MS-MBA-4-C4A3-2

Instruction Manual

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Revision History:

Date	*Description*	*Rev By*	*Check By*	*Rev no*
26-Aug-2025	*Initial Release*	*RL*	*Pavel*	*0*
16-Sep-2025	*General update*	*RL*	*Pavel*	*1*

1.00 Pattern Diagram

1.10 Horizontal Pattern

Frequency: 3700 - 4200 MHz
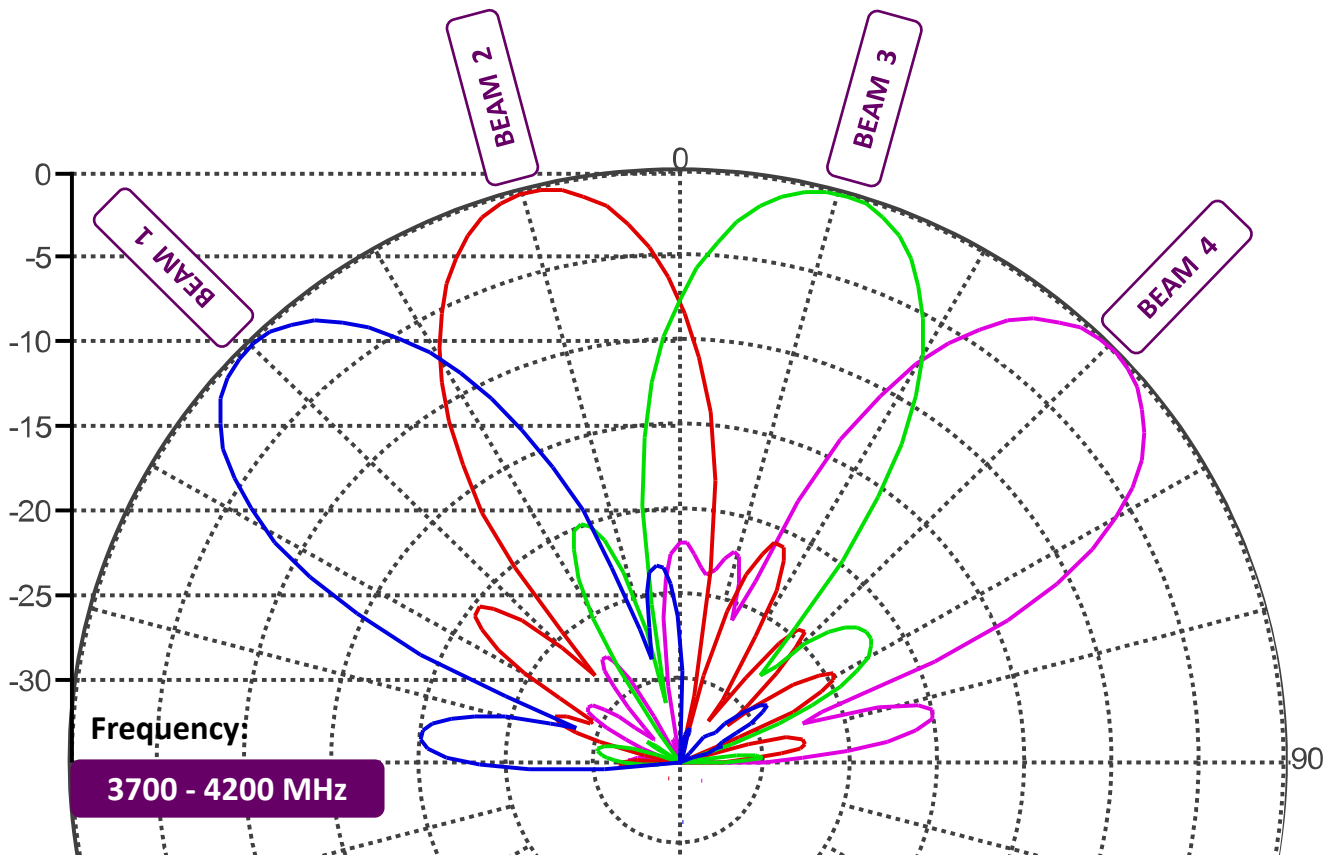
1.20 Vertical Pattern

