

## DT-IPC Network Switcher for 2-wire System

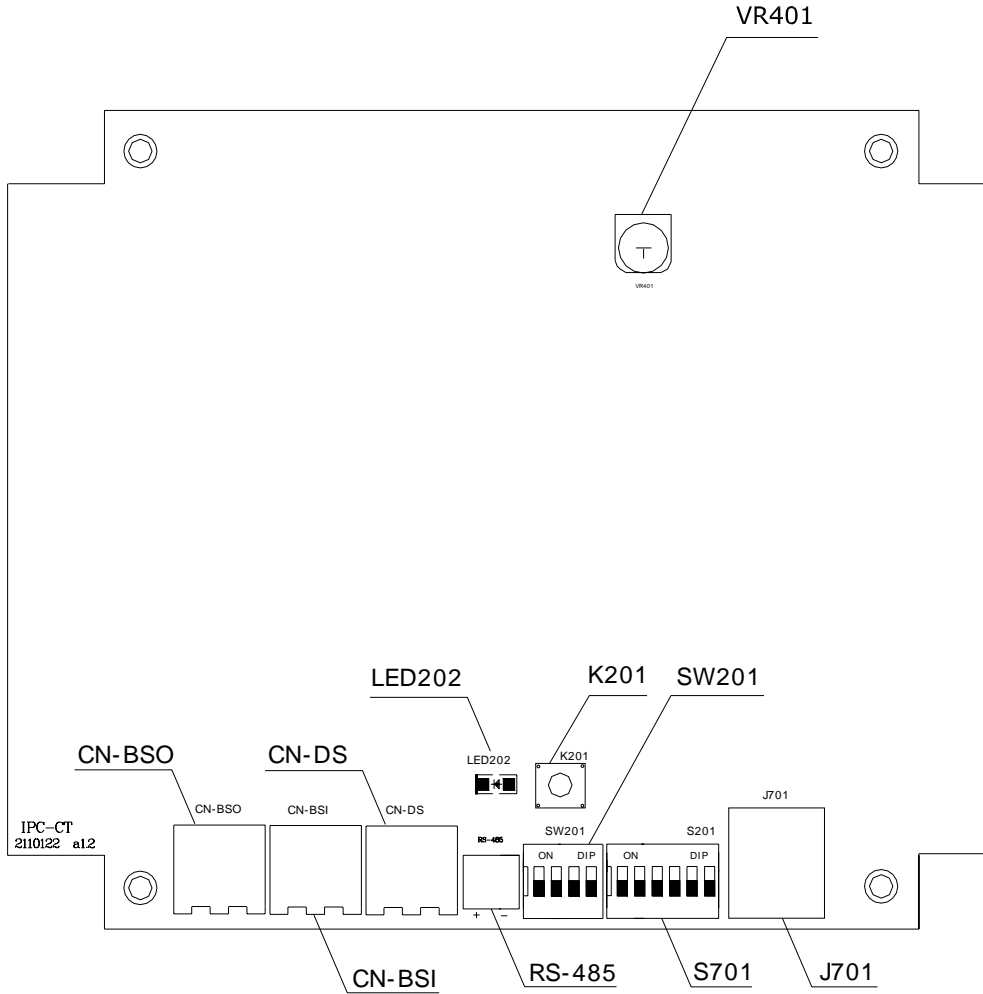


**Product Picture**

<b>Description</b>	<b>Feature</b>
<ul style="list-style-type: none"> <li>● DT-IPC is a network switcher that is a essential part for 2-wire system to access TCP/IP network. It's used to connect the parts in one block such as monitor, door station, to IP network. And only one DT-IPC is required in one block.</li> </ul>	<ul style="list-style-type: none"> <li>● A watchdog is designed into the circuit to prevent itself from system crash.</li> <li>● RJ45 Standard port</li> <li>● IP address setting &amp; store</li> <li>● Adjust talking volume</li> <li>● Support TCP/IP network and optical fiber transmission or network access</li> <li>● Adopt MPEG4 Protocol to process video and G.729 Protocol to process audio</li> <li>● Adopt Philips Tiedia DSP high performance chip</li> <li>● Include 100M Ethernet and RS485 ports</li> </ul>

