

## **Installation Guide**

Model	Page
08AA	304
09AA	306
11AA	309
36AA	311
38AA	313
50AA	316
51AA	319
58AA	320

## Antenna (08A) Installation Guide

Issue: 02



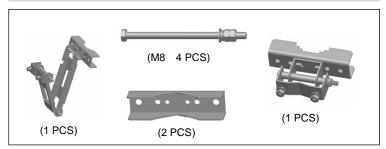
#### M NOTE

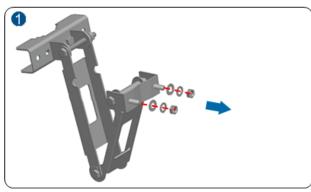
- 1, Only qualified personnel are allowed to install the antenna.
- 2, Appearance of the actual antenna may differ from the pictures.

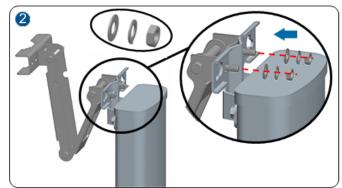
#### **Installation Tools**

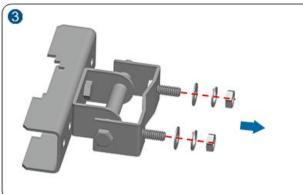
# 13 mm combination wrench (2 PCS) Inclinometer

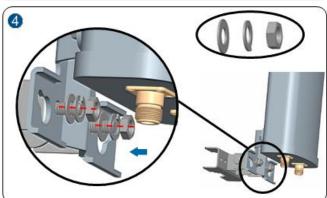
#### **Bracket Subassembly**



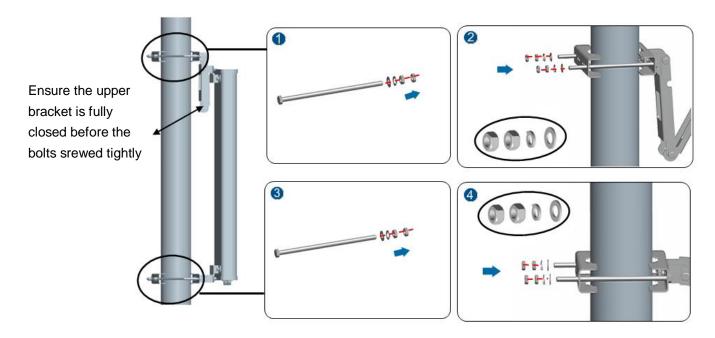








#### Install the antenna



#### 3 Adjust the mechanical mechanical downtilt angle

Metho

Precise measurement

Before adjustment, adjust the inclinometer to the desired downtilt angle. After adjustment, locate the bead in the inclinometer in the middle.



Finally, tighten all the nuts. Recommended torque see Table 1.

Table 1

Screws size	Torque
M8	18 Nm



#### Note

- 1. Make sure the antenna is installed in a safe and suitable location and well clear away from high power lines.
- 2. Do not attempt to carry out installation when it is raining, snowing or during stormy Weather.
- 3. Do not attempt to install the antenna on a pole of diameter other than the specified  $50\sim115$ mm.
- 4. The Electrical Downtilt Antennas should be checked for under controlling by HCU(Hand-held Control Unit) before they been installed.



## Antenna (09A) Installation Guide

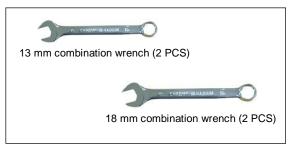
Issue: 03



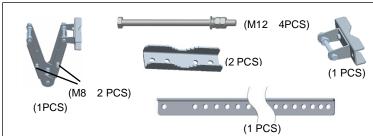
#### M NOTE

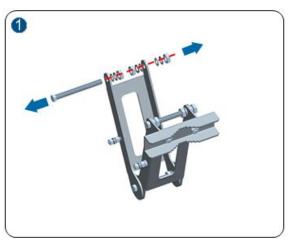
- 1, Only qualified personnel are allowed to install the antenna.
- 2, Appearance of the actual antenna may differ from the pictures.