Frequency: 3700 - 4200 MHz
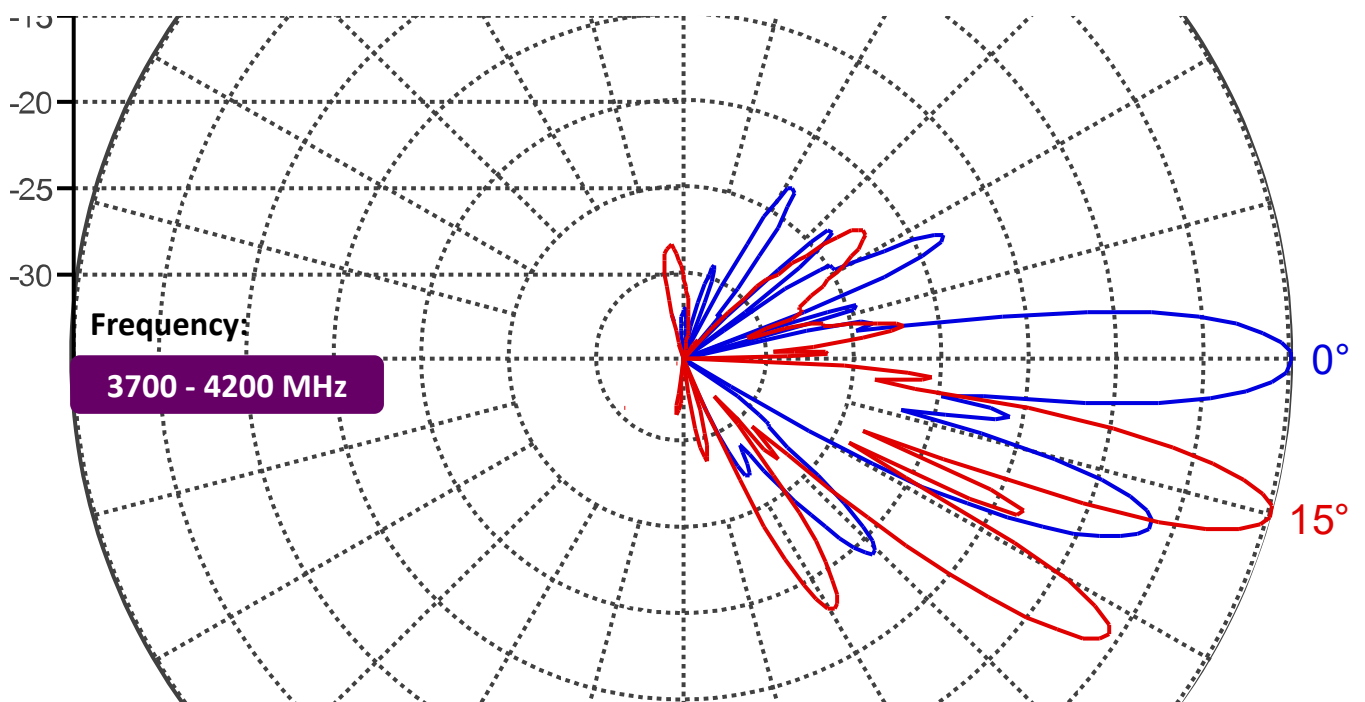
2.00 Beam and Connectors