1. Ports and function

1.1 Ports:



1.2 Port Description

Item	Silk-screen	Description
Power Indicator	LED202	Always ON while working
BUS	CN-BSO	Connected to DT-DPS
BUS	CN-BSI	Connected to monitor or DBC-4 that monitors are connected to
BUS	CN-DS	Connected to Door Station or DBC-4 that door stations are connected to
485 Signal Port	RS485	The port has two functions as follow: <ul style="list-style-type: none"> <li>◆ Connected to GP-Lift to output lift control signal</li> <li>◆ Connected to PC to update program</li> </ul>

Continuous:

Item	Silk-Screen	Description
DIP Switch	SW201	Details refer to DIP Switch Setting
DIP Switch	S201	Details refer to DIP Switch Setting
Reset	K201	Press to restart DT-IPC
Network Port	J701	Connected to network
Volume Potentiometer	VR401	Adjust the volume that is transmitted from this block to network ( <b>Note1</b> )

### (1) About Volume Potentiometer:

Note that the volume potentiometer is only used to adjust the volume sent to network. It can't adjust the volume received from network. Take taking between a monitor in a block and common door station as an example( communication between monitor and common door station is transmitted by IP network ), if the voice heard by monitor is not good enough, the volume potentiometer in DT-IPC that common door station is connected to should be adjusted, whereas if the voice heard by common door station is not good enough, we should adjust the volume potentiometer in DT-IPC of the block.

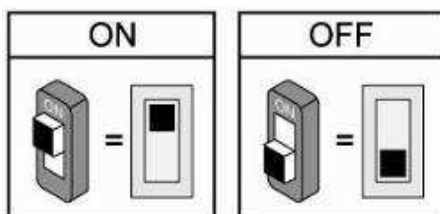
## 2. Installation

Rail mounting or Wall mounting is optional.

## 3. Parameter Setting

### a) DIP Switch Setting

DIP Switch Status:



## ✧ SW201 Setting (Defaults are OFF)

Port	Function	Status	Description
DIP1	Reserved	ON	/
		OFF	/
DIP2	Reserved	ON	/
		OFF	/
DIP3	Reserved	ON	/
		OFF	/
DIP4	Reserved	ON	/
		OFF	/

## ✧ S201 Setting (Defaults are OFF)

Port	Function	Status	Description
DIP1	ID code for guide unit called by door station	ON	Set ID code for Guard Unit or IPAgent, when calling this code from Door Station, DT-IPC will transmit the calling signal to Guard Unit or IPAgent. For example, the code is set to 1, and press 1 in the door station to call Guard Unit or IPAgent. <b>Note that monitor connected can't be set to the same user code to DT-IPC</b>
		OFF	
DIP2		ON	
		OFF	
DIP3		ON	
		OFF	
DIP4		ON	
		OFF	
DIP5		ON	
		OFF	
DIP6	Video Impedance	ON	Match video impedance
		OFF	Set to high impedance

b) PC Setting

Reserved

c) IP Address Setting:

i. Function of IP Address Setting Software(AVConfig)

- ✧ Set IP address of specified of DT-IPC
- ✧ View the configuration parameters of the specified device
- ✧ Adjust configuration parameters, you can instantly update a single device or all devices
- ✧ Address table editing and updating
- ✧ View specified DT-IPC's IP address table

ii. IP address setting method

All the DT-IPCs has the same default IP address, the software just can view one of them. Usually a DT-IPC is separately connected to computer to set the parameter to avoid duplication of the IP address)

- ✧ Power DT-IPC correctly;
- ✧ Connected to PC directly or network;
- ✧ Open AVConfig Software(Figure 1);

