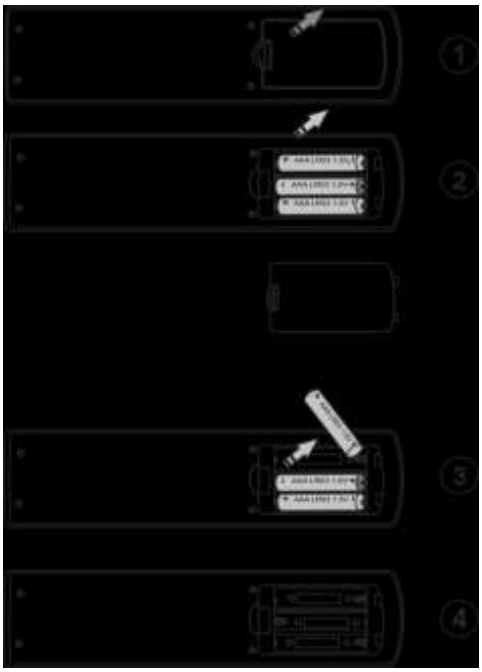
PC Programmable remote control

User Manual (USB mode version for end user)

Quick Guide

First Step

Prepare PC programmable remote control and remove 3pcs AAA battery if they are in the USB programmable remote control.



Picture 1

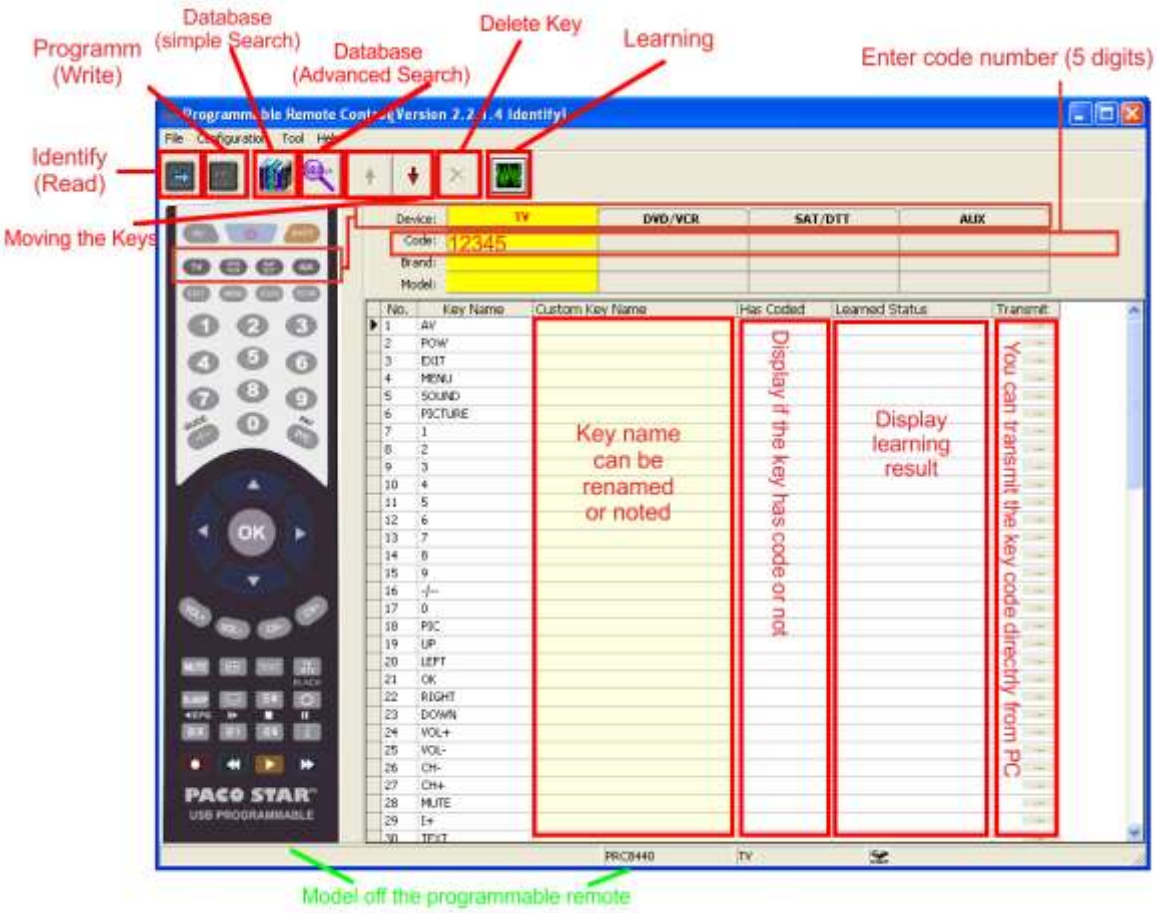
Prepare USB cable and connect USB remote control to the USB port of PC.

Picture 2

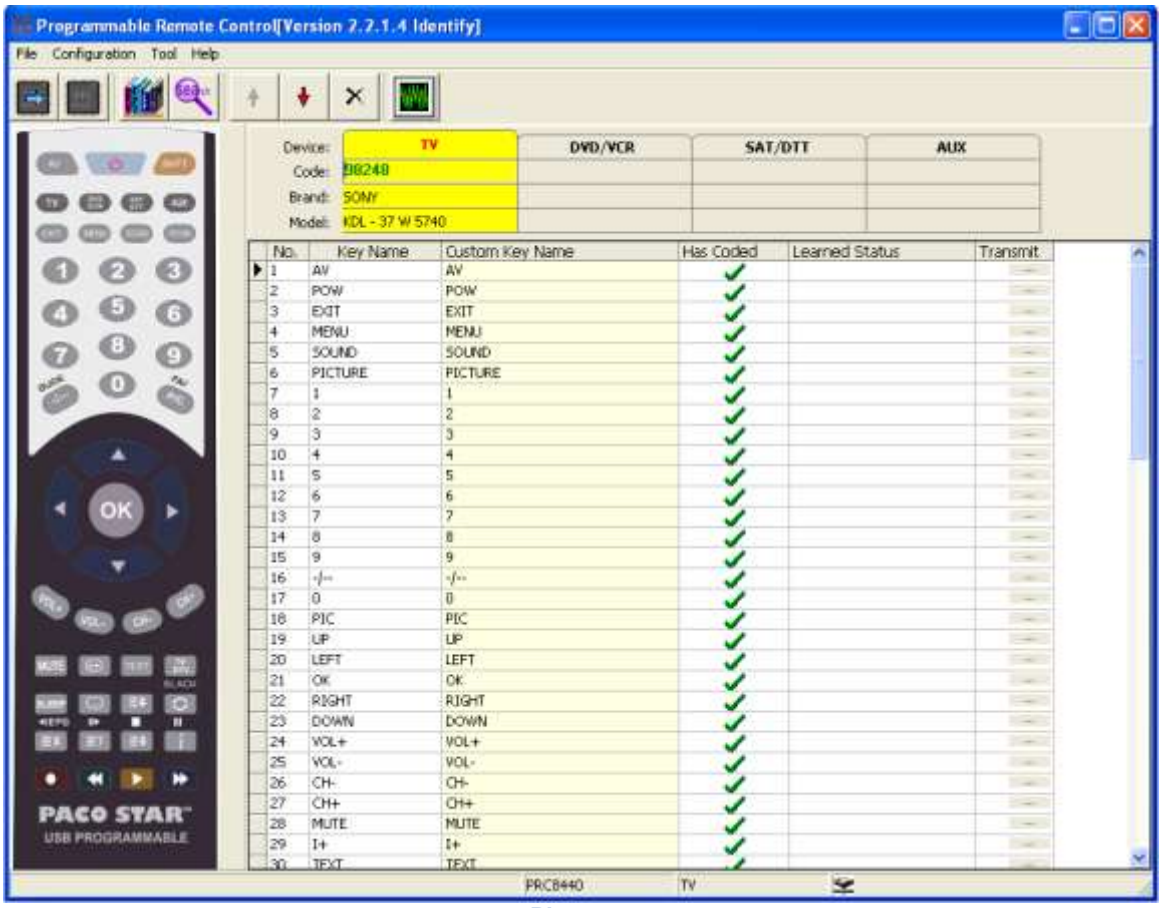
Downloading and installing software in your PC(windows OS).

Second Step

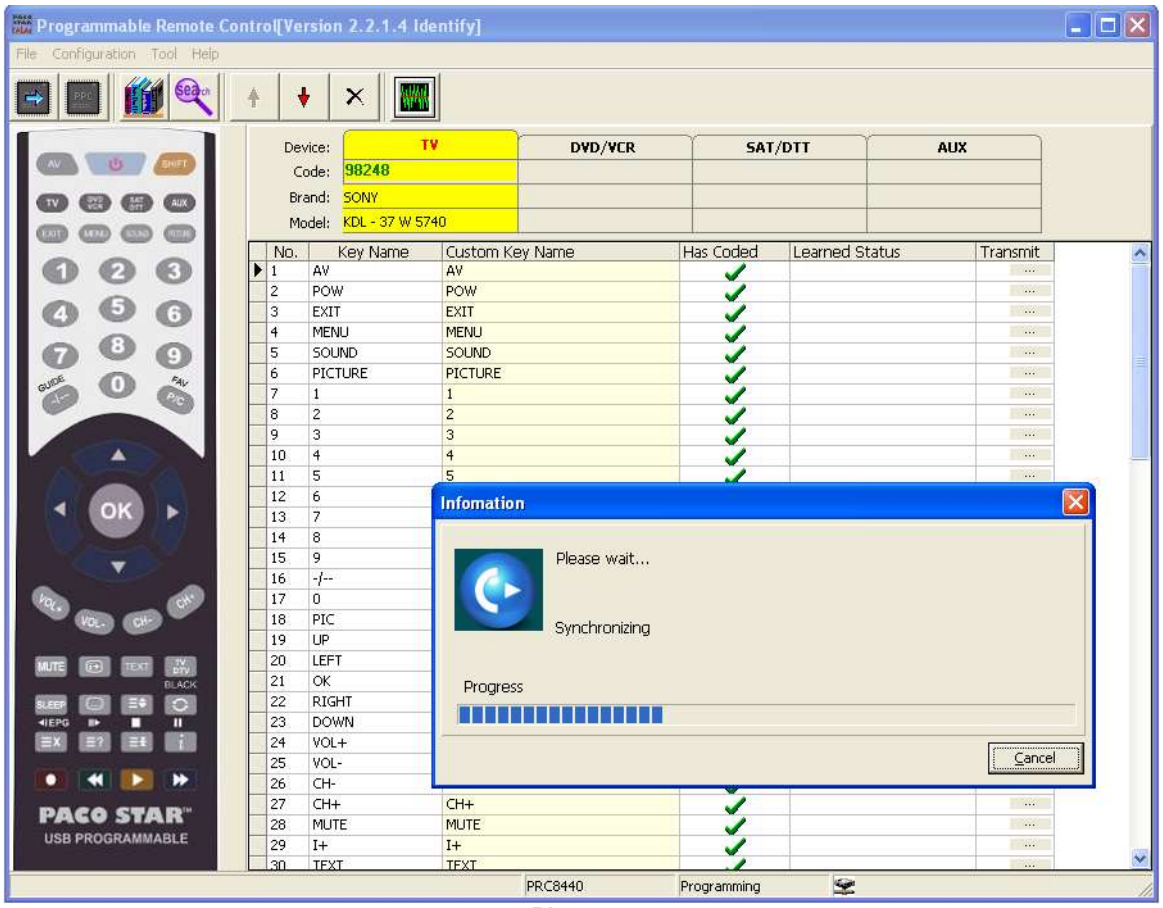
Identify (Read) or select USB remote control model manually
Code Select from database
Program (Write)



Picture 3



Picture 4


Programmable Remote Control[Version 2.2.1.4 Identify]
File Configuration Tool Help
Device: TV DVD/VCR SAT/DTT AUX
Code: 98248
Brand: SONY
Model: KDL - 37 W 5740
No. Key Name Custom Key Name Has Coded Learned Status Transmit
1 AV AV
2 POW POW
3 EXIT EXIT
4 MENU MENU
5 SOUND SOUND
6 PICTURE PICTURE
7 1 1
8 2 2
9 3 3
10 4 4
11 5 5
12 6
13 7
14 8
15 9
16 -/--
17 0
18 PIC
19 UP
20 LEFT
21 OK
22 RIGHT
23 DOWN
24 VOL+
25 VOL-
26 CH-
27 CH+ CH+
28 MUTE MUTE
29 I+ I+
30 TEXT TEXT
Infomation
Please wait...
Synchronizing
Progress
Cancel
PACO STAR
USB PROGRAMMABLE
PRC8440
Programming

Picture 5

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2. USB Remote control
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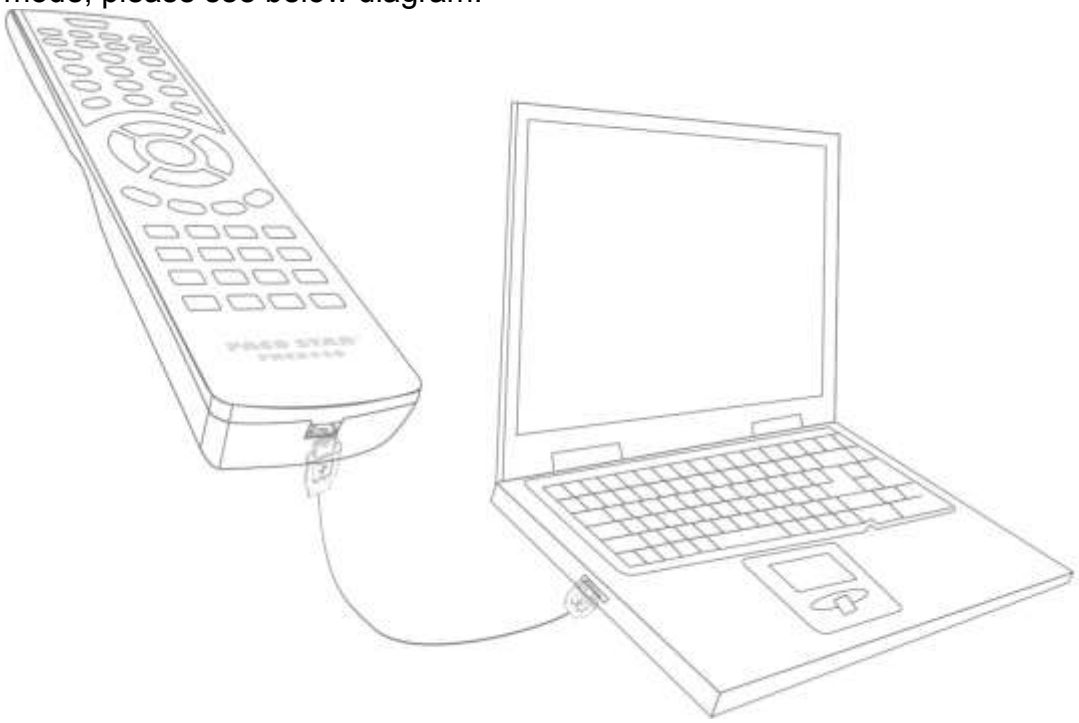
1. Description

PC programmable remote control is an update product for traditional universal remote control. Its main difference and characteristic is the IR code database source. Universal remote control contains IR code database in itself. PC programmable remote database is stored in PC or web server. So PC programmable remote has no risk to be out of date.
USB mode, please see below diagram.



Picture 6

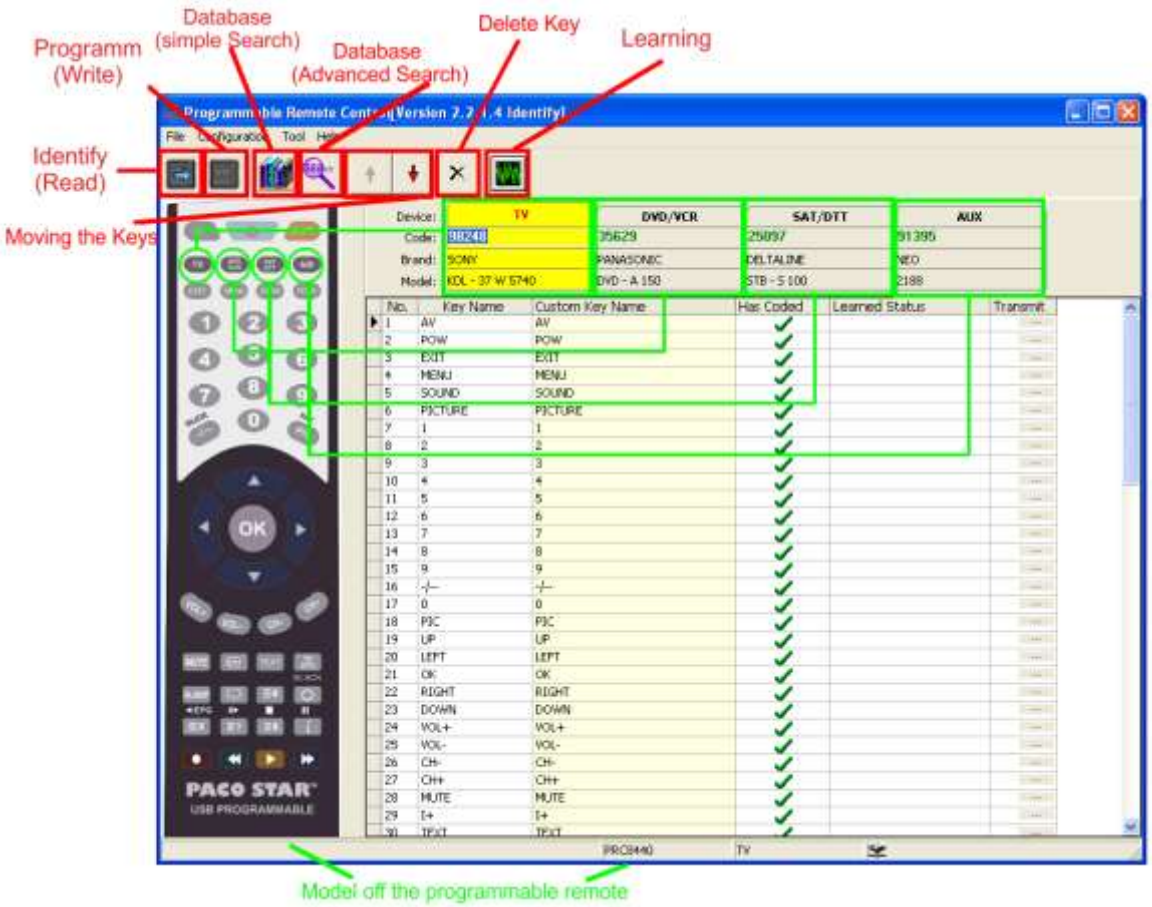
1.1. **Software**

"Programmable remote control" is a program which allows reading and copying every kind of IR remote controls. It has a big data base of original remote controls (if your original remote control is damaged or missing). It helps for coalescence the remote controls of all domestic technics.
The program works on personal PCs with Windows installed.

- **PC hardware request:**
  - CPU: 800MHZ and above
  - RAM: 256Mbytes and above
  - Hard disk, 4G bytes and above
- Operation system: Win 2000,Windows XP, Windows Vista, Windows 7.

1.2. Instructions for installation of the program.

Run the program from CD-ROM by double-clicking with the mouse and follow further instructions from the program. Answer with "NEXT" and "OK". It is usually installed in the folder C: \ Program Files \ Pacostar \ Programmable remote V2 and set a screen for quick launch icons named "IR Programmable Remote Control" and "USB Programmable Remote Control".
This training will use "USB Programmable Remote Control". Click twice on the icon with the mouse to start the program.