2.10 Plan View Resultant Beam Layout
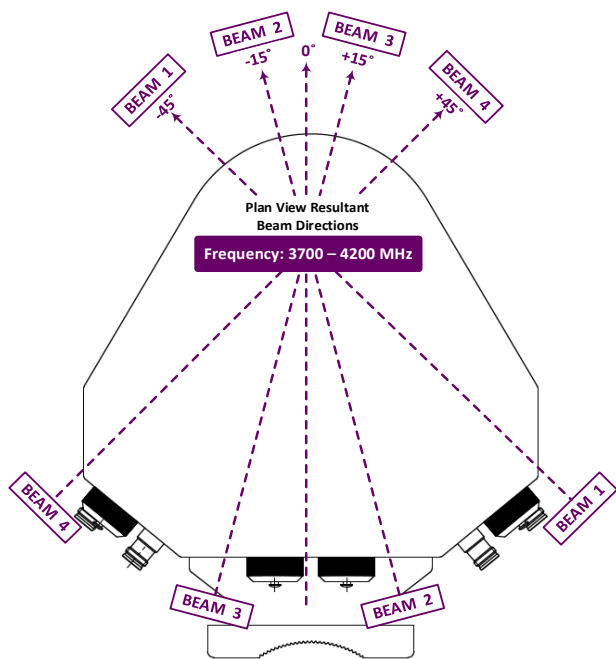
2.20 Connector Port Table

BEAM 4	BEAM 3	BEAM 2	BEAM 1
Port 15 (+45°)	Port 11 (+45°)	Port 7 (+45°)	Port 3 (+45°)
Port 16 (-45°)	Port 12 (-45°)	Port 8 (-45°)	Port 4 (-45°)
Port 13 (+45°)	Port 9 (+45°)	Port 5 (+45°)	Port 1 (+45°)
Port 14 (-45°)	Port 10 (-45°)	Port 6 (-45°)	Port 2 (-45°)

2.40 Connector Layout

2.30 Connector Detail
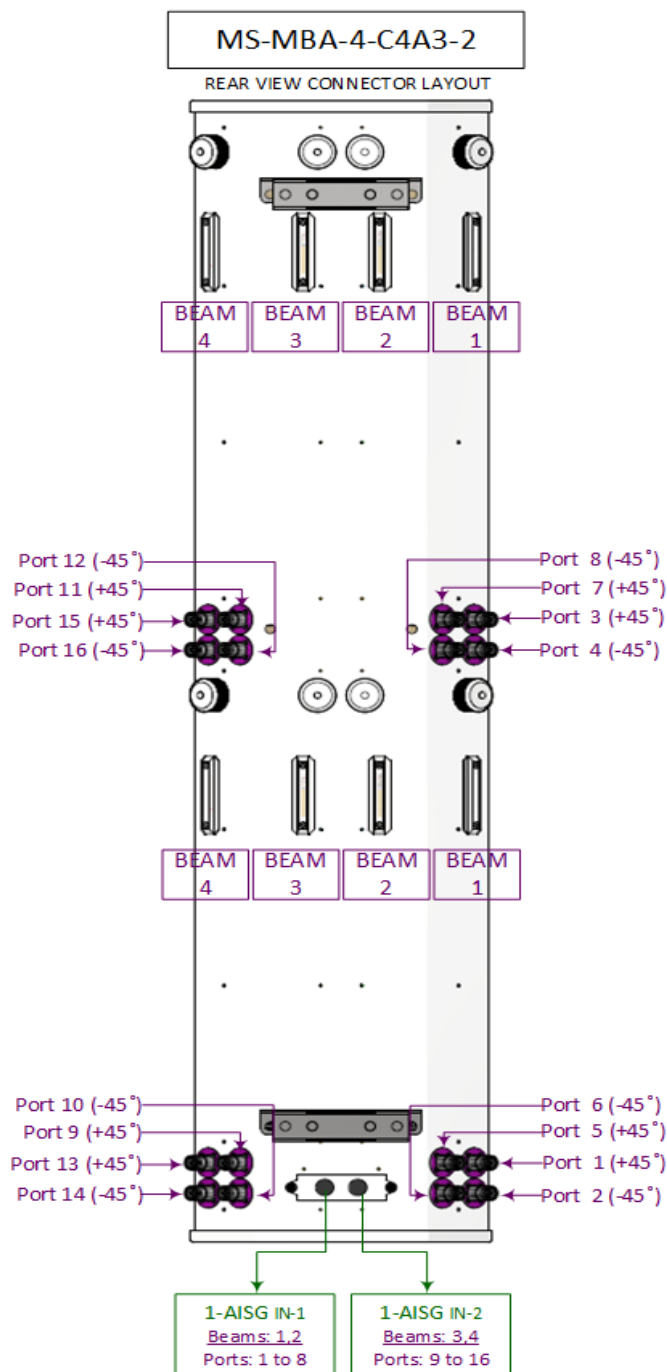
3.00 RET Operations and Information's

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 Example of Serial Numbers Label Reference