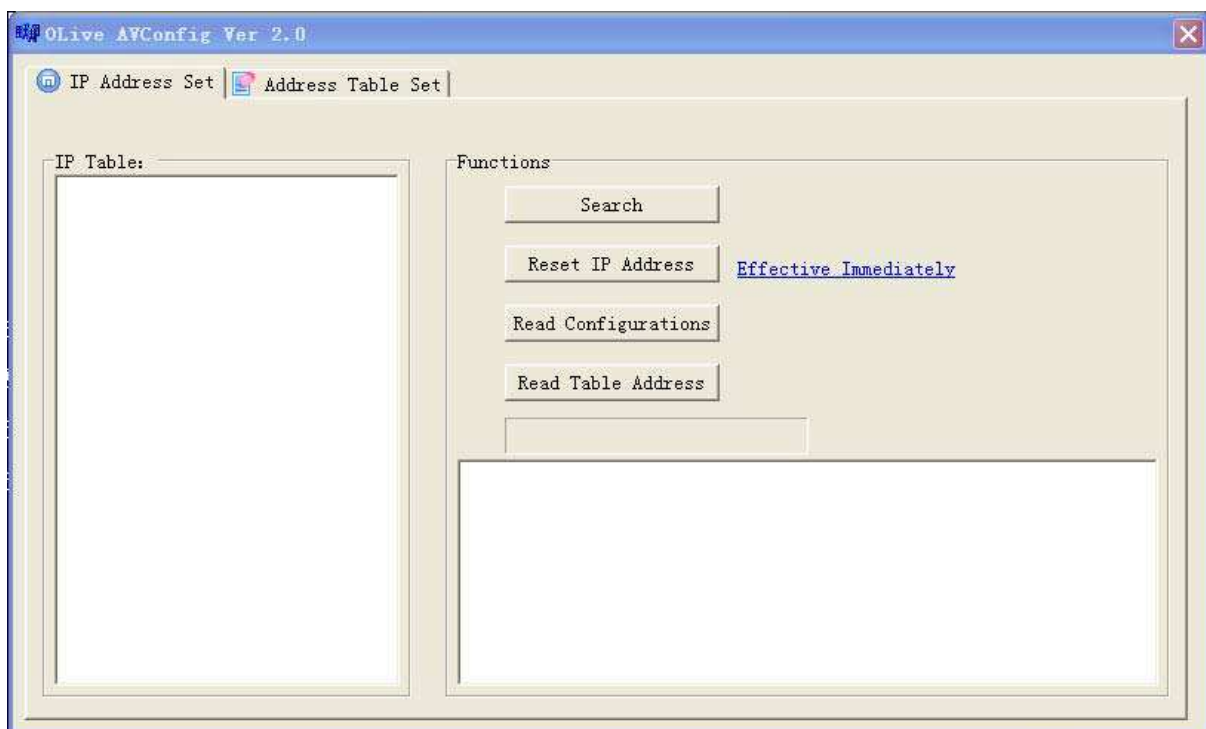


Figure 1

- ✧ [Search]: Search for all the online equipments in the network as Figure 2 shows (Note that IP addresses of DT-IPC and PC can't be the same, or DT-IPC can't be searched, but they must be in a same network segment).

