

Date	Prepared by	Approved by	Document nos	Rev
27 Jul 2023	Ray Ling	Pavel	MBA-3-L4A2-001	1

## **INSTRUCTION MANUAL MS-MBA-3-L4A2**

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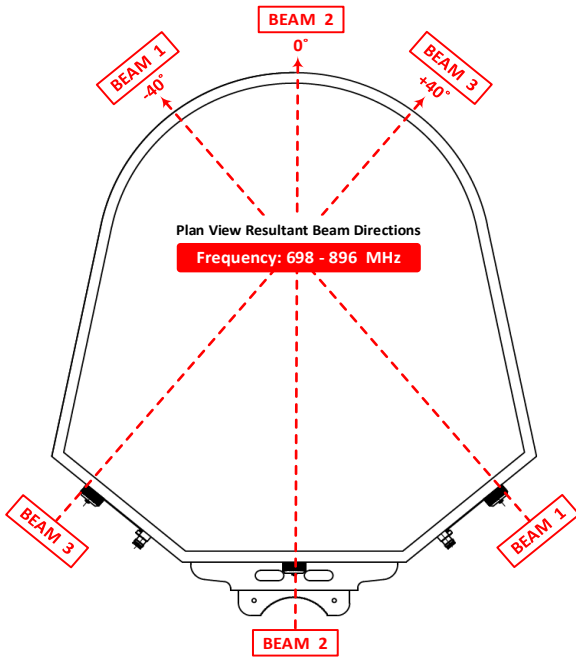
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#### **Revision History:**

Date	Description	Revised by	Revision nos.
27-Jul-23	Revised L-Band Frequency Range From 698-960 to 698-896MHz	Ray	1

# 1.00 BEAMS & CONNECTORS:

## 1.10 Plan View Resultant Beam Layout

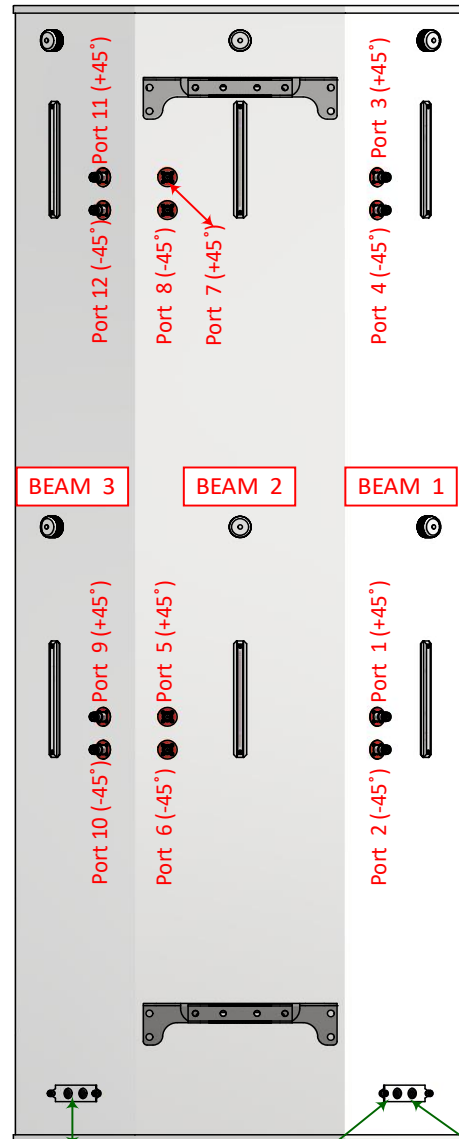


## 1.20 Connector Port Table

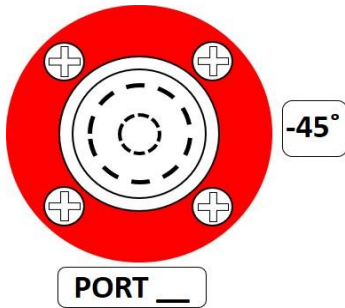
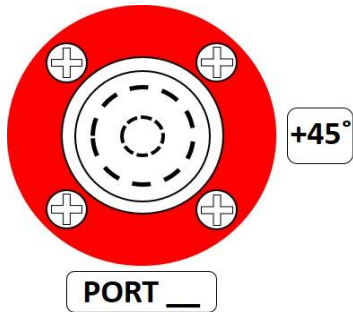
BEAM 3	BEAM 2	BEAM 1
Port 11 (+45°)	Port 7 (+45°)	Port 3 (+45°)
Port 12 (-45°)	Port 8 (-45°)	Port 4 (-45°)
Port 9 (+45°)	Port 5 (+45°)	Port 1 (+45°)
Port 10 (-45°)	Port 6 (-45°)	Port 2 (-45°)

