

Date	Prepared by	Approved by	Document nos	Rev
27 Feb 2024	Ray Ling	Pavel	MBA-4F2-IM-001	1

INSTRUCTION MANUAL MS-MBA-4-F2

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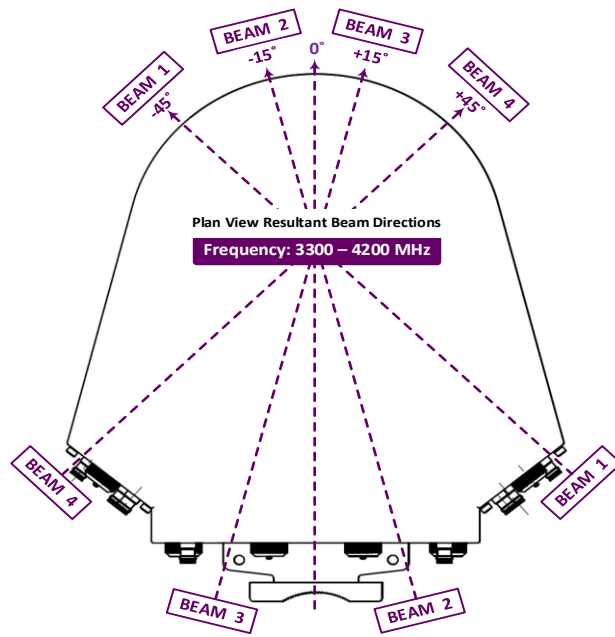
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Revision History:

Date	Description	Revised by	Revision nos.
27-Feb-24	To Include RET Operations/Information & Add in RET Serial nos. Sticker on the Antenna Backshell	Ray Ling	1

