RP-20F AVhome BOX

Instruction manual

Index

Version Description

Date	Ver.	Revised contents	Software Version
20130709	REV 1.2	Prototype	070803
2013/7/16	REV 1.2	Prototype	071002
2013/07/18	REV 1.2	Prototype	071805
2013/07/23	REV 1.2	Prototype	071805
2013/10/29	REV 1.5	Formal ver.	102902

e2-Live AVhome BOX (RP family)

Functions / Type	RP-05	RP-10N	RP-20F
Numbers of IR button	29 buttons	7 HA / 203buttons	7 HA /203 buttons
Power status detection	no	no	Yes, must be used with iPower or related
IR output mode	2 wires IR output	360 degree IR output	360 degree+7 wires specify separate output
Number of order/Macro	60 commands /10 macros	60 commands /10 macros	24 scenarios, 60 commands/ scenario (lighting & curtain control is available)
Macro setting edit tool/type	RC-09, limited in macro 1,2	RC-09 limited 1~10	RC-09 limited 1~10/ PC scenario 1~24
Suitable environment	IR extension small areas	Home appliances	Lighting/Curtain/HA/Scenario control
Others	Hidden, IR emission	Celling/wall/Desktop	Host with USB port, edit setting software

Hardware

- e2-Live RF Tx/Rx 2 way transmission
- Frequency: 433.92MHz +/- 150KHz
- Digital ID code (0000~9999)
- Receiving distances：open space 60 meters
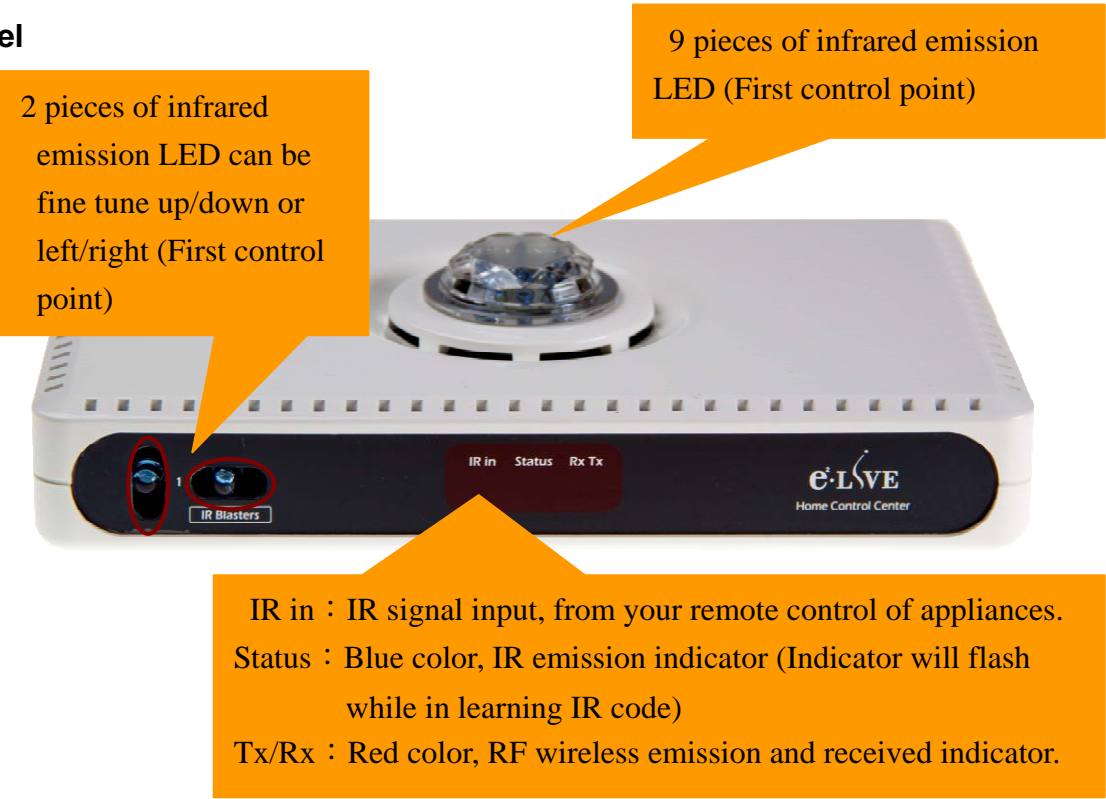- RS-485 port (open protocol for system installer to control RP-20F)

IR Learning processor

- Learning IR code：10KHz～455KHz。IR Code length：360 bit。
- IR emitting area：7 zones
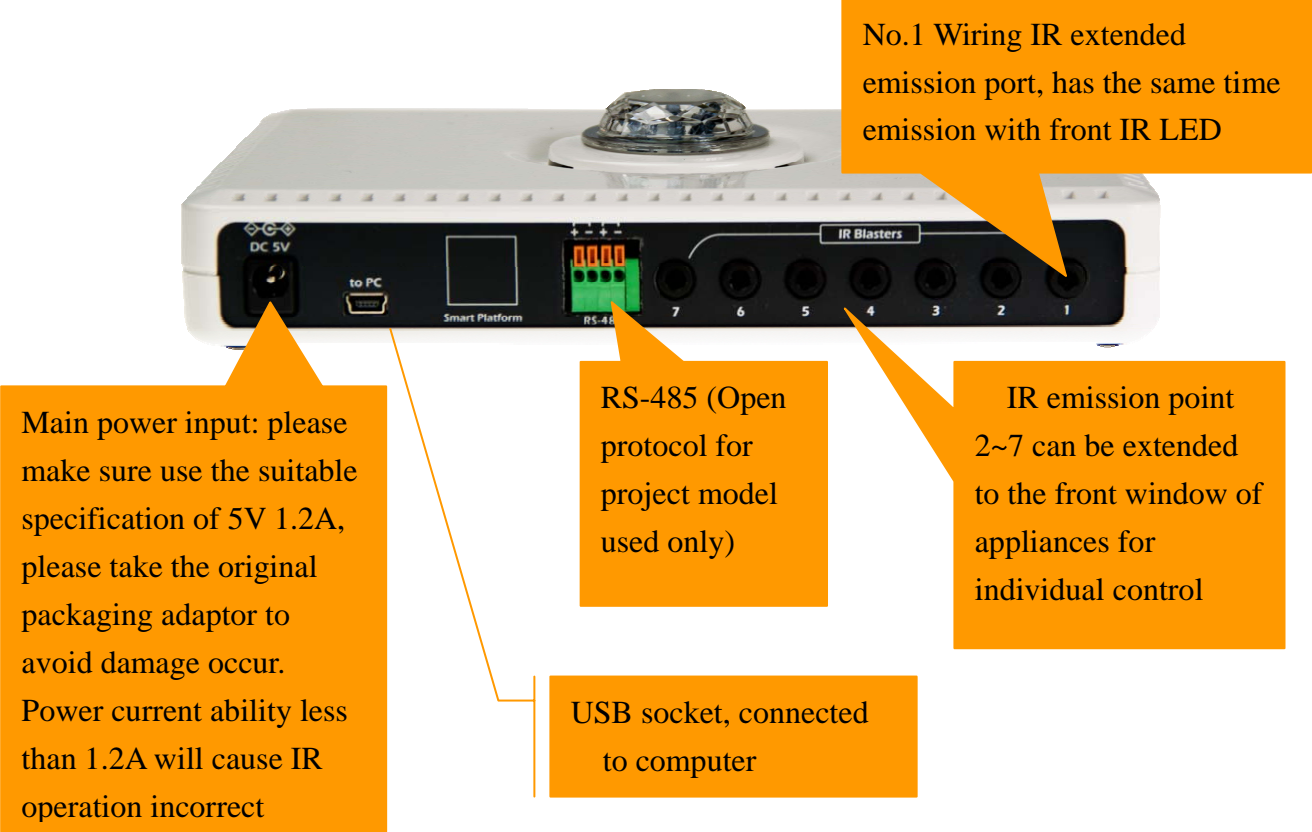- Power sources: 5V 1.2A Adaptor

Software

- Can be linked to 7 devices with 29 motions buttons
- 24 sets of scenarios with function of edit and save, each scenario can edit total 60 motions. Interval can be inserted into the actions of appliance (IR), from 1 to 60 seconds.
- Scenario editorial content include lighting, curtains, appliances and other actions.
- How many kinds of devices can be remotely control：

    7 sets of appliances, each device with 29 motions buttons

    5 lighting areas, each with 12 buttons include ON/OFF/ALL ON/ALL OFF/10%~100% dimmer

    1 area of curtain control with specifies the brand

    24 sets of scenarios
- Backup IR learning code and also scenario setting data, could restore all setting parameters
- The following operation system is available：

    Windows XP

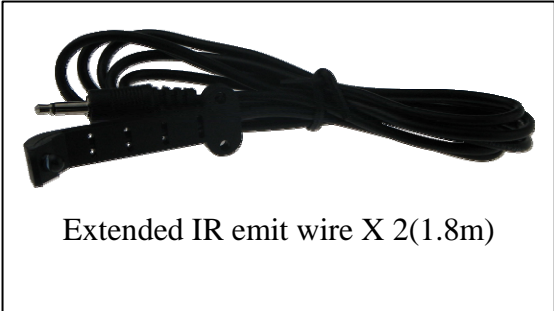   Windows 7 (32/64 bits)
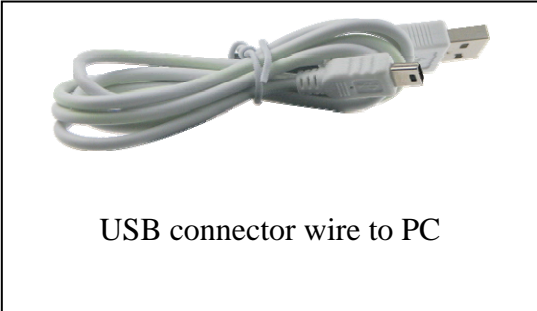
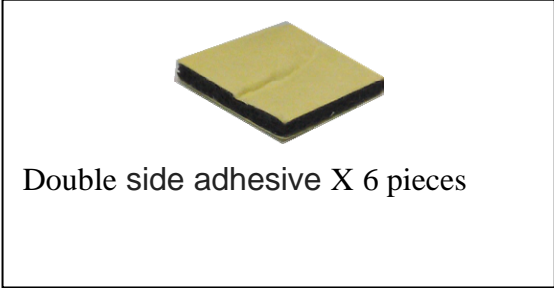   Windows 8 (32/64 bits)

Hardware

Front Panel

2 pieces of infrared emission LED can be fine tune up/down or left/right (First control point)

9 pieces of infrared emission LED (First control point)

IR in：IR signal input, from your remote control of appliances.
Status：Blue color, IR emission indicator (Indicator will flash while in learning IR code)
Tx/Rx：Red color, RF wireless emission and received indicator.

Rear Panel

No.1 Wiring IR extended emission port, has the same time emission with front IR LED

Main power input: please make sure use the suitable specification of 5V 1.2A, please take the original packaging adaptor to avoid damage occur. Power current ability less than 1.2A will cause IR operation incorrect

RS-485 (Open protocol for project model used only)

IR emission point 2~7 can be extended to the front window of appliances for individual control

USB socket, connected to computer

Accessary

|	
Extended IR emit wire X 2(1.8m)	USB connector wire to PC
DC Adaptor (5V 1.2A)	CD catalogue & instruction manual
Double side adhesive X 6 pieces	

IR individual areas control

RP-20F IR – total 7 areas

Point 1: Surround infrared emission on top cover, has the same time emission with the point 1 port of the rear panel

Point 1 wired IR output

Surround emission

IR in   Status   Rx Tx

IR Blasters
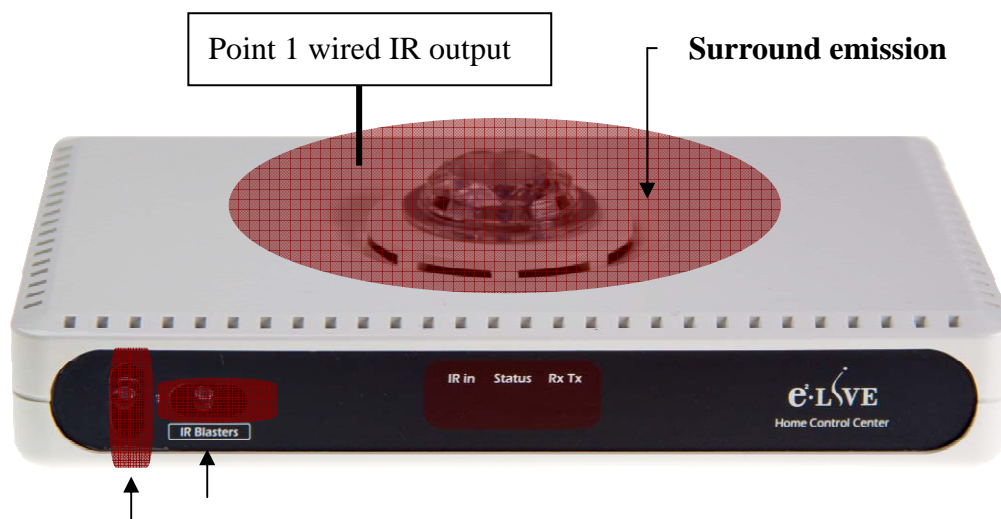
Up / down, left / right, Emission angle can be fined tune

Applications:

Surround infrared LED has 360 degree emit to control whole of home appliances of open space in the same room.

