# CX0902 DEICING SYSTEM INTRODUCTION

1. General Information

Deicing system are necessary for any antenna that is located in cold weather climates. They can keep the reflector and feed horn free of ice and snow and allow the user uninterrupted reception and transmission of satellite.

1.1 System configuration

The system consists of deicing control unit (indoor), outdoor wiring unit, heating unit, feed deicing/sub-reflector deicing sub-system and accessories. The deicing controller that can be fix in the 19inch rack.. The outdoor wiring unit include the waterproof case, the wiring terminal. Also the heating unit combine the electrothermal material, heat conduction layer, heat preservation layer and waterproof layer together in the whole film.
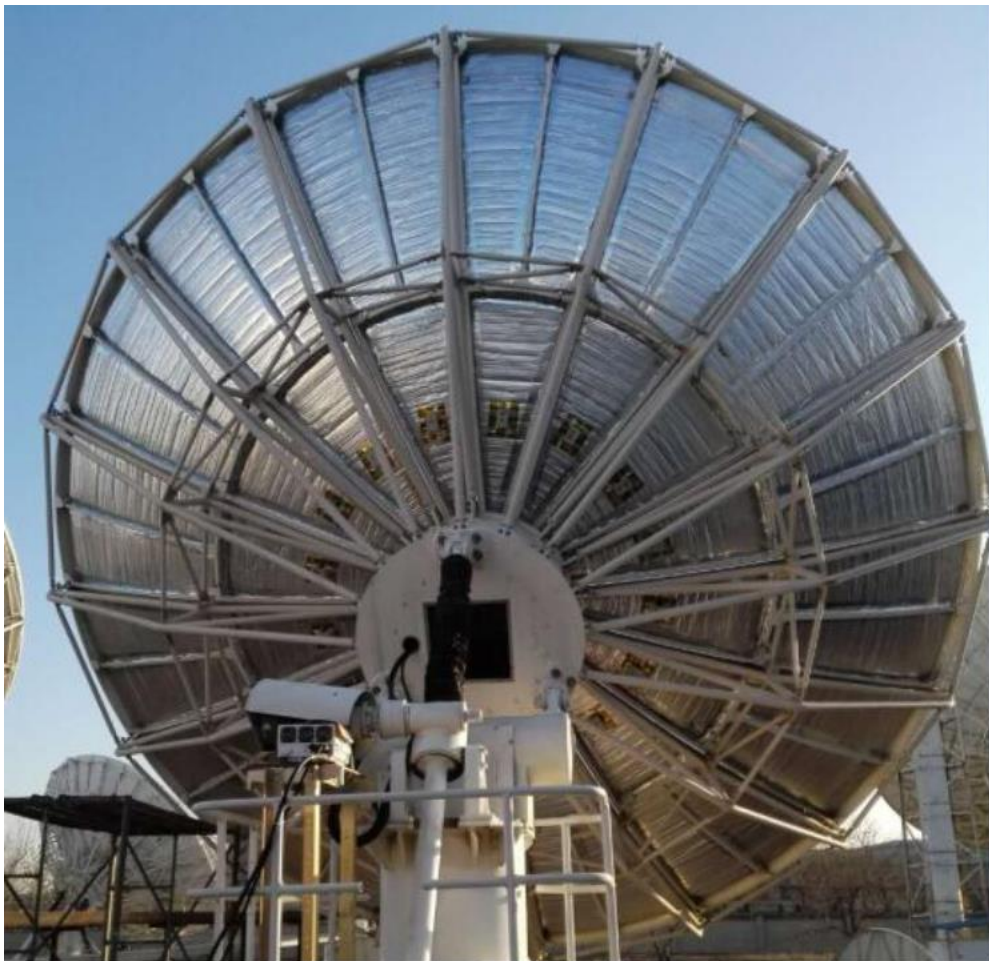
1.2 Features

• The heating unit can be fixed convenient and fast no matter the antenna already installed or the installation processing.

• Remote control function, the distance between the controller and antenna can reach 150 meters.

