### **39107 ANTENNA DRIVE SYSTEM**

## **USER'S MANUAL**

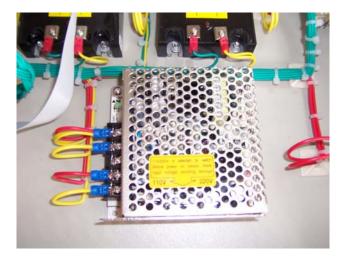


### Ver. 2.0

Probecom Microwave Technology Co., Ltd.

CAUTION: before the equipment installation. Please check the single phase service voltage is 110V or 220V, make sure that the preset voltage is accordance with the supply voltage. If it is different, adjust the switch like this:

Open the top panel of the ADU, then turn the transferred switch in the switching supply (S15-5, please see as the picture shows below) to the position which indicate the voltage accordance with the service voltage.



#### **1 Description of ADU Operation**

ADU is mainly used to control 3-phase motor, which drives the antenna. The control of ACU to the antenna is also realized by ADU. The front panel of ADU is illustrated in Figure.1



39107-P ANTENN	NA DRIVE UN	IIT	STA	TUS INDICATO	R		
	0	0	0	0	0	0	$\bigcirc$
	CW	CCW	UP	DOWN	PCW	PCCW	LOCAL
		$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	
POWER			S	LEW CONTROL			

Fig.1 Illustrated Diagram of ADU Front Panel



#### **1.1 Control Switch (LOCAL)**

Press the LOC key and ADU is in the local control mode. The antenna rotation can be controlled in each direction such as CW, CCW, UP and DOWN by the switch on the front panel of ADU.

Release the LOC key and ADU is under the control of ACU. Under such a mode, the antenna is driven to rotate by ACU.

# 1.2 Control Switch of Direction (CW, CCW, UP, DOWN, PCW and PCCW)

Press the CW, CCW, UP, DOWN, PCW or PCCW switches, the antenna will rotate towards the corresponding direction. It will stop rotating when the switch is raised.

#### 1.3 Status Indicator

When the antenna rotates to the limit position in some direction, the antenna stops rotating and the limit indicator in this direction is on(red light). When the antenna is rotated in the opposite direction, it will quit from the limit status.(green light)

#### 2 Input / Output signal Description of ADU

Figure.2 illustrates the rear panel of ADU and the function for each socket is as follow:



Fig.2 Illustrated Diagram of ADU Rear Panel



#### 2.1Triphase Power Switch

380V 3 phase power On/Off switch is provided for the purpose of protection. The switch is a short-circuiter, which will automatically cut off when there is short-circuit in ADU or the motor is over-flow.

Note: Don't blindly apply the power once again when the switch is automatically off. It doesn't apply the power until the fault is found and cleared.

2.2 CONTROL IN — Signal input of ACU rotation control

**STATUS OUT** — Signal output of ADU status

**LIMIT IN** — Signal input of limit

**POWER IN** — Input of 380V 3 phase power

AZ MOTOR — Output of Az. motor drive

EL MOTOR — Output of El. motor drive

POL MOTOR — Output of Pol. motor drive

OPTION — Backup

FUSE — 220V(110V) / 1.5A



Copyright©2008 Probecom

CABLE 1					
ADU <u>POEWR IN</u>	380V THREEPHASE POWER SOCKET				
	Cable model :RVV 4X1.5				
1	LINE PHASE A				
2	LINE PHASE B				
3	LINE PHASE C				
4	Neutral				

CABLE 1

CABLE 2

ADU <u>AZ MOTOR</u>	AZ MOTOR
P20J3Q	Cable model :YZ 3X1.0
1	1 (A)
2	2 (B)
3	3 (C)

CABLE 3

ADU <u>EL MOTOR</u>	EL MOTOR	
P20J3Q	Cable model :YZ3X1.0	
1	1 (A)	
2	2 (B)	
3	3 (C)	

#### CABLE 4

ADU <u>LIMIT IN</u>	LIMIT SWITCHES		
DB9 (Female)	Cable model: RVV 6X0.5		
1	CW SWITCH N.C.		
2	CCW SWITCH N.C.		
3	UP SWITCH N.C.		
4	DOWN SWITCH N.C.		
8. 9	CW、CCW、UP&DOWN SWITCHES COM.		

#### Note:

If the antenna rotate direction is not accordance with the actual operation, exchange the two connecter in motor at random. The definition of the ADU Front Panel statue is : when the green light is on, the direction is normal, when the red light is on, the direction mechanically limited.