Open space maximum 15 meters
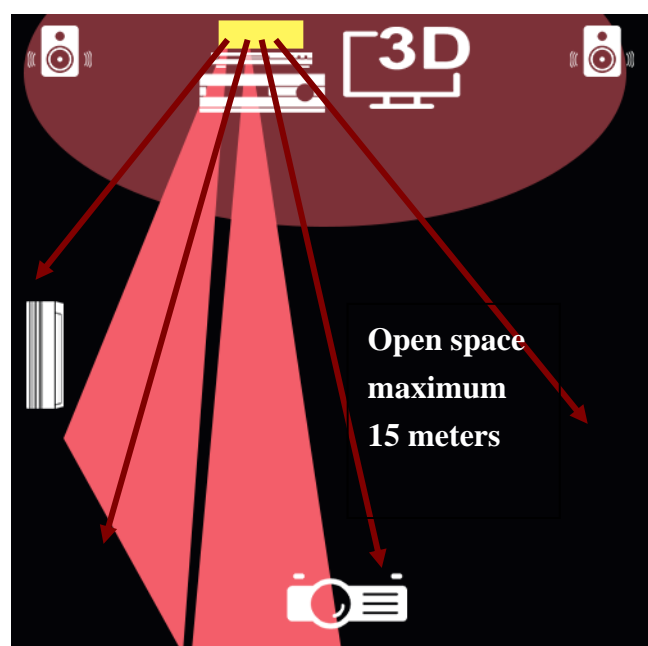
IR emission distances: 15 meters maximum, left/right 15 degree fine tune

In case of glass, IR refraction may beyond the control range, but you can fine tune the direction of the LED to come into the control range, therefor, before installation, suggest to find out all of the location of your appliances, then choose the suitable place.

Corresponding to the position of the remote control and setting software

RC-09

Operating device + device + action = first point emission

For example: TV TV Power, the RP-20 will sent emission by the first point of IR infrared signal .

RP-20 software

Control Validation / infrared appliances   scenarios set / Appliances

After pointing device button and choose "Point 1" emission. The RP-20 will send an infrared signal from the first IR emission point.

When the scenario is set, if want to output the first point, then please click on "1",

RP-20 first point controls with six IR emitter + a wired control, you can handle most of the device which is not accommodated in the cabinet environment.

But the remote controller of e2-Lvie is only RC-09, RP-20 remote control software support the first point emission, if this environment controlled by the first point, it will control in the range of all of the appliances, we recommend using All emission,the model can achieve the same effect as well.

All emission support all kind of remote controller of e2-Live. such as RC-09, itouch, VC-1500 Consistent with previous operating mode, HT-100, RP-20 software, etc., select the device (TV, DVD ...) first, then press (Power, CH +, CH- ....), After RP-20 received, all of the IR emitor will emission at the same time, no need to specify a fixed point.

The conditions of single point emission are:

There are two same brand device in same space, in order to avoid action together, it will need to specify a single point of emission

    For example, air-conditioned in living room or master bedroom.

    Learn the IR signal of air-conditioned to A / C position,

    The living room can using the first point emission which can emit to all space of the room.

    The air conditioning of the master room can use a single point of independent wiring type remote control

    If both need to be controlled together, you can adopt all points emission.

Point 2 ~ 7 are wired control

1. Appliances in Audio/Video cabinet tank:
    IR signals cannot penetrate the veil, if the device is placed in the cabinet tank, IR emission
    lines need to be extended to the cabinet in order to control

2. Devices are placed on the range of control
    IR extension wire can help to solve the problem of IR emit signal been cut off by shelter.

3. If two same brand devices were placed in the same place, for example, the air-condition of living
    room, master bedroom,
    Learning IR signal of your air condition onto the button of A/C
    Use top open IR to remote the air condition in the living room
    Put point 1 wiring IR to reach your master bedroom to control your second air condition
    If you want to control both of your air condition, you can use all emission output

    RP-20 package provides two IR infrared emission lines, connect to appliances can be installed
    according to the needs of the field wiring.
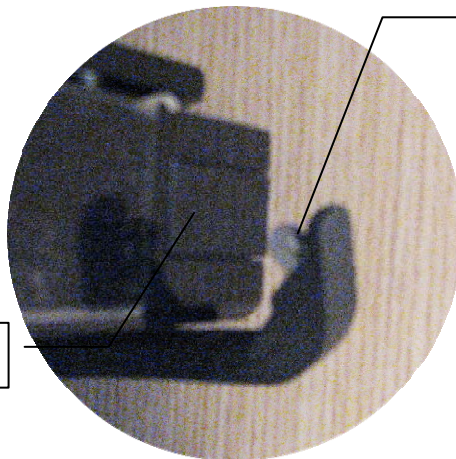
Packaging box with two IR emission line, please let emitting LED being positioned to front of the receiver (attached double-sided adhesive)

Position of the IR reception

2~7 ports of IR individual output

How to operate the RP-20F control points individually
RP-20F support individual IR emission, following devices can be control individually.
RP-20 software, Need to be open by PC
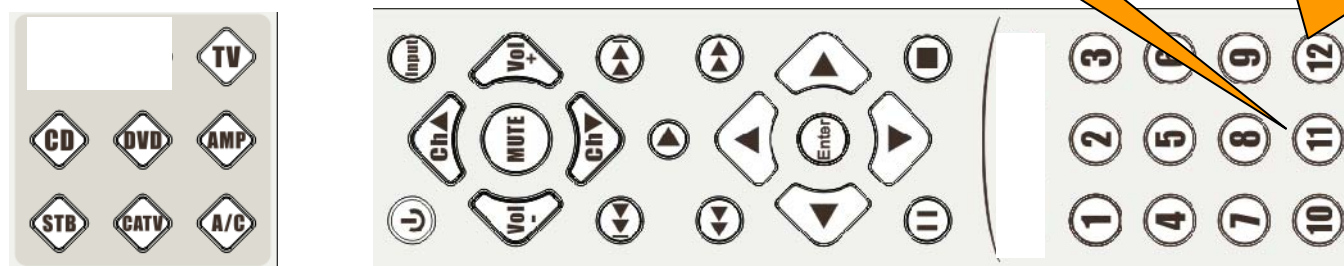RC-09 smart controller, provide three control type of whole region, point second, and point third
iTouch APPsoftware, provide whole region, point second, and point third
Individual IR control are related with RP-20 wiring and scenario editing actions, according to the installation environment, make sure which device need to be individual control, and with the matching use of hardware and software. The following, for the above-mentioned current e2-Live system provide individual operator interface will be described.

Use the software of RP-20F (need to connect to PC)

1.Select device

2. select which point of IR need to emit

3. press action button to emit has been selected point

Number 11 denote second point of IR

Number 12 denote thethird point of IR emission

Use RC-09 smart controller

1st press device, example [TV], 2nd press [⏻], then all of the IR emit at the same time

1st press device, example [TV], 2nd press [TV], 3rd press [⏻], then point 1 of IR emit

1st press device, example, 2nd press , 3rd press,then point 2 of IR emit

1st press device, example2nd press , 3rd press , then point of 3 IR emit

Use itouch (use with PC-09W or PC-09I, Wi-Fi emission)

Operation same as RC-09。

Select device first, example, 2nd press , then all points of IR emit

Select device first, example , 2nd press, 3rd press, then point 1 emit

Select device first, example , 2nd press,3rd press,then point 2 emit

Select device first, example , 2nd press,3rd press, then point 3 emit

RP-20 Home Control Center

1. Please insert the installation CD, it is in the packaging box
2. Installation CD will auto run and open its homepage

Software installation of RP-20

Click RP-20 executive program to auto run installation

During installation the program may ask you to download the update system of framework, Each computer may have different necessary, please make sure your PC can be connected to network, RP-20F will install necessary program automatically.

Click **Install**

Installing RP-20 (takes very short time to install)
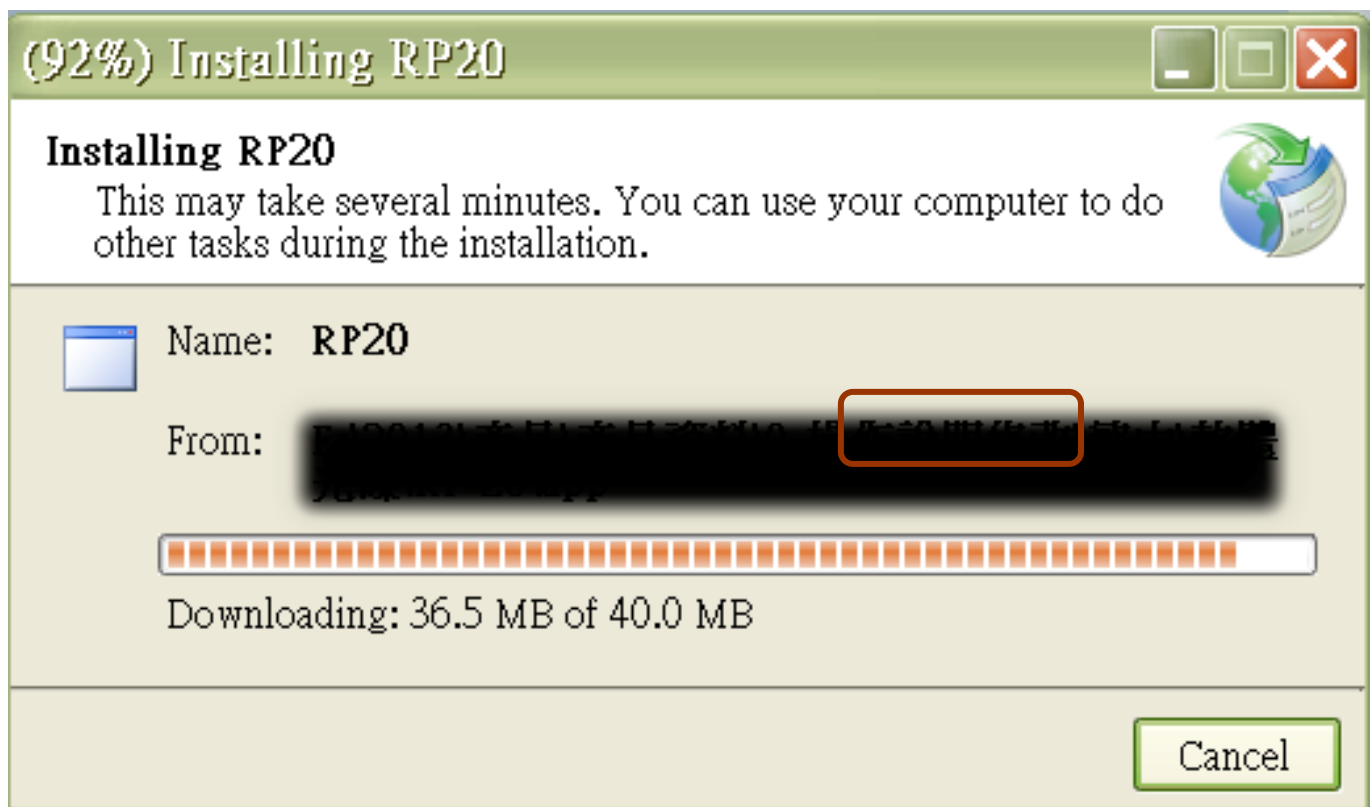
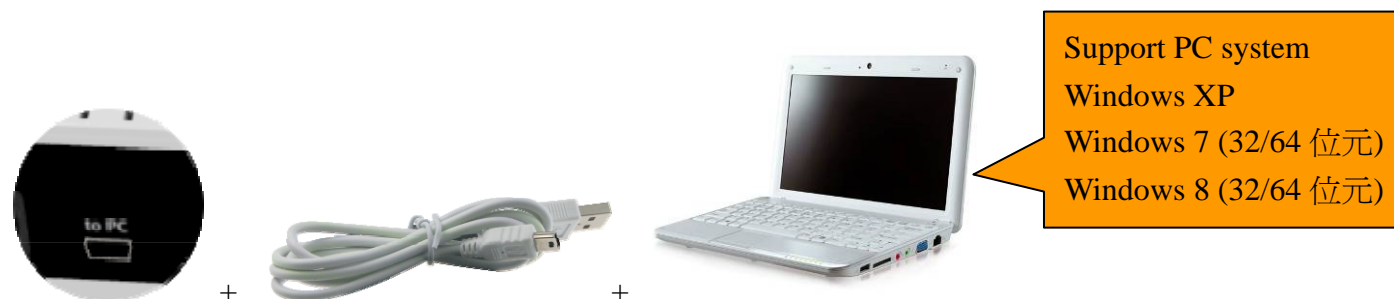After completed install, RP-20 will auto open

See the software is opened means that the installation is completed

You will find active program of RP-20 in the list of **Start/All programs**

RP-20 make sure connect to PC

Remove the connector wire out of the package, connect RP-20 and PC

Support PC system
Windows XP
Windows 7 (32/64 位元)
Windows 8 (32/64 位元)

+   +

Note：By using this connector wire to connecting RP-20 with PC to setting any parameters through your PC, does not require a transformer**, RP-20 can be powered by PC**

