

Date	Prepared by	Approved by	Document nos	Rev
28 Dec 2021	Ray Ling	Pavel	MBA-44-SH245-IM-001	1

INSTRUCTION MANUAL MS-MBA-4.4-SH2-SH2-45

TABLE OF CONTENTS:

1.00 BEAMS & CONNECTORS:

- 1.10 Plan View Resultant Beam Layout
- 1.20 Connector Ports Table
- 1.30 Connector Detail
- 1.40 Connector Layout

2.00 PATTERN DIAGRAM

- 2.10 Frequency: 2300 -2400 MHz
 - 2.11 Horizontal Pattern
 - 2.12 Vertical Pattern
- 2.20 Frequency: 3400 - 3600 MHz
 - 2.21 Horizontal Pattern
 - 2.22 Vertical Pattern

3.00 MANUAL TILT ADJUSTMENT

4.00 BRACKET INSTALLATION

- 4.10 Bolts & Nuts Requirements
 - 4.11 Bolts & Nuts
 - 4.12 Bracket
- 4.20 Tools Requirement
 - 4.21 Adjustable Spanner
 - 4.22 M12 Spanner
- 4.30 Bracket Spacing
- 4.40 Installation Sample

5.00 GENERAL LIFTING GUIDE

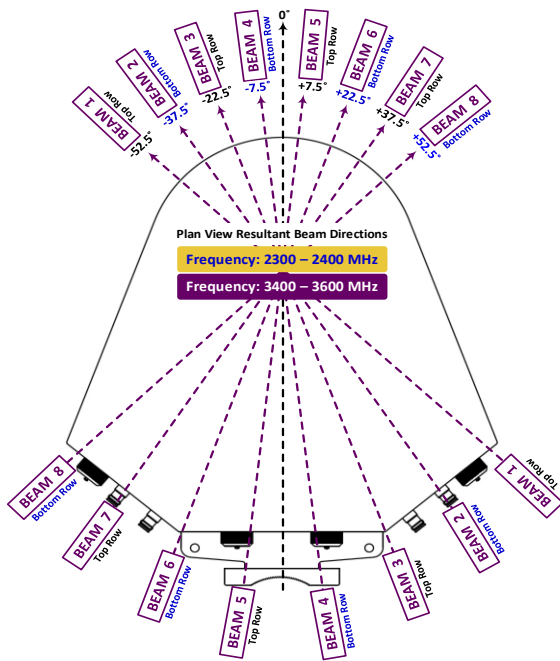
- 5.10 Lifting Belts & Shackle (Item not included in shipping)
 - 5.11 Lifting Belts (Qty=1~2)
 - 5.12 Shackle (Qty=2~4)
- 5.20 Single Belt Sample
- 5.30 Dual Belts Sample

Revision History:

Date	Description	Revised by	Revision nos.
28-Dec-21	Add RET Handle Caution sticker	Ray	1

1.00 BEAMS & CONNECTORS:

1.10 Plan View Resultant Beam Layout



1.20 Connector Ports Table

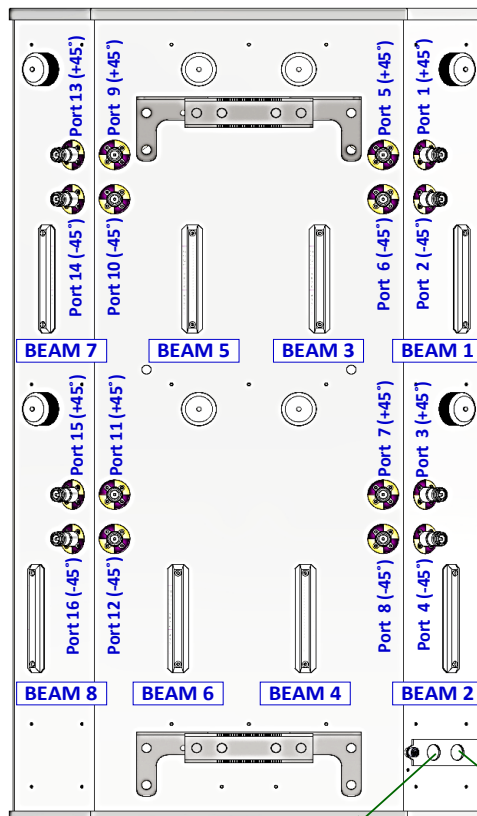
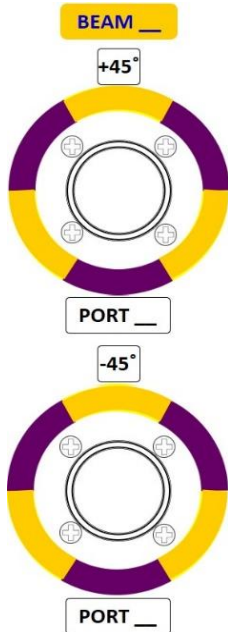
BEAM 7	BEAM 5	BEAM 3	BEAM 1
Port 13 (+45°)	Port 9 (+45°)	Port 5 (+45°)	Port 1 (+45°)
Port 14 (-45°)	Port 10 (-45°)	Port 6 (-45°)	Port 2 (-45°)
BEAM 8	BEAM 6	BEAM 4	BEAM 2
Port 15 (+45°)	Port 11 (+45°)	Port 7 (+45°)	Port 3 (+45°)
Port 16 (-45°)	Port 12 (-45°)	Port 8 (-45°)	Port 4 (-45°)

