

## Operation Description

The device is a LCD display wireless thermometer receiver operating on frequency 433.92MHz using for receiving the temperature of the swimming pool automatically from the transmitter by every 5 minutes, the data would be displayed on the unit's LCD, the unit is powered by two AA batteries.

### Specifications

Battery Requirements

Operating Voltage: 3.0Vdc

Batteries: 2 x AA battery

### Operating Temperature

Operating temperature : -20 °C to 60 °C

Relative humidity : 0 to 85% non condensing

### Transmission Frequency and Range

Operating frequency : 433.92MHz

Modulation : ASK

Range : 30 meters

### The Description of Circuit of RCV-53591:

#### 1. Mainboard section

Power management: 3.0Vdc from two AA batteries.

Four IOCs to response the operational button.

Four IOAs for RF receiver

SEGs to control LCD.

#### 2. LCD Section

3.35 inch LCD Screen

One LED light

#### 3. ASK Receiver Module

The ST-RXLC-A is based on a single-conversion, super-regeneration receiver architecture.

It can use in OOK/HCS/PWM modulation signal and demodulate to digital signal.

MO-RXLC-A had a high performance and easily to design your product. It can be used on wireless security system or specific remote-control function and other wireless system.

Absolute Maximum Ratings:

Parameter	Symbol	Condition		Specification			Unit
				Min.	Typical	Max.	
Operation Voltage				3.5	5	5.5	V
Sensitivity	Psens	Vcc=5.0V,	315MHz		-104	-101	dBm
		1Kbps Data Rate	434MHz		-104	-101	dBm
ASK out logic HIGH	VOH	Iload = 30 A		0.7*Vcc			V DC
ASK out logic LOW	VOL	Iload = 30 A				0.3*vcc	V DC
Supply current	Icc				3.5	4.5	mA
Tune on Time	Ton	Data start out by Vcc turn on			25		ms
Data Rate				300	1k	6k	bps
Output duty		Vcc=5V; 1kbps data rate		40		60	%