Power source of PC, but if the setting is completed, installed in a fixed location, Please use the power adapter attached with the package to ensure that the operation of RF and IR transmitter function properly.
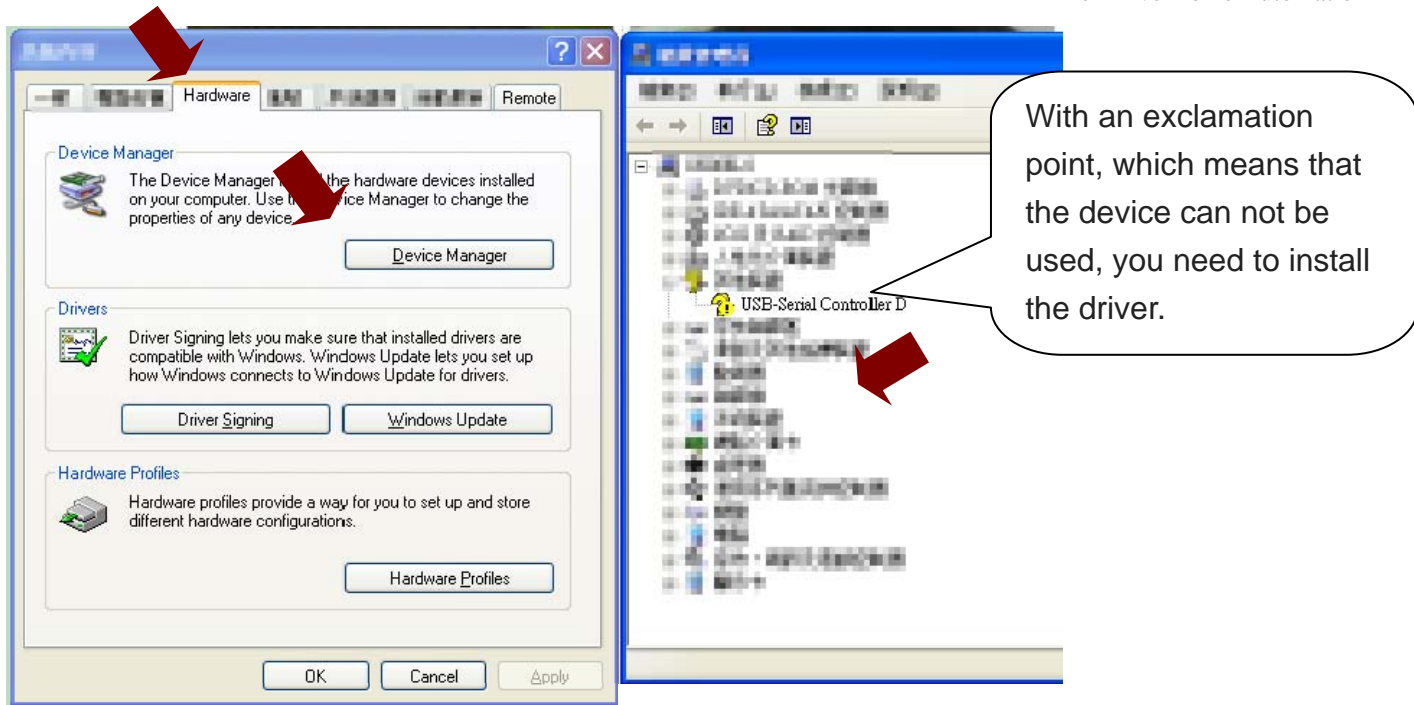
Install USB driver

Connect USB wire to PC, on the screen of right down angle of the PC will show that had automatically found the device of RP-20 USB.
x

If the computer does not have a suitable driver, the follow message will appear.

Or from the Device Manager to confirm whether the RP-20 USB devices can be used

> With an exclamation point, which means that the device can not be used, you need to install the driver.

If you turn on RP-20, no clickable COM on pull-down menu of the right connections,the USB device is not properly enabled, it can not be connected.
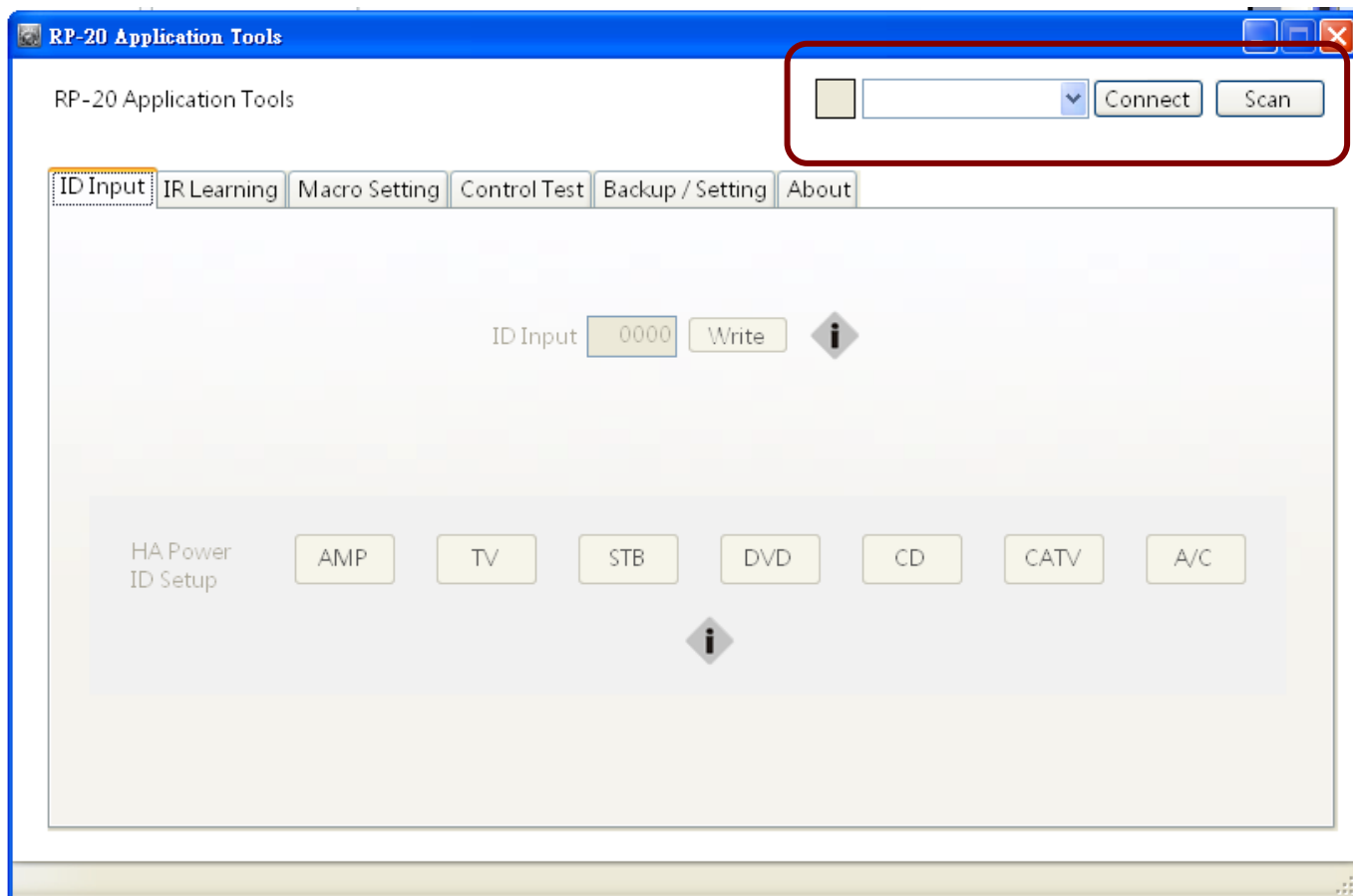
If you have any of the above circumstances occur, which means that you need to install RP-20F USB driver manually. take the CD out of the package insert into the CD slot, click USB driver to install.

After installation, please re-plug RP-20F USB once again, let the computer detect again.

Finish

Please choose the same COM position for RP-20

Open RP-20 will automatically appear maybe several connectable positions of COM. Please go to Device Manager to confirm the correct position of the COM, in order to successfully communicate with RP-20.

Click DETECT, currently there are actually connected to RP-2, its software will connect based on hardware COM position

If there is only one COM position or you had selected the clearly known one, then you can press CONNECT to link

RP-20　software

Connection

Before RP-20 be open, please use USB wire connect RP-20 with PC, then COM port will be detected
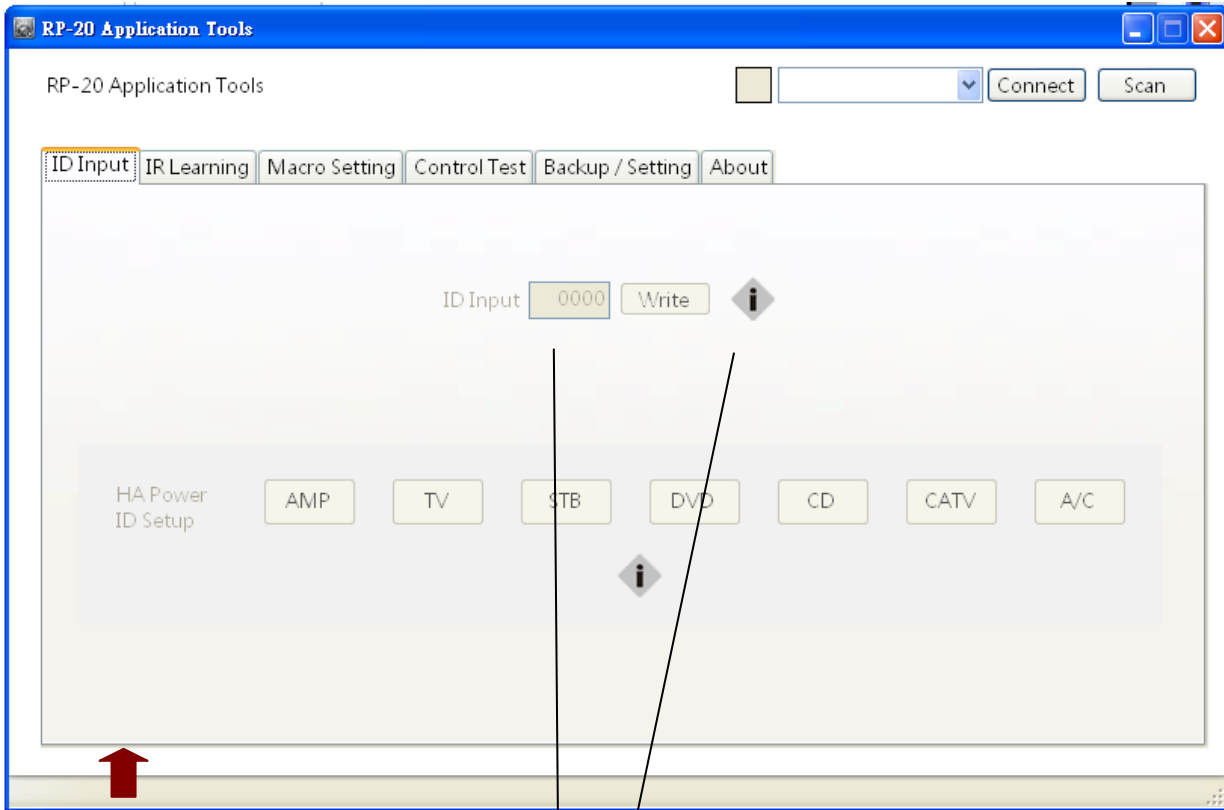
Home page setting
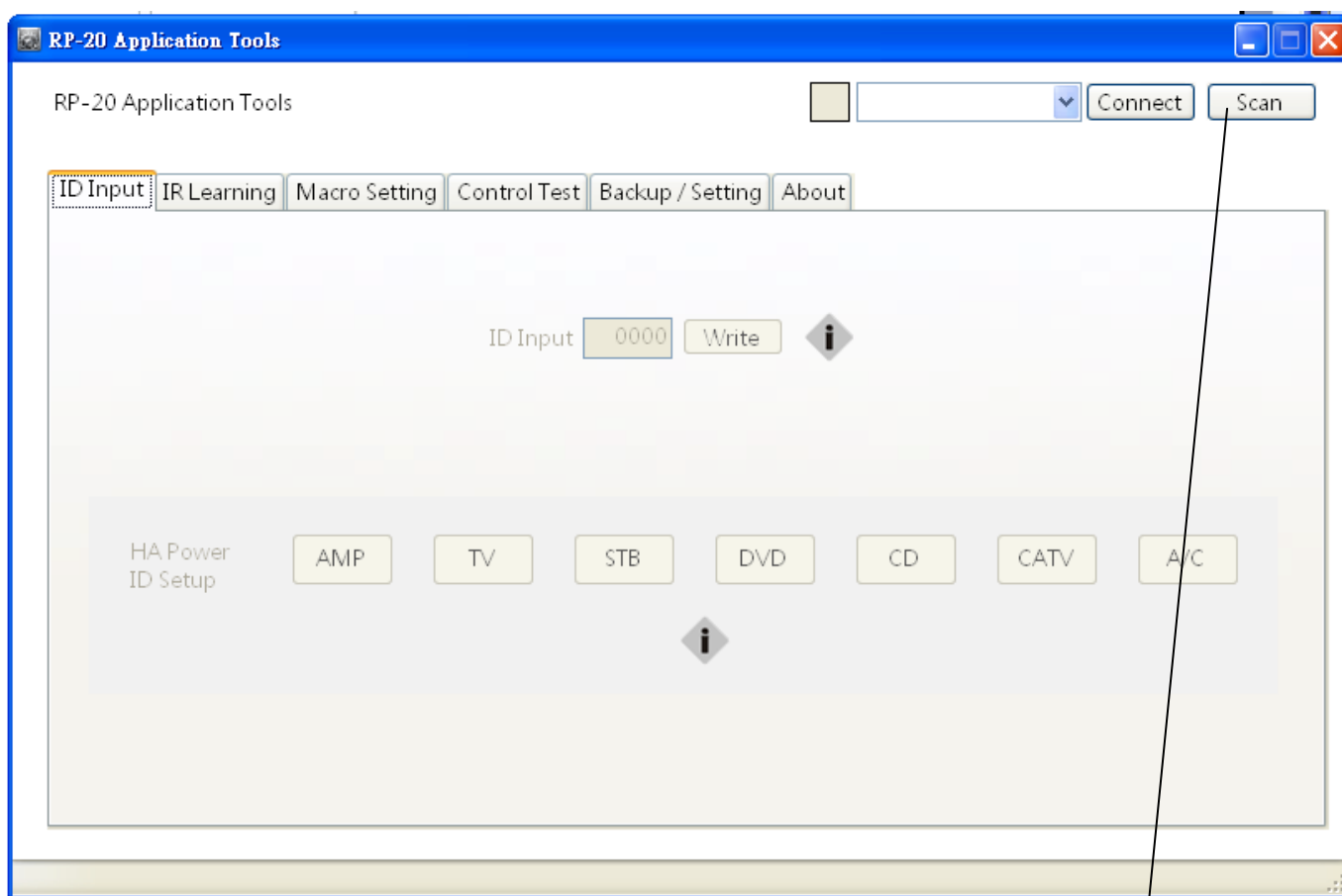
If RP-20 AVhome Box had been connected to PC, then press Detect to
  automatically find out the connection of COM port. If unconnect
If you can not successfully connect, please re-plug USB connector of
RP-20, and re-open the software automatically to execute the detect
again