Picture 7

2. USB Remote control

This kind of remote looks same as universal remote control or learning remote control. It combines all functions of universal and learning remote controls.
It can be programmed with any code of any device. Because its buttons can be programmed with any kind off information, you can design any kind of remote control with any kind off data to replace original remote.

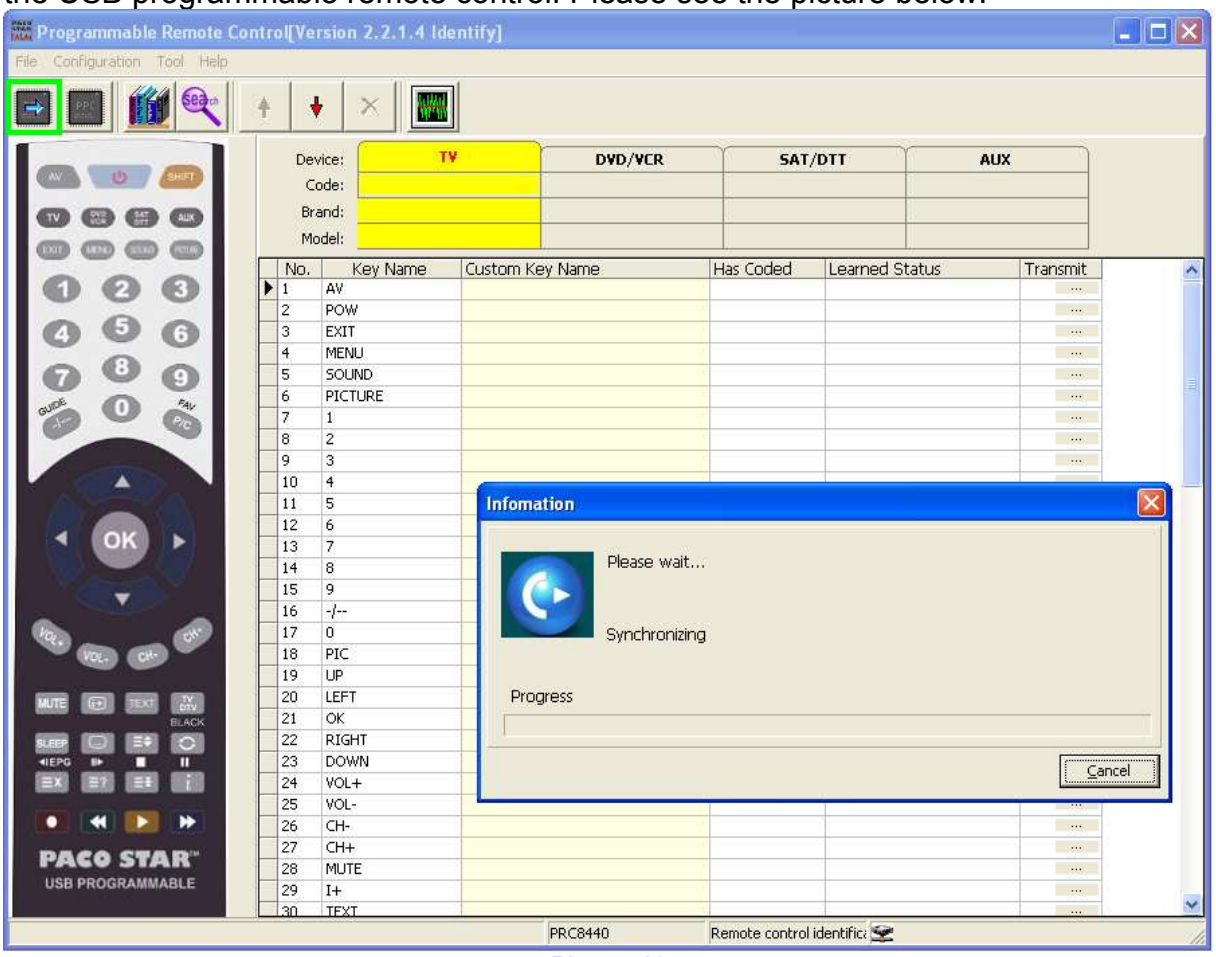
Picture 8

3. Identify(Read)

Please connect the remote to computer and start the software.

Picture 9

When first using or after programming, it can be identified by PC software and read back the content in the programmable remote control. When first you start the program you can press the Identify button to read the model and content off the USB programmable remote control. Please see the picture below.



Picture 10

After identify, the photo and model of the programmable remote control will be identified to correct model and photo, the content of the programmable remote

control will be read back and displayed in the software as above diagram, including Code, Brand, Model and key code info.

For V2 version, after identify, the photo and model of the USB programmable remote control will be identified to correct model and photo, the content of the programmable remote control will be read back and displayed in the software as above diagram, including Code, Brand, Model and key code info.

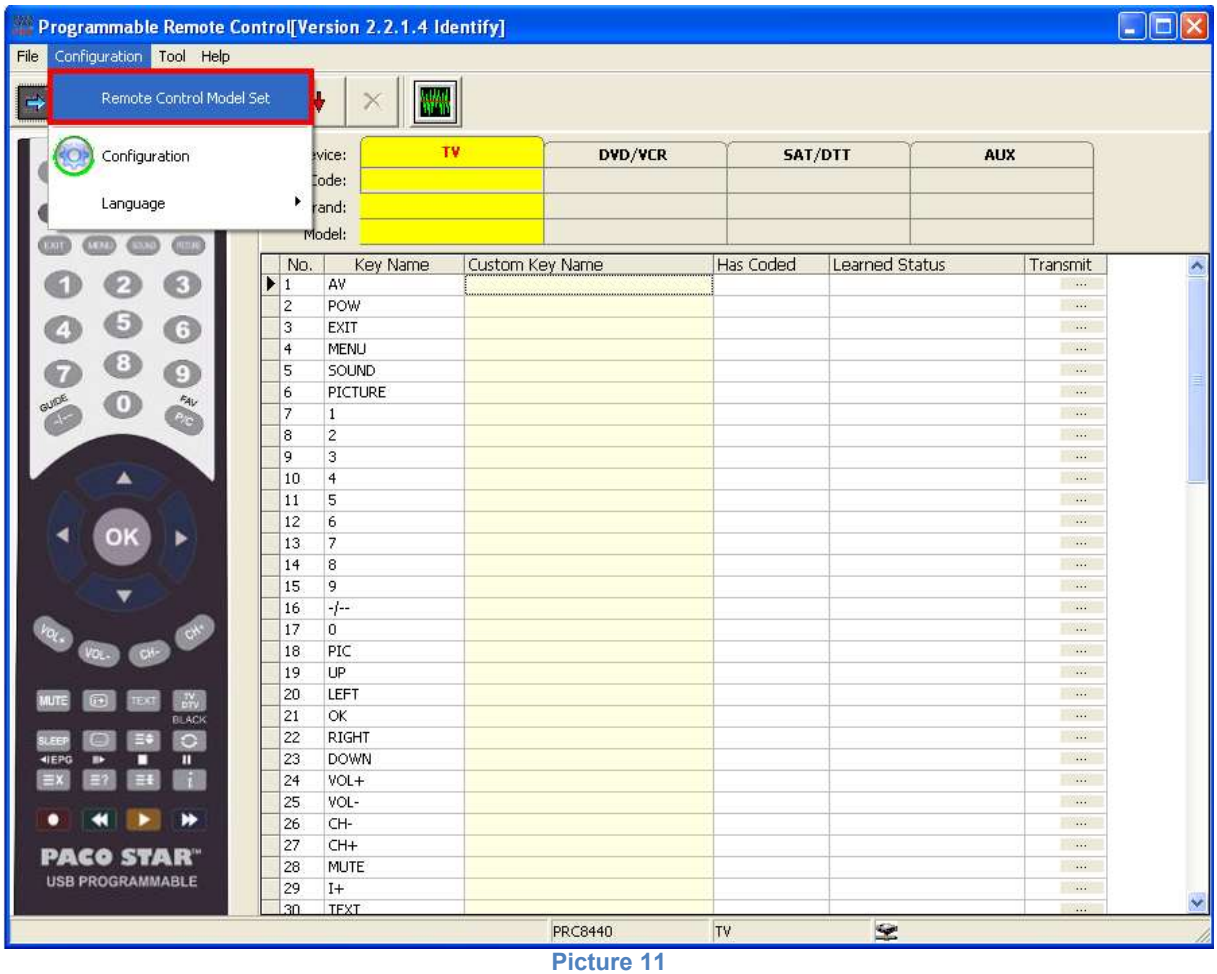
If there is a data recorded in the remote control, during the identification will be shown in which bank what information there is. In the image below, all four banks are filled.

Before programed, the model of the USB programmable remote control should be selected or identified.

For the older version V1 version, it has to be selected by hand. Please see below diagram.

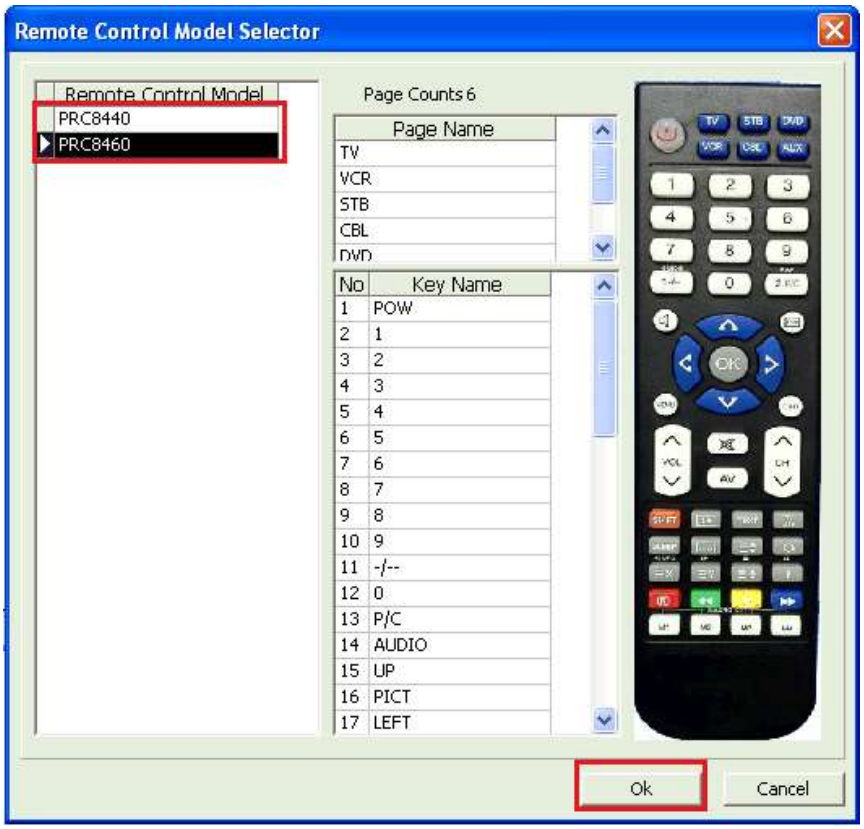
The model of the programmable remote control can be set manually

in the Configuration menu and submenu "Remote control Model Set"



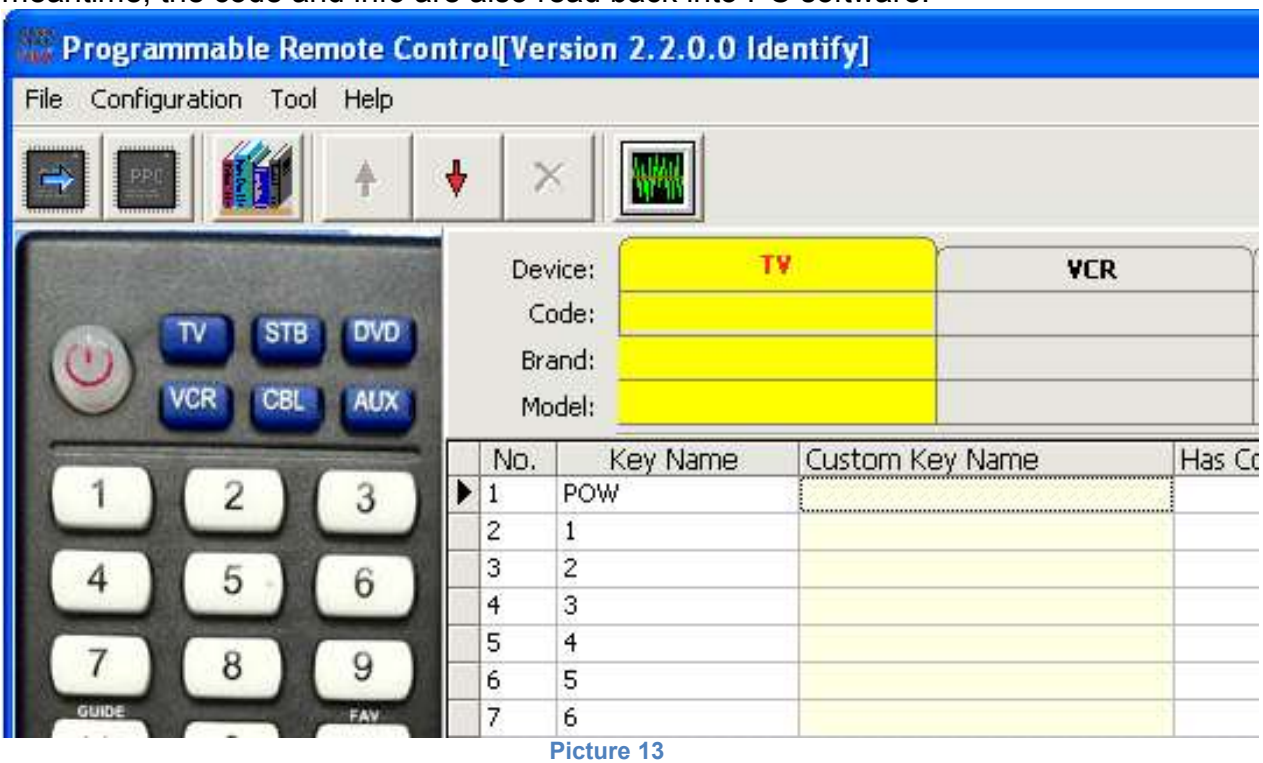
Picture 11

The model of the programmable remote control is selected and manually set from here.



Picture 12

For V2 version, it can be identified by software and adjusted to correct model and photo. Before using, the model is PRC8440 as above photo, if you use PRC8460, after using, the remote model and photo will be changed to below photo. In the meantime, the code and info are also read back into PC software.

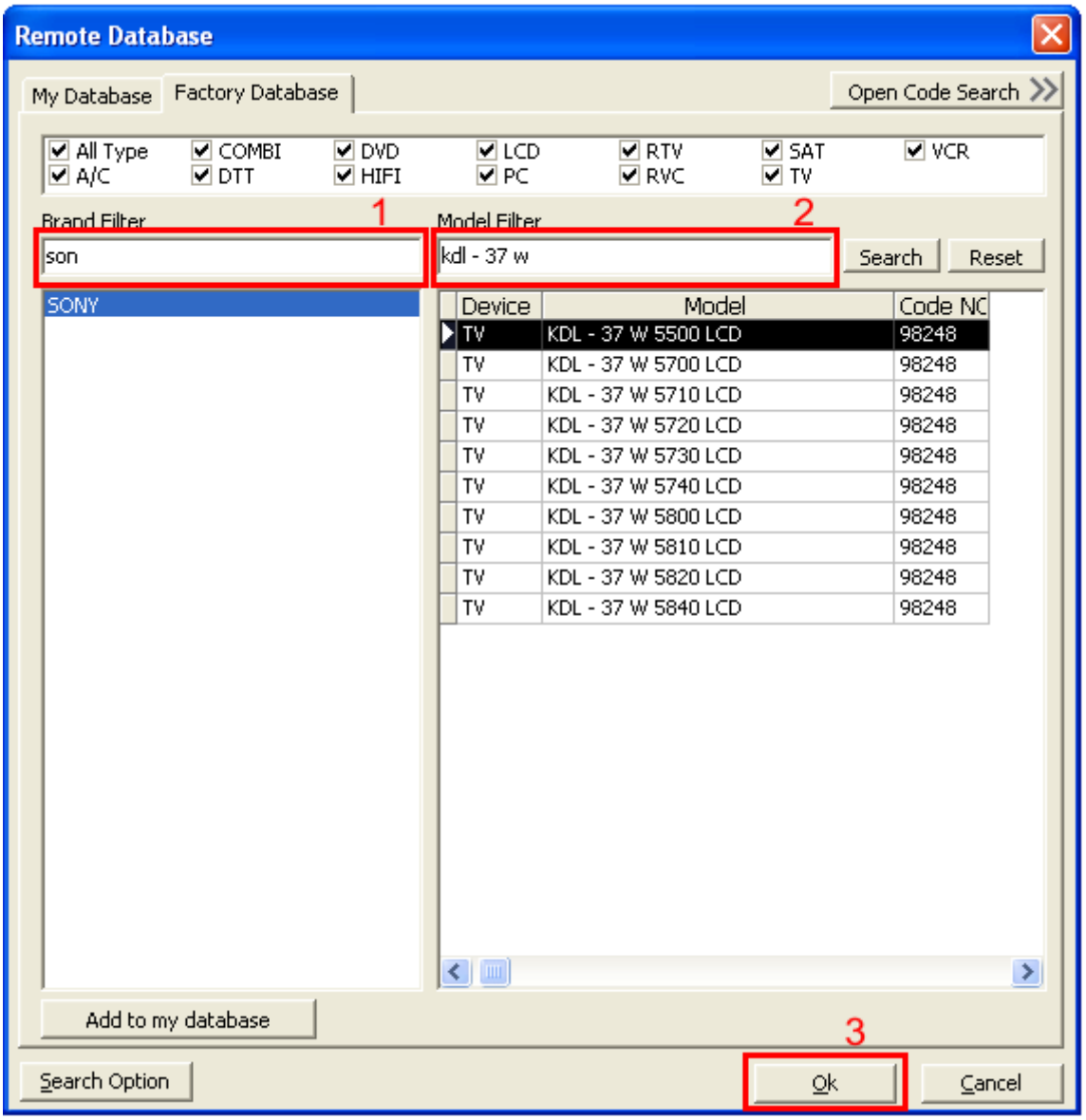


Picture 13

4. Code adding (simple search)

Once you have determined the type of programmed remote, proceed to charge the information banks (TV, DVD, SAT, and AUX).

A) Please see the image above and choose the third icon - "Database" button in the menu. Once you press the lower submenu appears
Than you can enter information of your device in the filters.