MATSING®
LENS TECHNOLOGY ENABLED

Model No. : MS-MBA-4-C4A3-2
Serial No. : MS-MBA-4-C4A3-2-00001
Frequency: 3700 – 4200 MHZ

Ret Controller Serial #
MBA4C4A3200001AMM
MBA4C4A3200001BMM

> Delete a zero in front if the serial number is more than 5 digits.

> *Reminder*: If information has been edited, remember to perform a "radio hard reset" for changes to take place.

3.11 Controller Display

NO	HDLC	Vendor	Serial Number	Product Number	H/W Version	S/W Version	3GPP	Device	AISG	Connect	Link
1	1	MS	MBA4C4A3200001AMM	ACS-RMC20	1.00	1.17	6	Multi RET	2	Connect	Link
2	2	MS	MBA4C4A3200001BMM	ACS-RMC20	1.00	1.17	6	Multi RET	2	Connect	Link

MBA4C4A3200001AMM (Beam 1,2.)
MBA4C4A3200001BMM (Beam 3,4.)

Model   s/no. 5 digits

3.12 Beam nos and Port nos Display

RET ID : MSMBA4C4A3200001AMM

RET Status and Control
Antenna Information List

| NO	Sector ID	Ant Model	Ant Serial	BEAM 2	BEAM 1
1/4	Beam 1 (Ports 1, 2)	MS-MBA-4-C4A3-2	MSMBA4C4A320001	Port 7 (+45°)	Port 3 (+45°)
2/4	Beam 1 (Ports 3, 4)	MS-MBA-4-C4A3-2	MSMBA4C4A320001	Port 8 (-45°)	Port 4 (-45°)
3/4	Beam 2 (Ports 5, 6)	MS-MBA-4-C4A3-2	MSMBA4C4A320001	Port 5 (+45°)	Port 1 (+45°)
4/4	Beam 2 (Ports 7, 8)	MS-MBA-4-C4A3-2	MSMBA4C4A320001	Port 6 (-45°)	Port 2 (-45°)

RET ID : MSMBA4C4A3200001BMM

RET Status and Control
Antenna Information List

NO	Sector ID	Ant Model	Ant Serial	BEAM 4	BEAM 3
1/4	Beam 3 (Ports 9, 10)	MS-MBA-4-C4A3-2	MSMBA4C4A320001	Port 15 (+45°)	Port 11 (+45°)
2/4	Beam 3 (Ports 11, 12)	MS-MBA-4-C4A3-2	MSMBA4C4A320001	Port 16 (-45°)	Port 12 (-45°)
3/4	Beam 4 (Ports 13, 14)	MS-MBA-4-C4A3-2	MSMBA4C4A320001	Port 13 (+45°)	Port 9 (+45°)
4/4	Beam 4 (Ports 15, 16)	MS-MBA-4-C4A3-2	MSMBA4C4A320001	Port 14 (-45°)	Port 10 (-45°)

4.00 Manual Tilt Adjustment

1	The MBA antenna comes in RET mode as a default, but if needed, it 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 in 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 and screw the waterproof cap back to its original position.