Functions

ID Setting

Here will display the instructions

Input 4 digital ID code, Press "wright" to input (0000~9999)
When enter impleted 4 digital numbers, it will be field with "0"
 in front of your input numbers, such as input" 123", the actual
 ID would be "0123", input "66", would be "0066"
When writing success, RP-20 AVhome Box will prompt
buzzer and LED.

buzzer
short "Bi" 4
times

LED :
Red flash 2
times

Setting ID of iPower (PS-301 or PS-302)

RP-20 work together with iPower to make sure the devices's power is ON or OFF. This special designed is to solve bland power ON/OFF control on scenario mansging.

Perform this function, please plug your home appliances in smart socket of iPower. Use this page, you can setting the location of remote control.

Note: This setting must work with our smart socket iPower, specify the selected button of iPower to get into learning mode.
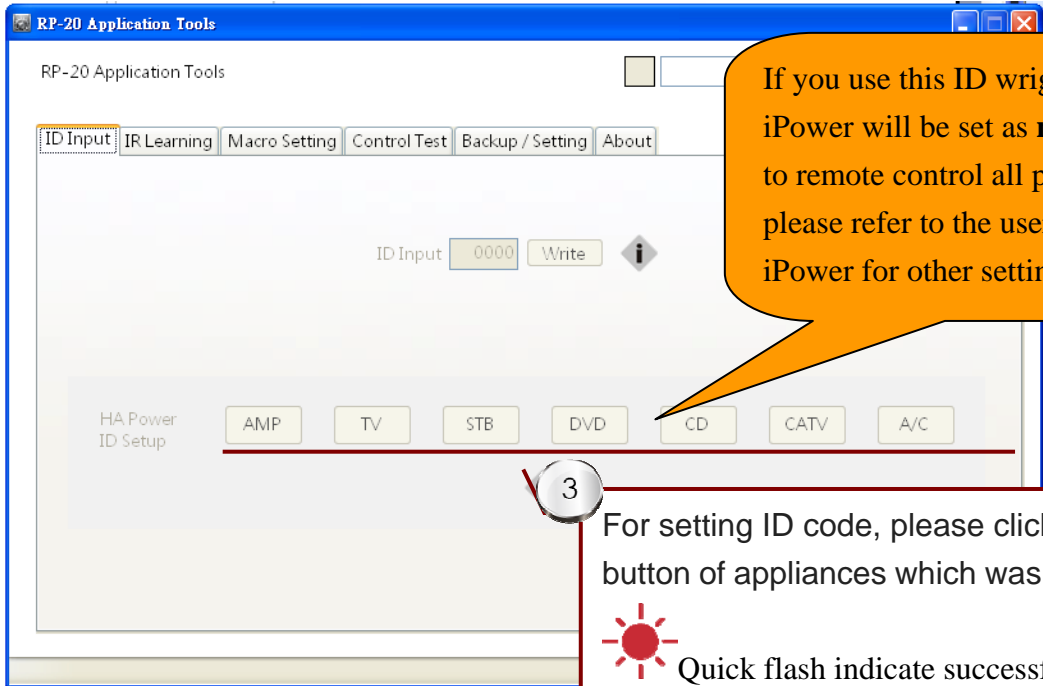
Press selected button of this setting page. Such as TV，CD，DVD….. iPower's red LED will flash, it means received your command and completed setting.

① Press and hold this button

② Poke a button in setting hole
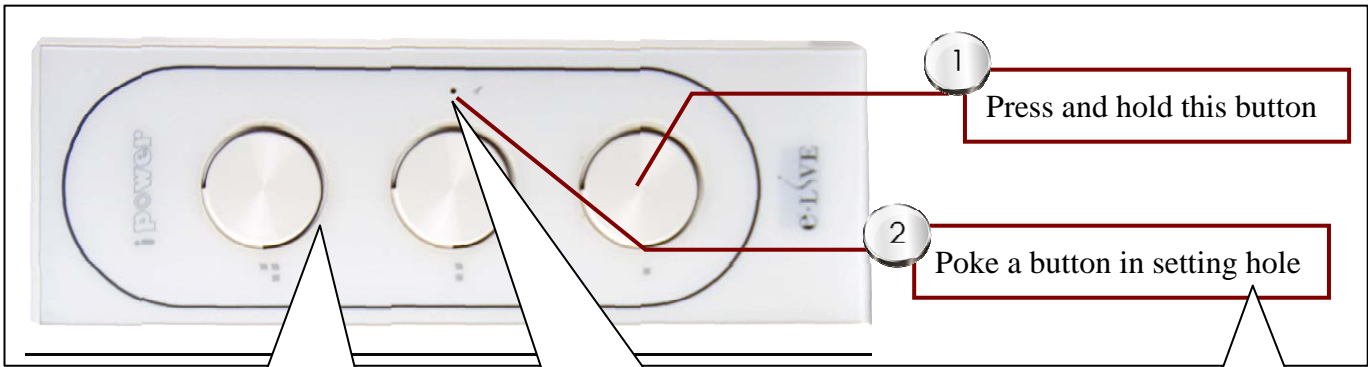
There are 3 AC sockets can beindividual control, and the mechanical tact switch is available

Setting button and indication of LED
Use attached setting sticker or paperclip for setting

LED solid red
☀
(waite for setting ID code)

RP-20 Application Tools

RP-20 Application Tools

ID Input | IR Learning | Macro Setting | Control Test | Backup / Setting | About

ID Input 0000 Write ⓘ

If you use this ID wrighting mode, iPower will be set as **not received** to remote control all power off, please refer to the user menu of iPower for other setting mode

HA Power ID Setup

AMP | TV | STB | DVD | CD | CATV | A/C

③ For setting ID code, please click the corresponding button of appliances which was plugged into the iPower.r

☀ Quick flash indicate successful ID setting

If tgere isn't any flash display, please repeat steps 1~3

IR Learning

Preparatory actions before the operation：

Tools needed: the original remote control of home appliances

- Make sure your home appliances is in the status of energized
  (Through the phone to activate the camera function), facing camera of your smart phone, press any button of any remote controller, if the emitting light of your remote controller can be seen, that means the emission of remote controller is in normal situation.
- Firstly planning useful remote keys of appliances (for example TV) to the correspondent button on RP-20.

Start to learn IR signals：

1. Press "Start Learning" button to enable right side buttons function
2. Press the button which to be learned of the device. Such as TV, the following 29 action buttons will become to the usable status.

29 action button will enable the buttons to have the function of press

3. Press corresponding function of a button on, such as ：

Buzzer

Short Bi

LED

Flash Blue LED

4. Pick up your remote controller of appliances, facing emission LED to RP-20 "**IR in**" then press down the power button to input power ON/OFF code.

Buzzer

Short Bi

LED

Blue LED flashed and then stable on

Attention: means into learning mode

IR in,
Please alignment here with your remote controller of appliances

Use your home appliance's remote to input button signal

5. Repeat step 2~3 to continually to learn remote signal into RP-20

Situations of need to re-learn

1. After input IR signal, if

> Buzzert
> One long, one short
> **Bl~ •Bl**

> LED
> Red flash twice
> Blue stable on

Please re-press the button of appliance IR signal
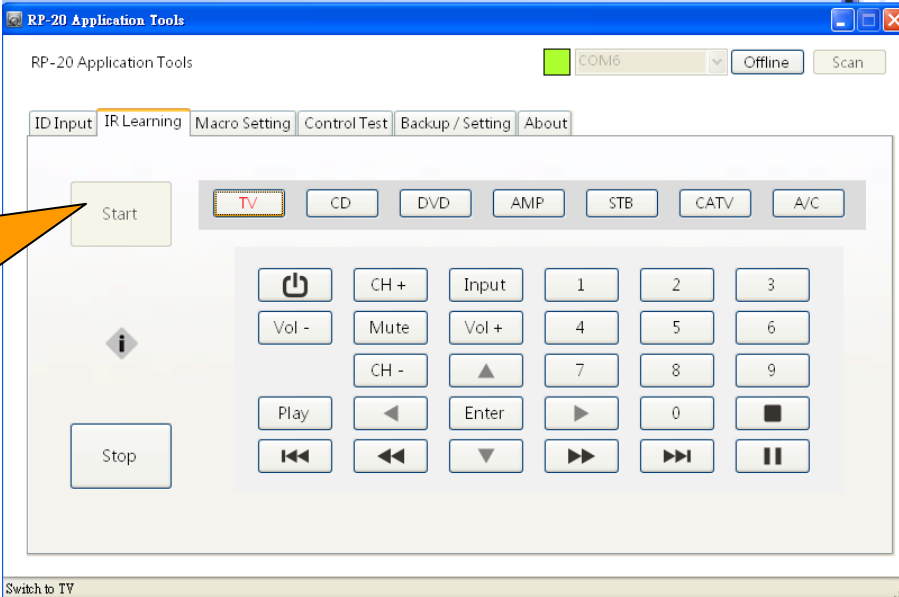
2. After input IR signal, when you hear of

> Buzzer
> Short Bi three times
> **Bl•Bl•Bl**

> LED
> Slowly flashing
> blue LED ....

Re-press a button of RC-09, then re-press the button of remote controller, if always fail, If the learning   has failed, please contact your dealer for help.

This faded button means it is in the status of learning mode

Press "Start learning" then you can select any one of the following devices to get into remote code

learning

Note: After you came into learning mode, if you don't action within 15 seconds, RP-20 will leave out the learning mode.

Beep of buzzer: RP-20 will enable the button of Start Learn. Press again into learning mode once more.

Leave Learning Mode

1.Completed learning all of your appliances IR, please press "Stop Learning" for interup learning mode."
2. In learning mode, no action over 15 seconds, RP-20 will leave learning mode automatiically

Bizzer
One long Bi~
two hort Bi~

) Bi~ •Bi•Bi

LED
Red LED flashed twice and turn off
Blue LED flash andfinally distinguish

"Start Learing" recovery means leave learning mode

When completed all learning action, suggest to operate again all of the buttons of RP-20 for confirm all learning are successfully.
Please switch to the following screen: Control Validation→**Infrared Appliances**，**Check Operation**
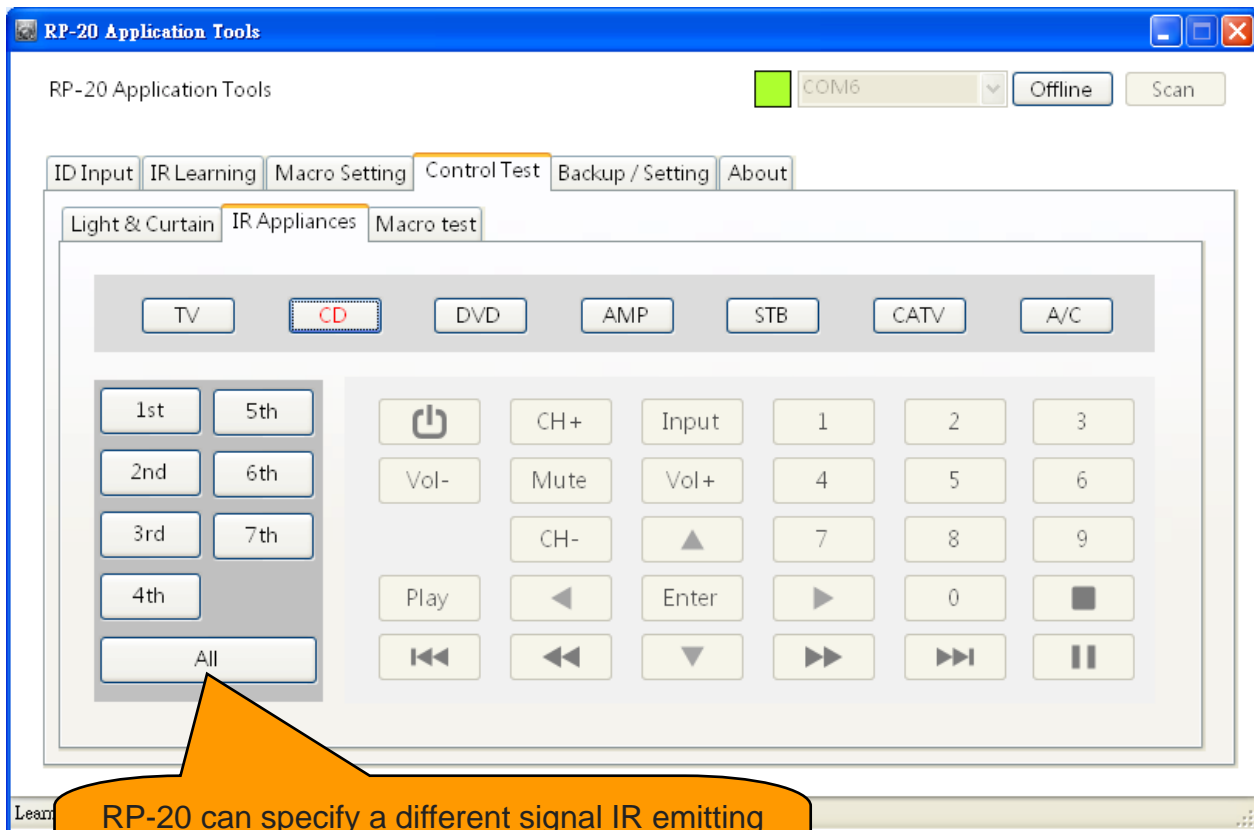
RP-20 can specify a different signal IR emitting region If you just want to verify that learning is successful, select "All emit"

Sequence of operations:

1. Select equipment

2. Select "All emit"

3. Press the right action key

4. Make sure the corresponding buttons are successfully remote control, if there is not, please repeat the learning sequence.

