

# GP99 Long Range Proximity Reader User Manual

## Introduction:

JUTAI 125kHz RFID Long Range proximity reader GP99 with featuring compact dimension .It can read range from 90cm to 130 cm depends on the interference on site. it can effectively penetrate solar film and allows MC-51 proximity card to be read from inside the car without winding down windows. The unit will run an excellent power supply and marking it particularly suited to access control car parking and through-well reading applications.

Ideal solution for car parking access control; residential and commercial building – no more hand getting wet during rainy day and less car robbery risk at entrance.

## Features:

- ▶ Can penetrate solar film (V-Kool40).
- ▶ Auto tuning function to compensate presence of metal and interference.
- ▶ Extended reading range from 90 cm to 130 cm.
- ▶ Bright LED indicators, tuning LED bar.
- ▶ Firmware up gradable in the field.
- ▶ IP-54 waterproof housing design.
- ▶ High-quality power supply with noise filter included.
- ▶ Loop Inductive function optional.
- ▶ Anti-rereading function included.

## Specifications

Interfaces	Wiegand 26 or 34 bits,RS232 or RS485 (Depends On The Firmware)
Reading Range	90-130cm
RFID Cards Accepted	125KHz, 64 bits, Manchester Encoding
Power Supply Input Voltage	AC120/60Hz or 230V/50Hz
Output Voltage	DC 12V / 1A
Audio /Visual Indication	Bright blue LED And Buzzer
Dimensions	420 (w) x 320 (L) x 45(D) mm
Housing Material	ABS

## Application Examples:

- ▶ Access Control.
- ▶ Car Parking Systems.
- ▶ Through -Wall Reading Application.
- ▶ Personal Identification.
- ▶ Any Long Range Reading Application.
- ▶ Hand Free Applications.

## Proximity Reader Advantages

- ▶ Anti-Rereading Function.
- ▶ Anti-Interference;
- ▶ Signal LED Indicators;
- ▶ Loop Inductive Function (Selection);
- ▶ Ip54 Water-Proof level;
- ▶ Long Service Life;

\*When the card within in the inductive range and card ID be read by one reader, the other reader will not read this card again. This function is main be used for solve the interference problems behind the other reader.

\*Under the same environment, the reader anti-interference ability is strong, very afflictive external conditions.

\*Our reader with the IP54 water-proof level, and it can work perfectly in the rainy days, no need the additional accessories, and it can save your cost ,and customers pay less money but can got very good experience.

\*Our reader has integrate the loop inductive function, it can work with our vehicle loop detector. For some special application, you can connect to the loop detector and when the vehicle on loops, the card can start to work with the reader, which can make the whole system with high reliable and stable.

## Obtaining The Best Reading Range

To obtain advertised reading range use high-quality RFID cards and install the reader in a noise and metal-free environment.

The quality of RFID cards affects the reading range of the reader. Poor cards can reduce the reading distance by as much as 50%. On the other hand, using special “thick” RFID cards (that contain the coils with a much larger number of turns) can increase the reading distance of GP99 to beyond 90-130 cm.

The main frequency of the reader is 125KHz. Regular CRT monitors generate noise in this band and can interfere with the operation of the reader. Other 125KHz RFID readers can affect the reading range of the reader even from a distance of several meters! Our reader provides a special serial command that can be used to verify current noise level- see section 9.

Avoiding metal objects means that it should not be installed on metal surfaces. Metal grids inside the concrete walls also count. Our reader includes advanced auto-tuning circuitry that compensates for the presence of metal (see section 7) but the best reading range is still obtained in the metal-free environment.

## 14PIN Cable

Number	Wire Color	Function
1	White-Green	Wiegand D0
2	Yellow	Wiegand D1
3	Blue	RS232-RXD
4	Gray	RS232-TXD
5	White-red	Read ID interval-A
6	Orange	Read ID interval-B
7	White	RS485-A
8	Brown	RS485-B
9	Purple	Reserve
10	Dark blue	Loop Detector(Connect to GND)
11	Red	Relay COM
12	White-Black	Relay N.O
13	Pink	Relay N.C
14	Black	GND

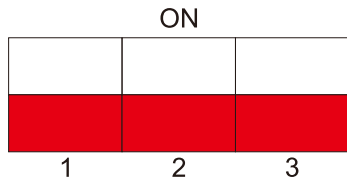
## 2 PIN Cable

Number	Wire Color	Function
1	Red	12V(Connect to power supply)
2	Black	GND(Connect to power supply)

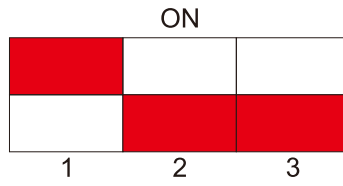
# Read ID Interval Setting:

Two Sets Reader Working Together ( Installation Distance  $\geq 1.5\text{m}$ )

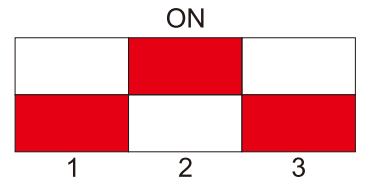
1. Read ID Interval 3sec



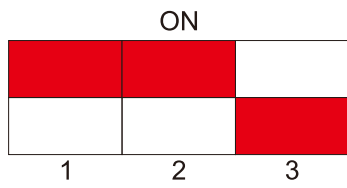
2. Read ID Interval 5sec



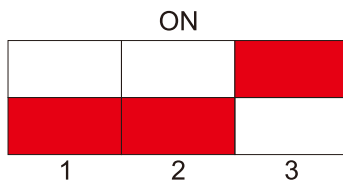
3. Read ID Interval 10sec



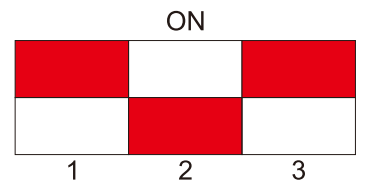
4. Read ID Interval 15sec



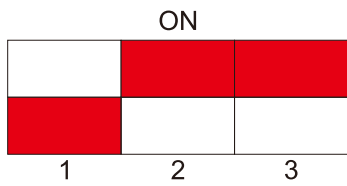
5. Read ID Interval 25sec



6. Read ID Interval 35sec



7. Read ID Interval 45sec



8. Read ID Interval 60sec