Picture 14

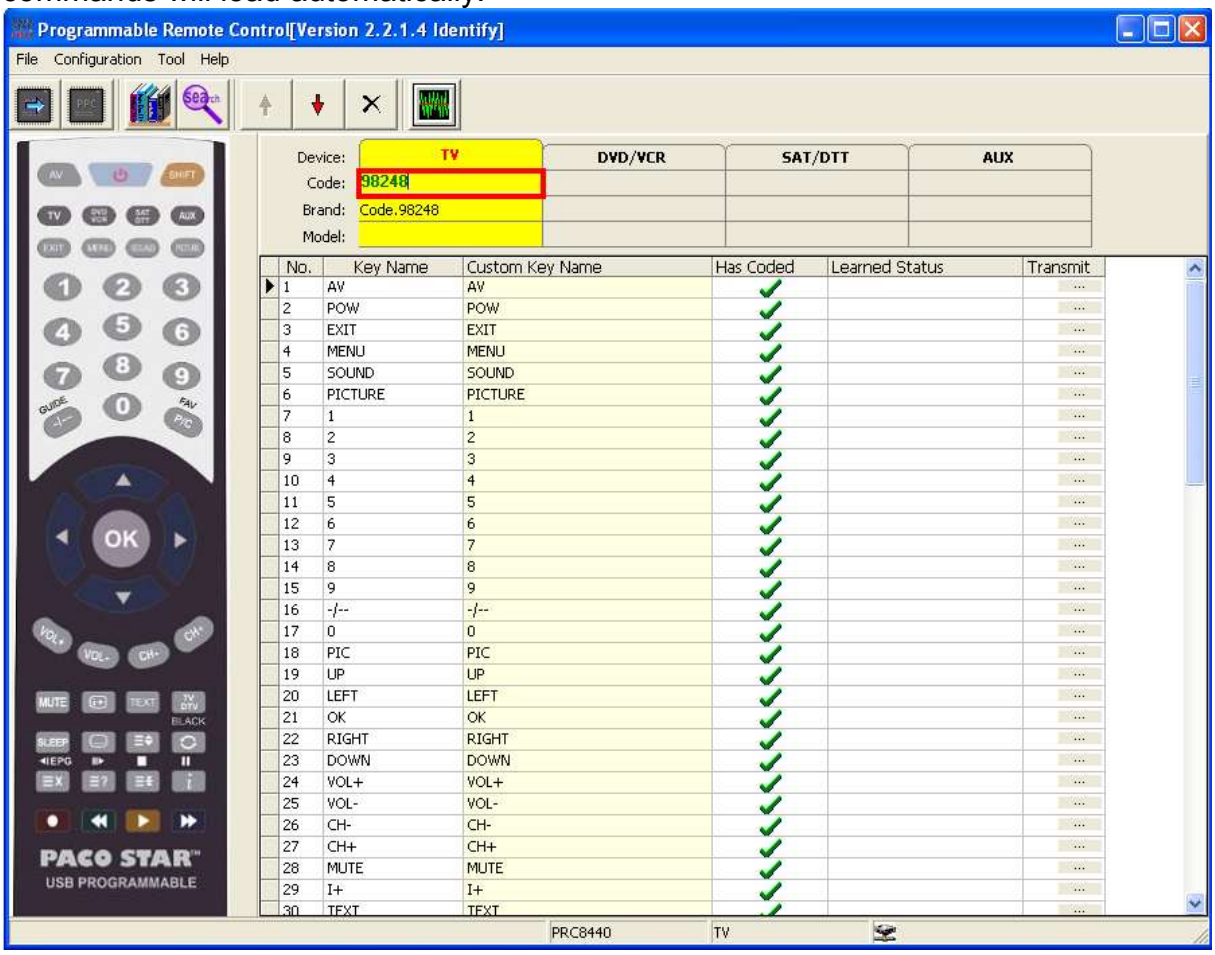
(1) Filter brands - Enter the brand of the device. (for example SONY)
(2) Model Filter -Enter the device model. (for example KDL - 37 W 5740)
(Some remotes have written a model of them so you can try to entering the initials(digits) that are on the remote).

(3) Press "OK" for confirmation (optional).
Once you have found the brand and the model of the remote you are looking for, select OK.
This way you can choose a code for every device, as it is shown above- TV, VCR/DVD, SAT and AUX.
After you press “TV”, “VCR/DVD”, “SAT” and “AUX, the chosen field becomes yellow. In the procedure above you charge the others “VCR/DVD”, “SAT” and “AUX”

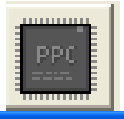
In the four cells can be placed in different types of devices. For example, two TVs and two receivers (TVs "TV" and "VCR / DVD") (receivers in "SAT" and "AUX"). You can do all sorts of combinations.

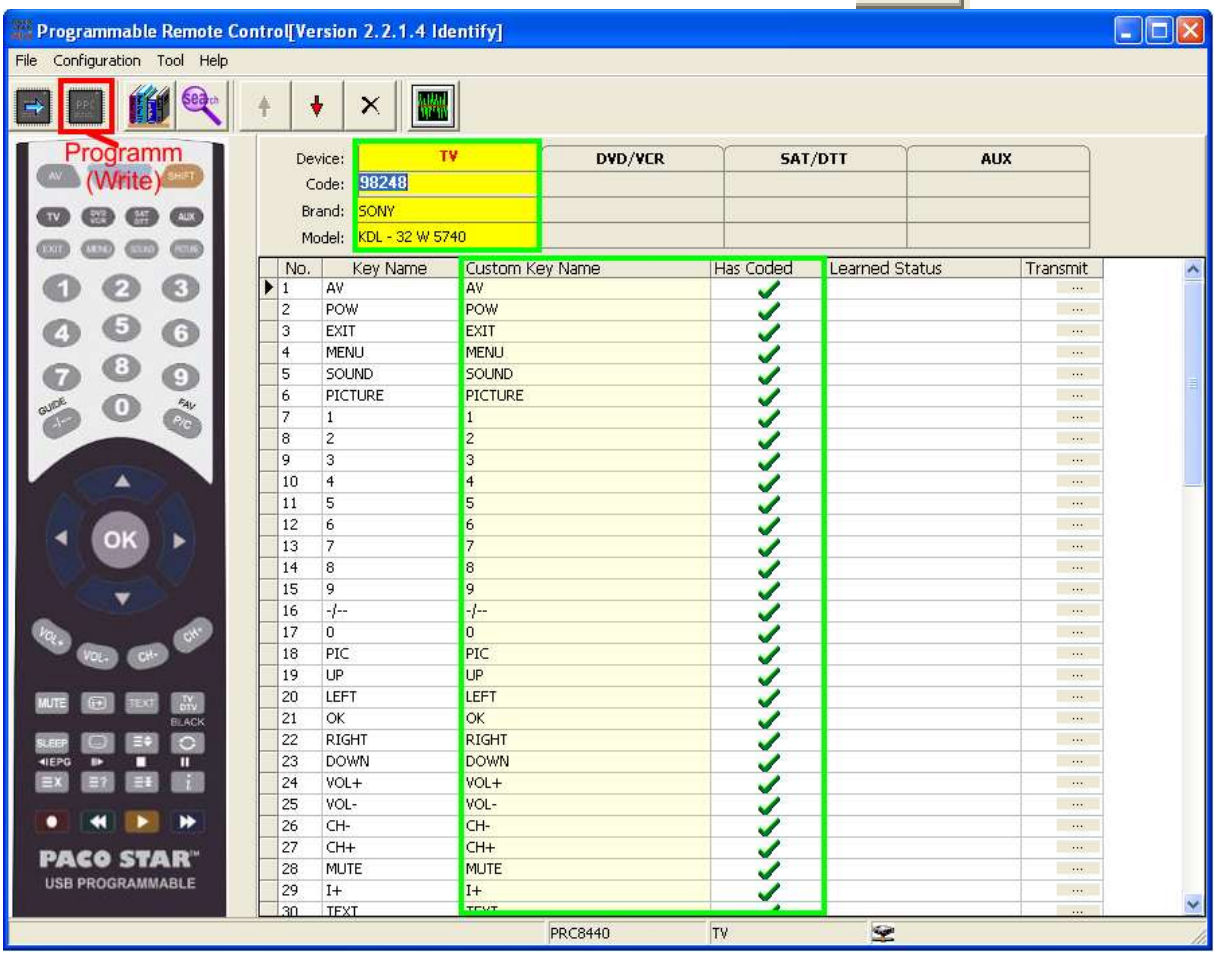
B)Direct entering of the code

If you know the code number, you can enter it directly(in the cell “CODE”) and table commands will load automatically.



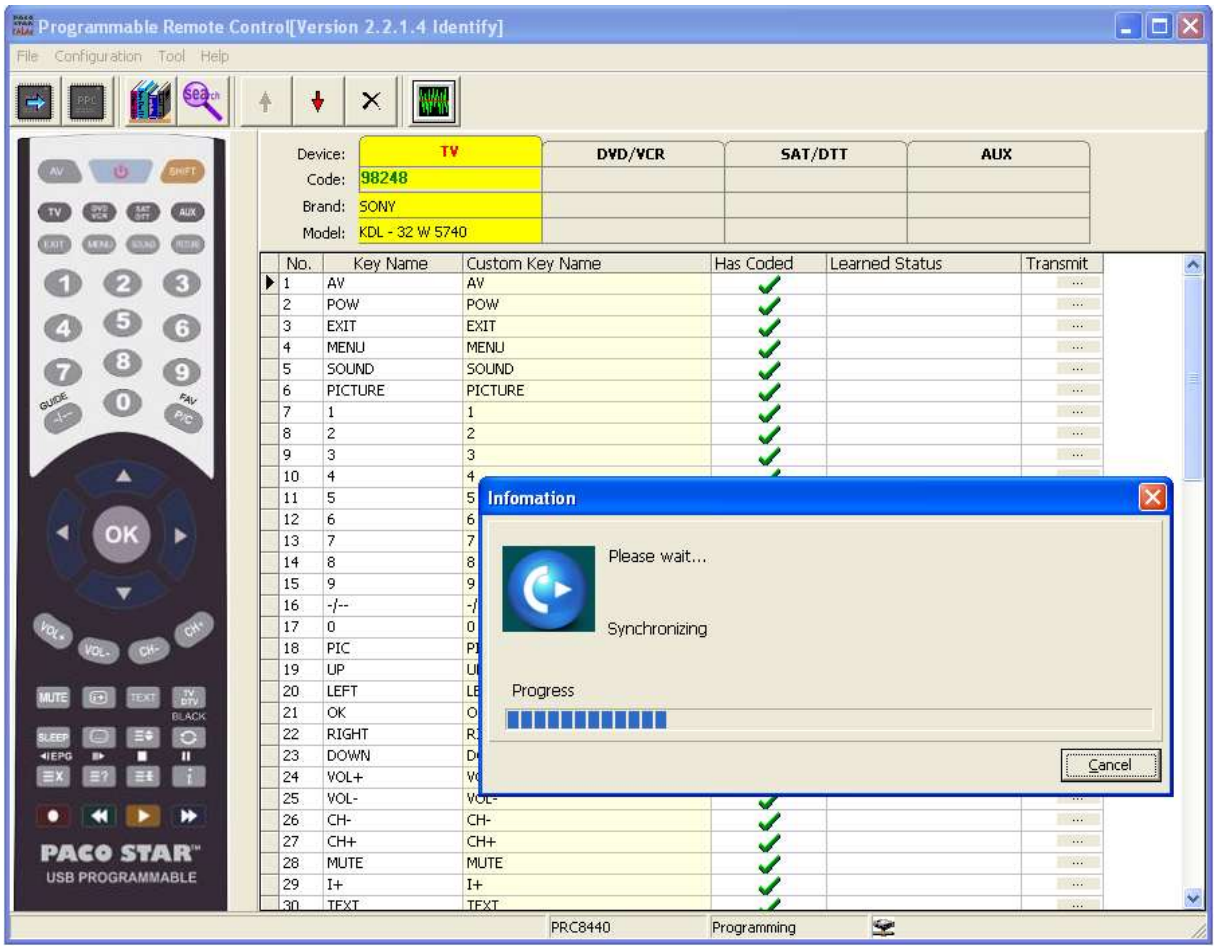
5. Programm(Write)

Before the remote control is being programmed, you choose the model of the programmable remote or it is identified. The remote you are going to program and the picture on left of the program have to be the same. Otherwise the buttons will mismatch.
Once all codes are selected, press the "Program" button  (or F9) .



Picture 15

The information below appears.



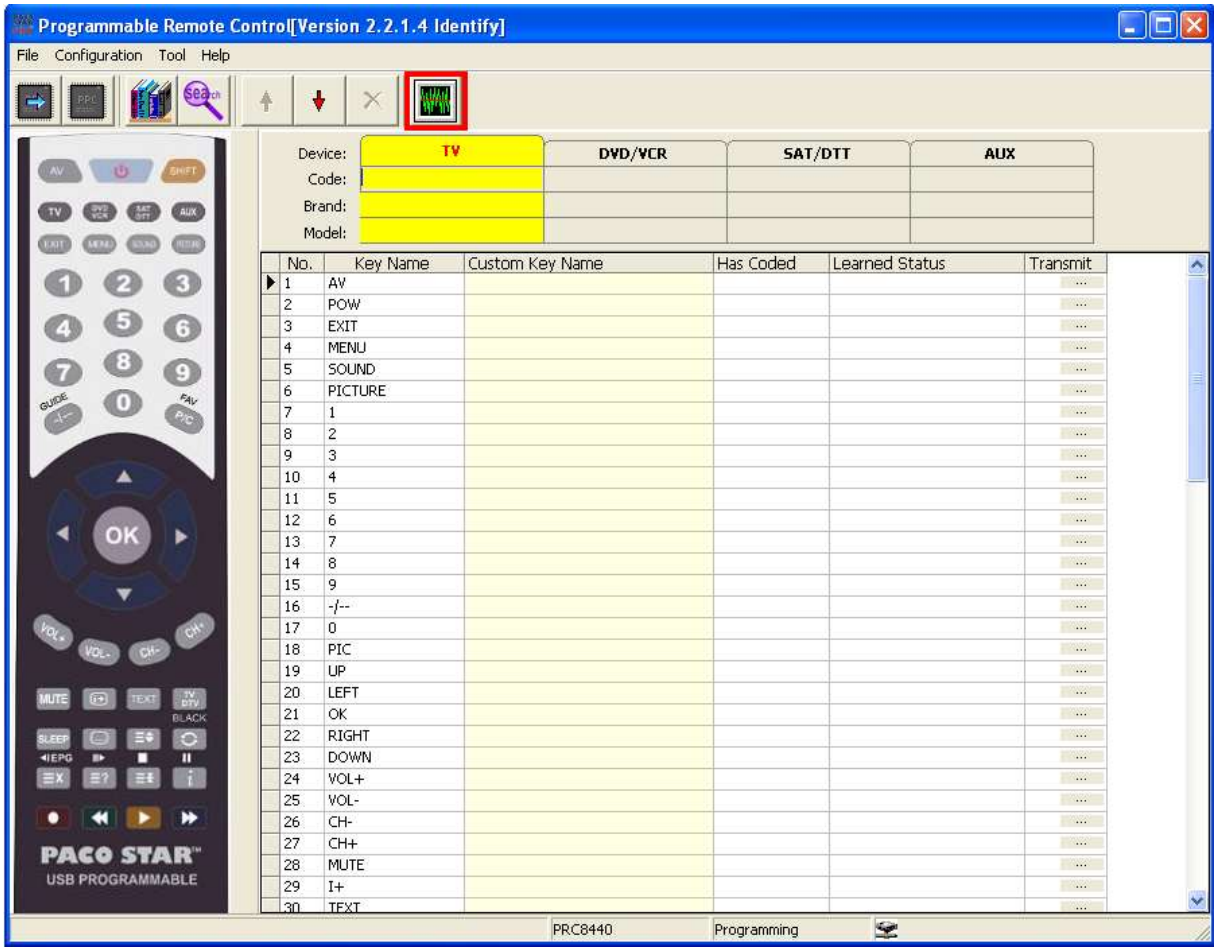
Picture 16

Once the transfer is completed, programming (writing) has been successfully completed

To check whether the information is entered correctly you can click the “Identification” button and repeat the operation in section 4

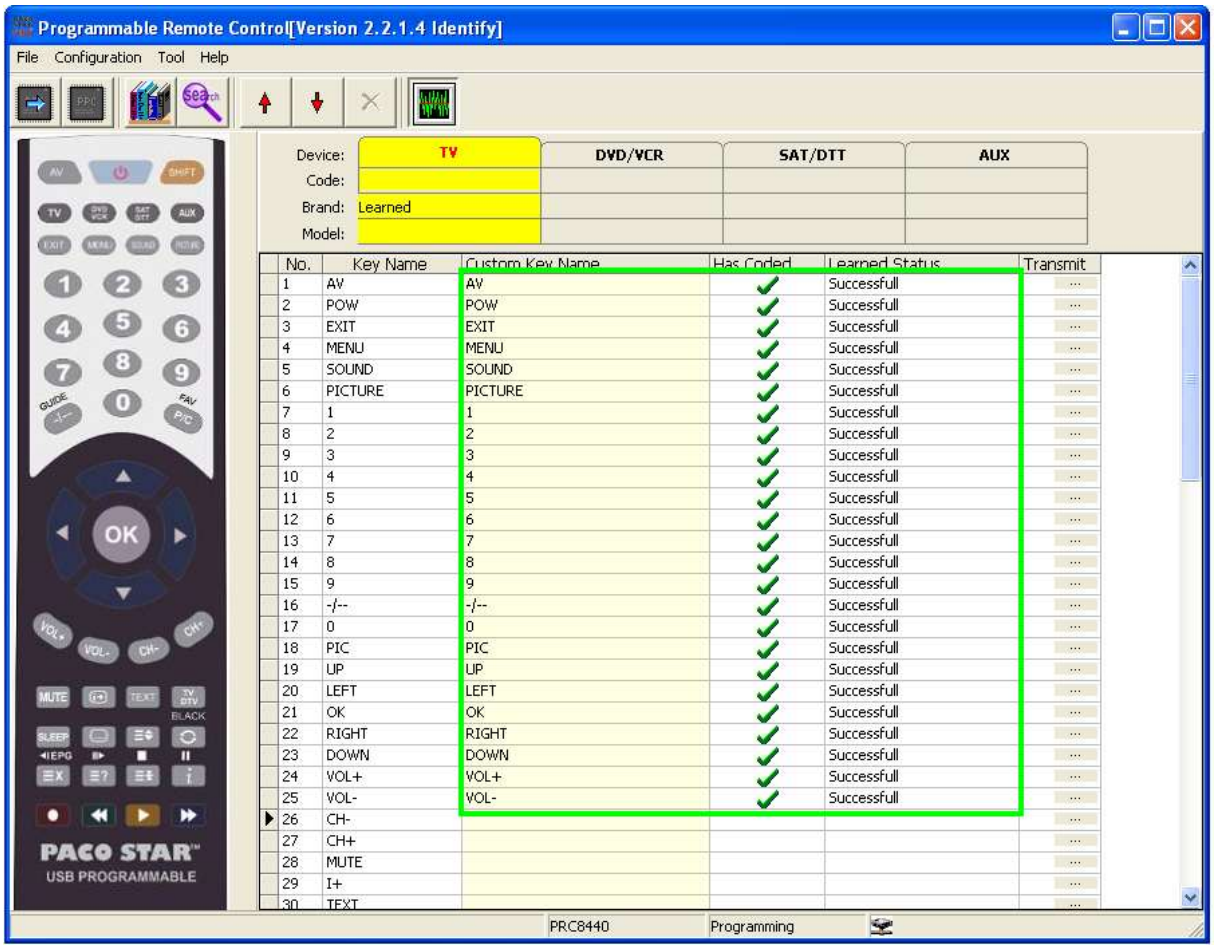
6. Code Learning (reading of new original remotes)

1) To enter in Learning mode press the Learning button, as shown below.



Place the original remote control toward the programmer, leave 2-10cm.

3) Then place the cursor in the writing field of the button, you would like to learn and press the button of your original remote (you click over the 1 power and the field becomes black then you click the POWER button on your remote control).
The computer receives a signal with a code saved in advance and will reproduce the status of the outcome of learning.
If the learning of the original remote control button is successful, in the active button field a green check mark appears and is written “Successful”.