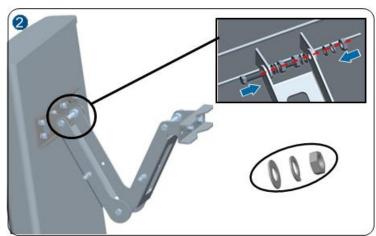
#### **Installation Tools**

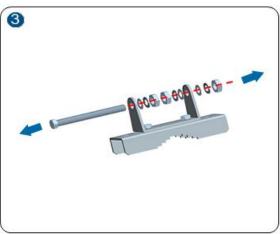


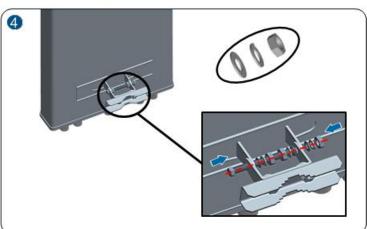
#### **Bracket Subassembly**



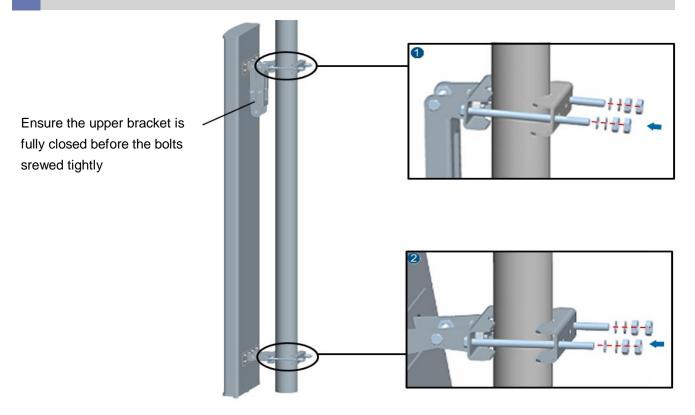


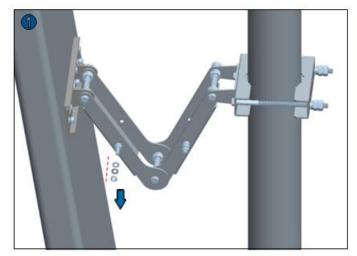


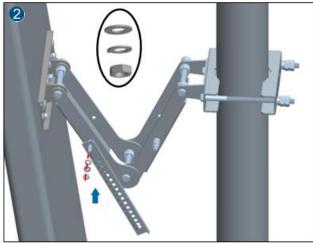




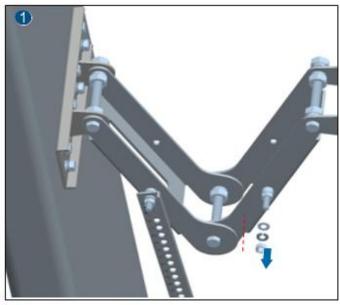
#### 2 Install the antenna

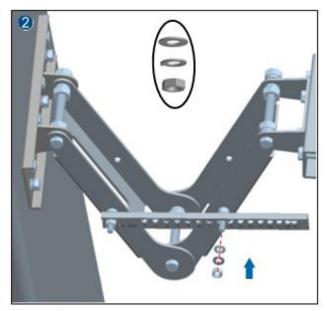


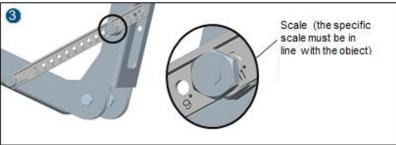




#### 4 Adjust the mechanical downtilt angle







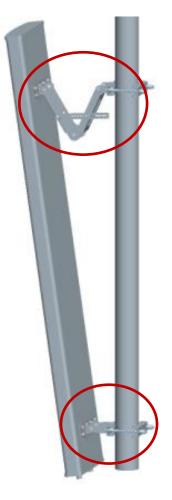
Finally, tighten all the nuts. Recommended torque see Table 1.