Scenario Setting

Edit lighting & curtain

Editable Setting 24 Macros

Devices
Light 01
Light 02
Light 03
Light 04
Light 05
Curttain (specify)

Keys
01~12

Actions
Lighting
ON/OFF
ALL ON/ALL
OFF
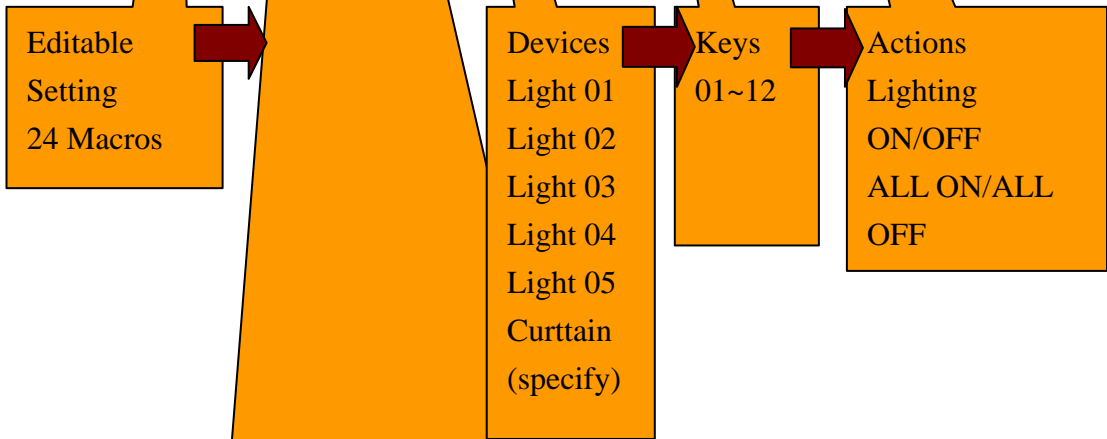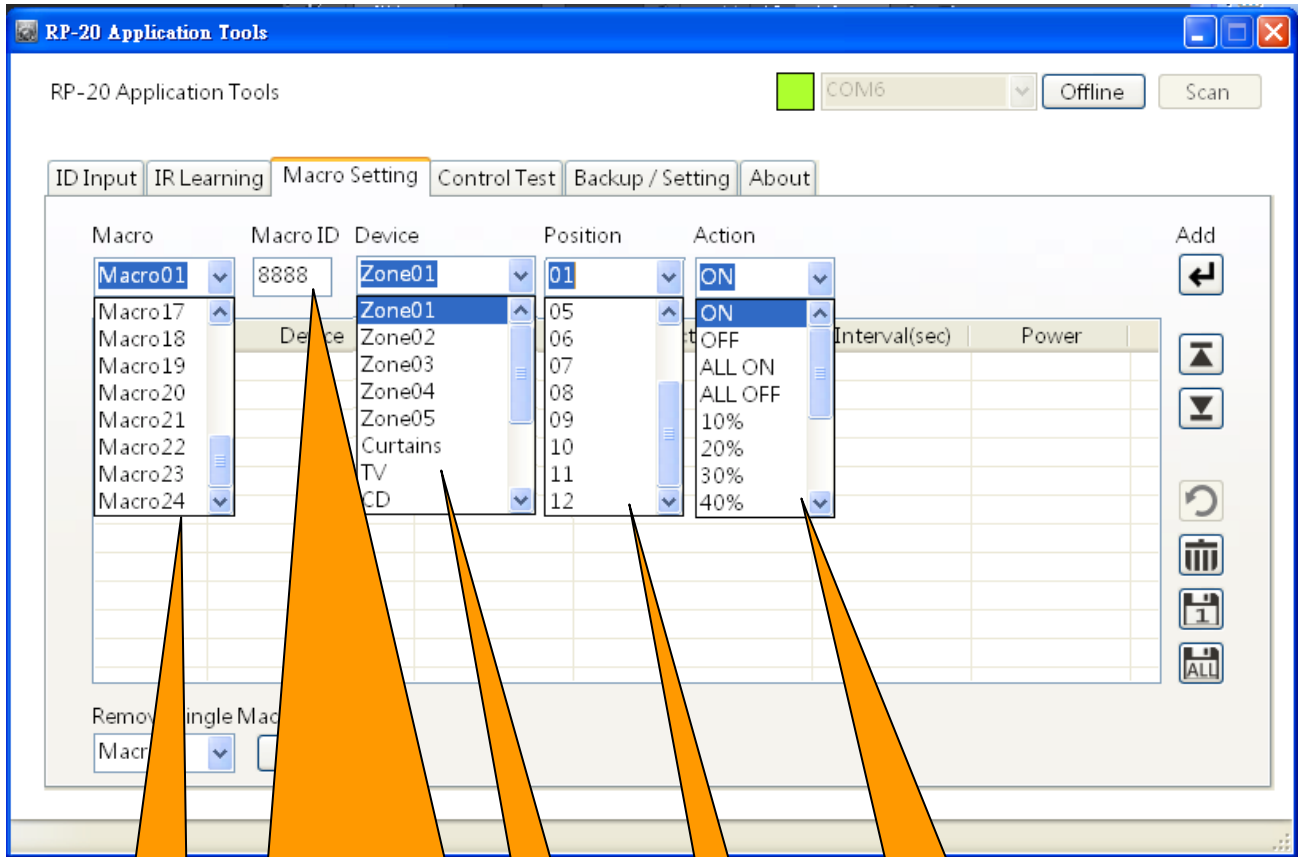
RP-20AVhome Box1~24 Macros ID can be specify difference with RP-20 to corresponding lighting, curtain, and iPower. Please note that in use of any remote control device operation, remote controller ID must same as RP-20, not same as scenario.

Edit Home Appliances

Interval: (only appliance action can be inserted interval) from 1 to 60 seconds, up/down to choose or key in the wanted numbers of seconds, maxmum is 60 seconds, more than 60 seconds are limited to 60 seconds. 0 second and 1 second do not have the significant effect.

Note: During execution scenario of RP-20, if setting none detect, the interval time still working, for example, TV Power still ON and 10 seconds interval, if the power been detected ON, will perform 10 seconds interval before next action
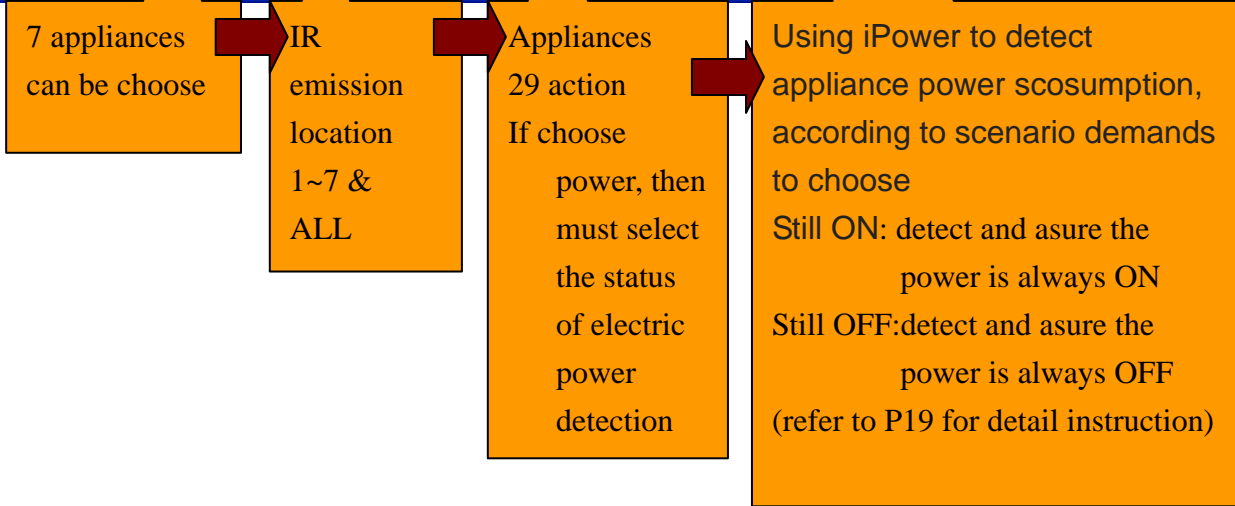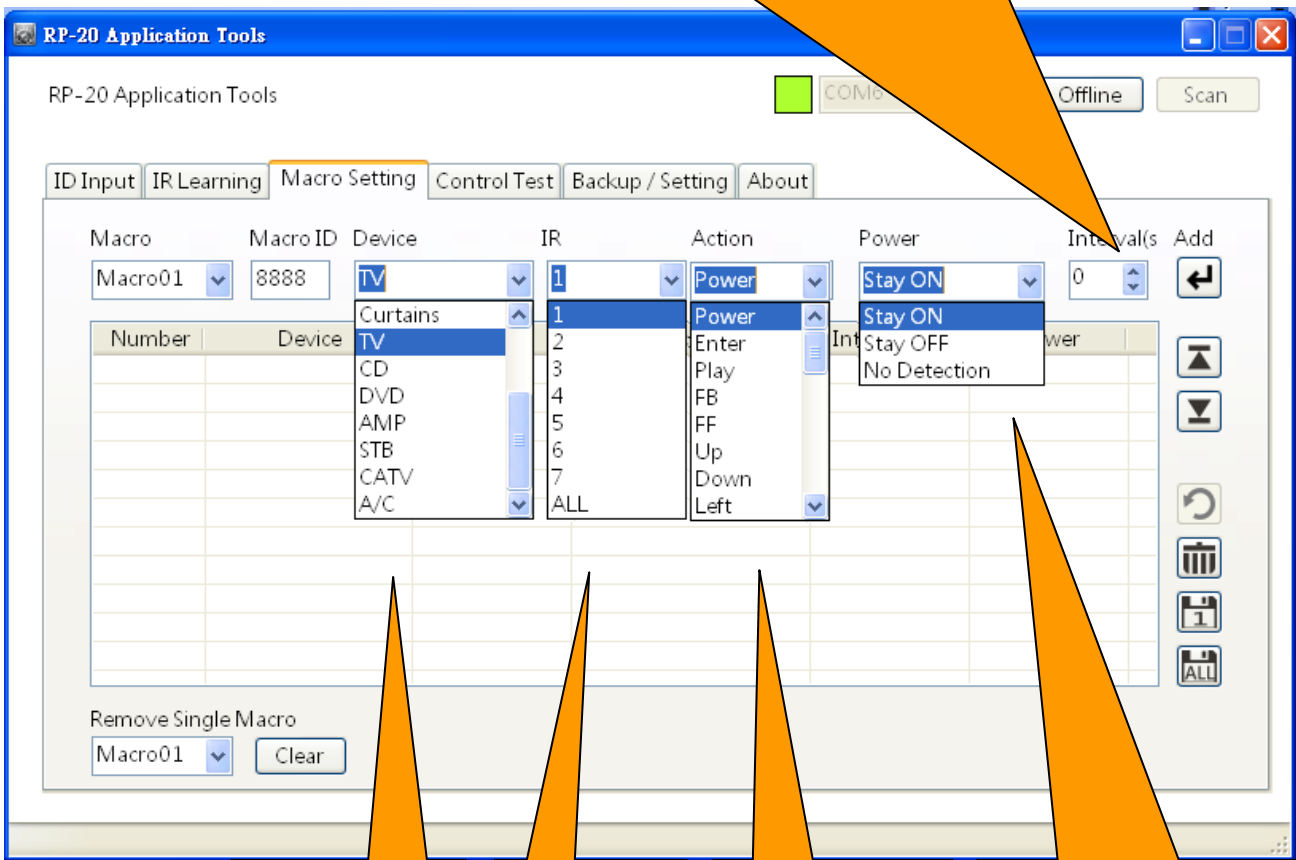
7 appliances can be choose

IR emission location 1~7 & ALL

Appliances 29 action
If choose power, then must select the status of electric power detection