Tilt Adjustment Knob

Angle Indicator

RET Controller
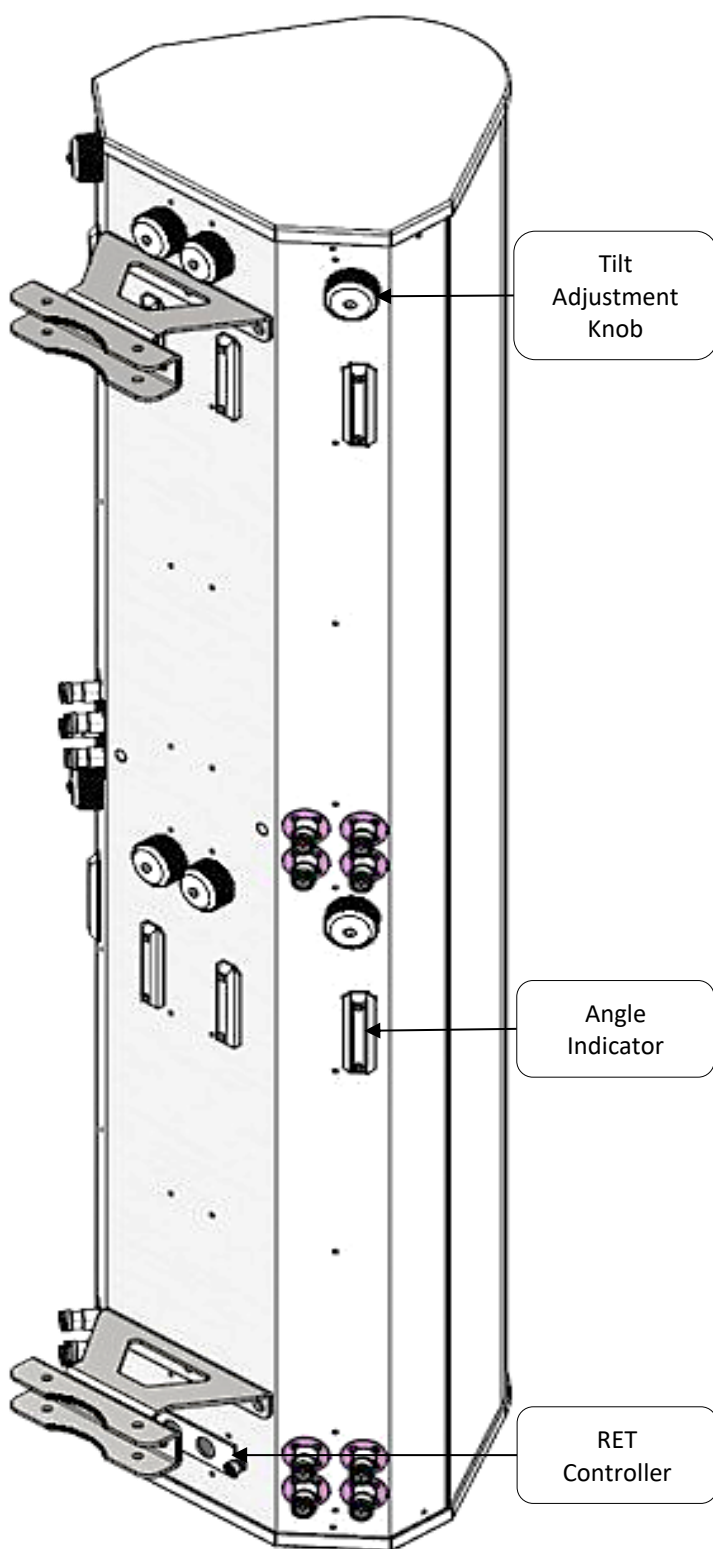
Unscrew/Screw the cap for tilt adjustment process

Engaged with internal RET motor position

PULL AND TURN

Pull handle out to disengaged RET for tilt adjustment

PULL AND TURN

PULL AND TURN

5.00 Bracket Installation

5.10 Bolts, Nuts and Tools

Bracket	Mounting Bolts		Nuts	
Qty	Size	Qty	Size	Qty
2	M12x200mm	4	M12	8

5.11 Bolt and Nuts Set

5.20 Tools

M12 spanner

Adjustable spanner

5.12 Bracket
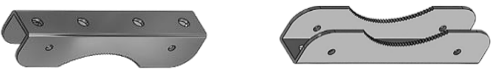
5.30 Bracket Spacing & Installation Sample

135.0 mm

1252.0 mm

156.0 mm

Before Installation

After installation