1.00 BEAMS & CONNECTORS:

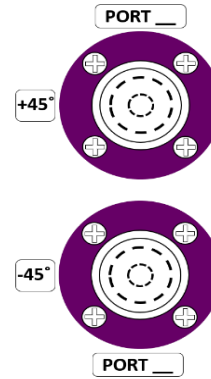
1.10 Plan View Resultant Beam Layout



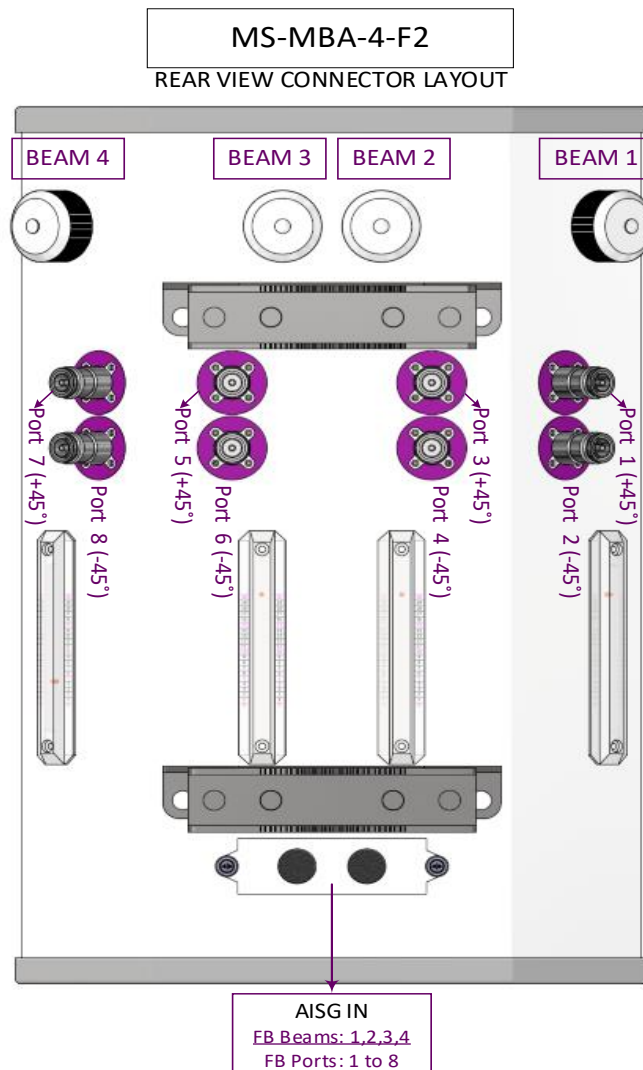
1.20 Connector Port Table

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

1.30 Connector Detail

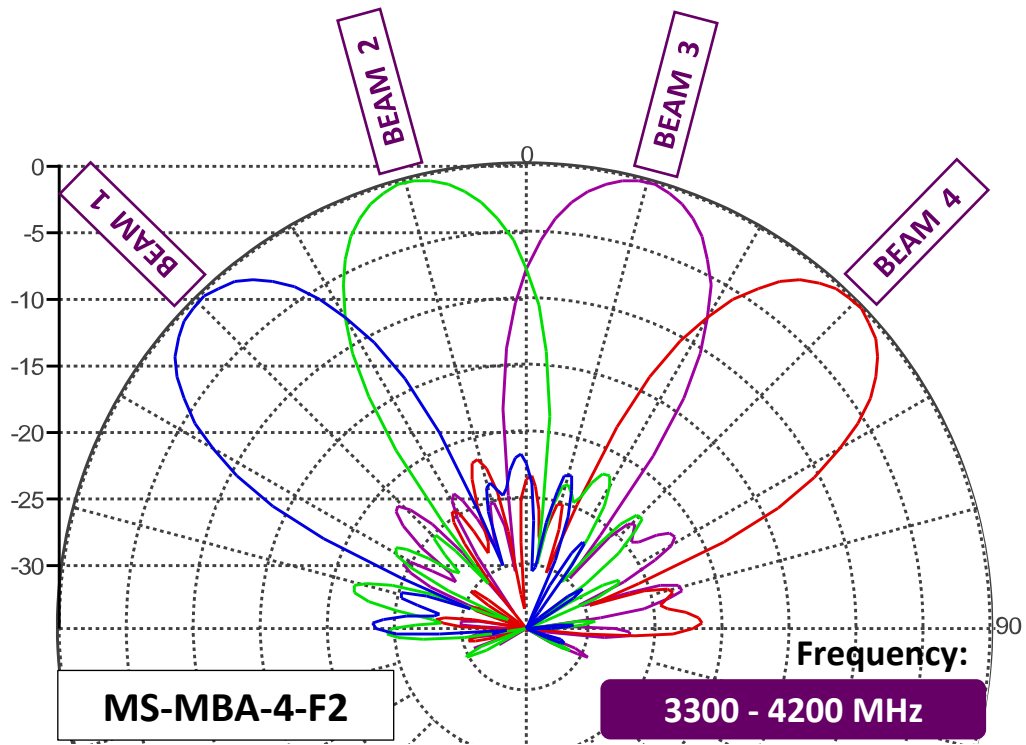


1.40 Connector Layout

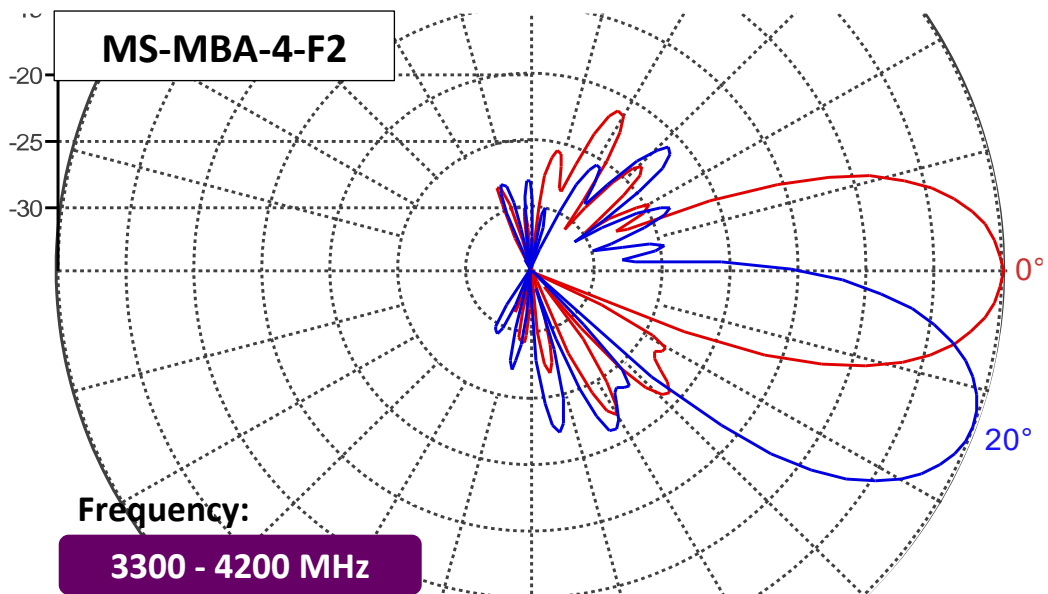


2.00 PATTERN DIAGRAM

2.10 Horizontal Pattern



2.20 Vertical Pattern



3.00 RET Operations / Information

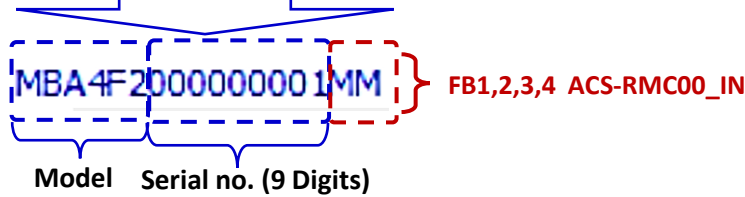
A standard AISG 2.0 compliant cable (not included) is used to connect the MDCU to the AISG interface control. Once connected, use an AISG 2.0 compliant Control software to perform a Sub Unit SCAN to identify the RET Elements.

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	MBA4F200000001MM	ACS-RMC00	1.00	1.17	6	Multi RET	2	Connect	Link



3.20 Model & S/N Reference From Label

Antenna s/nos Sticker

Model No. : MS-MBA-4-F2