Using iPower to detect appliance power scosumption, according to scenario demands to choose
Still ON: detect and asure the power is always ON
Still OFF:detect and asure the power is always OFF
(refer to P19 for detail instruction)

Scenario tool

After data selected, press here for adding one new command on the bottom of the list

Select and move edited data up and down for smooth scenario control

Recovery a previous action, you can always forward recovery

Click to delete a selected single data row

Save the current page of single scenario setting

Save all 24 scenario setting, will take a little time, please be attention to see front RxTx red LED,
Stop flash means save compled
Still flashing means saving in progress, do not try to operate other function for safty saving

Clearn up memory

Empty single scenario action of RP-20, make sure the connection between RP-20 and PC is in normal status before performing.
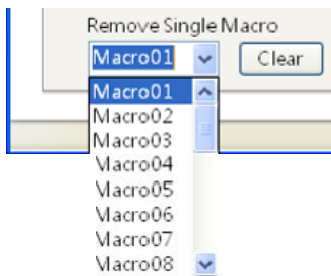
RxTx Red LED
Flashing three times then turns off

Select the scenario which you want to be deleted

According to the following steps, you could insert one action into scenario edit setting program

planned well your action conditions, press to add in this edit setting row

Click this edit setting row, use to move this edit setting row to where you want be placed

Save

 Single scenario storage, only saving the current scenario of the screen

 All scenario storage, saving all of the scenarios from No.1 ~ No.24 will take a little bit
longer, please make sure it was completed saved after red LED slow flash is stop.
During storage, the screen will be temporarily unable to carry out any operation action,
please do not remove the USB link cable, so as not to affect the action of storage.

operation with iPower

1. Plugs appliances into iPower, such as TV, DVD,CD
2. Use RP-20 to setting the location of remote control (refer to p4)
3. Fine tune every detection of home appliancesons on ipower to make sure correct detection
(please refer to iPower menu)
4. Use RP-20 software / scenario edit / power current detection defined
      Content of scenario edit

TV (must to open TV)

Still power ON：During perform scenario, RP-20 will check the power current status of TV
If the TV is in the status of power ON, then RP-20 do not send out

thecommand action. (to avoid reverse action)

If the TV is in the status of Power OFF, then RP-20 will send out the command action to
turn on TV
Note: Please make sure the main power of iPower is in the status of Power ON, You
can recognized the current status of appliances powerby iPower
Still power OFF：If TV is in the status of power off, then RP-20 do not send out the

command action (to avoid IR reverse action)

If TV is always ON, then RP-20 will send out the [⏻] aommand to turn off the TV

No detect：Don't care the status of appliances power ON or OFF, just perform the command of scenario.

Scenario Vaidation setting

After completed editting and storage of scenario, suggest to confirm the correctness and fluency of perform of scenario, if there is any problem of action then you could easy adjust and fine tune on setting page.

Please switch to the following page to perform : control verification→**scenario verification**

Scenario editing note:

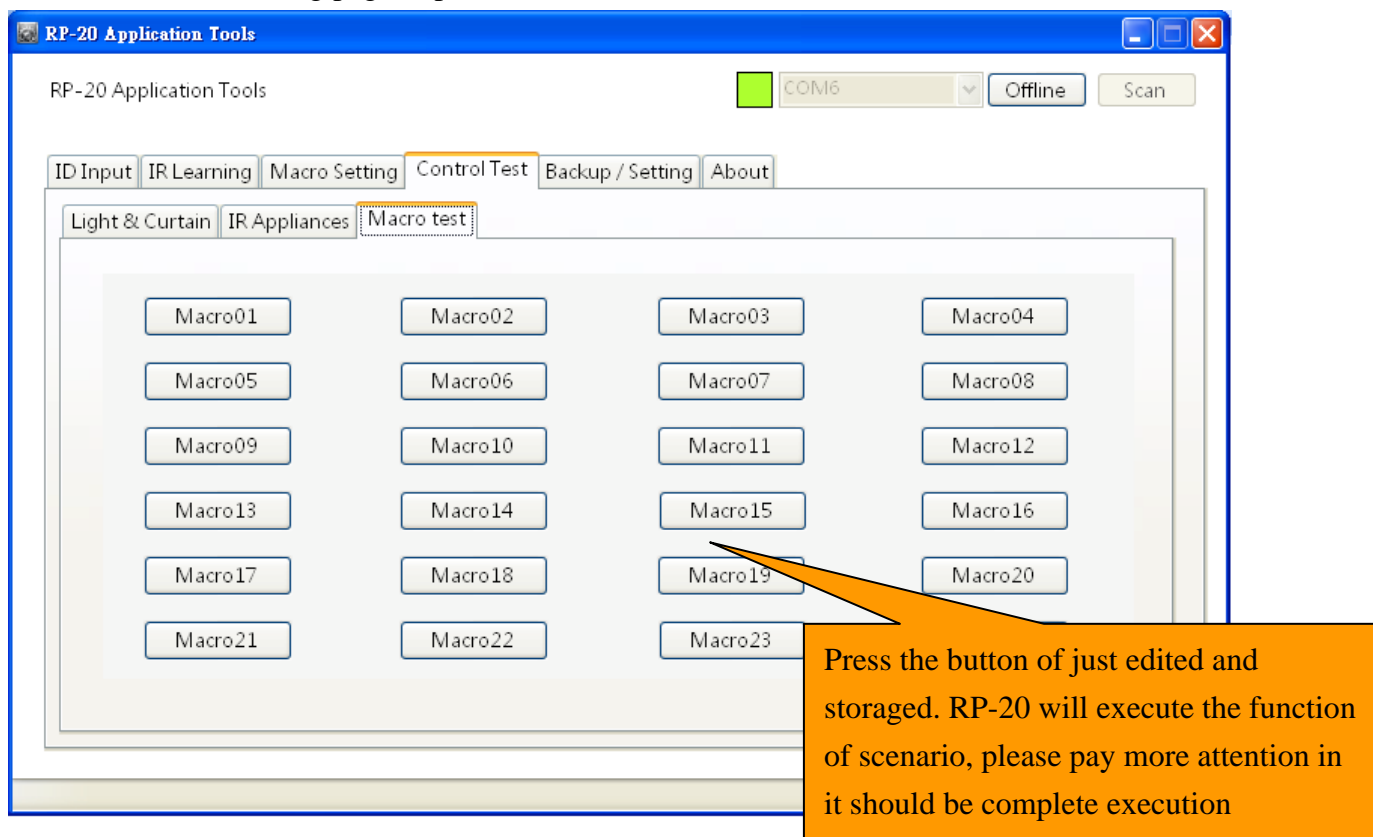RP-20 provides a rich scenario editing functions let e2-Live scenarios easier to play with the performance of the operation

Also need special attention to several important functions when editing a scenario, in order to ensure actually perform the operation of scenarios.

1. RP-20 porovide 7 zones of IR individual emission, with 2 to 6 points of wiring type IR, please make sure the wire is connected to correspondent device for correct remote control.
2. RP-20 provides intelligent power sockets combined with iPower, in scenario editing, there are 7 appliances can detect the actual status of power on / off, if used with iPower, in order to better ensure the accuracy of the scenario action, please make clarify the initial conditions of power ON/OFF
3. RP-20 provide IR with the insert interval function, Lighting and curtain control doesn't have such

function.

4. RP-20 provide different ID for lighting and curtain control, please make sure and input the scenario's ID before saving, this ID would be stored to RP-20 while saving.

5. After scenario storage, please use Control Verification/Scenario Verification to test immediately to make sure your setting is correct and adjust instantly.

Scenario remote controller.

You can also use the following remote controllers to perform the following actions scenarios
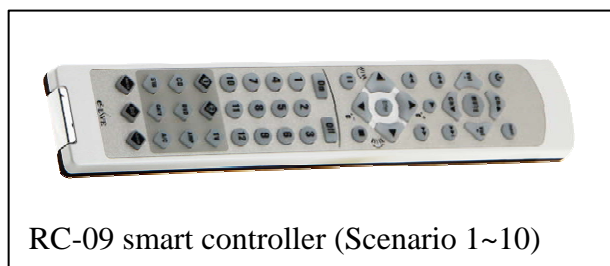
RC-09 smart controller (Scenario 1~10)	HT-100 LCD Controller (Scenario 1~24)
PC-09W/I+APP software (Scenario1~24)	
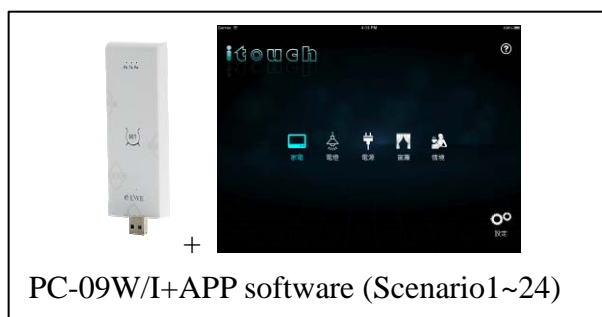
Link to other scenario control
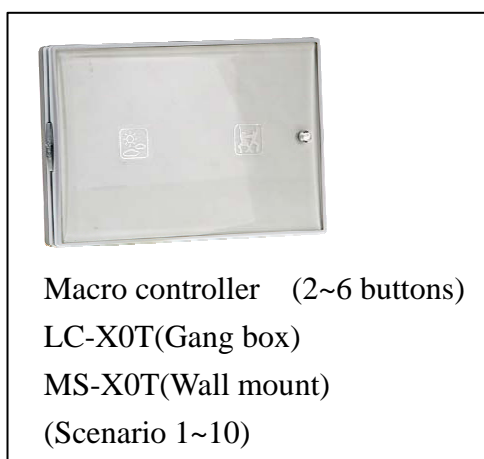
Macro controller (2~6 buttons) LC-X0T(Gang box) MS-X0T(Wall mount) (Scenario 1~10)	FS-02N Trigger linking controller (Scenarios 1~10)	VC-1800 family Video server+PC-09N (Scenarios 1~10)
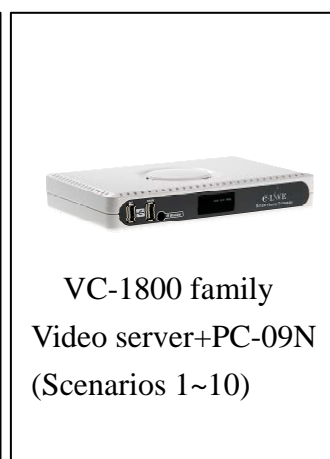
Control Verifications

RP-20 software : The purpose of control verification is to make sure its works after IR learning and scenario setting, it also provide remote control of lighting and curtain, it could be remote control all function of e2-Live via this software. In operation, the network connections of RP-20 or PC must be maintained.

Lighting & Curtain
Guided operation buttons, select device in sequence→Location→Dimmer/ON/OFF(Dimmer switch only)
ALL ON / ALL OFF is for 1st ~5th areas ALL ON/ALL OFF, curtain control is operated with specify brand.
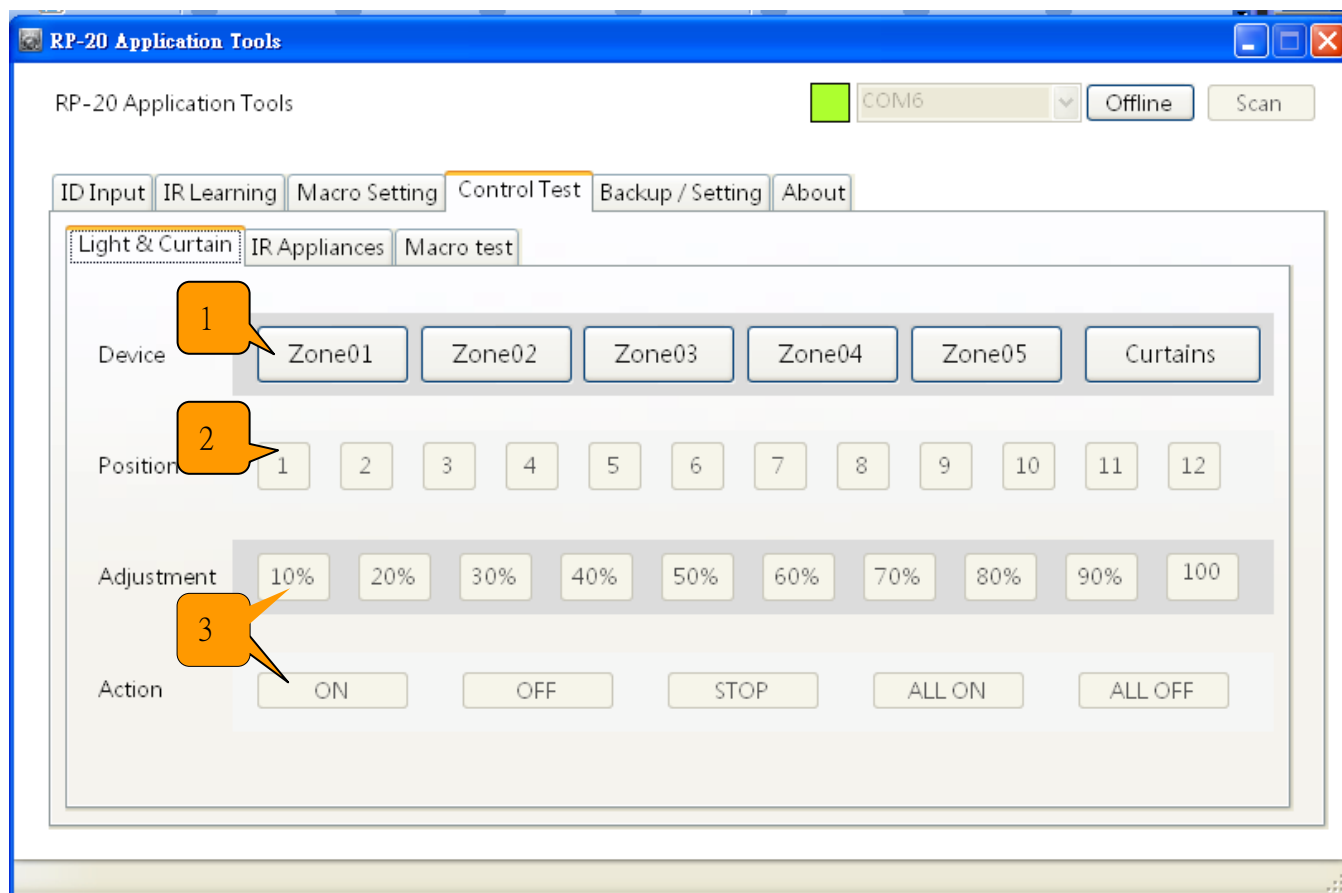
Appliances Infrared control