Table 1

Screws size	Torque
M8	18 Nm
M12	32 Nm

#### Note

- 1. Make sure the antenna is installed in a safe and suitable location and well clear away from high power lines.
- 2. Do not attempt to carry out installation when it is raining, snowing or during stormyweather .
- 3. Do not attempt to install the antenna on a pole of diameter other than the specified  $50\sim115$ mm.
- 4. The Electrical Downtilt Antennas should be checked for under controlling by HCU(Hand-held Control Unit) before they been installed.



## Antenna (11A) Installation Guide

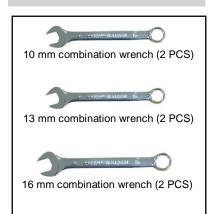
Issue: 03



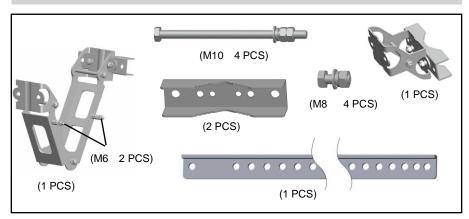
#### M NOTE

- 1, Only qualified personnel are allowed to install the antenna.
- 2, Appearance of the actual antenna may differ from the pictures.

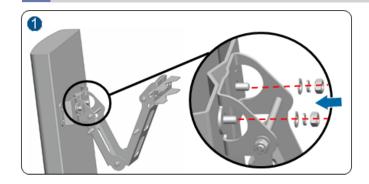
#### **Installation tools**

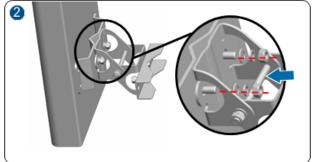


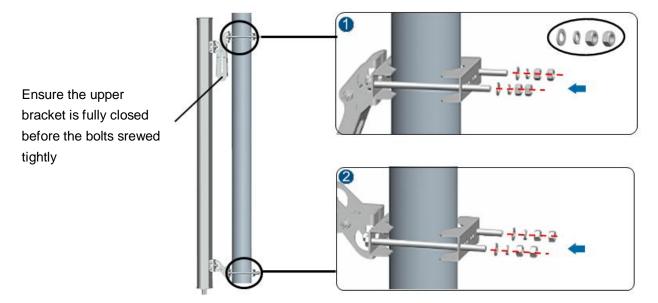
#### **Bracket Subassembly**



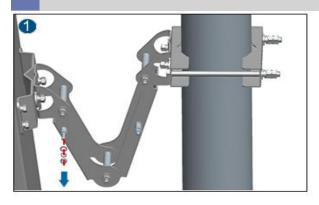
#### 1 Install the bracket

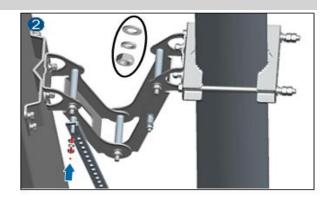




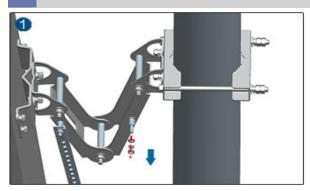


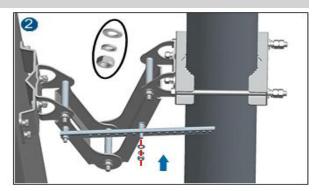
#### 3 Install the scale

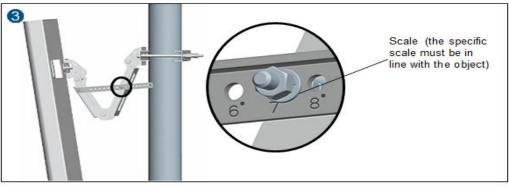




### 4 Adjust the mechanical downtilt angle







Finally, tighten all the nuts.

Recommended torque see Table 1.

