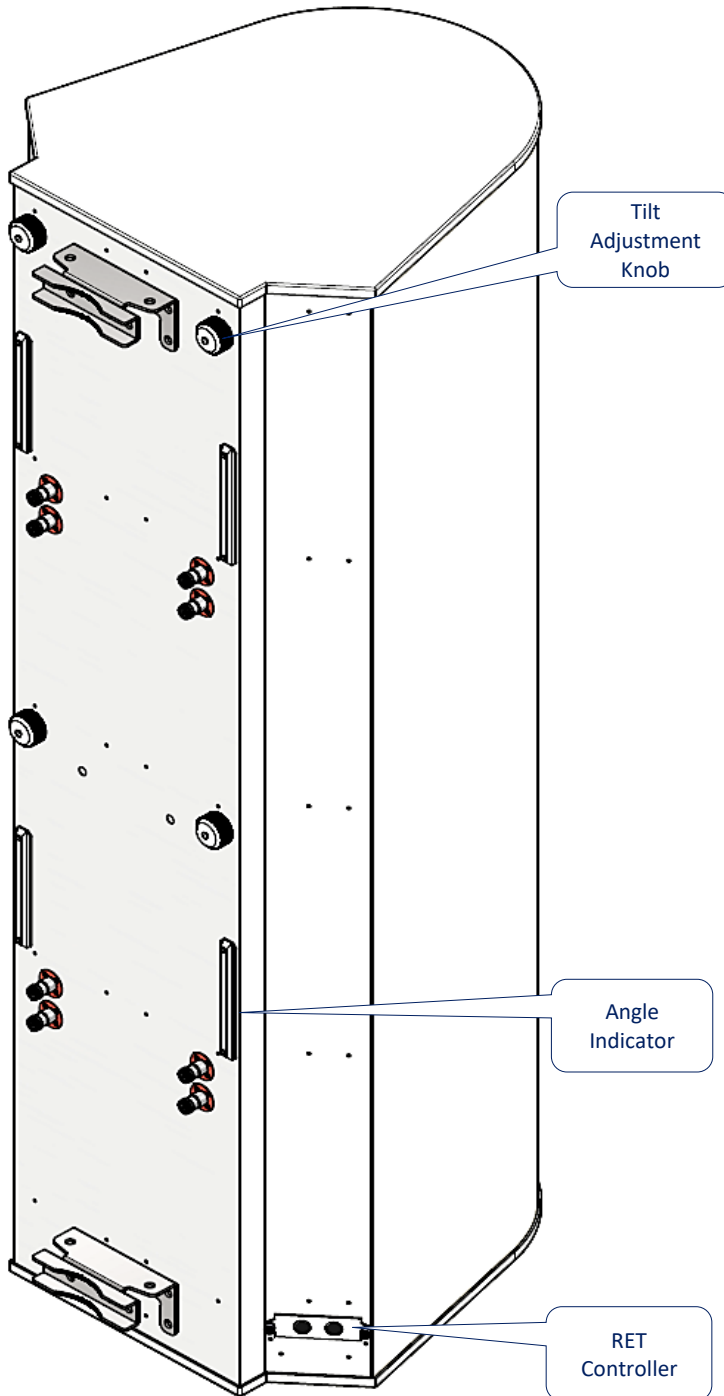
RET Status and Control

Antenna Information List

NO	Sector ID	Ant Model	Ant Serial	Current Tilt	Status
1/4	LB Beam 1 (Ports 1, 2)	MS-MBA-2-L4A2	MSMBA2L4A2-000001	0.0	Normal
2/4	LB Beam 2 (Ports 5, 6)	MS-MBA-2-L4A2	MSMBA2L4A2-000001	0.0	Normal
3/4	LB Beam 1 (Ports 3, 4)	MS-MBA-2-L4A2	MSMBA2L4A2-000001	0.0	Normal
4/4	LB Beam 2 (Ports 7, 8)	MS-MBA-2-L4A2	MSMBA2L4A2-000001	0.0	Normal

#### 4.00 MANUAL TILT ADJUSTMENT

1	The MBA antenna come in RET mode as default, but if needed can also be manually adjusted. To do so, please unscrew the waterproof cap behind the element whose tilt is to be adjusted.
2	By Default the knob is on engaged mode, pull out the handle for manual tilt adjustment, turn the handle to change the tilt.
3	When done, push the handle back in, screw the waterproof cap back to the position.



Unscrew/Screw the cap for tilt adjustment process



Engaged with internal RET motor position



Pull handle out to disengaged RET for tilt adjustment



## 5.00 BRACKET INSTALLATION

### 5.10 Bolts & Nuts Requirements

Bracket Qty	Bolts		Nuts	
	Size	Qty	Size	Qty
2	M12 x 200mm	4	M12	10
***Additional Lock Nuts M12 x 4pcs				

### 5.20 Tools Requirement

#### 5.21 Adjustable Spanner



### 5.11 Bolts & Nuts



### 5.12 Bracket



### 5.22 M12 Spanner



### 5.30 Bracket Spacing & Installation Sample

