

## ACI-RS485/ ADV transporter dongle User Manual

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### 1. Package:

1-1 ACI-RS-485/ ADV transporter dongl x 2

1-2 User manual x 1

1-3 USB to Micro-USB cable x 2

1-4 433MHz Antenna x 2



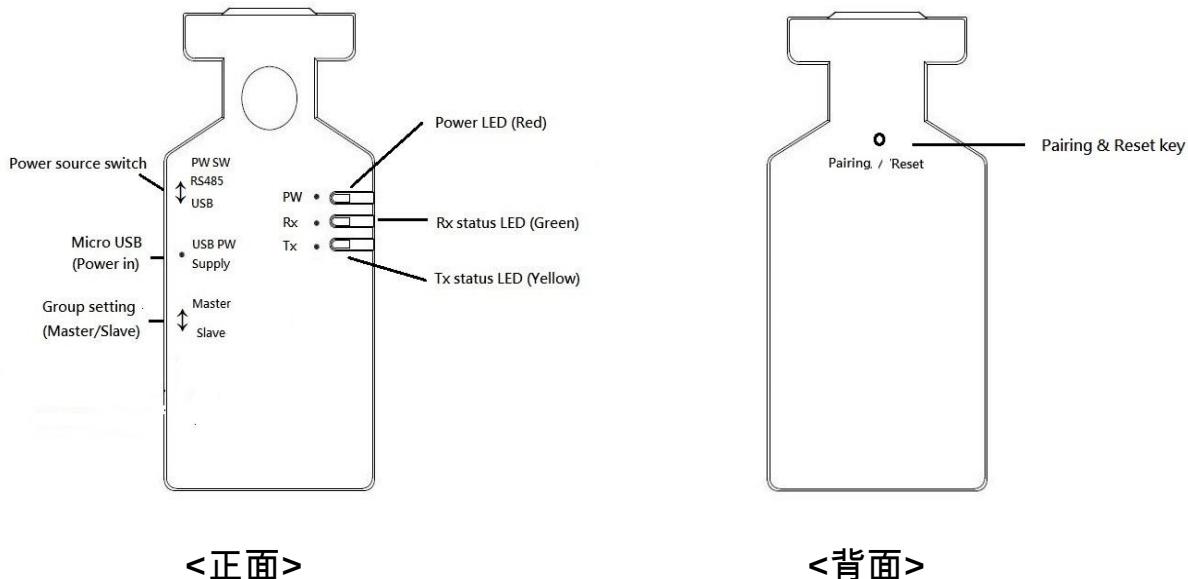
### 2. Setting guide:

2-1 Use the USB to Micro-USB cable, the micro-USB connector plugs the ACI-RS485/ ADV dongle and USB connector plugs to NB/PC's USB port.

2-2 To finished settled the power, Red LED light will be light that is meaning power “ON”.

※ Tx LED light is yellow; Rx LED light is green.

Note: 433MHz antenna is pluggable.



2-3Default setting :