 Screws size
 Torque

 M6
 9 Nm

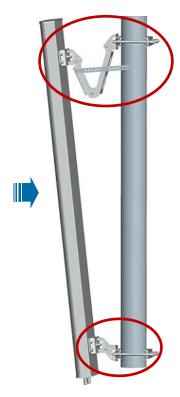
 M8
 18 Nm

 M10
 25 Nm

Table 1

## Note

- 1. Make sure the antenna is installed in a safe and suitable location and well clear away from high powerlines.
- 2. Do not attempt to carry out installation when it is raining, snowing or during stormyweather.
- 3. Do not attempt to install the antenna on a pole of diameter other than the specified  $50\sim115$ mm..
- 4. The Electrical Downtilt Antennas should be checked for under controlling by HCU(Hand-held Control Unit) before they been installed.



## 36AA Mechanical Downtilt Antenna Installation Guide

Issue: 03



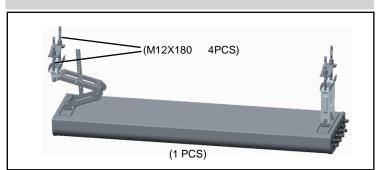
#### M NOTE

- 1, Only qualified personnel are allowed to install the antenna.
- 2, Appearance of the actual antenna may differ from the pictures.

#### **Installation tools**

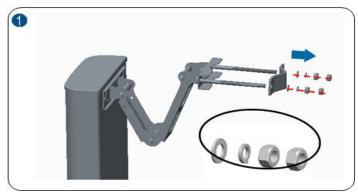
5			
Tool	Specification	Qty	Inclinometer
Spanner	10 (mm)	1 PCS	N SO
Spanner	17 (mm)	2 PCS	10 S NO
Spanner	19 (mm)	2 PCS	Compass
			-

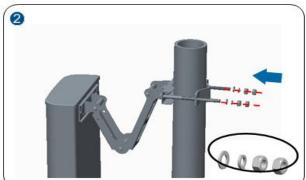
#### **Bracket subassembly**

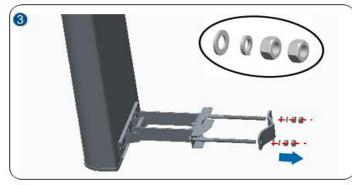


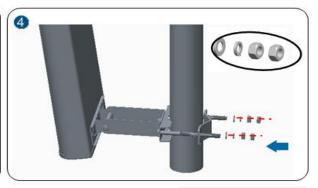
#### 1 Install the antenna

Don't tighten the nuts on the upper and lower brackets at this moment.



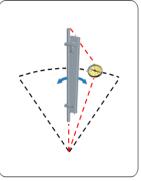




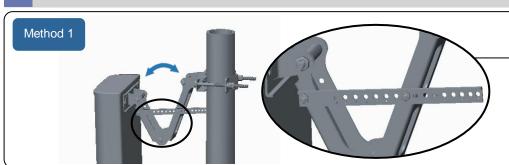




2 Adjust the azimuth



#### 3 Adjust the mechanical downtilt angle



Scale of bracket (the specific scale must be in line with the object)

#### Method 2

#### M NOTE

- 1.Before adjustment, adjust the inclinometer to the desired downtilt angle.
- 2. After adjustment, locate the bead in the inclinometer in the middle.

Finally, tighten all the nuts. Recommended torque: Table 3.1





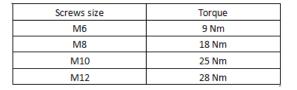






After adjustment

#### • Table 3.1



#### Note

- 1. Make sure the antenna is installed in a safe and suitable location and well clear away from high power lines.
- 2. Do not attempt to carry out installation when it is raining, snowing or during stormy weather.
- 3. Do not attempt to install the antenna on a pole of diameter other than the specified  $50{\sim}115$ mm.
- 4. The Electrical Downtilt Antennas should be checked for under controlling by HCU(Hand-held Control Unit) before they been installed