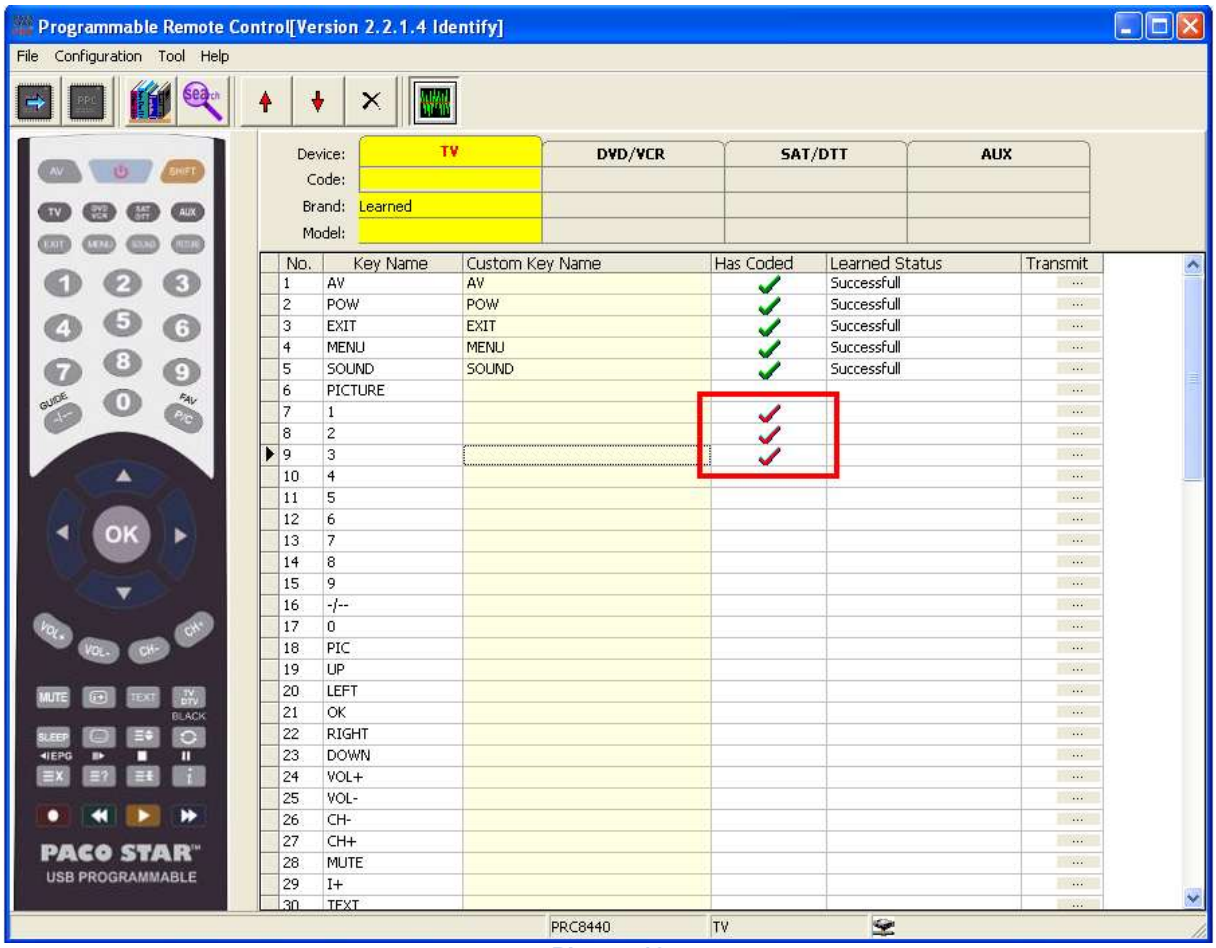
Picture 17

If the button is read correctly it will show "Successful" and will pass on to the next button (in this case AV). Press the "AV" on your original remote. Continue this way until you read all the buttons of the original remote.

4) To exit Learning mode, please press the "Learning mode" button again. You can push some of the buttons of the original remote in front of the programmer, so it can quit this regime faster.

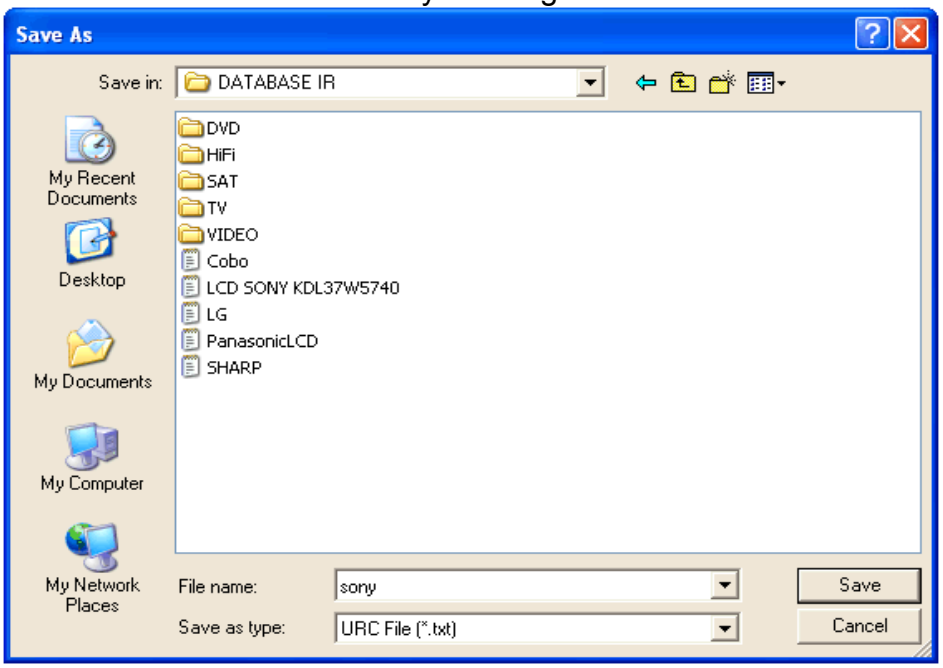
If the reading of the original remote control button was successful, in the field “Active button”, a green check mark appears and writes “Successful”.

If the result shows up as in the red rectangle(the image below), this means that the learning didn’t pass successfully, or that currently the code from the original remote cannot be programmed.



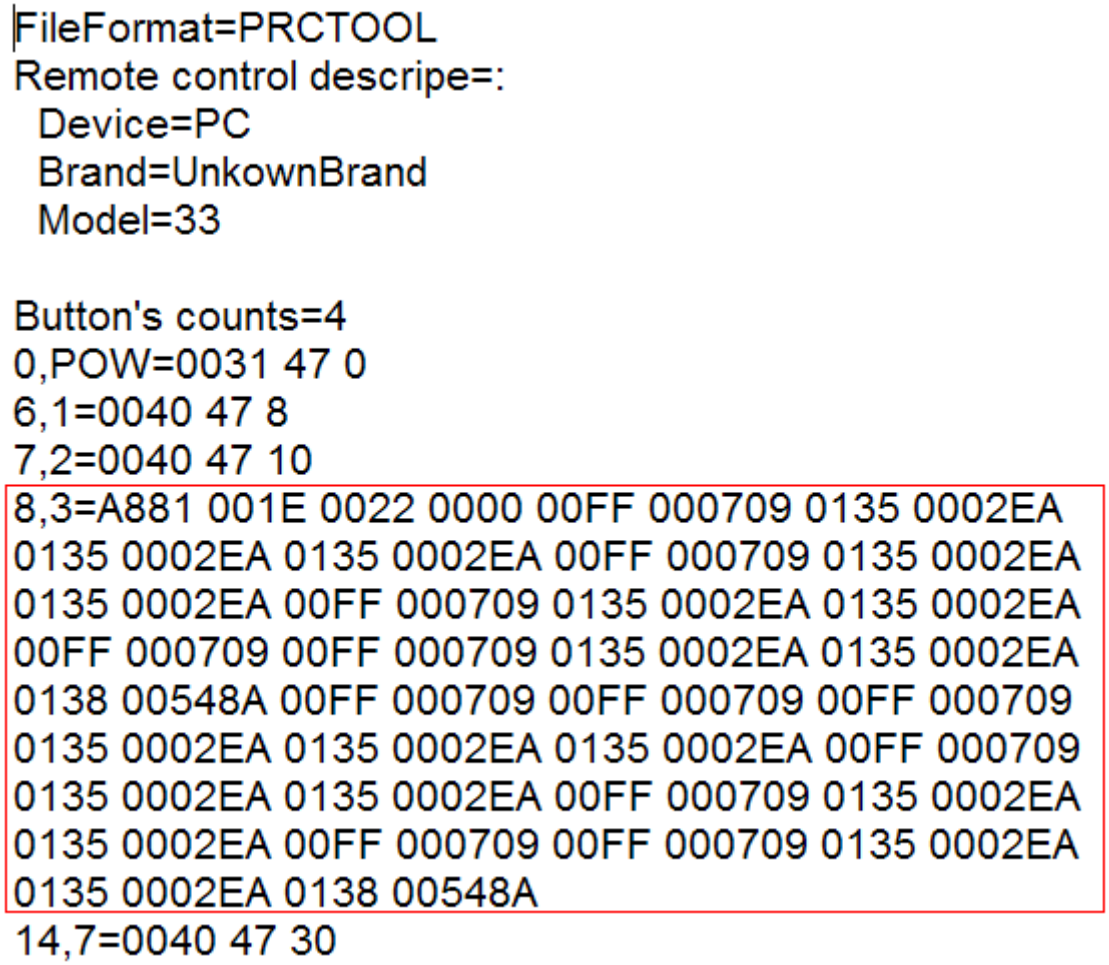
Picture 18

The learning result can be output to hard disk. Let us see the sample result in install directory C:\Program Files\Pacostar\Programmable remote V1 or C:\Program Files\Pacostar\Programmable remote V2.
The result from the Learned codes can be stored on your computer's hard drive. Let's see the result in the installation directory ... \Programmable remote V2\....



Picture 19

Open the .txt file and its content is similar to the image below.



Picture 20

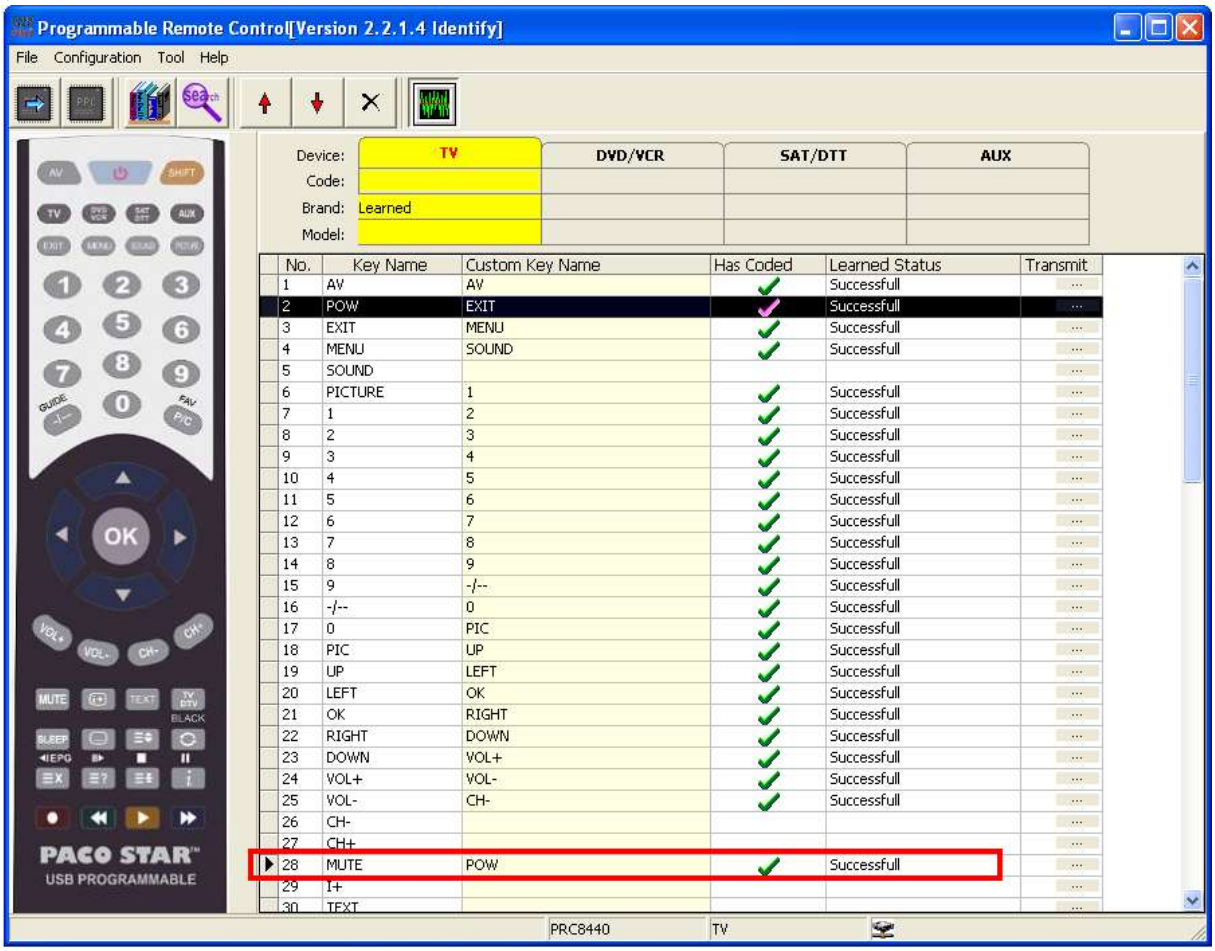
This result in the red rectangle is a kind of IR wave data, which should be processed and then it can be programmed into programmable remote control. It is kind off data protocol which has not been entered into the database yet. For more detail, please browse supplier's website or remote control data center.

5) Key code adjust –

Clients can set off the programmable remote control's buttons.

Software provides you unlimited possibilities for dealing with the functions of the remote. You can change, modify, add, delete buttons and commands from the programmable remote control's buttons. Then press "up" and "down" buttons, and change the position of buttons. Also in the "Customer Name button" in training, you can write the name of the button on your original remote control if it conflicts with the field of the programmable.

v

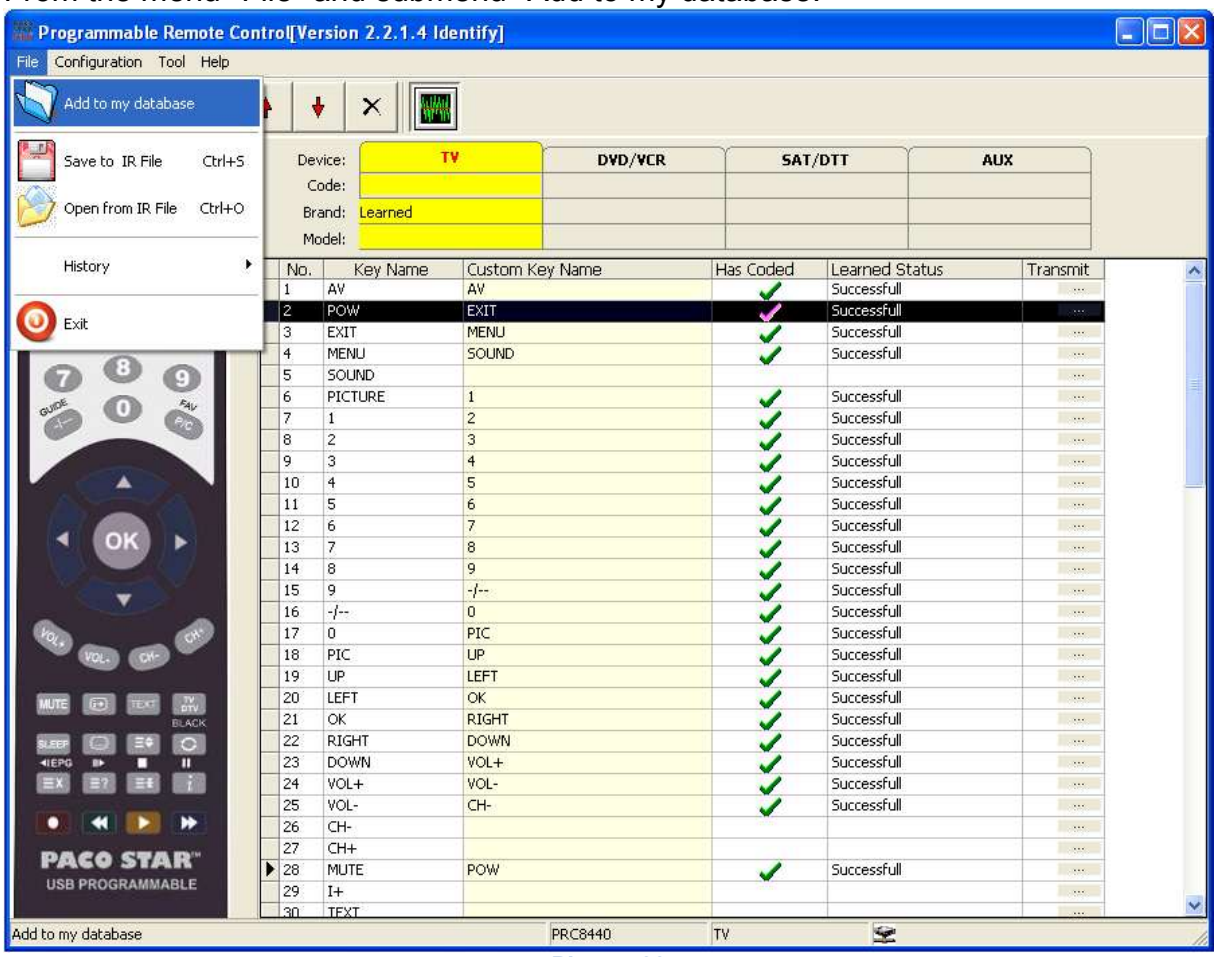


Picture 21

If you'd like to delete some off the buttons, press
After you save the file in text PRCTOOL format you can also change them in text format. The option for editing the code file is recommended for advanced users.

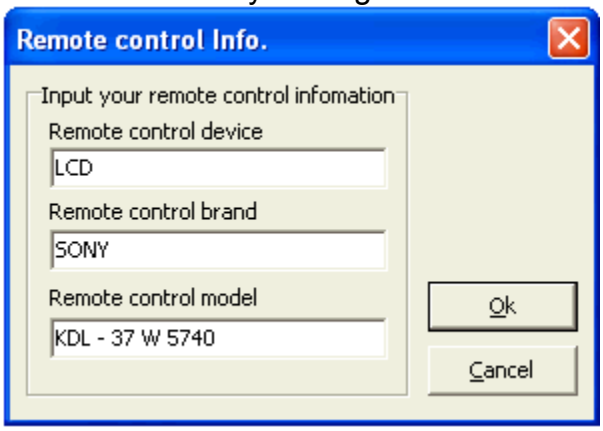
6) Add to my database.

Once the buttons of the original remote control are read (learned), you can add read information to your database.
From the menu "File" and submenu "Add to my database."



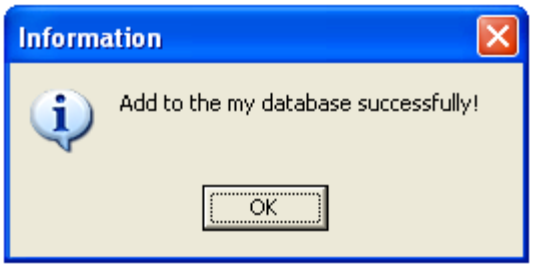
Picture 22

A submenu appears where you must enter information about the original remote that you have read.
Describe the type, brand and model of your original remote control device.