## 1.40 Connector Layout

**MS-MBA-3-L4A2**  
REAR VIEW CONNECTOR LAYOUT



## 1.30 Connector Detail



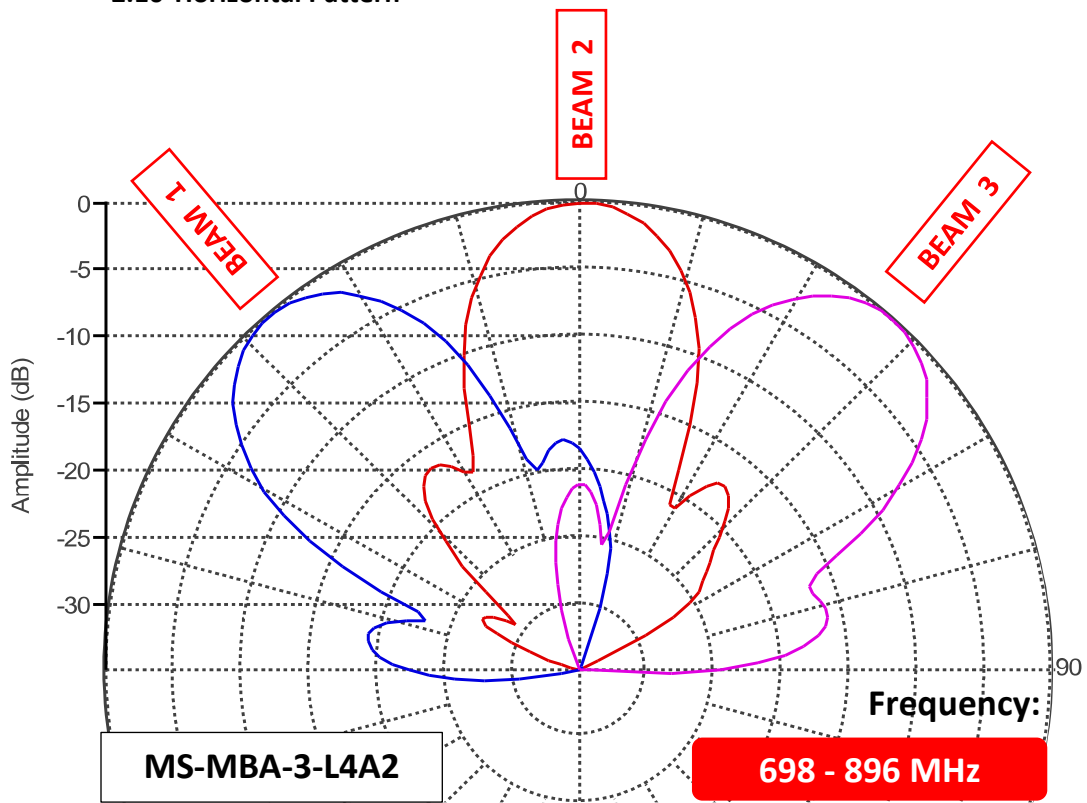
AISG IN  
LB Beam: 3  
LB Ports: 9,10,11,12

AISG IN-1  
LB Beam: 1  
LB Ports: 1,2,3,4

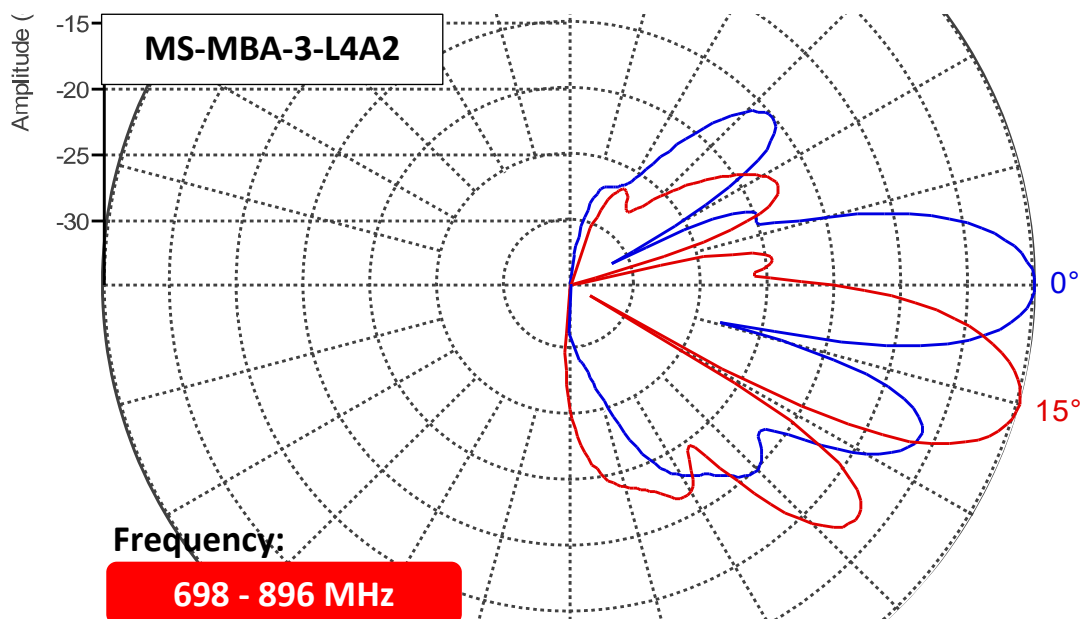
AISG IN-2  
LB Beam: 2  
LB Ports: 5,6,7,8