## Antenna (38A) Installation Guide

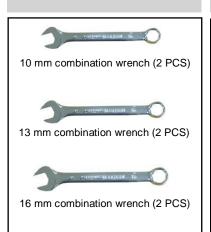
Issue: 03



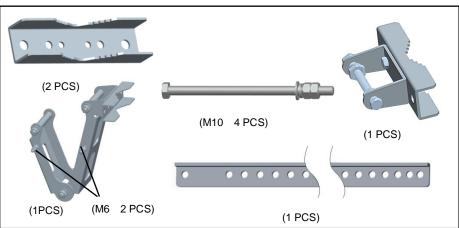
#### **M** NOTE

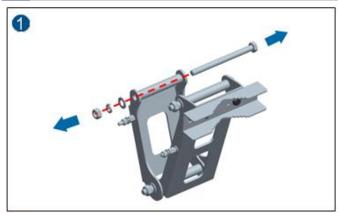
- 1, Only qualified personnel are allowed to install the antenna.
- 2, Appearance of the actual antenna may differ from the pictures.

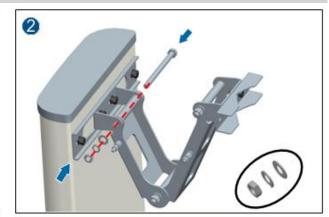
#### **Installation tools**

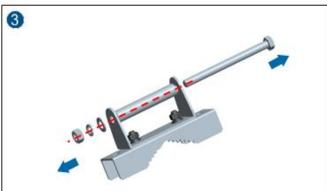


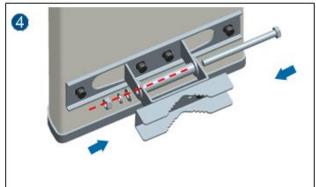
#### **Bracket subassembly**



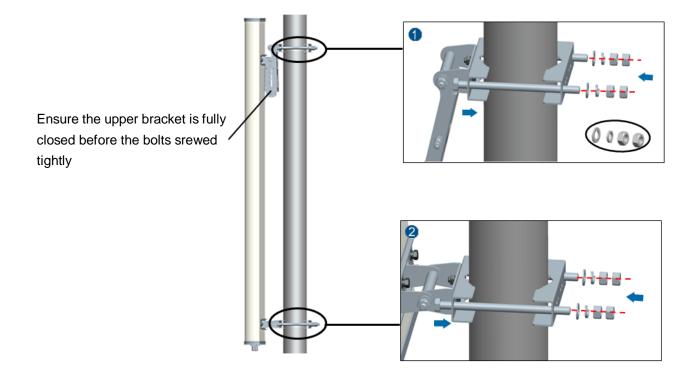




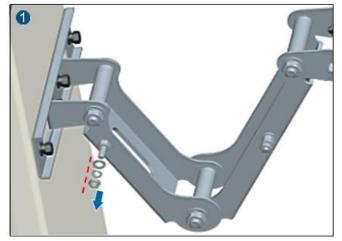




#### Install the antenna

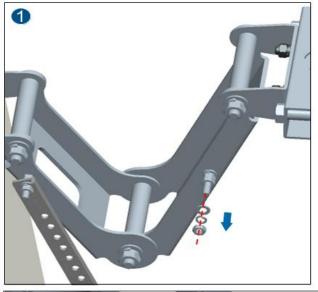


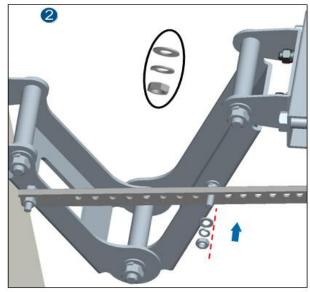
#### 3 Install the scale

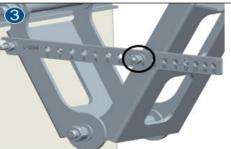


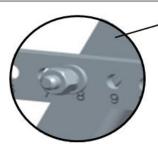


#### Adjust the mechanical downtilt angle









Scale (the specific scale must be in line with the object)

Table 1

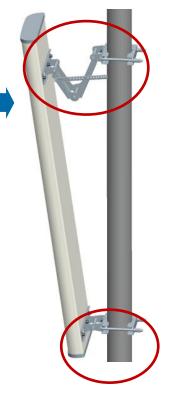
Finally, tighten all the nuts.