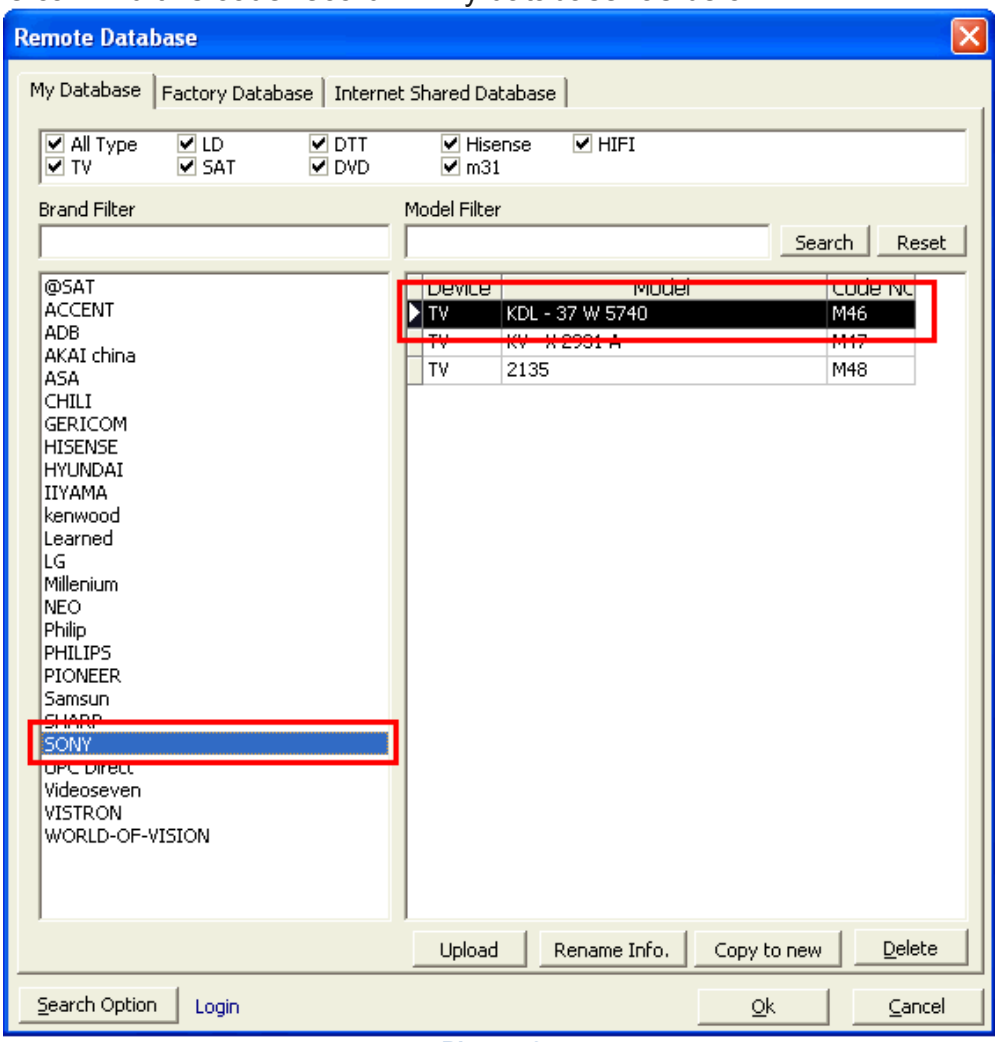
Picture 23

And click OK . Info massage is appears that everything passed successful.



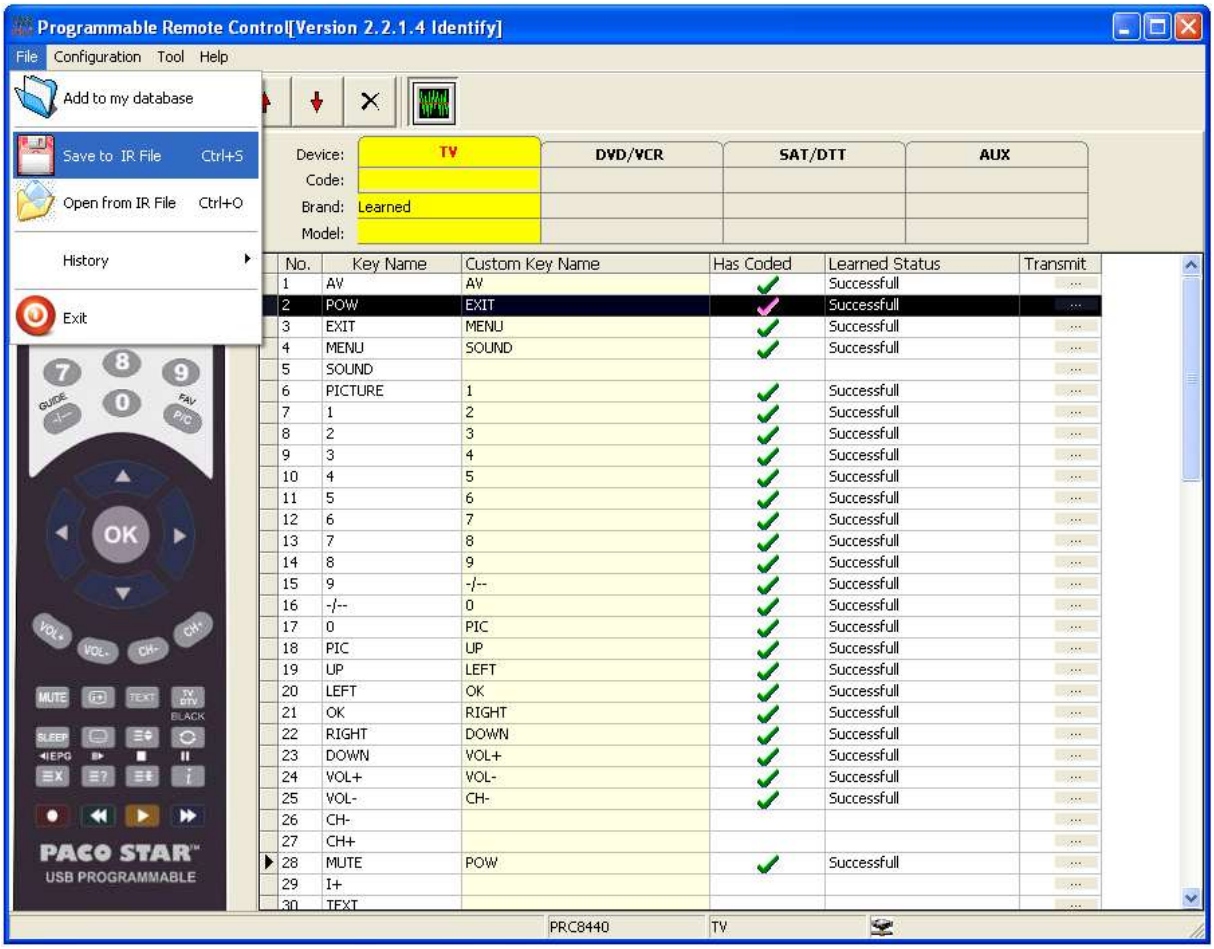
Picture 24

Then, we can find this code record in "My database" as below.



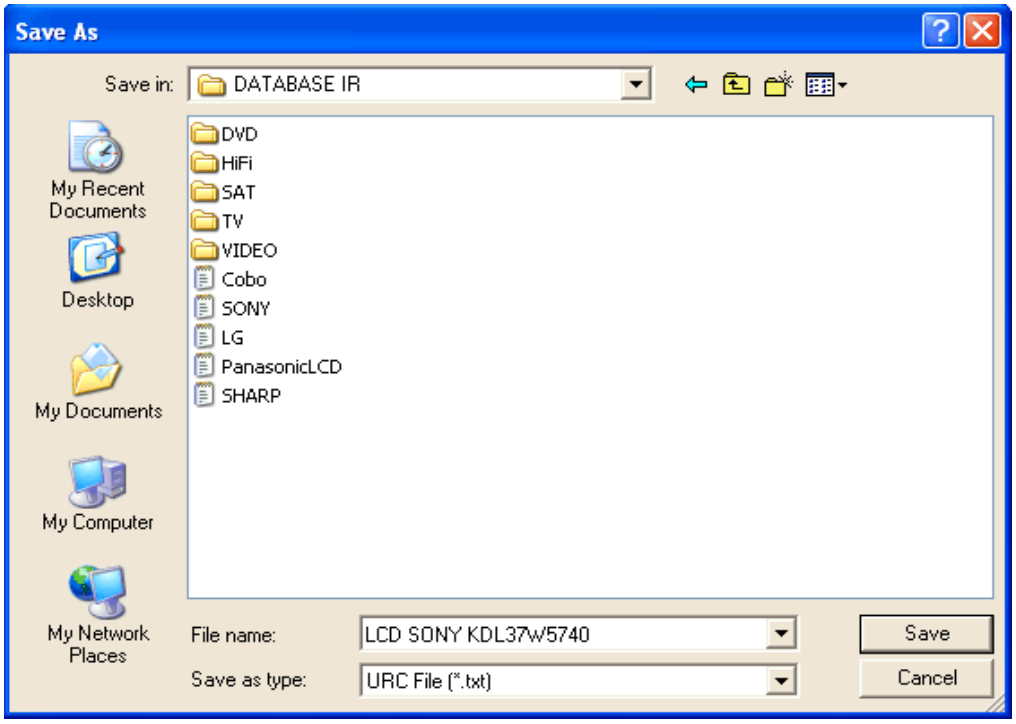
Picture 25

7) Saving learned data to the original remote's information on hard disk.
It is recommended that in addition to adding code to the database, the read code is also stored in a text file.
From the menu choose "File" and submenu "Save to IR file" or (Ctrl + S).



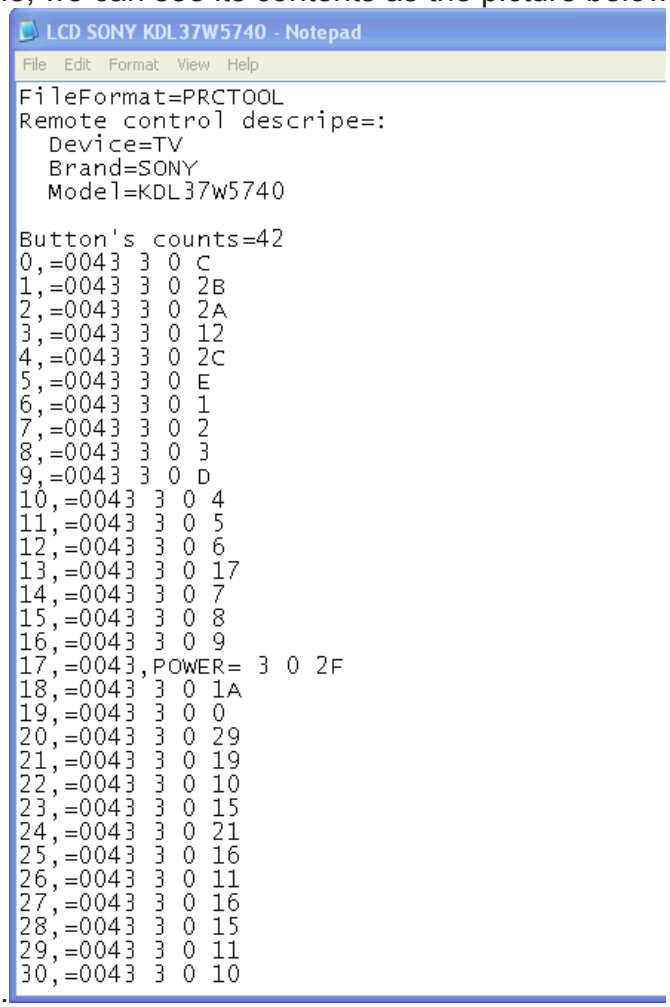
Picture 26

Specify in which directory you want to save the file.
Also set file's name.



Picture 27

Then you can find the saved "LCD SONY KDL37W5740.txt" file in your hard disk. Let's open this txt file, we can see its contents as the picture below.

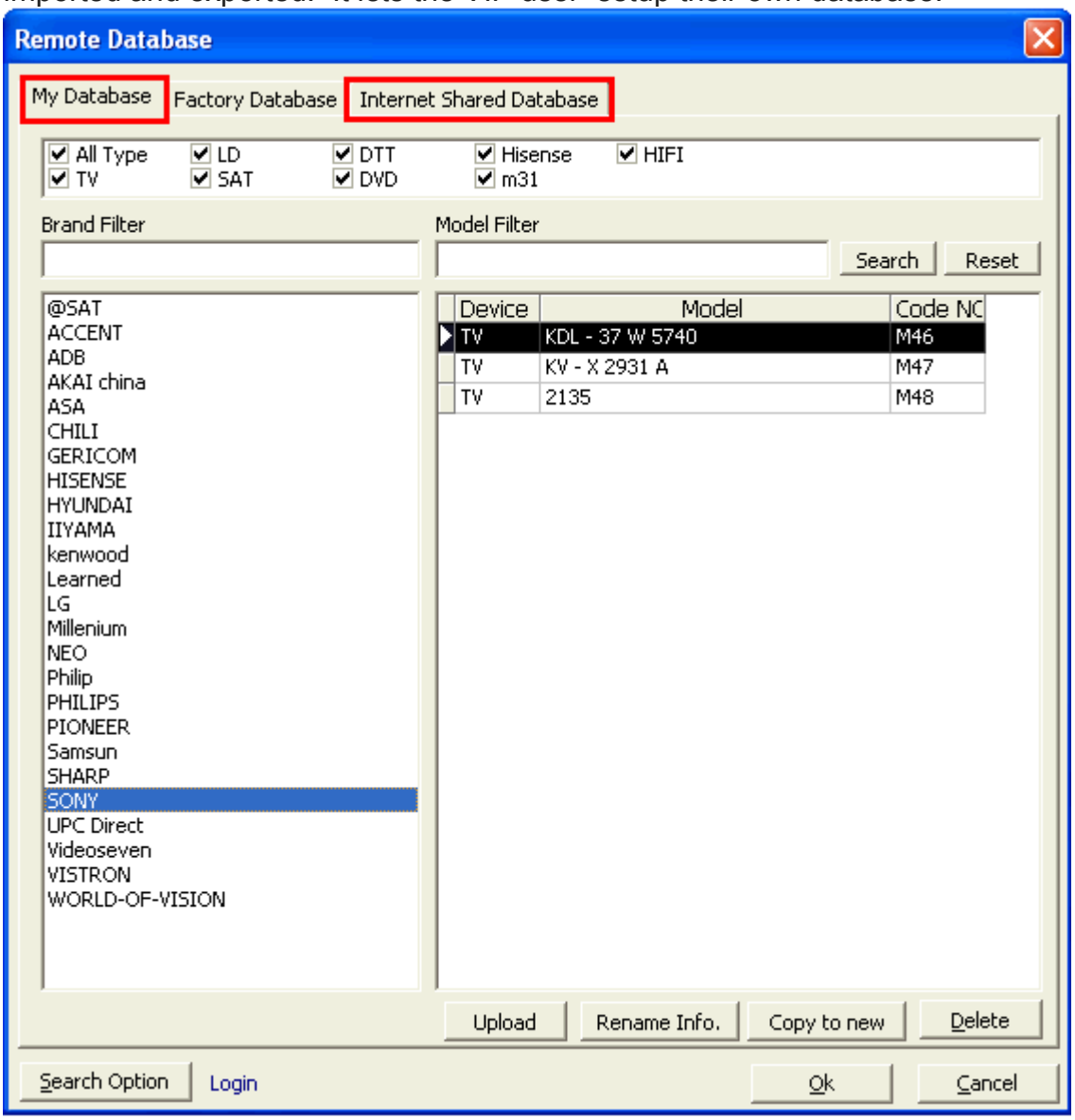


Picture 28

For professional use it is recommended except for the text file in the directory, which the text file is saved, to be added a picture of the original remote. In the example the saving structure of the files is:
D:\DATABASE IR\TV\SONY\ LCD SONY KDL37W5740.txt
The image can be saved in the same directory
D:\DATABASE IR\TV\SONY\ LCD SONY KDL37W5740.jpg
In this way there could be made a visual reference afterwards.
It is recommended that once the text file is saved, to be opened and checked for any different data such as Picture 24.

7. Manage database

The codes in “My database” and "Internet shared database" can be added, deleted, imported and exported. It lets the VIP user setup their own database.



Picture 29

(1) Possible databases - My database, Factory database (internet shared database).
(2) Advanced Search Options - opens the window of functions for automatic and compares searching of remote controls.
(3) Type of technics - Option to select different types of devices (TV, satellite receiver, video, DVD ...)
(4) Filter by brand and model filter. These fields determine the exact brand and model you are looking for a remote control.
(5) Add to my database - after you choose a code from default database, then this button is added to "My Database”
(6) Search Options- The result of the searching is different according to the parameters of settings which you choose in the search menu “Search options”

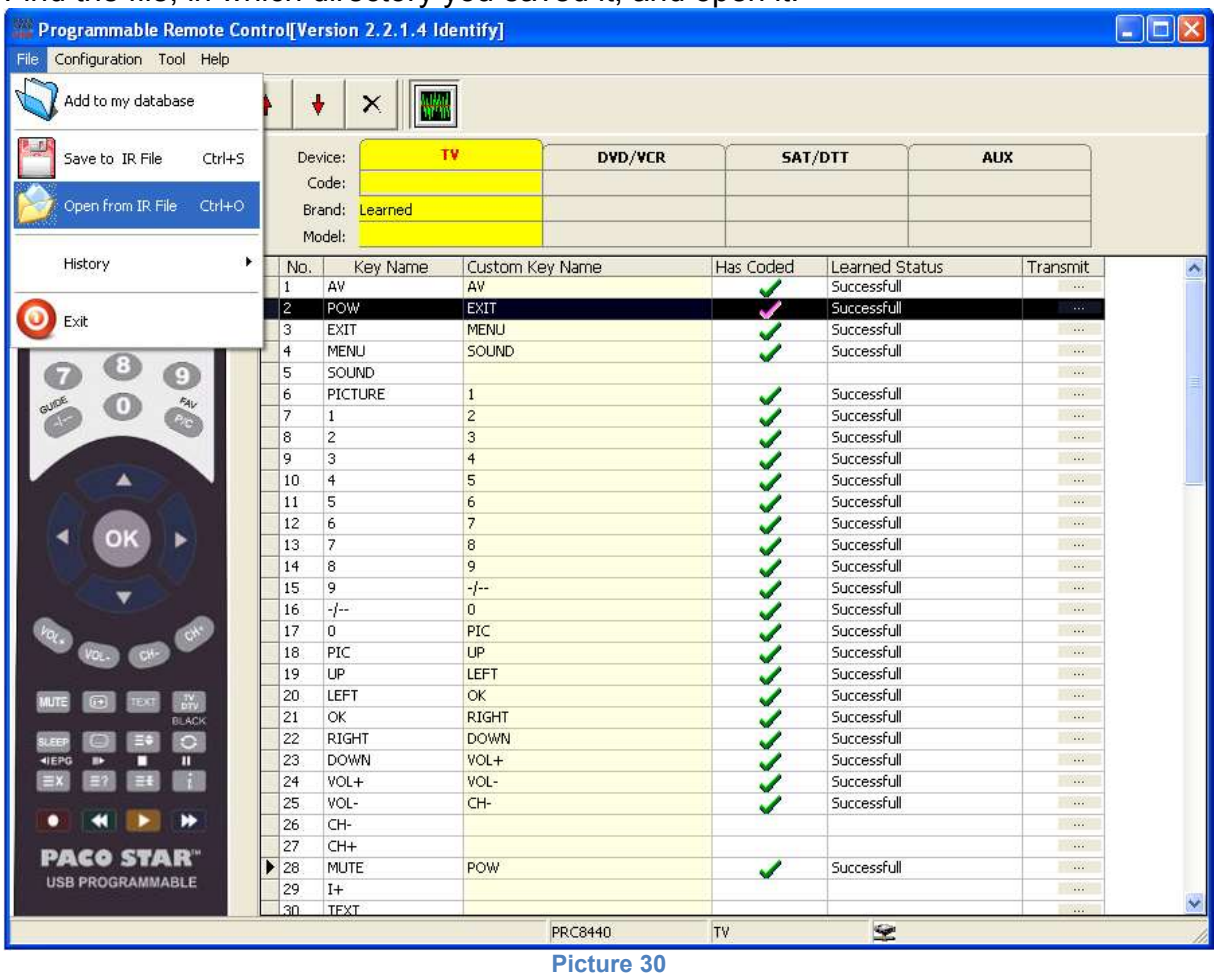
7.2. My database

My database is a library of remote codes that the user has read from the original remote and they can create own database of remotes. Also my database allows remote control editing.