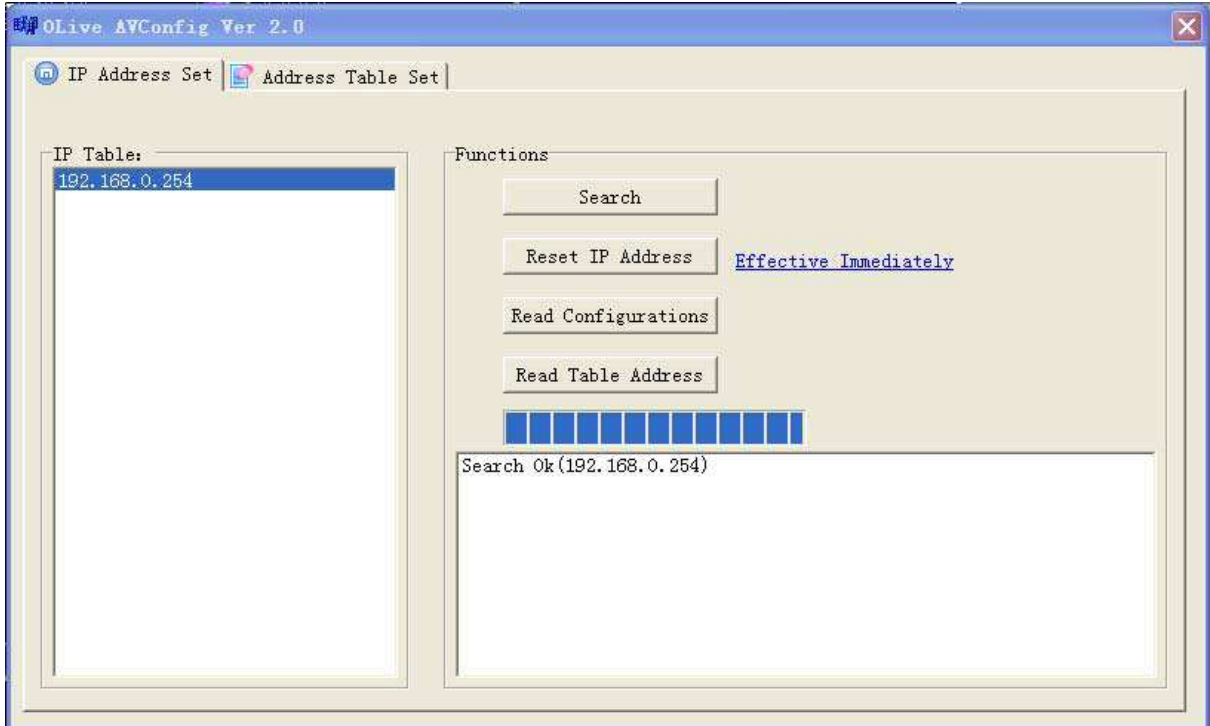


Figure 2

- ✧ [Reset IP Address]: Change IP address, subnet mask, gateway and MAC address of the selected DT-IPC in the IP list of IP table. IP address could be changed as follows (Figure 3):

Firstly, select the DT-IPC needed in the list of IP table, click Reset IP Address button, and input the IP address and MAC address you want to change to, then click 确定 button to confirm, thus IP address update completely (Figure 4). Note that IP\_Mask & gateway (192.168.0.1) are the same for different DT-IPCs in the whole system, but IP Address and MAC address of every DT-IPC must be unique. IP address is fixed to 192.168.0.xxx, and the range of xxx is 2 to 254. In other words, xxx can't be 1 and 255. At last, we could search again to check if the IP address is successfully changed.