Recommended torque see Table 1.

Screws size	Torque
M6	9 Nm
M8	18 Nm
M10	25 Nm

#### Not

- 1. Make sure the antenna is installed in a safe and suitable location and well clear away from high power lines.
- 2. Do not attempt to carry out installation when it is raining, snowing or during stormy weather.
- 3. Do not attempt to install the antenna on a pole of diameter other than the specified  $50{\sim}115$ mm.
- 4. The Electrical Downtilt Antennas should be checked for under controlling by HCU(Hand-held Control Unit) before they been installed.



## Antenna (50A/50AA) Installation Guide

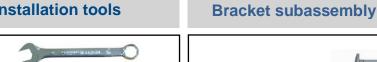
Issue: 03

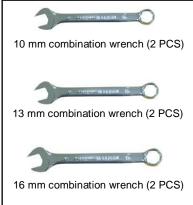


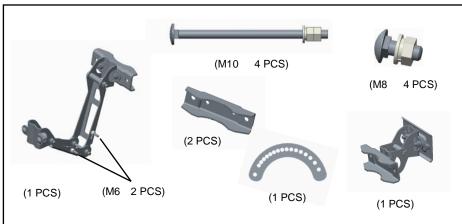
#### **M** NOTE

- 1, Only qualified personnel are allowed to install the antenna.
- 2, Appearance of the actual antenna may differ from the pictures.

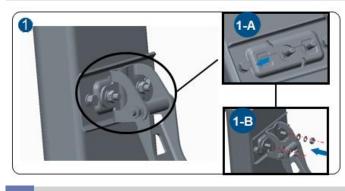
#### **Installation tools**

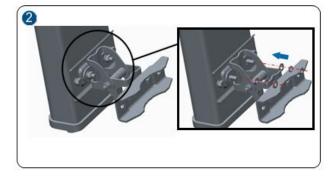


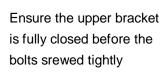


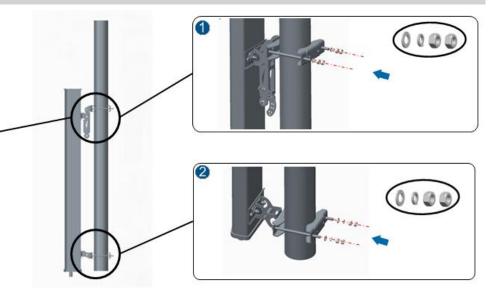


#### Install the bracket

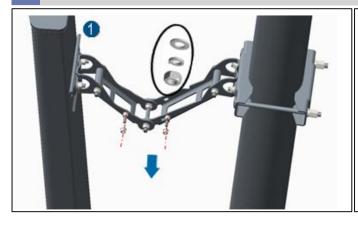








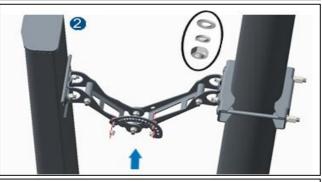
#### **Install the Scale**





### Adjust the mechanical downtilt angle







Scale (the specific scale must be in line with the object)

Finally, tighten all the nuts. Recommended torque see Table 1.

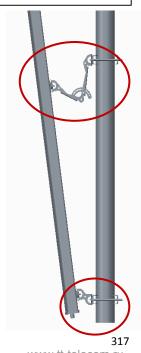
Screws size	Torque
M6	9 Nm
M8	18 Nm
M10	32 Nm

Table 1

#### Note

- 1. Make sure the antenna is installed in a safe and suitable location and well clear away from high power lines.
- 2. Do not attempt to carry out installation when it is raining, snowing or during stormy weather.
- 3. Do not attempt to install the antenna on a pole of diameter other than the specified 50~115mm.