• Independent work area and any one area failure do not affect the work of the other areas. • Multi areas work circulation, which are suitable for high power load. • Load and sensor fault alarm, can achieve abnormal alarm of the load and sensor work state • Remote computer monitoring system, real-time rendering of the regional temperature curve charts, and the user can store information periodically. • Uniform heating in reflector, especially high temperature region is formed on the easy snow area of reflection, and ensure snow removal efficiency.

·The system can be tailored to suit the individual customer either a snow-sensor combine the fully automatic deicing system.

1.3 Specification

Power	220V/380V 50HZ(option)	Single phase AC
System power capacity (4.5m)	4.5KW(6 panels) 9KW(12 panels)	
Max power consumption (4.5m)	4KW(6 panels) 8KW(12 panels)	
Max heating temperature	50°	Environment -10°,breezy
Max control distance	150m	Between controller with antenna
Operational temperature range of deicing controller	≧ -10°	Indoor
Temperature range	-30°~40°/-60°~80°(option)	
Temperature control precision	+/-1°	
Remote control interface	RS485/RJ45(option)	
Temperature range of heating air gun	80°	Adjustable
Air quantity of heating air gun	150l/min 500L/Min	Options

Cables temperature range	-60°~80°	

1.4 system plot

Standard drawing block as figure 2.
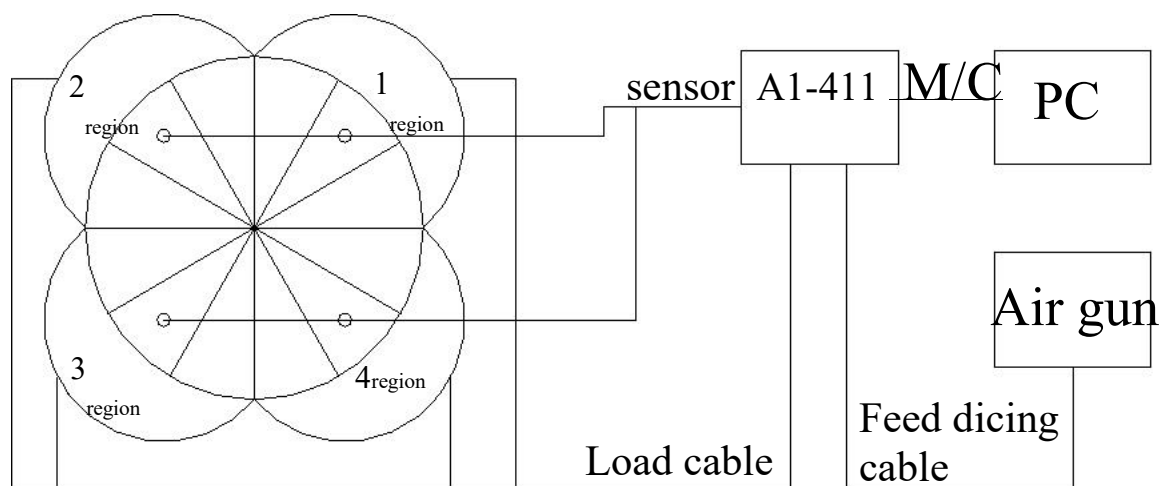
The customization system as the separate document.

figure2

1.5 type explanation

A	1	-	4	1	1
Antenna size	Feed deicing		4 circuits heating /alarm	Remote control	Operation mode

Antenna size	Diameter
A	4.5m and smaller
B	6.2
C	7.3
D	9
E	11.3
F	13,16

Feed deicing	Options
1	Included
0	None

Reflector heating/alarm	Options
1	1 region heating /alarm
2	2 region heating /alarm

3	3 region heating /alarm
4	4 region heating /alarm

Remoter control function	Options
1	Included
0	None

Operation mode	Description
1	Multiple simultaneous running
0	Multiple turns, cycle running