Select device--➔IR emission location--➔Action button
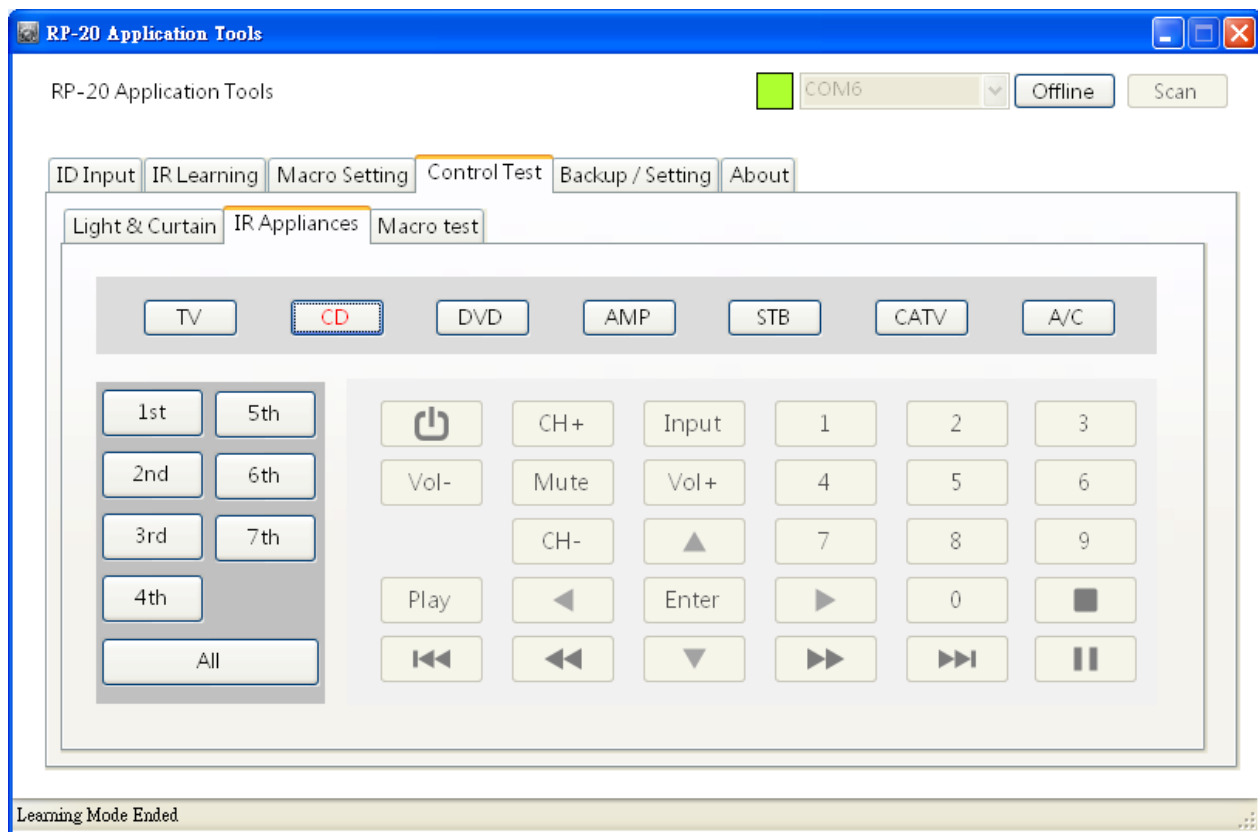
Scenario verifications

Press button of scenario 01~24，RP-20 will be executed immediately, be careful to operate, 。
during operation of scenario, it does not accept others remote commands again.
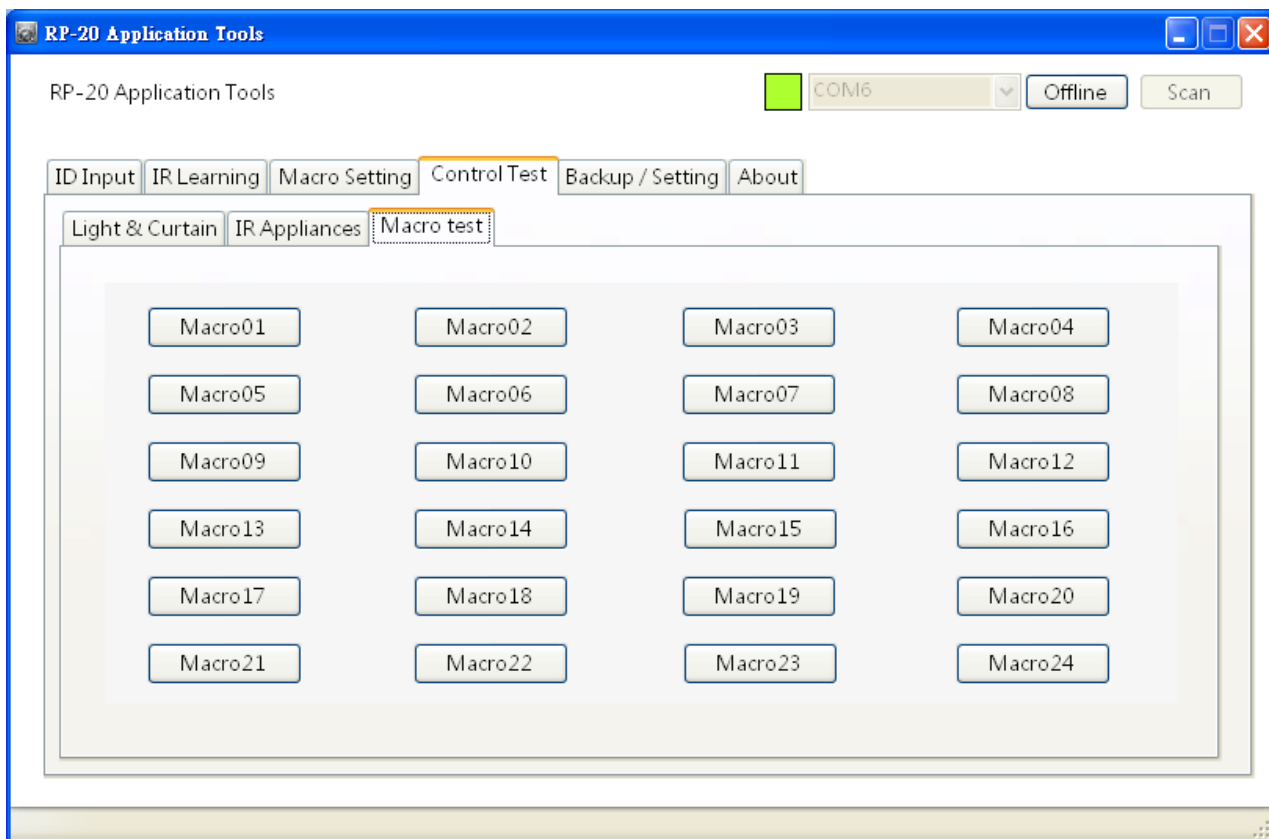
Backup Setting

Backup recovery

For RP-20 to read out the backup setting data

The information of RP-20 software could backup or recovery are as follow：

1. Remote ID
2. Infrared learning data
3. RP-20 AVhome Box scenario settings

The default storage path, suggest do not changed

Press

File names can be modified in either Chinese or English
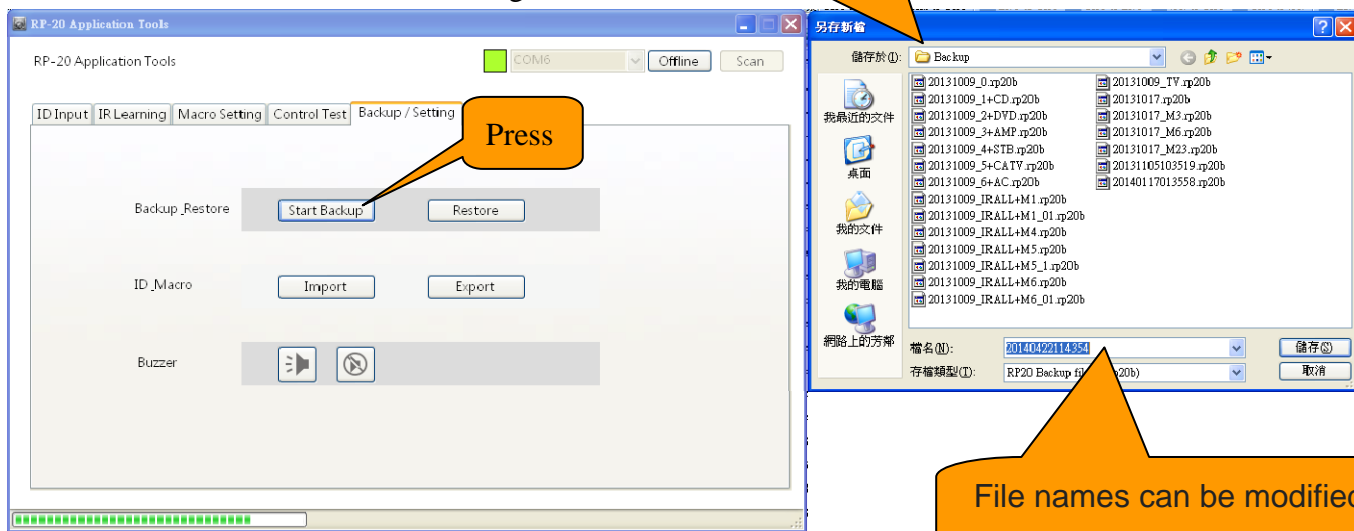
Its takes about 2 or 3 minutes to backup or recovery. Do not remove the USB connection, in process of backup or recovery to avoid error reading or wrighting.

Backup purpose

1. If there is any probrom of RP-20, then you could revovery back to initial status
2. Copy to another RP-20

Recovery：
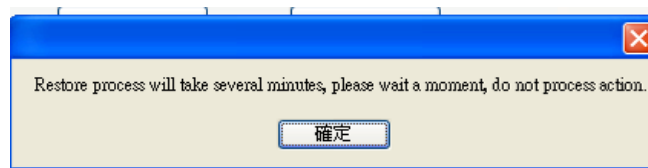
ID & Scenario

For RP-20 software setting is finished【Scenario & ID data】, You can save as a file to PC

RP-20 can save a single or all of the scenarios to PC for storage, and read back to RP-20 by Input.