For particular installation, please contact Tongyu Communication Inc.



Tongyu reserves all rights to change specications without prior notice.

website: www.tycc.cn

## Antenna (51A/51AA) Installation Guide

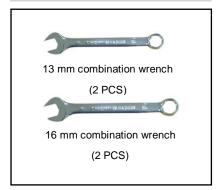


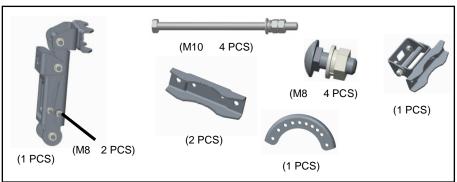
#### M NOTE

- 1, Only qualified personnel are allowed to install the antenna.
- 2, Appearance of the actual antenna may differ from the pictures.

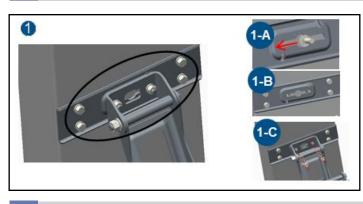
#### **Installation tools**

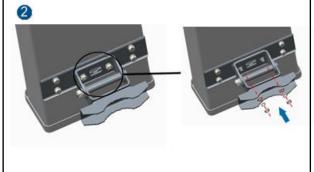
## **Bracket subassembly**

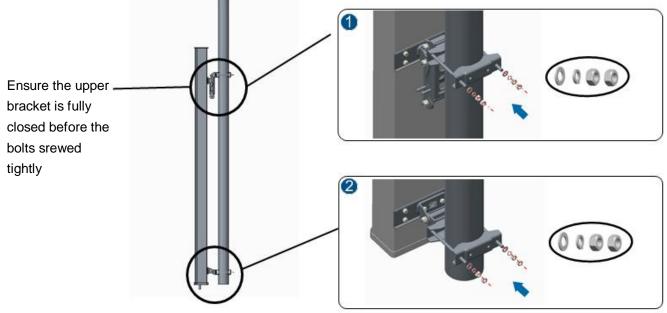




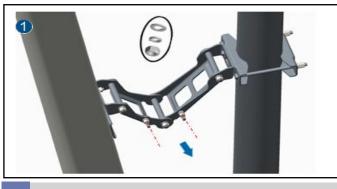
#### 1 Install the bracket

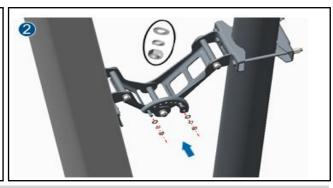






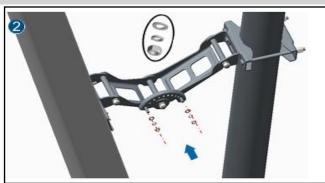
#### **Install the Scale**





#### Adjust the mechanical downtilt angle







Scale (the specific scale must be in line with the object)

Table 1

Finally, tighten all the nuts. Recommended torque see Table 1.

Screws size	Torque
M8	18 Nm
M10	25 Nm

#### Note

- 1. Make sure the antenna is installed in a safe and suitable location and well clear away from high power lines.
- 2. Do not attempt to carry out installation when it is raining, snowing or during stormy weather.
- 3. Do not attempt to install the antenna on a pole of diameter other than the specified 50 $\sim$ 115mm.
- before they been installed.



## Antenna (58AA) Installation Guide

Issue: 03



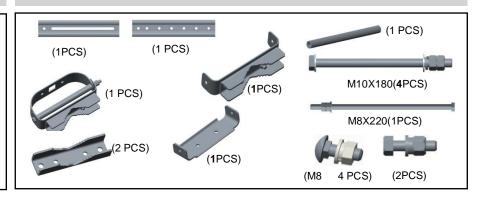
#### M NOTE

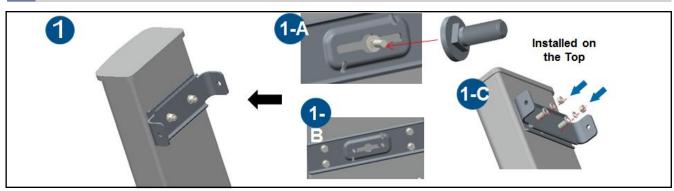
- 1, Only qualified personnel are allowed to install the antenna.
- 2, Appearance of the actual antenna may differ from the pictures.