2. Controller

Front & real panels of the controller as shown
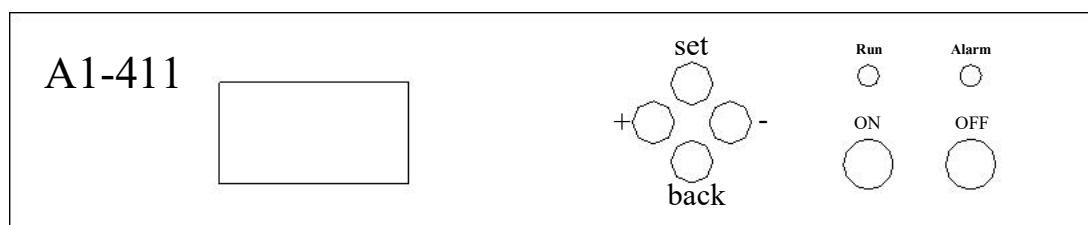
Front panel

The power switch (on/off): Control chassis power on and off

Parameter settings (set): Press set key into parameter setting area to select parameters

Parameter adjustment（-/+）: Adjust parameter values

Operation (Run): When the green light, it stands for in normal status currently

Alarm indicator (Alarm): When the red light, it stands for that there is one or more fault points occur

Display area: Display the whole system working state and alarm information (see the third part)
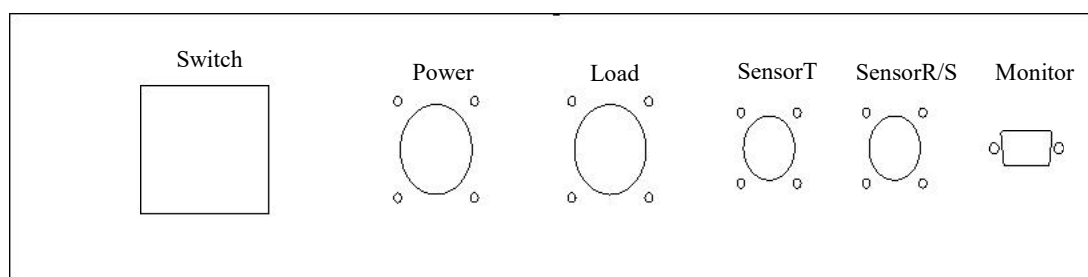
Real panel

Power supply circuit breaker (Switch): Chassis and load short circuit protection.

Power supply (Power): Power supply for chassis and connect single-phase 220V AC power

Load output (Load): To connect and supply 4 circuits load heating and for the heating gun

Temperature sensor output (Sensor): To connect the temperature sensor areas needed to heating and temperature sensor outdoor

4

Rain/snow sensor（sensor R/S）：Connect with the Rain/snow sensor that locate outside.