## 2.00 PATTERN DIAGRAM

### 2.10 Horizontal Pattern

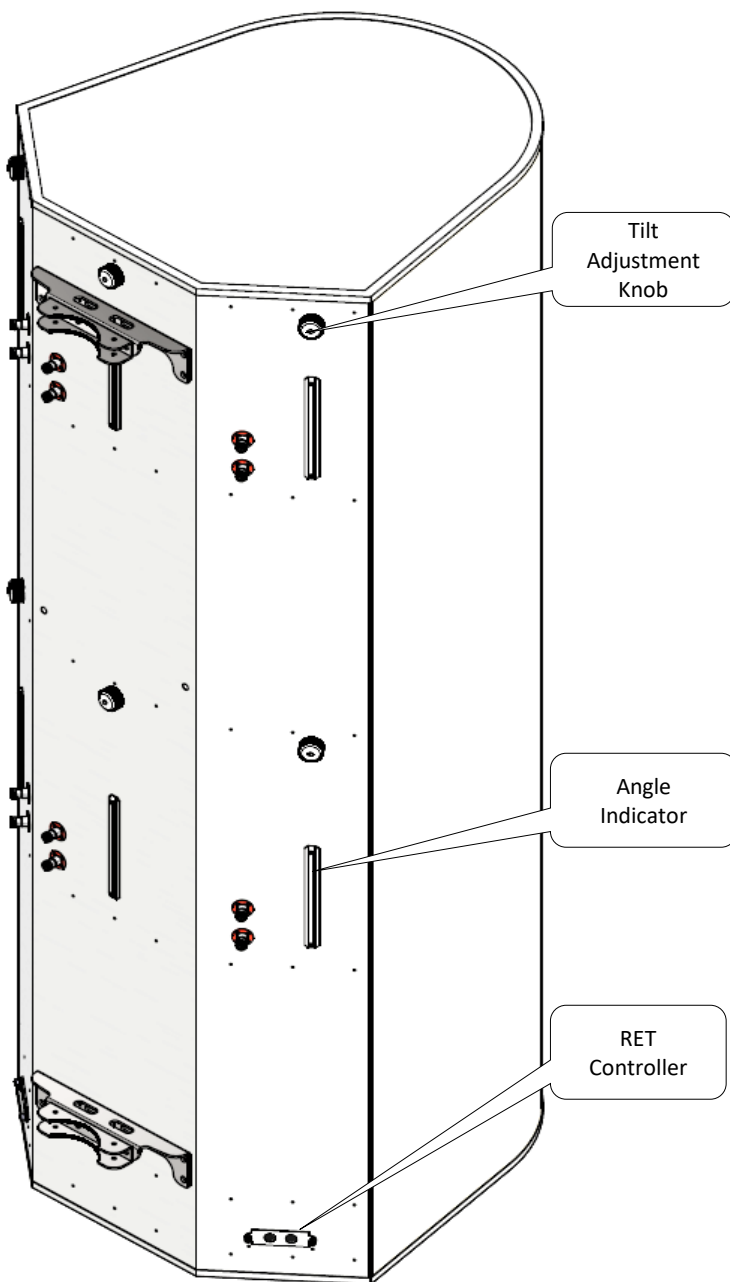


### 2.20 Vertical Pattern



### 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**



## 4.00 BRACKET INSTALLATION

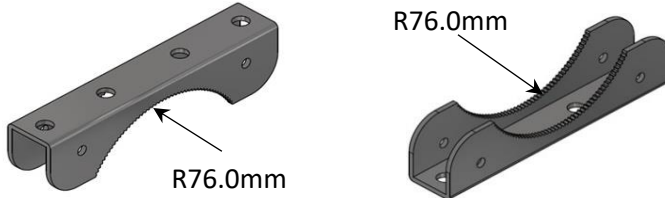
### 4.10 Bolts & Nuts Requirements

Bracket	Bolts		Nuts	
	Qty	Size	Qty	Size
2	M12 x 200mm	4	M12	10

### 4.11 Bolts & Nuts



### 4.12 Bracket



### 4.20 Tools Requirement

#### 4.21 Adjustable Spanner



#### 4.22 M12 Spanner



### 4.30 Bracket Spacing & Installation Sample