Baud rate: 9600 bps

Data bit: 8

Parity: None

Stop bit: 1

RF data-rate: 10k

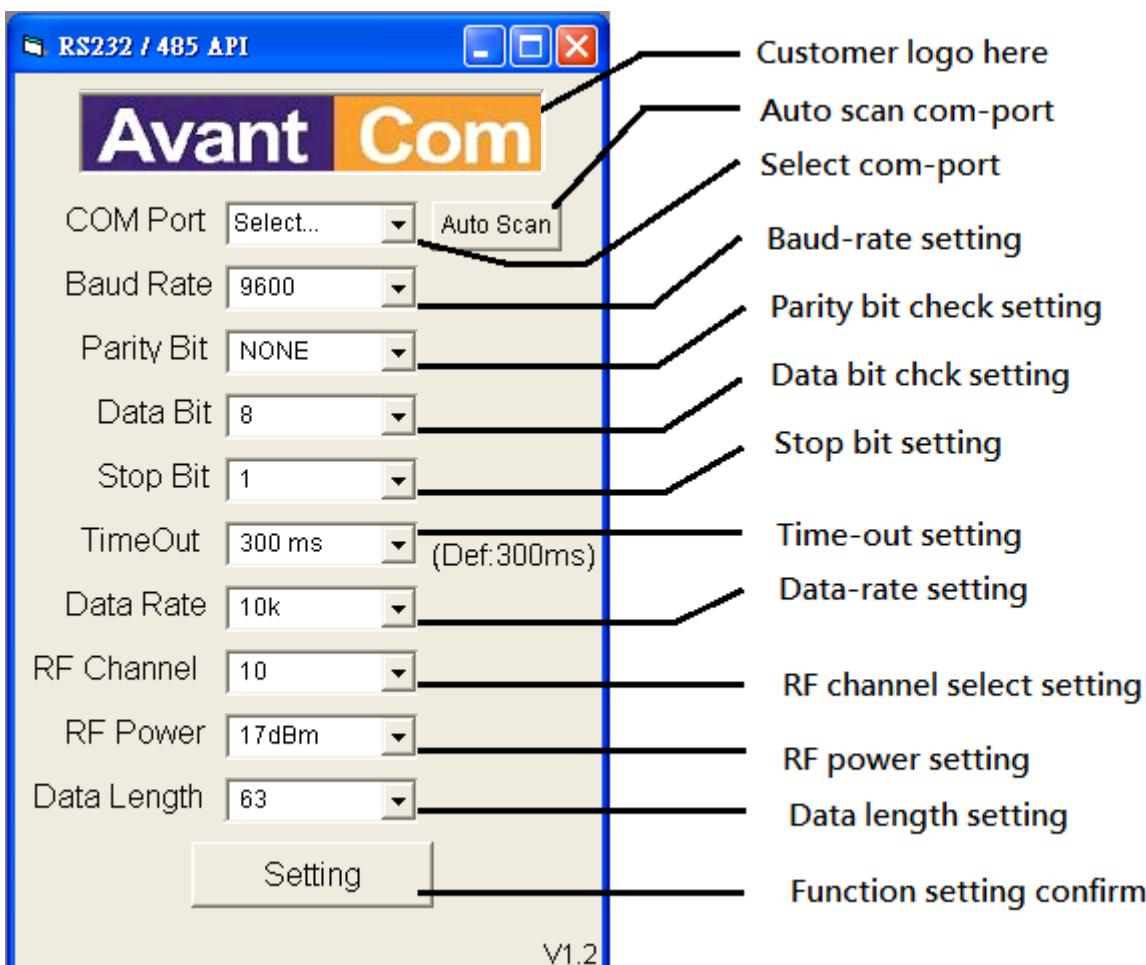
Timeout: 300ms

Starting paired : 1 to 1 mode

※If the ACI-RS485/ ADV dongle was used, Not sure the “Baud rate” setting, turn back to see a hole and press the Pairing/Reset button, and re-plugs the 5VDC power, waiting for 6 second and then release the button, TX/RX LED light will be flashing each other about 5 times to be the default setting .

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2-4 Baud rate AP setting:



2-4-1 Execute the RS232/485/USB AP.exe it show a window above.

2-4-2 Use the RS485 to USB cable connecting between the RS485 dongle and NB/PC USB prot.

2-4-3 Please check ACI-RS485/ ADV dongle and NB/PC connecting or not and then AP window will show "Auto Scan" to select the Com Port.

2-4-4 Baud Rate : Baud Rate value.

2-4-5 Parity Bit : None/ Odd/ Even.

2-4-6 Data Bit : 6/ 7/ 8 (bit).

- 2-4-7 Stop Bit : 1/ 2 (bit).
- 2-4-8 Time Out : (UART wait for Time Out value) , is selecting 2ms ~ 1000ms.
- 2-4-9 Data Rate : 2k bps ~ 250k bps.
- 2-4-10 RF Channel : Ch0 to Ch15(16 channel).
  - ※If ACI-RS485/ ADV dongle on 1to 1 or 1 to more mode must select the same channel.
- 2-4-11 RF Power : Min -8dBm to +17dBm( 4 levels is selected).
- 2-4-12 Data Length : 13 bit to 63 bit (11 levels is selected).
- 2-4-13 Press the "Setting" button, If the ACI-RS485/ ADV dongle was succeed, it TX/RX LED light will be flashing 3 times.

## 2-5 Pairing setting < 1 to 1>

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### 1. Switch dongle to Master/ Slave



### 2. Check PW(Power) light



### 3. Default setting : Jabbing Pairing/ Reset button, over 7seconds and release it



When it finished that, Tx/ Rx LED light  
flashing each other 5 times.



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Master



5. Jabbing Pairing/ Reset button, Tx/ Rx LED light holding to be pairing mode.



(When it finished that Tx/ Rx LED light flashing 5 times)



Slave



4. Jabbing Pairing/ Reset button, Tx/ Rx LED light holding to be pairing mode.



(When it finished that Tx/ Rx LED light flashing 5 times)



Video for reference :

<https://www.youtube.com/watch?v=89LcFNZfsUs>

## 2-6 Pairing setting < 1 to more >:

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1. Setting the same one to one steps again.



Master



Slave : S1

3. Jabbing Pairing/ Reset button, over 3seconds and release it.



The Tx/ Rx LED light flashing 3 times, it finished one to more mode.



2. Jabbing Pairing/ Reset button, over 3second and release it



The Tx/ Rx LED light flashing 3 times it finished one to more mode.



PS: If you wanna pair one to more, please to see step 4 ~ step 10 °



Slave : S2

4. Switch S2 Dongle to Slave



Master

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9. Jabbin Pairing/ Reset button, to be pairing mode.



The Tx/ Rx LED light will be flashing 3 times, it finished the pairing.



(Master has a first pairing group)

Slave : S2

5. Plug Micro-USB to be supporting 5VDC Power.



6. Default setting :  
Jabbing Pairing/ Reset button over 7 second and release it.  
(Tx/ Rx LE light flashing 5 times)

**See <1 to 1> Step 3**



7. Jabbing Pairing Key, about 3 seconds and release it.  
The Tx/ Rx LED light flashing 3 times, it will be one to more mode.