 Serial No. : MS-MBA-4-F2-00001
 Frequency: 3300 – 4200 MHz

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 9 digits

RET Controller Serial #
 MBA4F200000001MM

RET Controller s/nos Sticker

3.30 Beam Nos & Port Nos Display

RET ID : MSMB4F200000001MM **FB1,2,3,4 ACS-RMC00_IN (Port Assigned)**

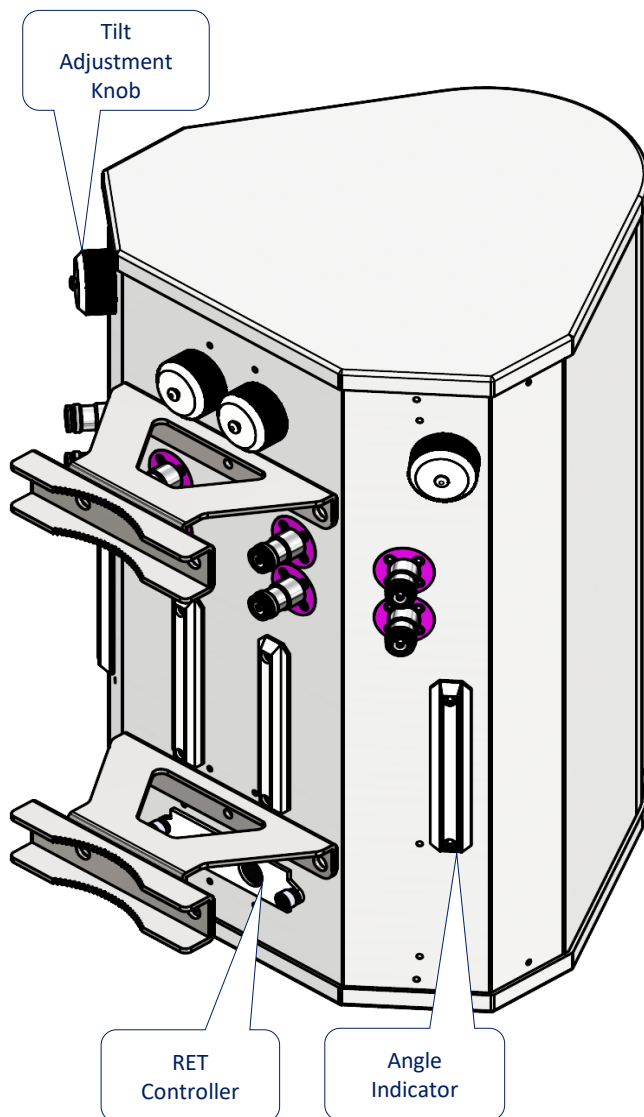
RET Status and Control

Antenna Information List

NO	Sector ID	Ant Model	Ant Serial	Current Tilt	Status
1/4	FB Beam 1 (Ports 1, 2)	MBA-4-F2	MBA4F200000001	0.0	Normal
2/4	FB Beam 2 (Ports 3, 4)	MBA-4-F2	MBA4F200000001	0.0	Normal
3/4	FB Beam 3 (Ports 5, 6)	MBA-4-F2	MBA4F200000001	0.0	Normal
4/4	FB Beam 4 (Ports 7, 8)	MBA-4-F2	MBA4F200000001	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	Bolts		Nuts	
	Qty	Size	Qty	Size
2	M12 x 200mm	4	M12	10

5.11 Bolts & Nuts



5.12 Bracket



5.20 Tools Requirement

5.21 Adjustable Spanner



5.22 M12 Spanner



5.30 Bracket Spacing & Installation Sample