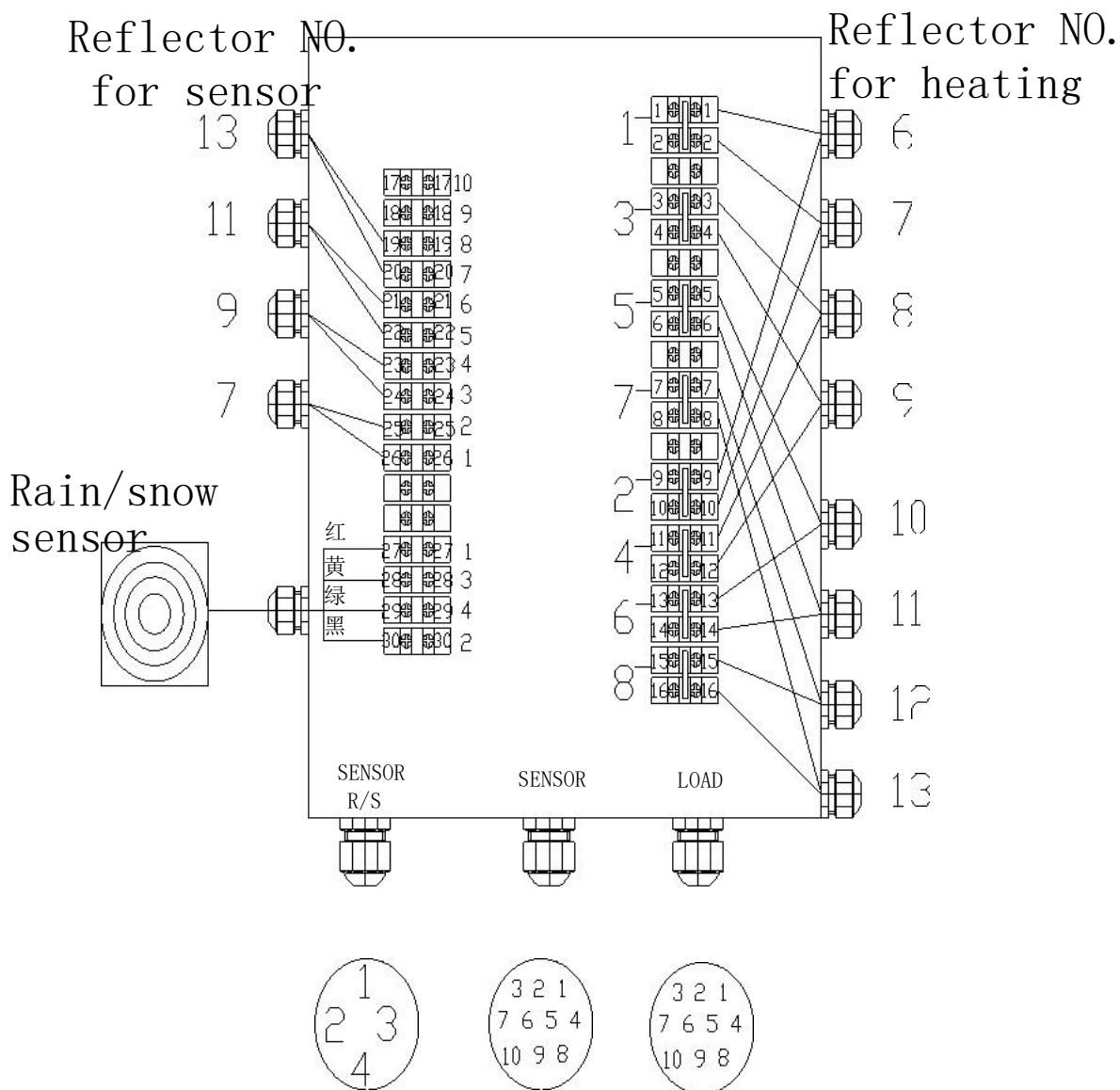Monitor port (Monitor): Connect with the remote control computer

3．Screen

DIC-III CONTROLLER

Reg	Swi	Temp	State	Alarm
1#	✓	-30.0 ℃	Off	Sen C
2#	✓	-30.0 ℃	Off	Sen C
3#	✓	-30.0 ℃	Off	Sen C
4#	✓	-30.0 ℃	Off	Sen C
5#	✓	1min	Heat	Normal

Ots T: Sen C

Para set   9600/1

Reg	Swi	Max T	Min T	Load
1#	✓	30.0 ℃	28.0 ℃	150 W
2#	✓	30.0 ℃	28.0 ℃	150 W
3#	✓	30.0 ℃	28.0 ℃	150 W
4#	✓	30.0 ℃	28.0 ℃	150 W

Reg	Swi	Heat t	Cool t	Load
5#	✓	2min	2min	150 W

4．**Outdoor wiring unit**

Reflector NO. for sensor

Reflector NO. for heating

13
11
9
7

Rain/snow sensor

13
11
9
8
7

1
3
5
7
2
4
6
8

6
7
8
9
10
11
12
13

红
黄
绿
黑

SENSOR R/S

SENSOR

LOAD

1
2 3
4

3 2 1
7 6 5 4
10 9 8

3 2 1
7 6 5 4
10 9 8

5．Electric film

10

11

6. Feed deicing

7. Remote interface