**See <1 to more > step 2**



8. Jabbing Pairing/ Reset button, it will be pairing mode, The Tx/ RX LED will be holding light.  
(It's finished,, Tx/ Rx LED light flashing 5 times)

**See <1 to 1> step4**

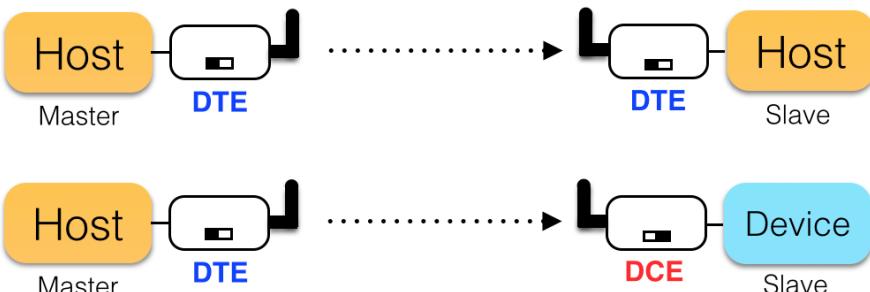
(Slave S2 finished 1 to more)

PS: If you wanna pair S3 · S4 · ...Sn ·  
Please re-setting step 4 to step 10.

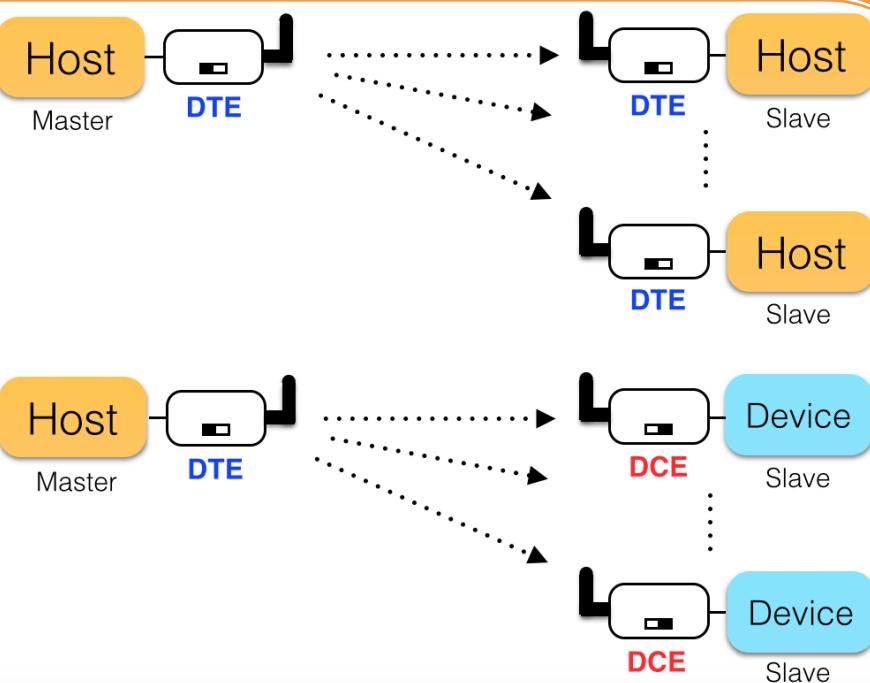
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2-7 DTE / DCE Switch Note:

### One to One

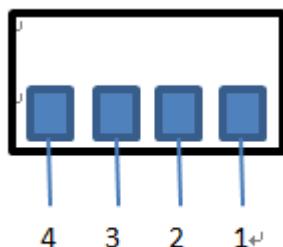


### One to More



### 3. RS485 Interface

#### 3-1 Pin out



#### 3-2 Signals:

| Pin | Signal | Description                   |
|-----|--------|-------------------------------|
| 1   | VDD    | Input Power (24VDC, 1.0A Max) |

|   |        |             |
|---|--------|-------------|
| 2 | D+ / A | TxD+ / RxD+ |
| 3 | D- / B | TxD- / RxD- |
| 4 | GND    | Ground      |

#### 4. Our contact info:

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This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try correcting the interference by one or more of the following measures:

- Reorient the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into and outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

低功率電波輻射性電機管理辦法(NCC)

第十二條 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

英文警語：

NCC Warning Statement

Article 12

Without permission, any company, firm or user shall not alter the frequency, increase the power, or change the characteristics and functions of the original design of the certified lower power frequency electric machinery.

Article 14

The application of low power frequency electric machineries shall not affect the navigation safety nor interfere a legal communication, if an interference is found, the service will be suspended until improvement is made and the interference no longer exists.



Avant-Com, Inc.  
Wireless RS232 dongle

**FCC ID: 2AE2I-GC632461**

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

Working temperature: -40 to 85 degree.