1.40 Connector Layout

MS-MBA-4.4-SH2-SH2-45

REAR VIEW CONNECTOR LAYOUT

1.30 Connector Detail



AISG IN-1

Beam 1: Port 1 - 2
 Beam 3: Port 5 - 6
 Beam 5: Port 9 - 10
 Beam 7: Port 13 - 14

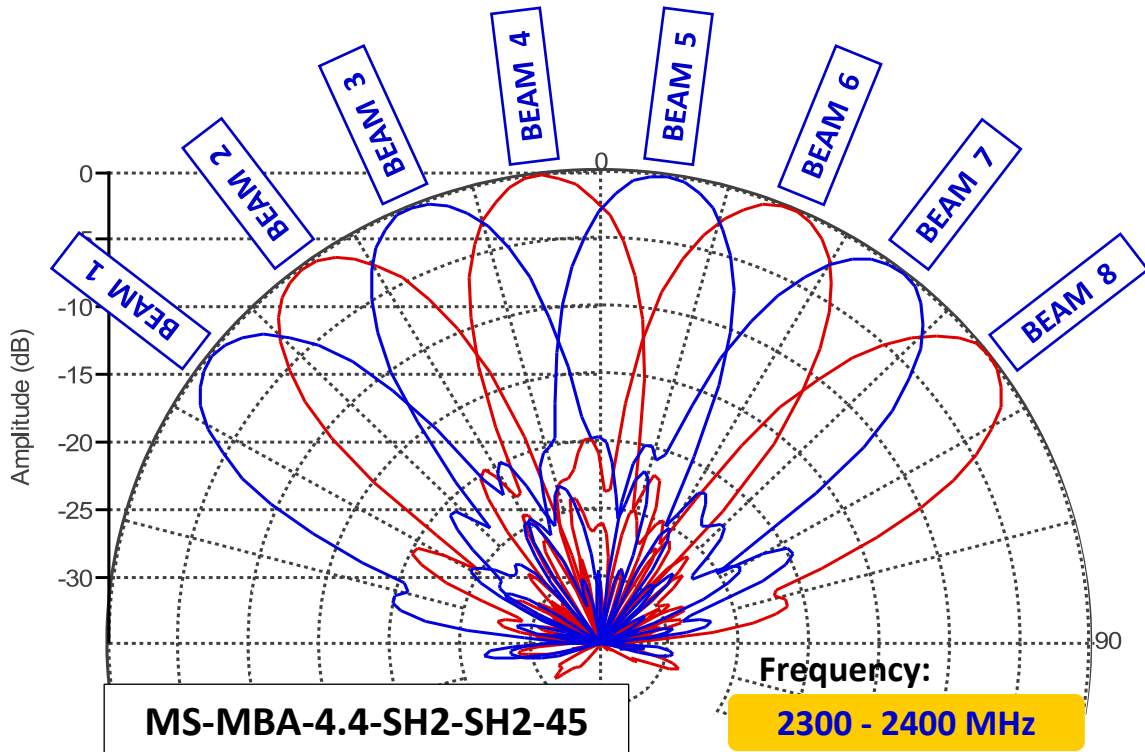
AISG IN-2

Beam 2: Port 3 - 4
 Beam 4: Port 7 - 8
 Beam 6: Port 11 - 12
 Beam 8: Port 15 - 16