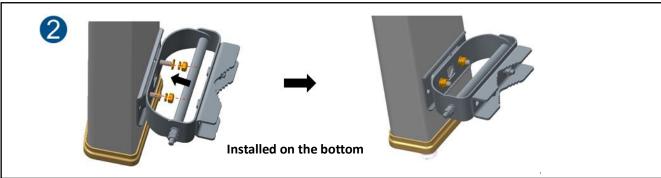
#### **Installation tools**

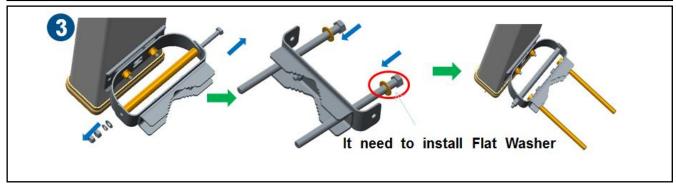


#### **Bracket subassembly**

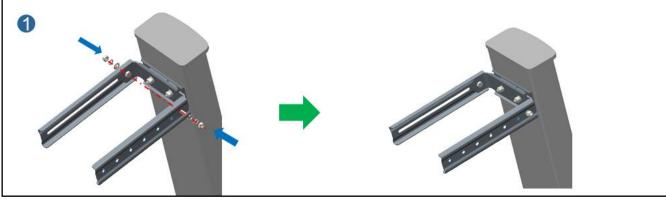


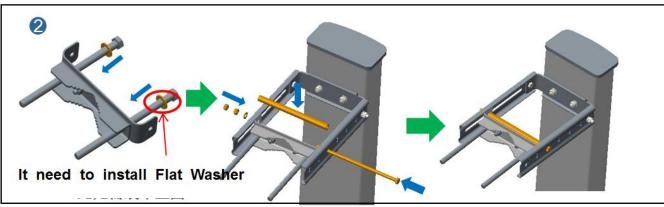






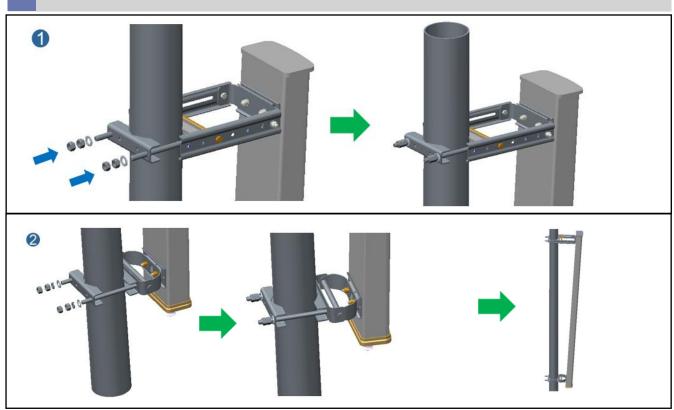
## 2 Install the Scale and Adjust the mechanical downtilt angle







Scale (the specific scale must be in line with the object)



Finally, tighten all the nuts.

Recommended torque see Table 1.

Table 1

Screws size	Torque
M8	18 Nm
M10	25 Nm

#### Note

- 1. Make sure the antenna is installed in a safe and suitable location and well clear away from high power lines
- 2.Do not attempt to carry out installation when it is raining, snowing or during stormy weather
- 3.Do not attempt to install the antenna on a pole of diameter other than the specified  $50\sim115$ mm
- 4. The Electrical Downtilt Antennas should be checked for under controlling by HCU(Hand-held Control Unit) before they been installed