

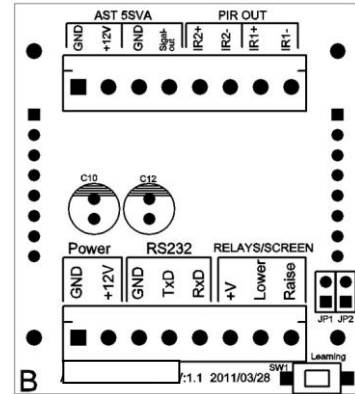
## USER MANUAL

### INTRODUCTION:

IR learning device with 2 ports, Screen Control, 5SVA internal protocol built in and RS232 Central Control.

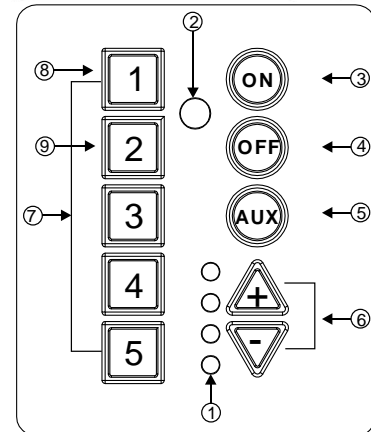
### CONNECTIONS:

1. AST 5SVA: Connects to 5SVA protocol UMT/AST items
2. PIR OUT: 2 independent IR Emitter connections.
3. Power: External power input - DC12V 300mA.
4. RS232: Used for update program and central control.
5. RELAY/SCREEN: Auto controlling screen.
6. SW1/Learning: Learning button for IR.



### PANEL FUNCTIONS:

1. Volume indicator.
2. IR receiver.
3. Power On.
4. Power Off.
5. AUX control for relay in 5SVA or HUB.
6. Volume UP/DOWN.
7. Source select buttons.
8. IR1 learning.
9. IR2 learning



### IR LEARNING:

1. Push OFF, turn off the unit then ON LED will light in orange.
2. Push SW1 (Learning), then ON LED will slow flash light which means the unit is learning.
3. Select 1 or 2 button according to the IR you choose. 1 means IR1 learn, 2 means IR2 learn.
4. Place the IR Remote Control eye against IR receiver window, push button 1 or 2 then ON LED will light in fast orange flashes. It means IR learning signal had been received.
5. Selecting 1 or 2 will keep the learning signal on 1 or 2 then ON LED flash slowly.
6. By repeating stages 3 to 4 you can learn a second signal and so on.
7. Pushing again SW1 (Learning switch) will exit out of the learning mode.
8. Clear learning signal: in learning mode push and hold 1 and 2 button 3 seconds the all LED flash it means clear all learning signals.

### RS232 DATA FORMAT:

Baud rate 38400

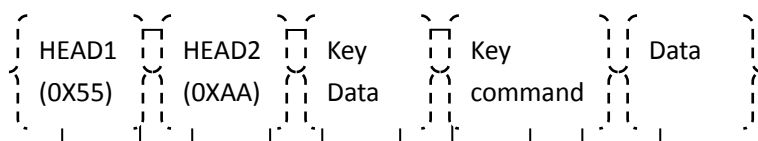
Head1:0x55, Head2:0xAA, key data(0x00-0x09), key command(0x00-0x07),data(0x00-0xff)

Key data 0x00-0x09: 0x00 is the "ON" button, 0x01 is the "OFF" button, 0x02 is the "AUX" key, 0x03 is the "V+" key 0x04 is the "V-" key 0x05 is the "1"key 0x06 is the "2"key 0x07 is the "3"key 0x08 is the "4"key 0x09 is the "5" select key.

Key command: 0x00 send all IR data. 0x01 send only 5SVA data. 0x02 send only IR1 data.

0x04 send only IR2 data . Any combination of the three data is possible.

Data: ON OFF button in the Send Data command is the data for Lower and Raise time, Sending AUX key Data 0 for AUX OFF and 1 for ON.



### TECHNICAL DATA:

POWER INPUT: DC12V 300mA

IR: TRANSMITTER & RECEIVER: 38K - 56K. MAX DISTANCE: 8M

Learning code:256 bit (32 byte)