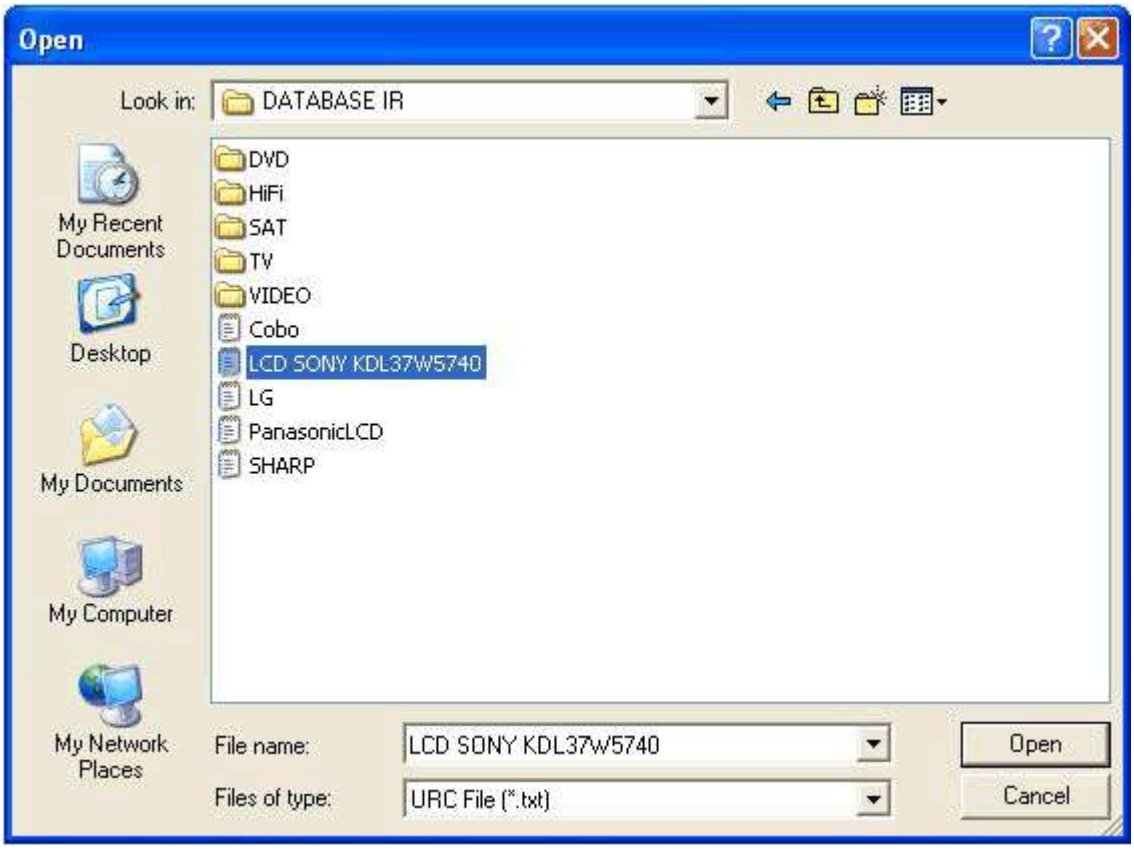
7.2.1. New code in my database, can be added by:

- Computer file(.txt).
- Factory database.
- Internet shared database.
- Learned (Read) codes.

a) Add to my database from IR file.
To do this go to "File" menu - "Open file from IR" or (Ctrl + O).
Find the file, in which directory you saved it, and open it.



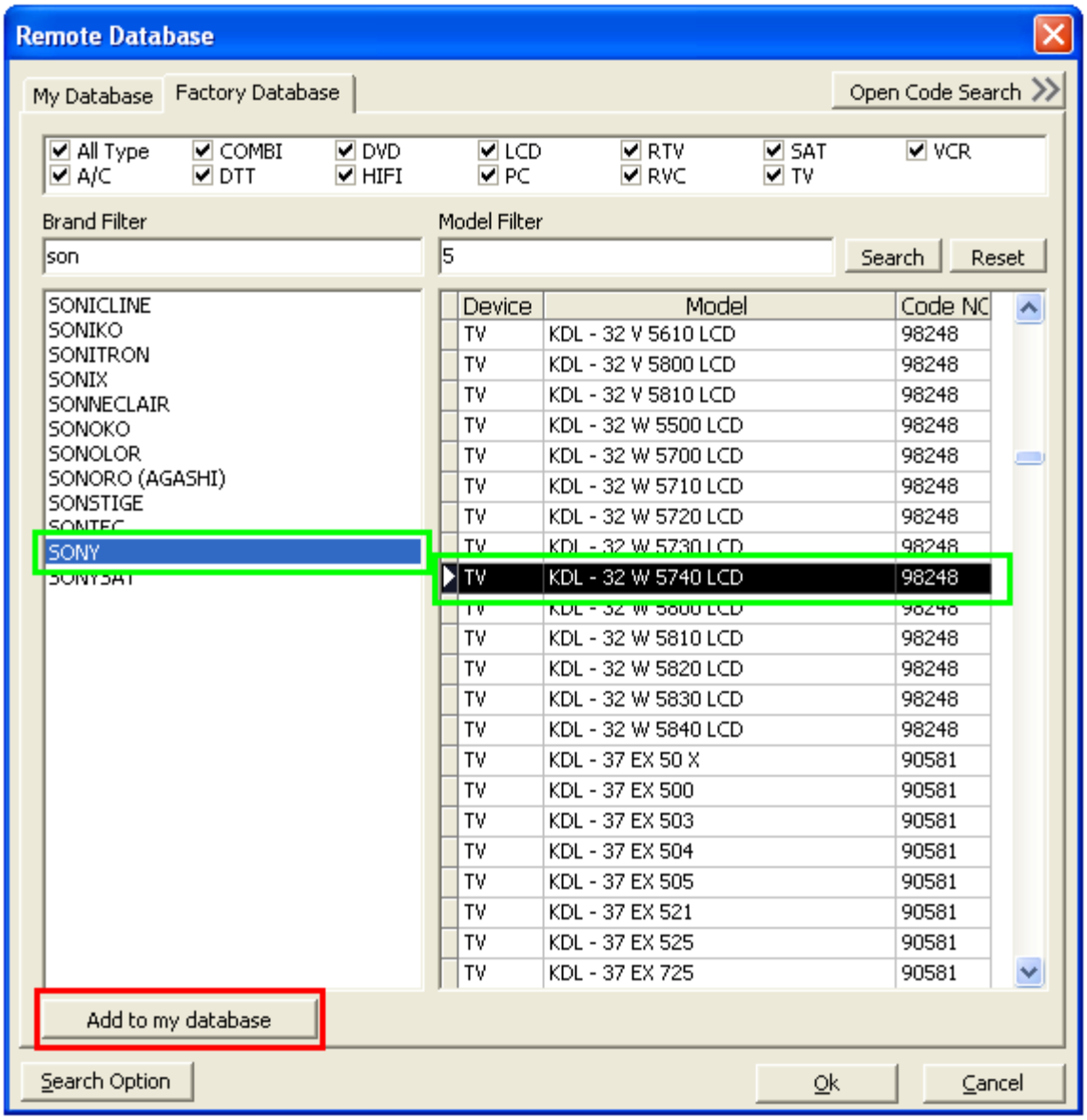
Picture 30



Picture 31

After it's opened the IR file with the before hand saved code and it shows up in one of the banks (TV, DVD, SAT or AUX), go to menu "File" and submenu "Add to my database" .
If everything is successful, you will receive a message that the code has been successfully added to "My Database"

b) Add to "My Database" from the "Factory database", occurs when you load the code into a bank (TV, DVD, SAT, or AUX) and then go to menu "File" and submenu "Add to my database. "Or directly from the factory database after you mark the chosen code and click the "Add to my database" button.



Picture 32

c) Add to "My Database" from the "shared Internet database", occurs when you load the code into a bank (TV, DVD, SAT, or AUX) on "Internet shared database," and then go to the menu "file" and submenu "Add to my database."

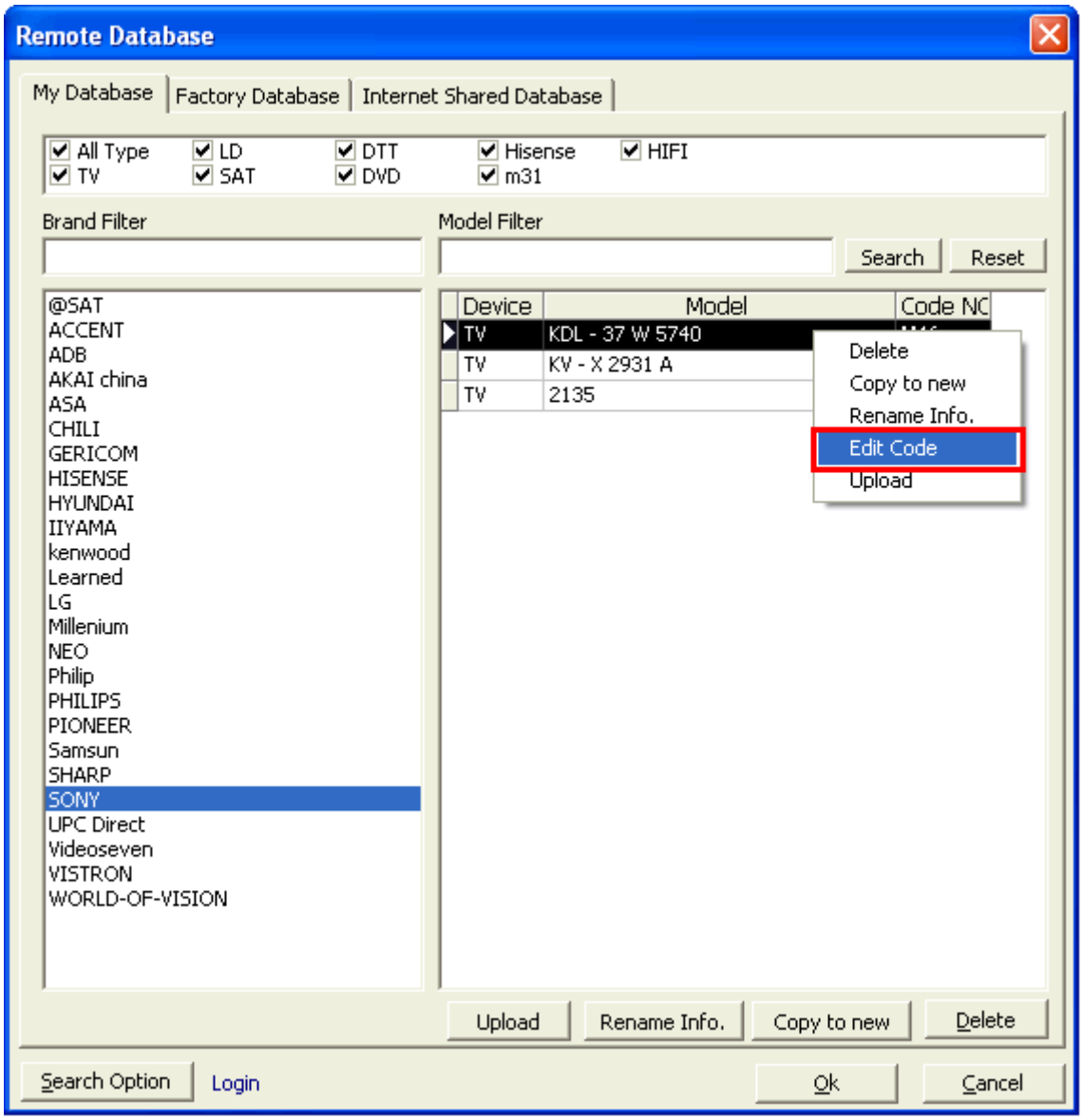
d) Read the data from the original remote.
Read section 6 "reading the data from original remote" to learn how to read data from a remote control function for training software. After having read the buttons on the original remote go to menu "File" and submenu "Add to my database"

7.2.2 Edit the code in "My Database"

Select code (example Sony KDL-37W5740), as in the picture below, press the right mouse button and you will see the following options:

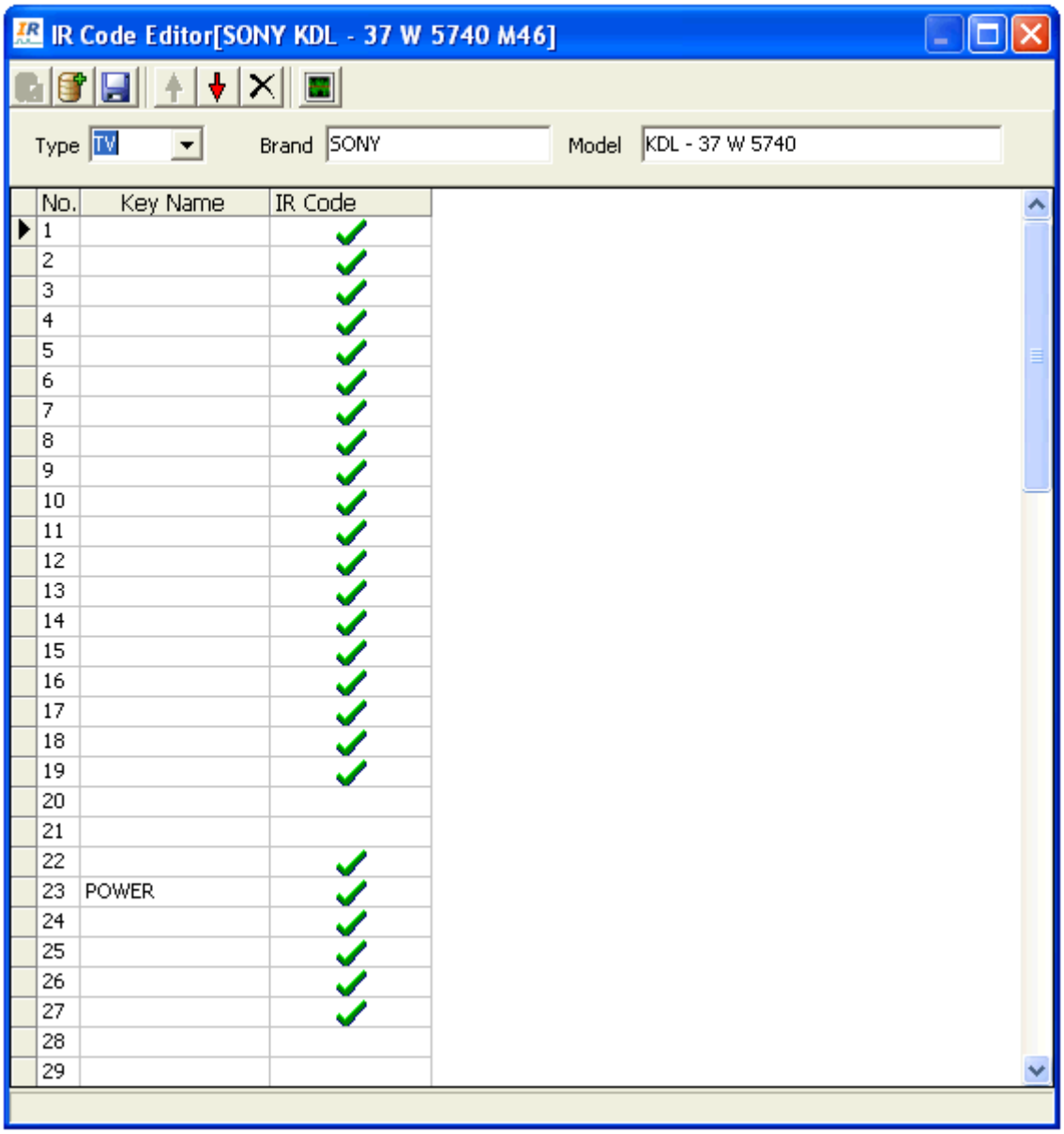
a)Delete- deletes the selected code.
b) Copy to new - copy the code with new information on the type, model and brand of device.

c)Rename info- Renames the selected data source (Device Type,Brand, Model).
d) Edit Code - Edits the selected data source.
e) Upload - Uploads



Picture 33

Edit Code – you can open and edit the code.



Picture 34

There are below functions to edit code.

Save into my database

add to my database

save to IR file(TXT)

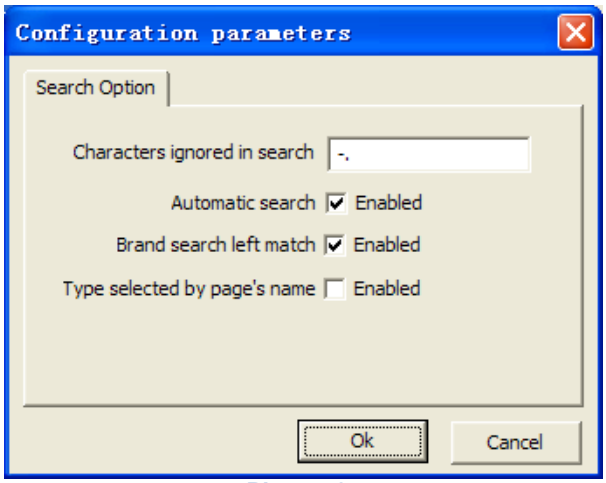
adjust up

adjust down

delete

learning

7.3.Search options (configuration of the filters)



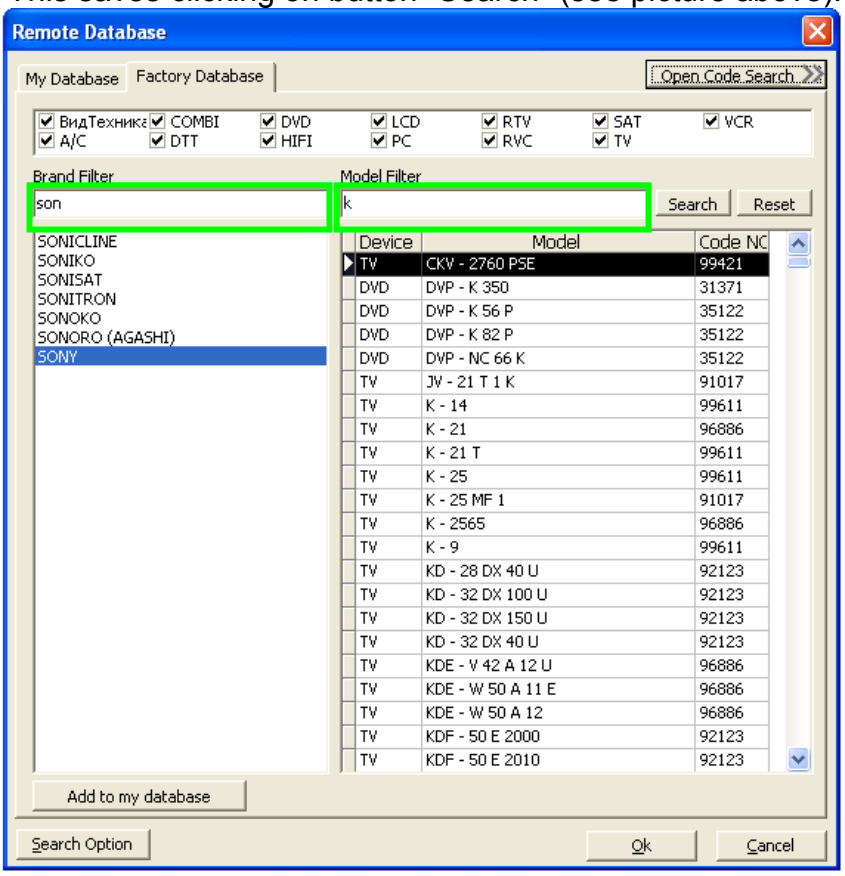
Picture 35

- **Characters ignored in search, this is for Brand filter and Model Filter.**

Symbols and characters that are ignored in search of brands and models (used in brands filter and model filter). Example - dash, slash, etc..