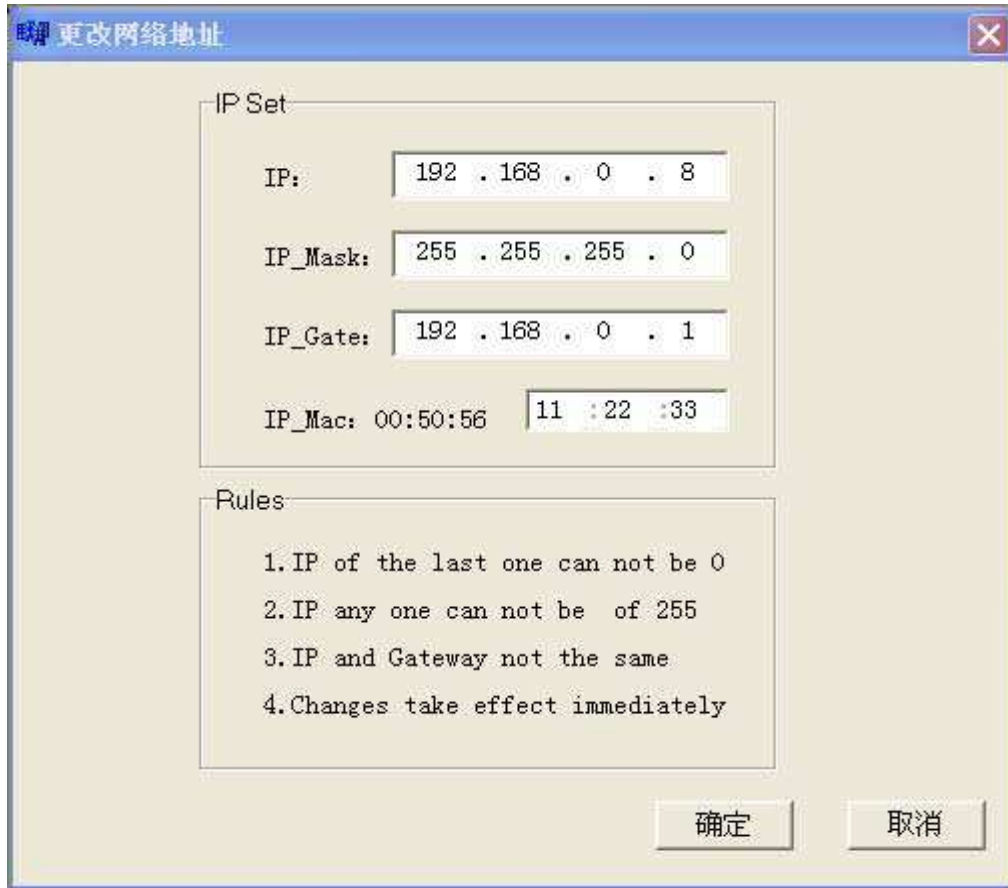


Figure 3

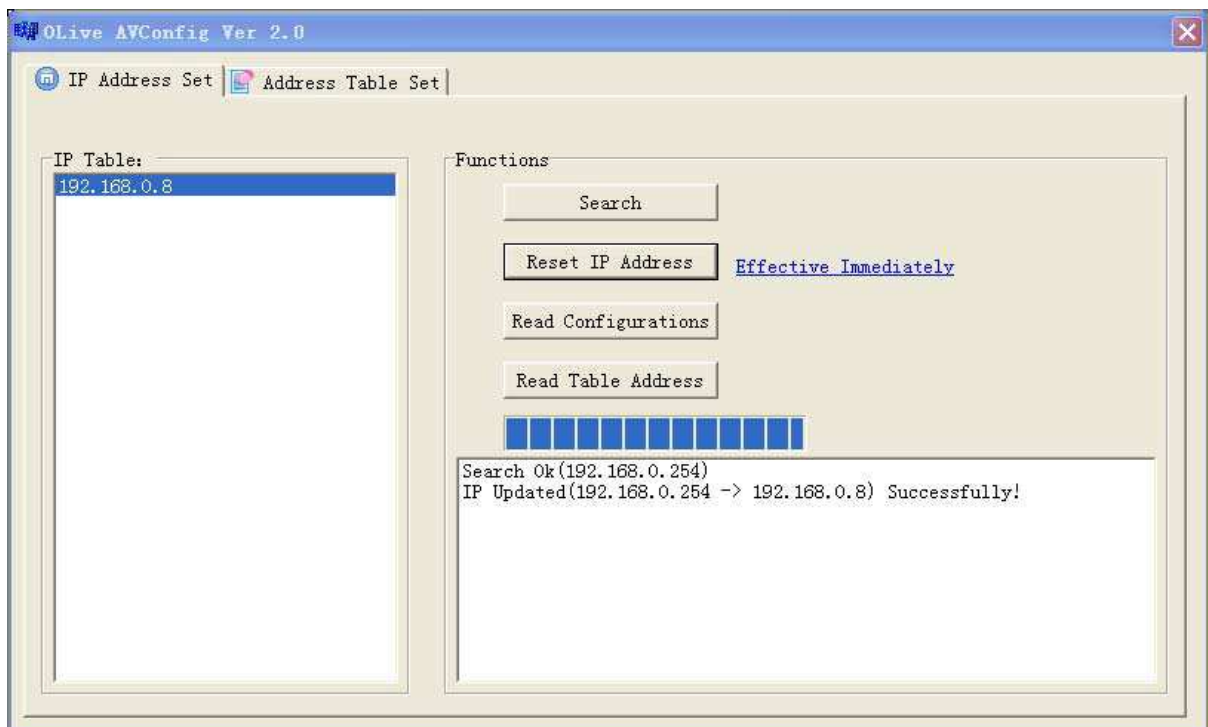


Figure 4

✧ [Read Configurations]: Read configuration parameters of the selected DT-IPC

Details is as follows:

Click Read Configurations button, in the UART Parameters frame change Mode to RS485 and change Baud Rate to 9600, in the Timeout Frame change both of Video & Audio to 360秒, then click Single Set button to confirm change.

