

# KL204U PROXIMITY CARD ACCESS CONTROLLER WITH CASE

## INTRODUCTION

This is a low cost proximity card access controller with dual output for external controlling. One output from the relay directly with NC and NO connection. The other is a power output for driving external devices. The KL204U standalone access controller can accept a maximum of 204 proximity cards. A 9 to 12V DC supply is required to power the kit, which has a current consumption of less than 200mA. A 9VDC/300mA (2.1mm center positive) plug pack will do fine.

## OPERATION

There is a 6-position jumper block for configure the operation of the unit.

<b>POSITION</b>	<b>DESCRIPTION</b>	<b>FUNCTION</b>
6	TMR0	To select the relay on time with authorization granted.
5	TMR1	
4	TMR2	
3	RVSE	ON: to reverse the operation of the relay.
2	CLRA	ON: to clear all memories.
1	CLRM	ON: to clear the master card memory.

<b>TMR2</b>	<b>TMR1</b>	<b>TMR0</b>	<b>FUNCTION</b>
OFF	OFF	OFF	Relay on for 1 second on authorization granted.
OFF	OFF	ON	Relay on for 2 seconds on authorization granted.
OFF	ON	OFF	Relay on for 5 seconds on authorization granted.
OFF	ON	ON	Relay on for 10 seconds on authorization granted.
ON	OFF	OFF	Relay on for 20 seconds on authorization granted.
ON	OFF	ON	Relay on for 50 seconds on authorization granted.
ON	ON	OFF	Relay on for 100 seconds on authorization granted.
ON	ON	ON	Relay state is toggled on each authorization granted.

\* ON : Jumper shorted, OFF : Jumper opened

## **Master Card Programming**

Put either CLRA or CLRM to ON position and power up the unit. The unit is waiting for a master card to be read. Pick a proximity card and put on top (around 1 inch above) of the KL204U, the card is read and stored as the master card. Then remove the power and put both CLRA and CLRM to OFF position. On next power on, the unit will be in normal operation.

## **Grant/Remove Card Authorization**

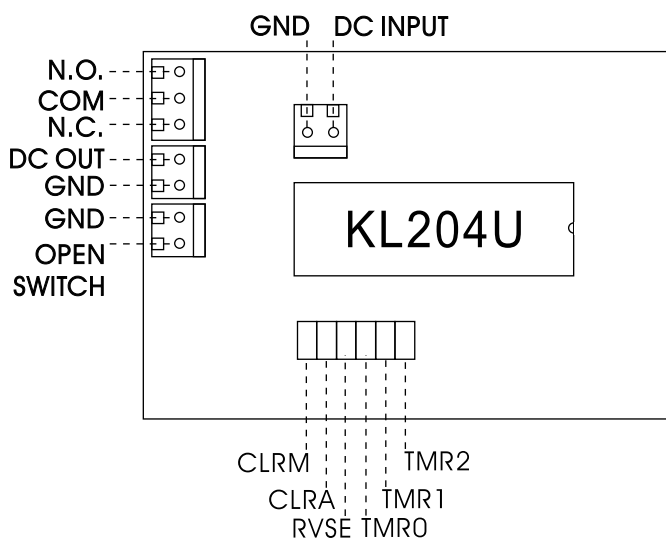
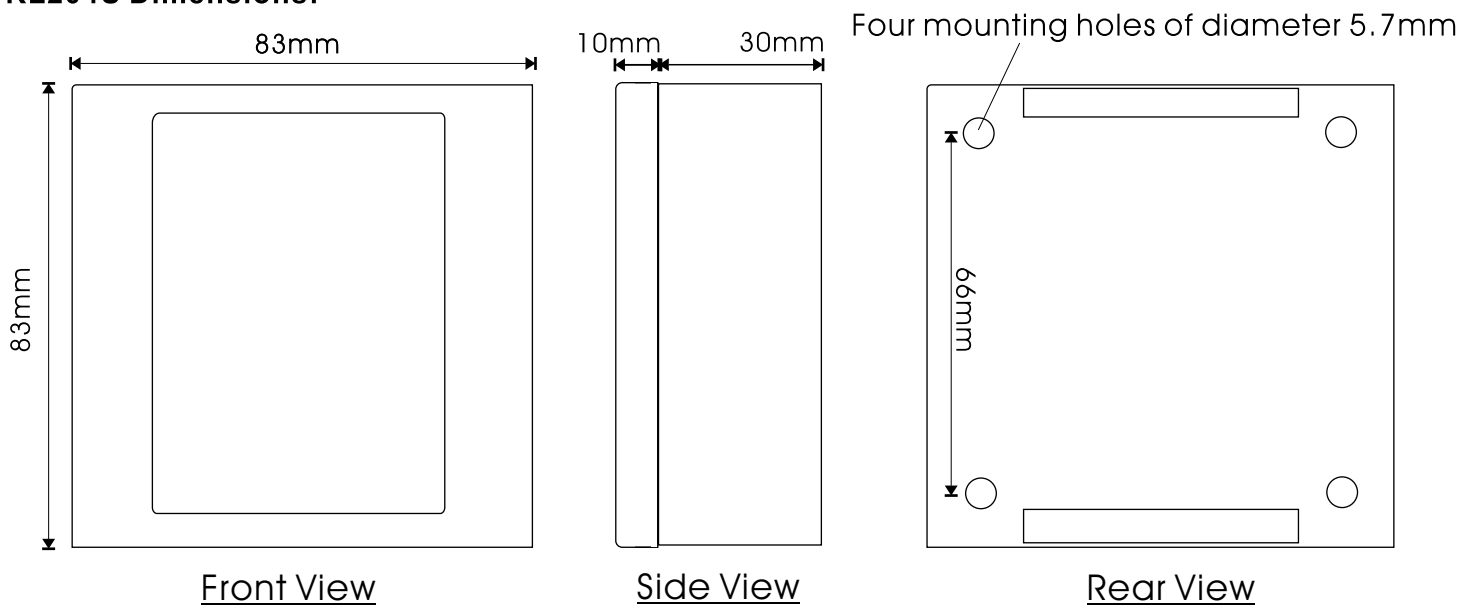
When the unit is in normal operation, put the master card on top of the KL204U for 5 seconds, the unit will enter into programming mode with green LED stays lite. Then place a card on top of the KL204U, if the unit responds with a single beep sound means authorization is granted to that card. On the other hand, if the unit responds with a dual beep sound means authorization is removed from that card. If no more card need to be added or removed, the unit will return to normal operation after 5 seconds idle. If a long beep is responded, it means all memory locations are occupied.

## Normal Operation

If an authorized granted card is placed over the KL204U, the red LED and the relay is turned on as set by TMR0, TMR1 and TMR2 with a beep sound. On the other hand, if an unauthorized card is placed over the KL204U, the red LED and the relay will have no action and no beep sound.

An input contacts is provided, if it is shorted, the unit will respond the same as an authorized card read.

## KL204U Dimensions:



Terminal Layout