- **Automatic search, means the result will change according to the characters entered if "enabled".**

Automatic search means that results will change as characters are entered, if marked "Active." Example: In search of brands is set "Son", and in the model filter is set "k". It also shows all the devices, which brands begin with the "Son" and contain letter "K" in the model. This saves clicking on button "Search" (see picture above).

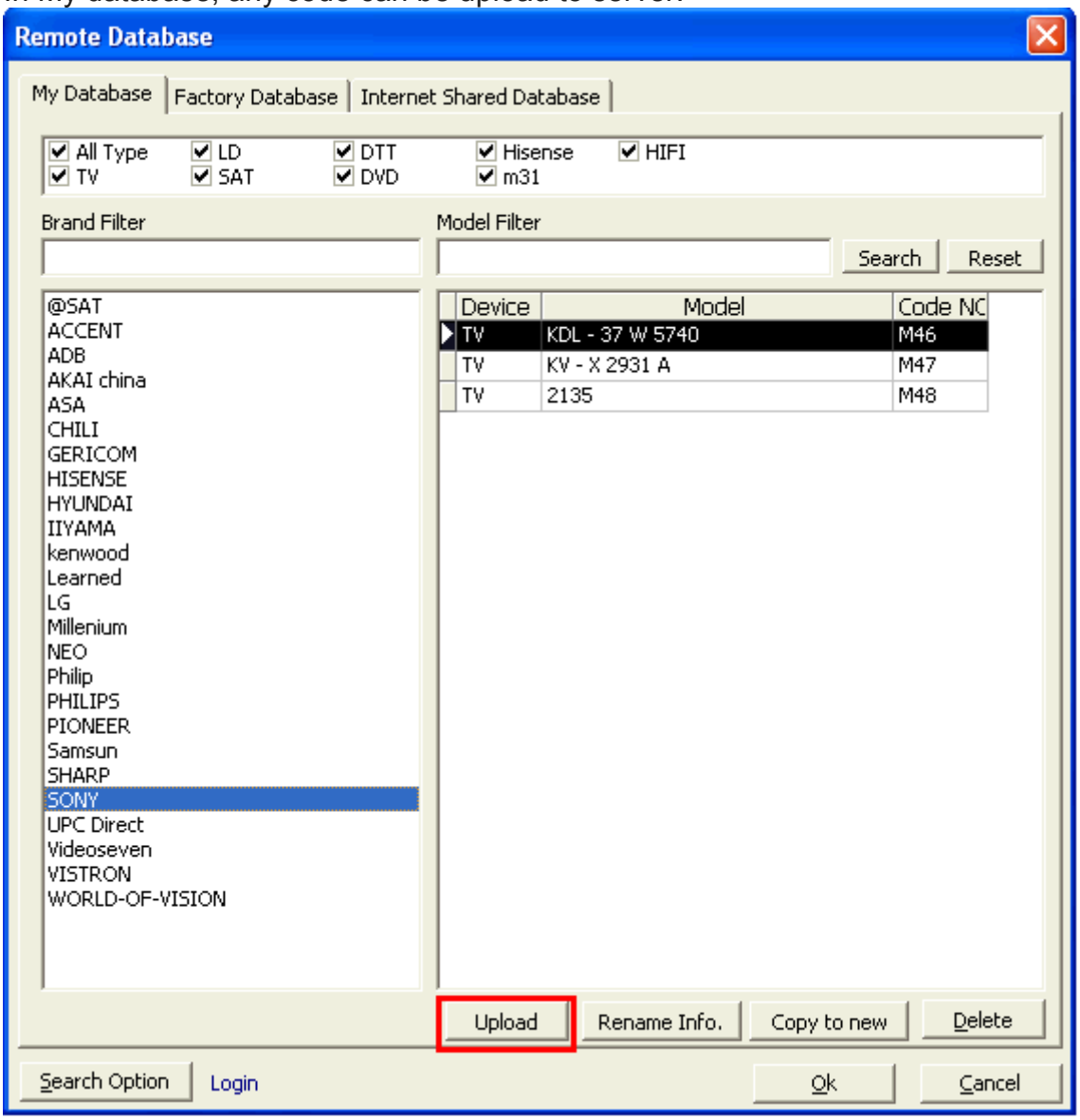


Picture 36

- "Brand search left match" means that we are looking only with prefix if it's "allowed" ("Active"). If "Active" is not selected, the written characters will be searched by full name of brands and models.
- **Type selected by page's name** – Choose how the result appears.

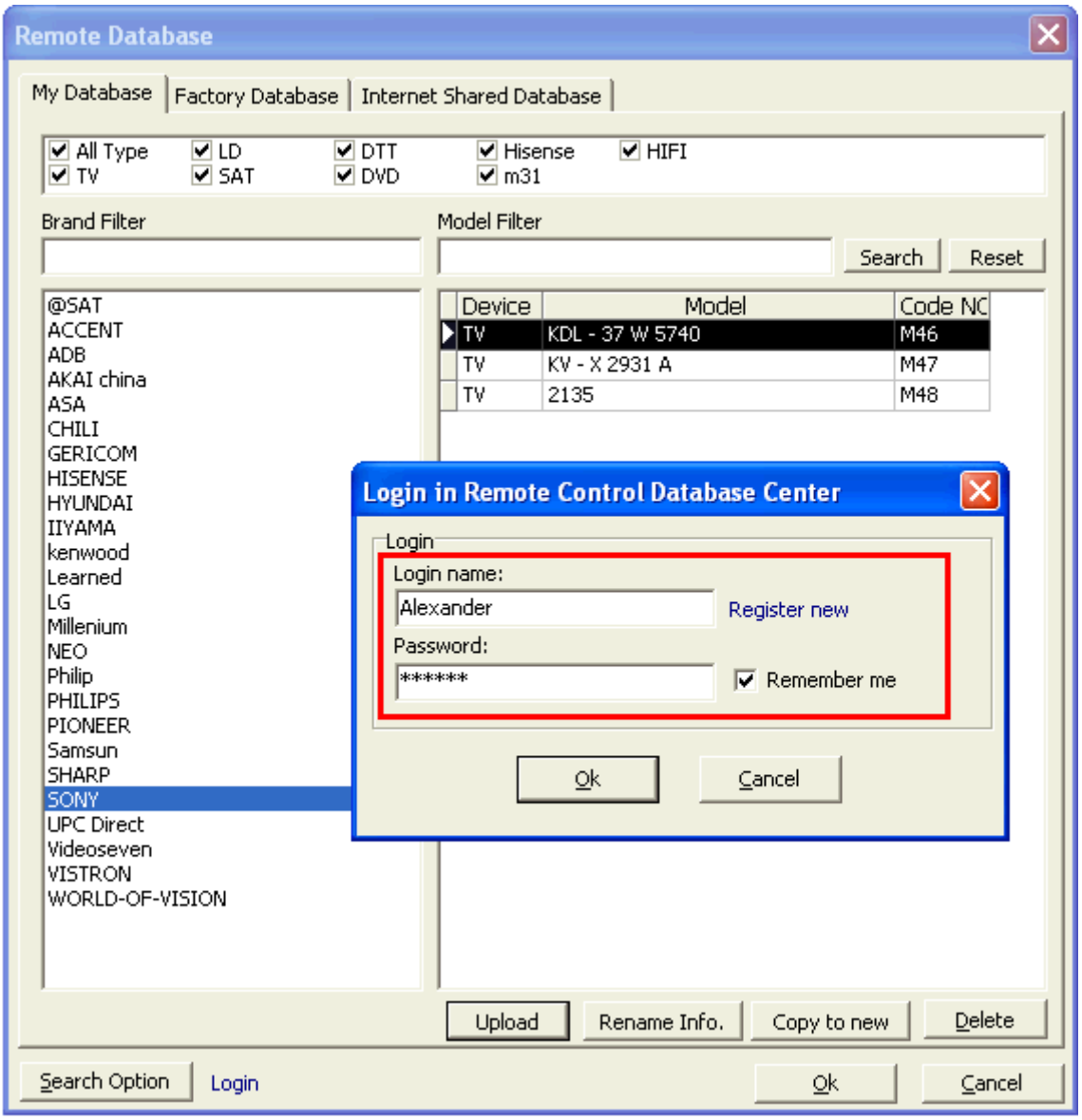
7.4. Internet Shared Database

In My database, any code can be upload to server.



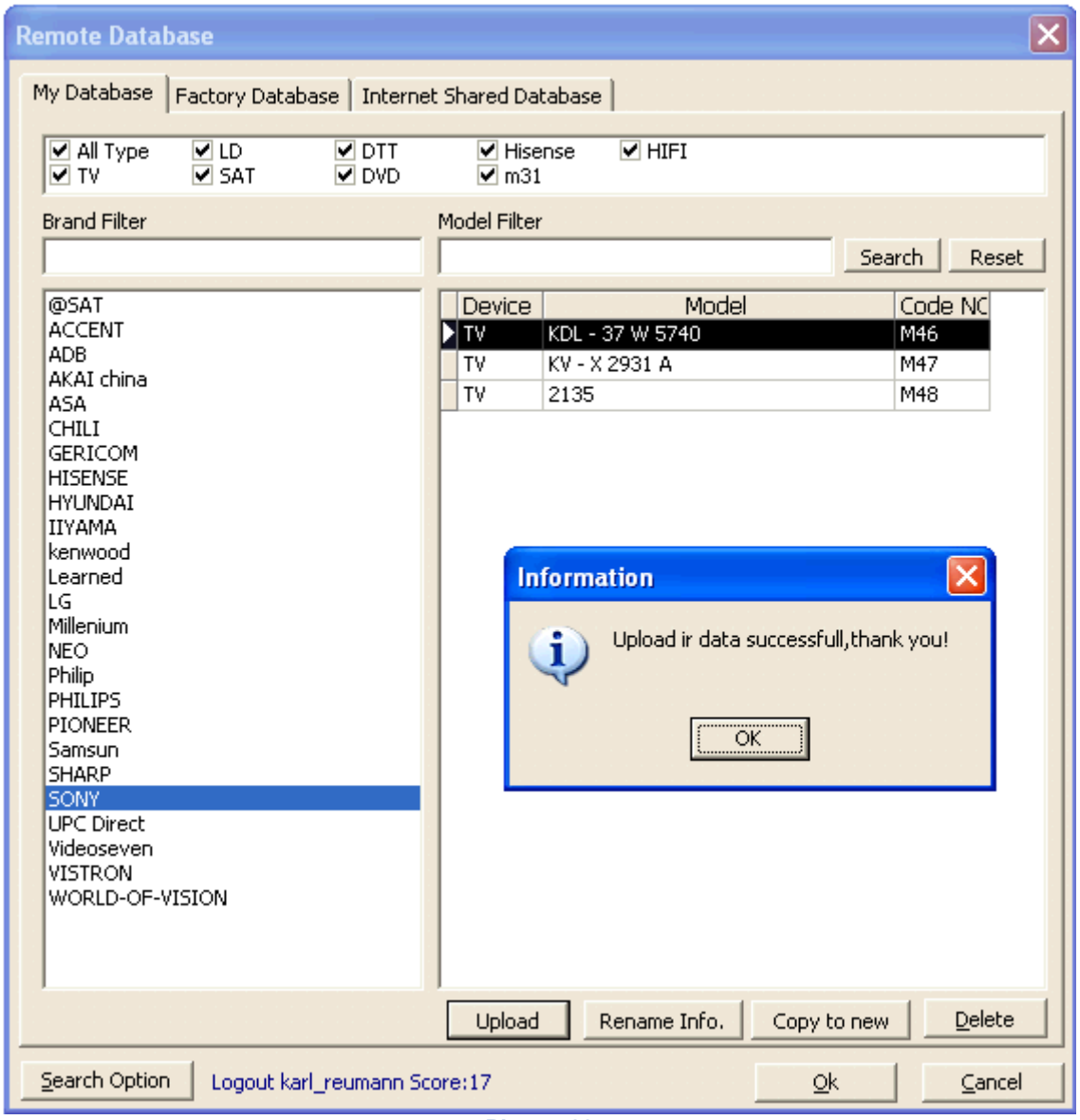
Picture 37

To be able to upload the information you will need a username and password. You can register www.usbrem.com.



Picture 38

Once you have registered you can Login and upload the data codes.



Picture 39

After uploading the IR code, the new code will be authorized by web manager. Once one code is authorized, it will be shown in "Internet shared database" or “factory database” after updating.

8. Code search

If you only know device type (TV,DVD,...), don't know brand name, model name, you can use this function to search the code. When you meet a device, you are not able to find its remote or replacement, please try this function, maybe it can help you. Many devices use the same basic models of remotes. Your remote, most probably is under another model or brand.

How to use this function?

It is very simple. The USB Programmable remote controls can be used to transmit IR codes to control device from PC. Please see below photo which is used in PC-BASED remote control. USB programmable remote is connected to PC and the software is sending the wanted commands.

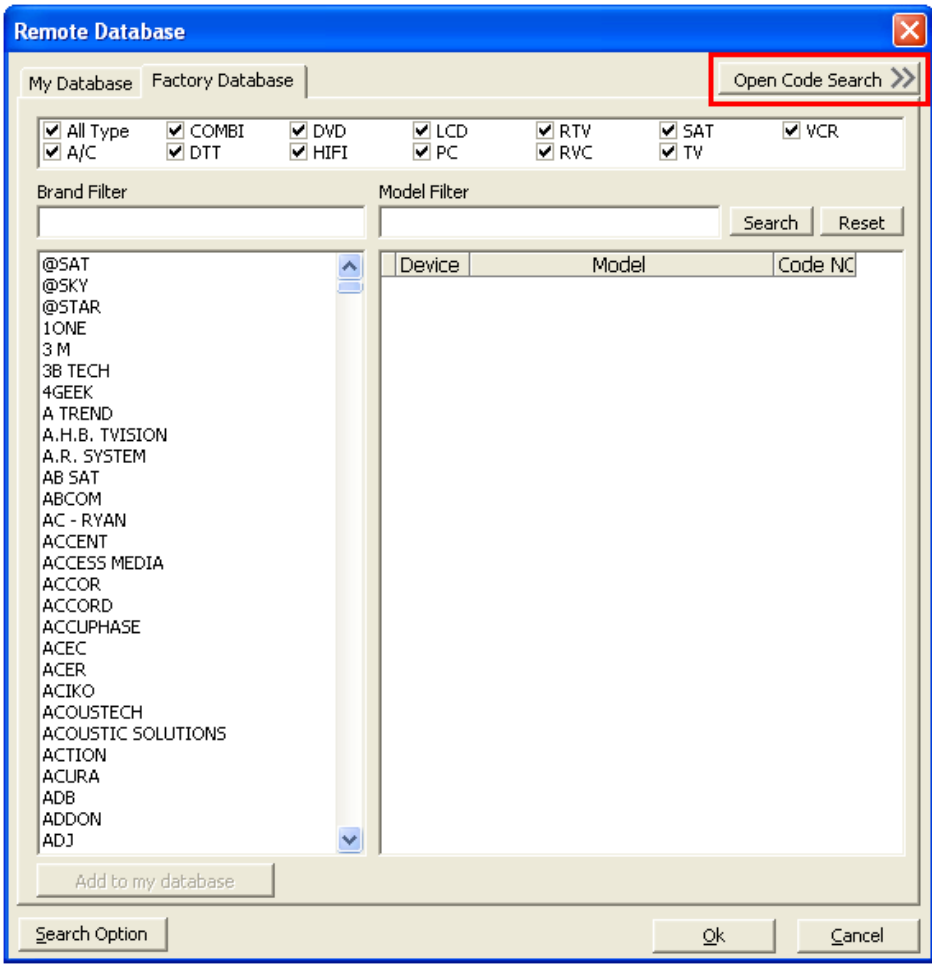
Picture 40

There are 3 types of advanced search:

- **KEY CODE SEARCH (comparison codes)**
- **TRANSMITTING SEARCH**
- **LEARNING SEARCH**

To start the advanced search, click on "Search" button

Then you have to click on the “Open Code Search” to open the advanced search (see picture below).



Picture 41

Then the 3 types off advanced search will appear.

8.1. LEARNING SEARCH

Picture 42

The learning search is used when we want to check if the original remote that we have is already in the database.

Software compares the sent functions of the buttons on the original remote with the buttons on the codes from the database.

If matching buttons "Current Code Group List" shows the remaining number.

In the right side is loaded the virtual remote, with the number of codes that will be compared to the original remote.

The default button is initially selected "POWER" (surrounded by a red dashed line).

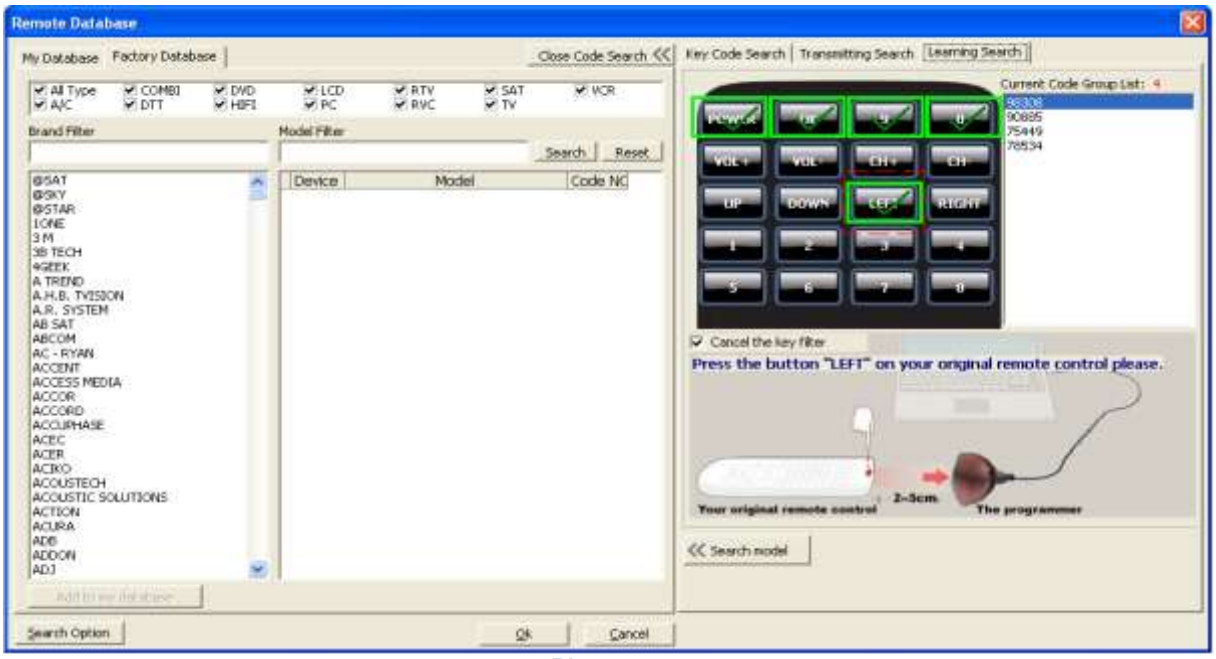
Point the original remote control in front of the USB programmable remote control. The distance should be from 1 to 5 cm.

