KS485U-ID Proximity Card Reader

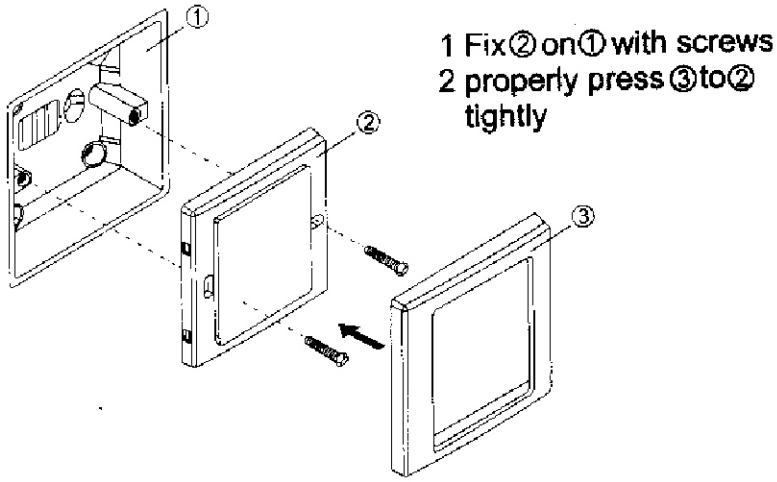
INTRODUCTION

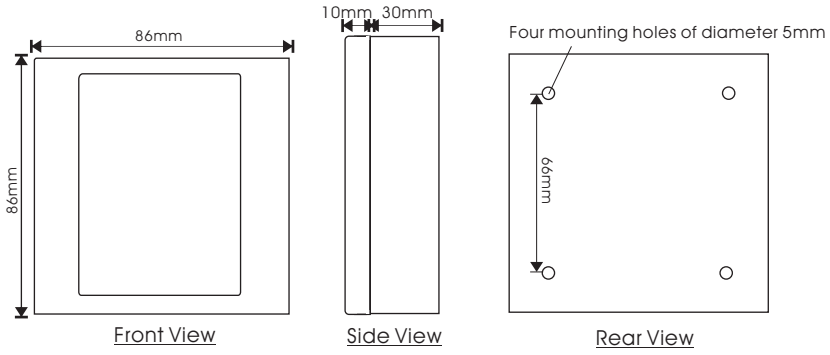
The KS485U-ID proximity reader unit is a cost effective solution for proximity card application systems, e.g.time clock for attendance, library card, membership card, door access controlling, etc. User can write their own applications freely.

The proximity reader unit is fully software controllable. A maximum of 31 readers can be connected in bus topology (i.e. parallel). The jumpers on reader are used to set the identity number (ID) of itself. The ID is used to identify the reader on the bus.

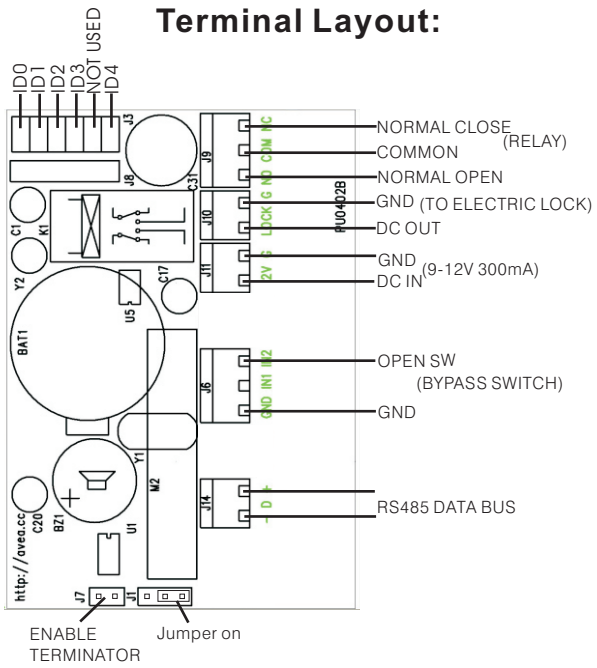
A 9 to 12V DC supply is required to power the reader, which has a current consumption of less than 300mA. In case to drive an electric strike, the power supply should be large enough to drive both the strike and the reader.

Dimensions:





Terminal Layout:



SETTINGS

The communication speed is fixed at 115200 bit/s. The frame format is 8 bit data, no parity, one start bit and one stop bit.

COMMUNICATION PROTOCOLS

When the reader read a valid card, it will send the card code to the PC.

Commands can be sent to the reader at any time and the reader will send back the response (if available).

Card reading (From reader to PC):

On card reading the following code sequence will be sent out from the reader:

0x02, ID, 0x06, n1, n2, n3, n4, n5, cs, 0x03

Where cs=n1+n2+n3+n4+n5

Commands (From PC to reader):

Command	***Hex***	***Description***
~,ID,r	0x7e, ID, 0x72	Turn off Relay
~,ID,R	0x7e, ID, 0x52	Turn on Relay
~,ID,1	0x7e, ID, 0x31	Pulse Relay for 1 second
~,ID,2	0x7e, ID, 0x32	Pulse Relay for 2 seconds
~,ID,l	0x7e, ID, 0x6c	Turn off LED
~,ID,L	0x7e, ID, 0x4c	Turn on LED
~,ID,0	0x7e, ID, 0x30	Make a beep sound

Packet Response (From reader to PC):

Response	***Description***
0x02, ID, 0x02, 0x52, 0x52, 0x03	Reader reset
0x02, ID, 0x02, 0x50, 0x50, 0x03	Switch closed
0x02, ID, 0x02, 0x70, 0x70, 0x03	Switch opened

Test software is available from http://www.avea.cc/spec/test232.zip