Purpose of output data of scenario

1. Save for backup file
2. For the purpose of revise current setting data of RP-20 to reduce re-setting time

Output:
Save the current scenario settings to PC for later revised using (could be one or more)

RP-20 Application Tools

RP-20 Application Tools

COM7 | Offline | Scan

ID Input | IR Learning | Macro Setting | Control Test | Backup / Setting | About

Macro
Macro01

Macro ID
8888

Device
Curtains

Position
02

Action
ON

Add

Number	Device	Position	Action	Interval(sec)	Power
1	Zone01	01	ON	0	
2	TV	ALL	Power	0	Stay ON
3	DVD	ALL	Power	0	Stay ON
4	DVD	ALL	Down	0	
5	DVD	ALL	Pause	0	
6	AMP	ALL	Power	0	Stay ON
7	AMP	ALL	FF	0	
8	Zone01	01	OFF	0	
9	Curtains	01	ON	0	
10	Curtains	02	ON	0	

Remove Single Macro
Macro01 | Clear

(10 / 60)

Output file

The default storage path, suggest keep the path

RP-20 Application Tools

RP-20 Application Tools

COM7 | Offline | Scan

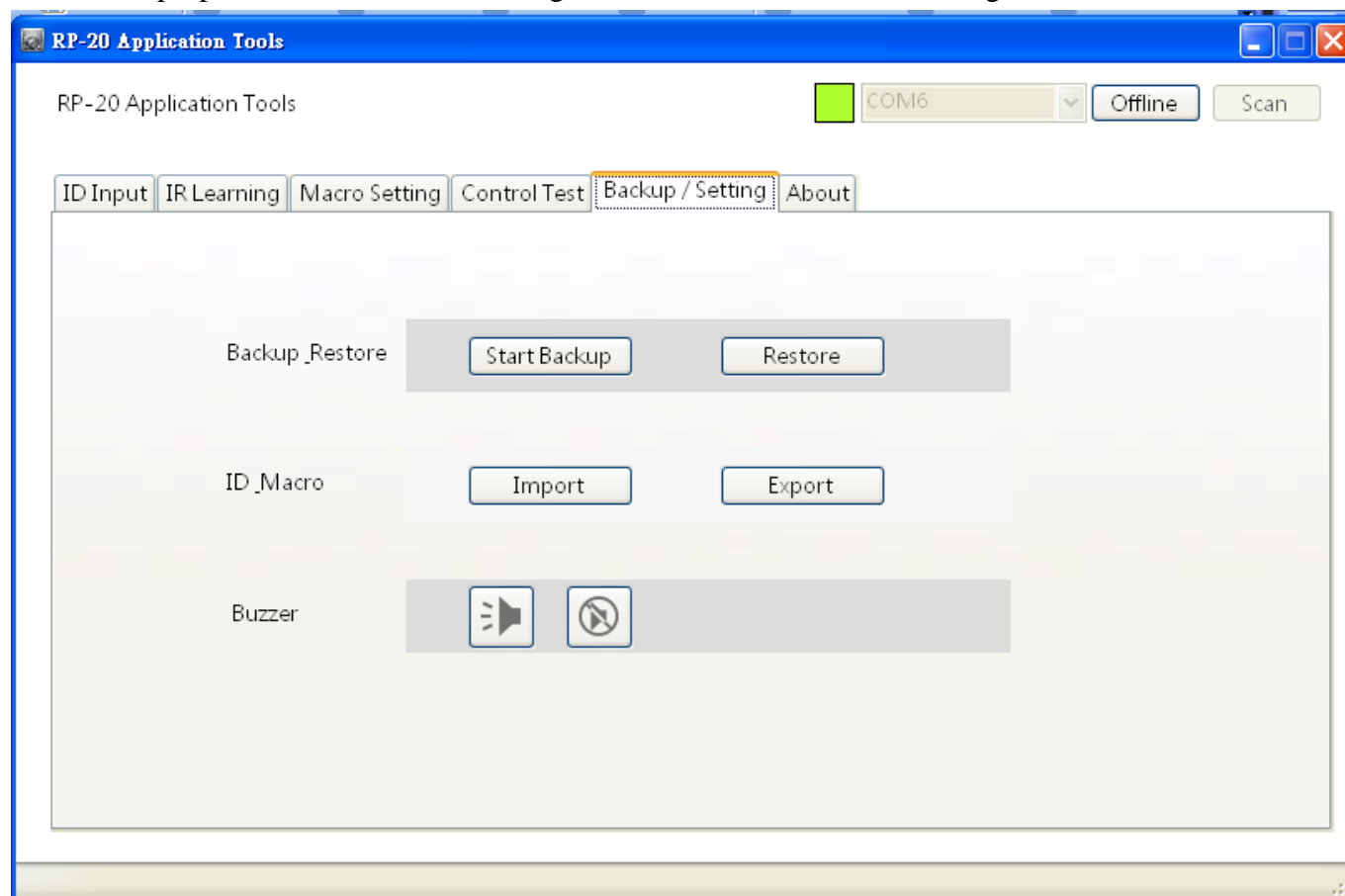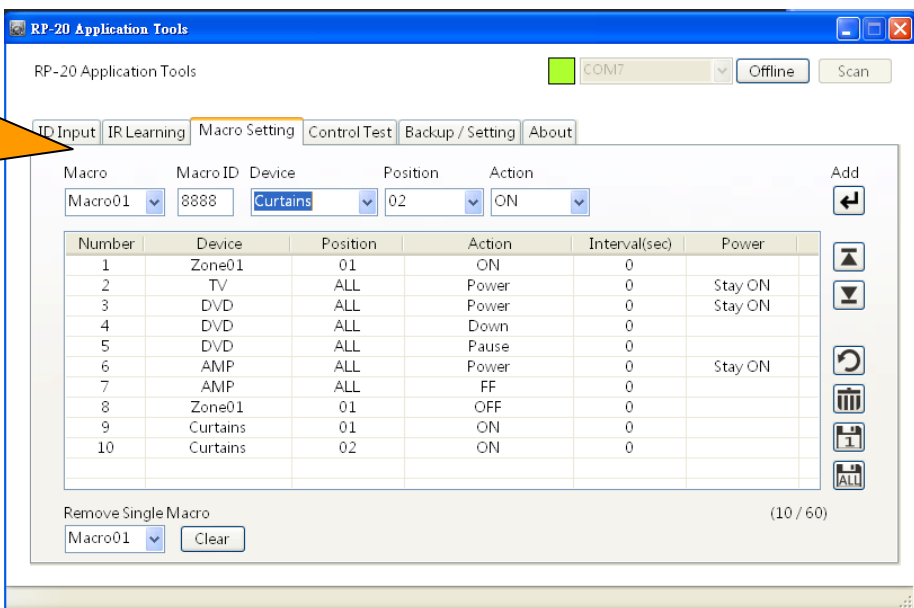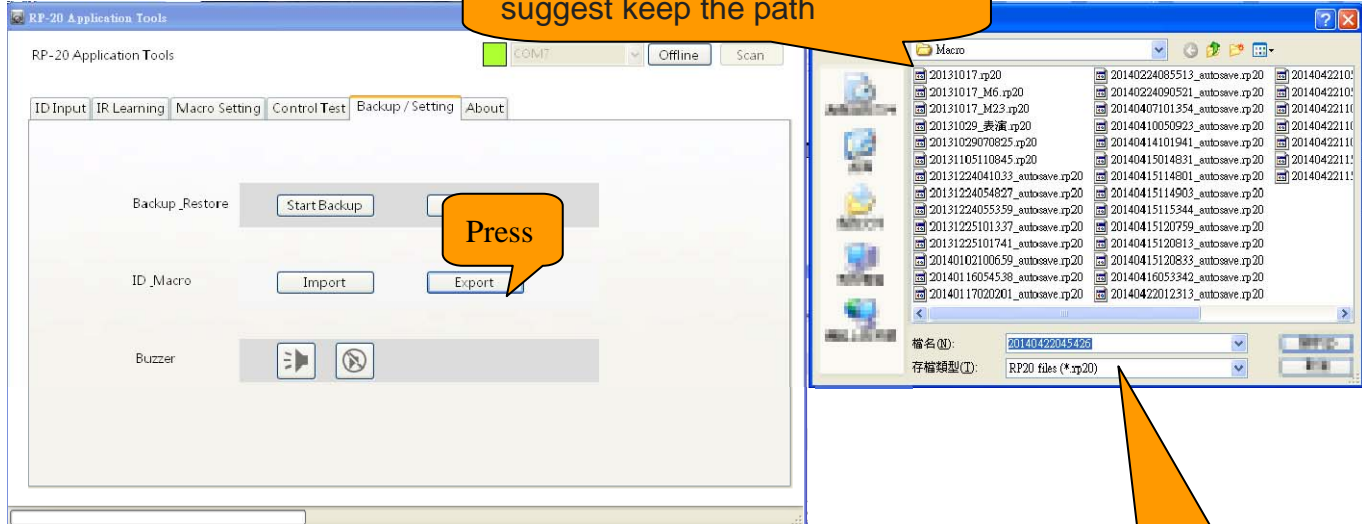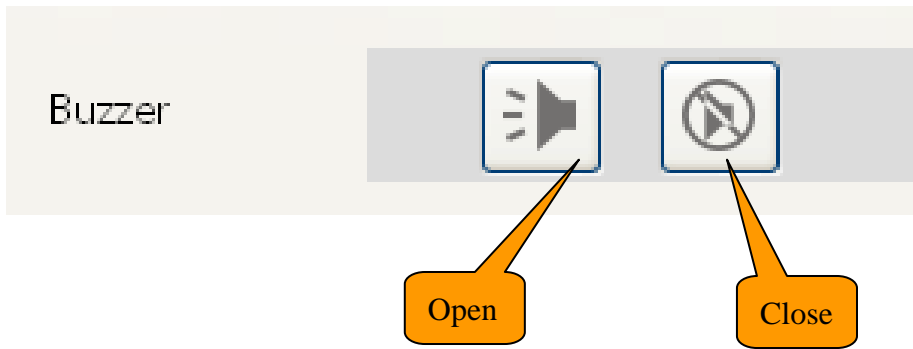ID Input | IR Learning | Macro Setting | Control Test | Backup / Setting | About

Backup _Restore   Start Backup

Press

ID _Macro   Import   Export

Buzzer

Macro

20131017.rp20
20131017_M6.rp20
20131017_M23.rp20
20131029_表演.rp20
201310290708025.rp20
20131105110845.rp20
20131224041033_autosave.rp20
20131224054827_autosave.rp20
20131224055359_autosave.rp20
20131225101337_autosave.rp20
20131225101741_autosave.rp20
20140102100659_autosave.rp20
20140116054538_autosave.rp20
20140117020201_autosave.rp20

20140224085513_autosave.rp20
20140224090521_autosave.rp20
20140407101354_autosave.rp20
20140410050923_autosave.rp20
20140414101941_autosave.rp20
20140415014831_autosave.rp20
20140415114801_autosave.rp20
20140415114903_autosave.rp20
20140415115344_autosave.rp20
20140415120759_autosave.rp20
20140415120813_autosave.rp20
20140415120833_autosave.rp20
20140416053342_autosave.rp20
20140422012313_autosave.rp20

20140422210
20140422210
20140422110
20140422110
20140422110
20140422115
20140422115

檔名(N): 20140422045426
存檔類型(T): RP20 files (*.rp20)

File names can be modified in either

Open/Close/Muting RP-20

Buzzer

Open   Close

In IR learning, RP-20 is recommended to open the buzzer can help confirm the operation action
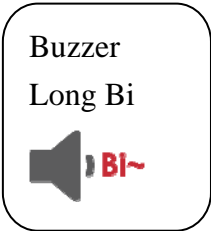
RP-20 host has received.

After editing operation is completed with the relevant settings, you can choose to turn off the buzzer

About

Restore factory settings：

Press and then sure to

```
Buzzer
Long Bi
◀)) BI~
```

, IR learning data and scenario setting will be cleare. Please be confirm before execution.

ID will be retained, so if you need to change the ID, please use the Home page's ID settings, to re-write ID
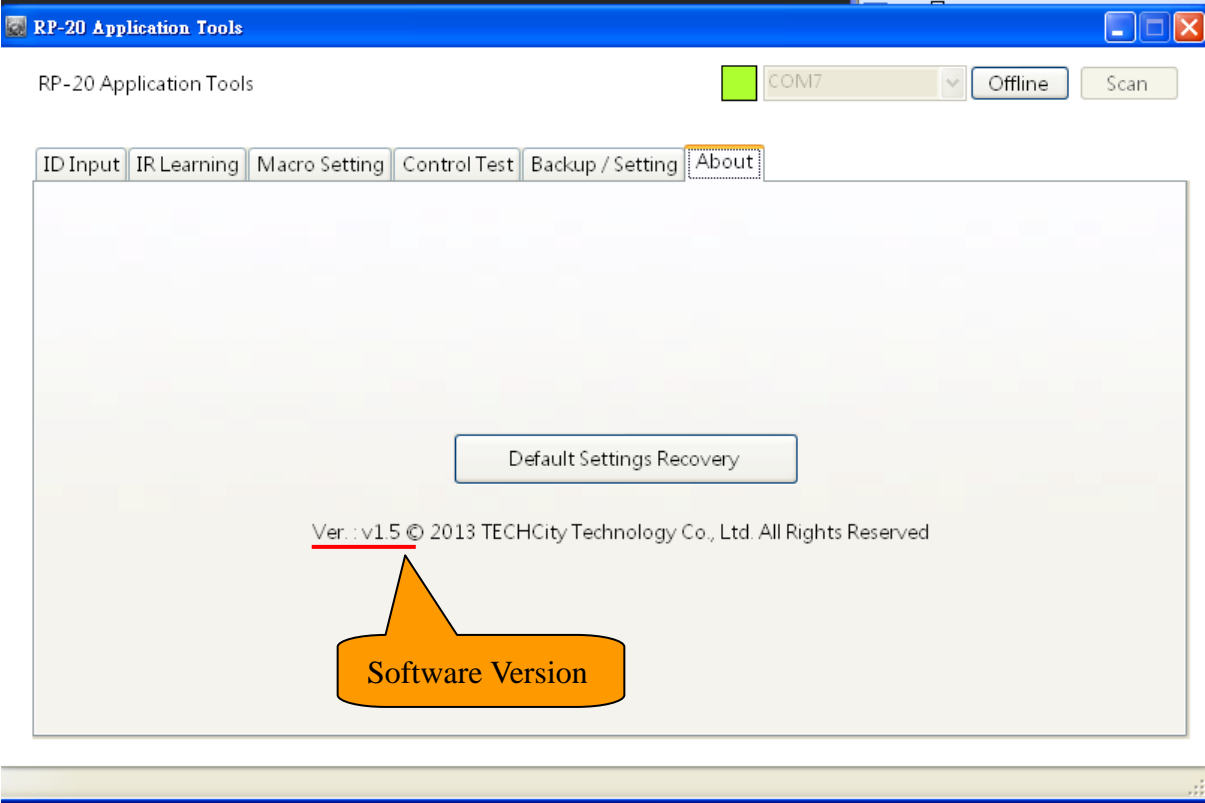
FCC Notice

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.

NOTE 1: 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 to correct the interference by one or more of
the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that to which the receiver is
   connected.
-Consult the dealer or an experienced radio/TV technician for help.

NOTE 2: Any changes or modifications to this unit not expressly approved by the party
responsible for compliance could void the user's authority to operate the equipment.