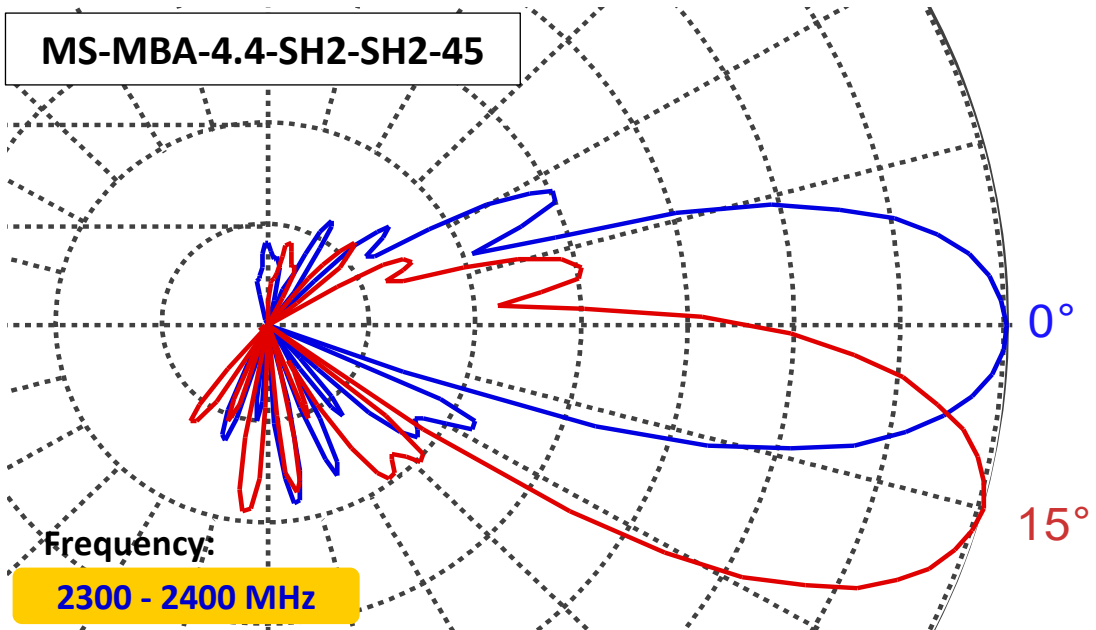
2.00 PATTERN DIAGRAM

2.10 Frequency: 2300 -2400 MHz

2.11 Horizontal Pattern

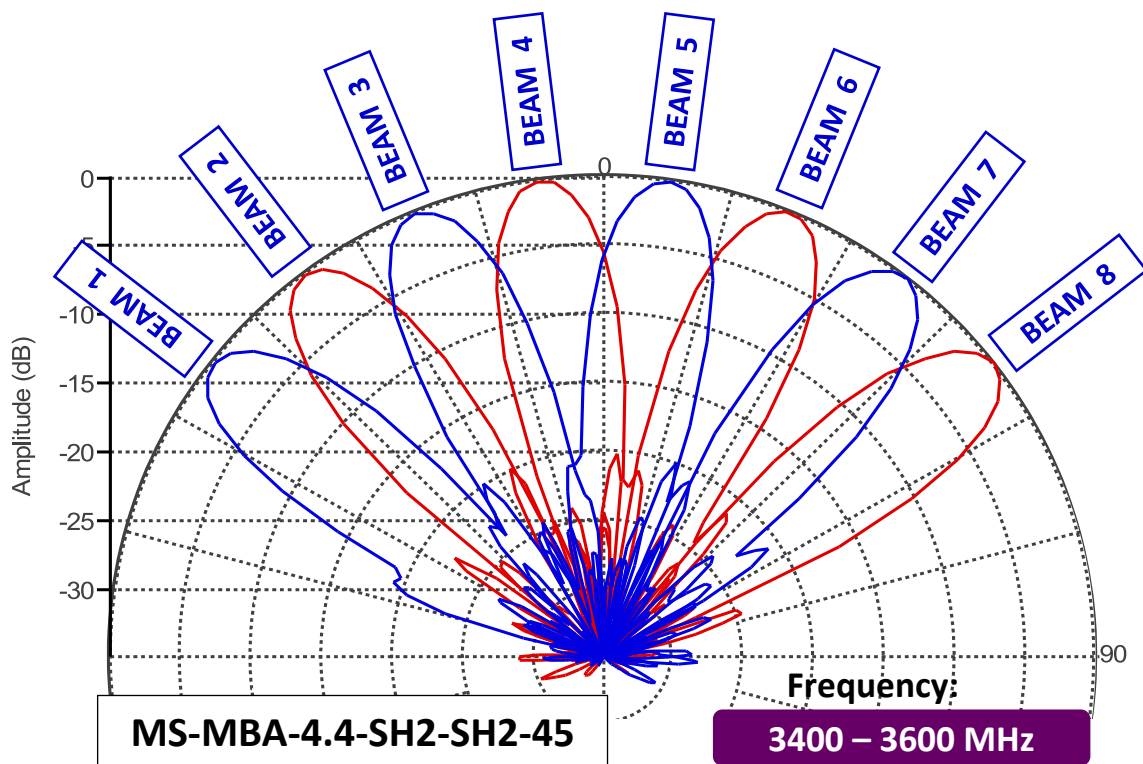


2.12 Vertical Pattern

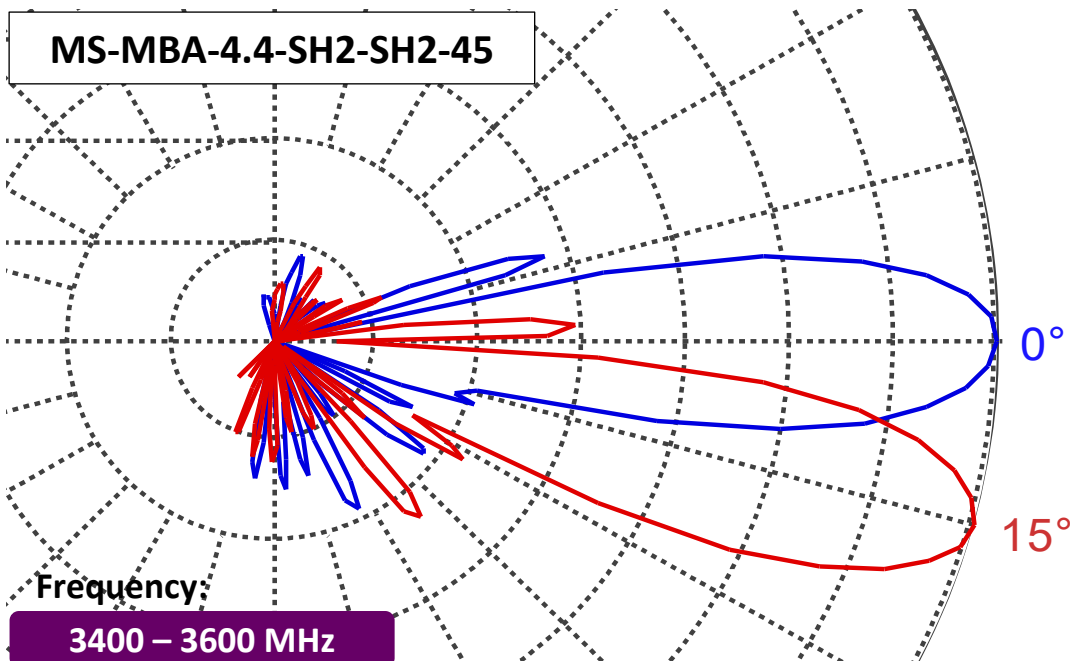


2.20 Frequency: 3400 - 3600 MHz

2.21 Horizontal Pattern



2.22 Vertical Pattern



3.00 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. |



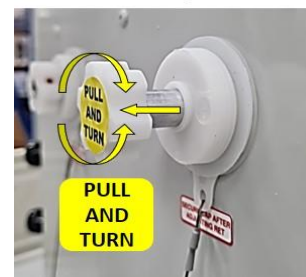
Unscrew/Screw the cap for tilt adjustment process



Engaged with internal RET motor position



Pull handle out to disengaged RET for tilt adjustment