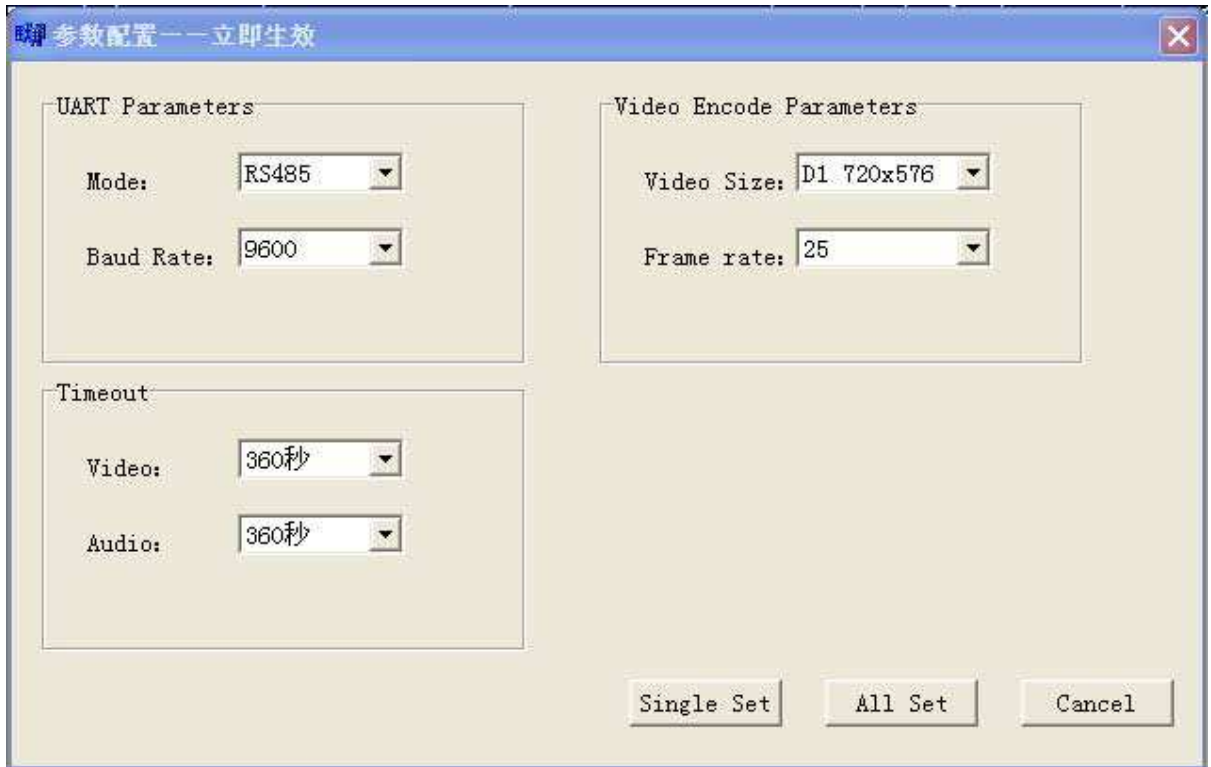


Figure 5

**Note that the default IP address of DT-IPC is 192.168.0.xxx. Make sure IP address of PC is in the same IP network segment(192.168.0.xxx), but can't be the same address as DT-IPC. The IP address range of DT-IPC connected to door station or common door station is 192.168.0.2 to 192.168.0.246 . Whereas The IP address range of DT-IPC connected to guard unit and IP-Agent(PC) is 192.168.0.247 to 192.168.0.254. IP address of every DT-IPC or PC must be unique. (192.168.0.1 is reserved for system. )**



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d) PC IP address setting in PC

Network Neighborhood - Local Area Connection – Attribute – Internet Protocol (TCP/IP)

Double Click Internet Protocol (TCP/IP) and set IP address to 192.168.0.xxx.

#### 4. Specification:

Working Voltage: DC 24V, Power Supply model: DT-DPS

Standby Current: 80mA

Working Current: 300mA

Video Signal: CCIR, 1Vp-p , 75 $\Omega$

Audio Signal: 300~3,400 KHz, 0~240 mV

Transmission Mode: TCP-IP

Port: RJ45

Network Interface: Standard Ethernet interface

Dimension(W\*H\*D): 138\*151\*66mm

Working Temperature: -10°C - 40°C