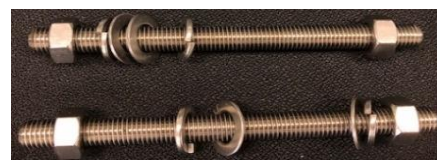
RET Controller

4.00 BRACKET INSTALLATION

4.10 Bolts & Nuts Requirements

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

4.11 Bolts & Nuts



4.12 Bracket



4.20 Tools Requirement

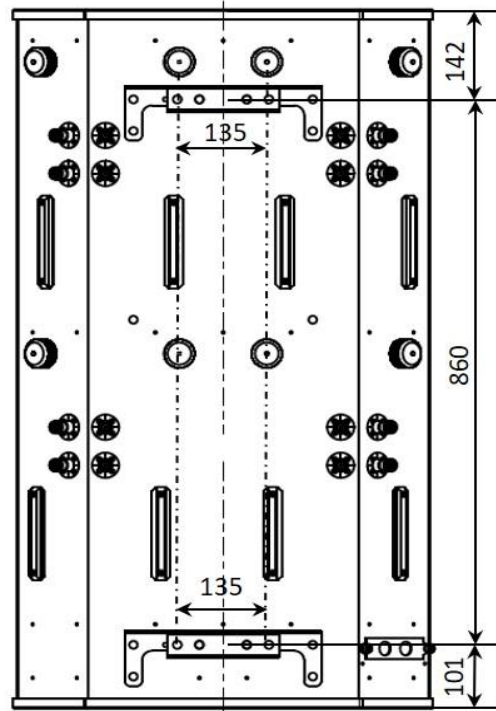
4.21 Adjustable Spanner



4.22 M12 Spanner



4.30 Bracket Spacing



4.40 Installation Sample



Bracket Installation



5.00 GENERAL LIFTING GUIDE

5.10 Lifting Belts & Shackle (Item not included in shipping)

5.11 Lifting Belts (Qty=1~2)



5.12 Shackle (Qty=2~4)



5.20 Single Belt Sample



5.30 Dual Belts Sample