Picture 43

Press the “Power” button of your original remote. The software compares it with the database, which codes have the same button for “Power”

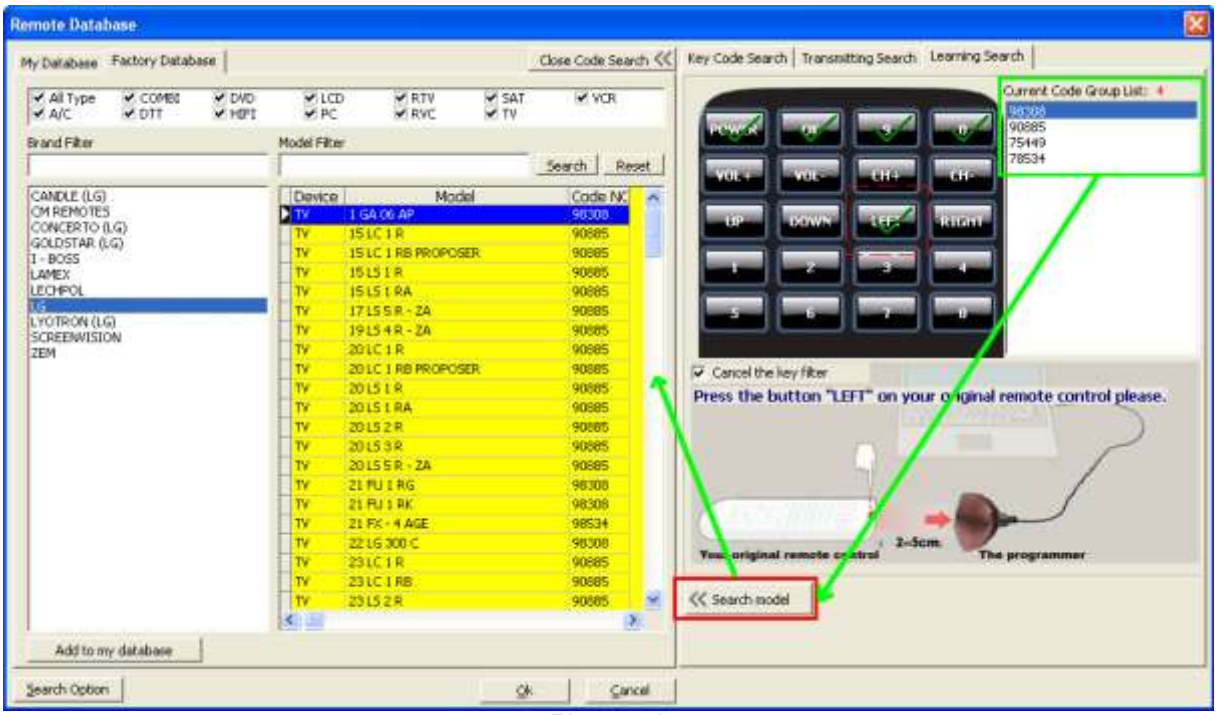
Picture 44

After pressing the button and comparing it, 22 codes(remotes) are remaining from the database. Select the next button to make a comparison. In this case "OK" button. Continue doing this until only few codes(remotes) remain.
In this case after we compared the "Power", "OK", "9", "0" and "LEFT" buttons (circled in green in the picture below), four codes(remotes) with the same five buttons remained. After the comparison of few more buttons, the result would be one or two codes left.



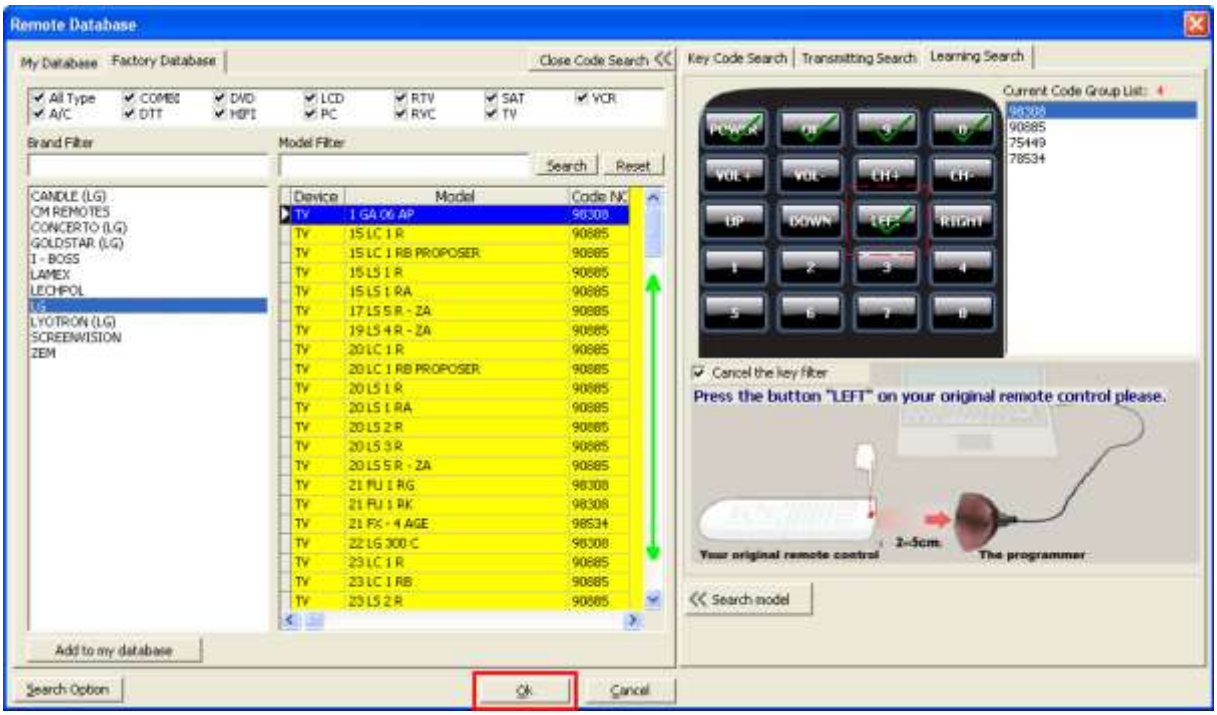
Picture 45

Once the number of codes is reduced sufficiently, from the four codes that remained, select the "Search Model" button (see the picture below) in the left side appears the brands and models, which have these 4 codes.



Picture 46

Once we see the brands and models of the codes, we can load the selected code in one of the four banks (TV, DVD, SAT, and AUX), pressing the button "OK".



Picture 47

8.2. TRANSMITTING SEARCH

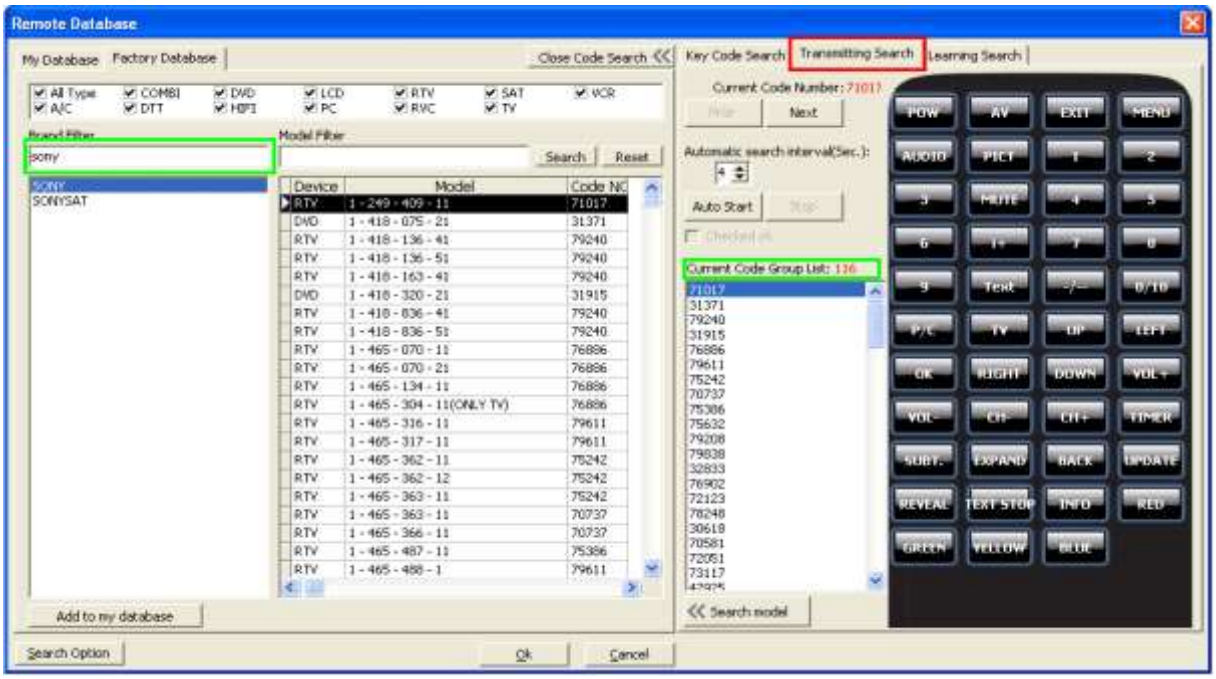
In transmitting search a selected button from the database of codes is sent to the device by the USB Programmable remote. It is pointed to the device and the software parameters are set to send the key codes. Entering the Brand, Type or Model is recommended to reduce the number of codes.

For example if you know the brand of the device is VESTEL, it will be set in the brands filter. You can also set the type of equipment (TV, SAT, HIFI, LCD, PC, VCR, DTT, etc.).. This further reduces the number of codes. Then choose a button from virtual remote to send the code. Most often sending starts with the "POWER" button, but according to the device type, the button may be different. Before transmission, the device must be switched on and prepared for usage. IR programmer must be directed to the device we're looking a remote for. When searching, be careful about the reaction of the device. For example, when code for “Power” button (ON / OFF) is transmitted, you should see whether the device switches on or off.

Let's make a test automatic search.

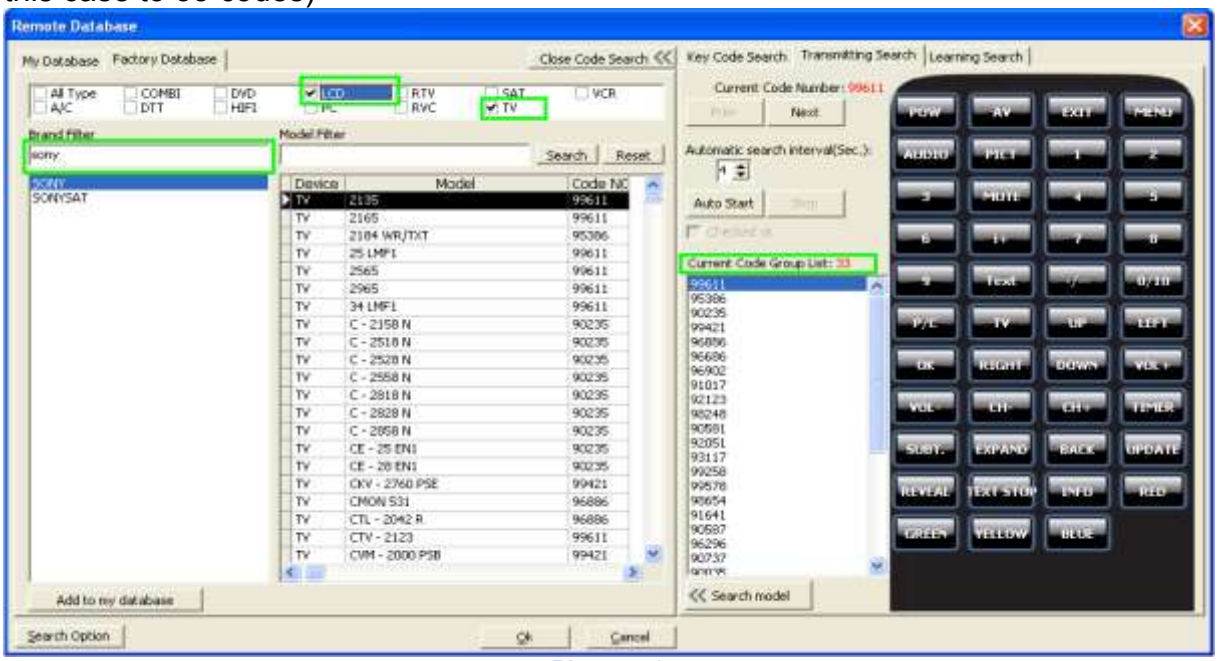
Before you start the 'automatic search code „let’s limit the count of the codes. See image below for this example.

If you only know that the brand of the LCD is Sony (no model), then input in the filter the brand "SONY". In "Current Code Group List:" there are 116 codes left that are for "SONY". These 116 codes apply to all types of equipment.



Picture 48

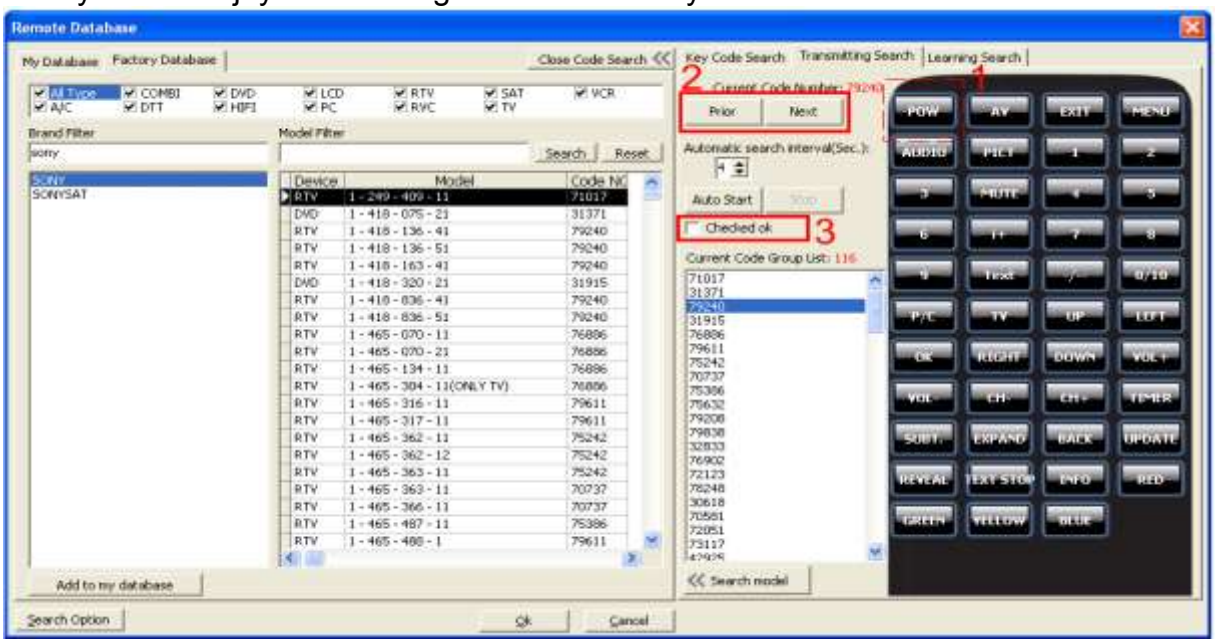
We can mark the code for LCD and TV only, so the number will decrease further (in this case to 33 codes)



Picture 49

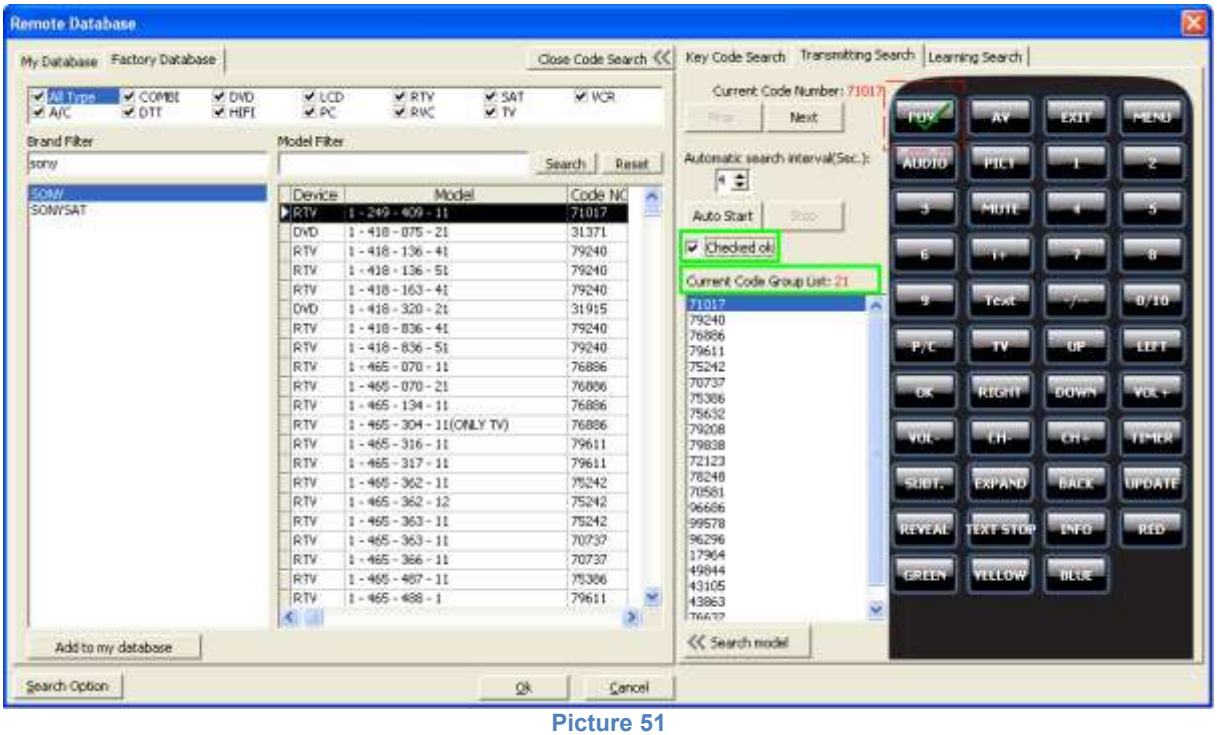
You can use manual code search and automatic search.
In manual mode a button on the virtual remote is selected and then the buttons "Next" and "Previous" are used to change the codes.
If using an automatic search there is interval between transmission of codes and you can change that time. The interval can be from 4 to 9 seconds. Then choose a button from the virtual remote control.
USB Programmable remote control, should be directed to your device. Press the "Auto Start". The software starts transmiting commands sequentially from the database. Once you activate the function of your device, press "STOP".
The software displays the number of codes that have the same data for the selected button ("Current Code Group List:"). Once you find the first button, you have to mark

"checked OK". Then select another button on the virtual remote and press again "Auto Search" button to continue your search. In this way after the next matching command, the number of compatible remotes will decrease. Continue the procedure until you find the correct remote code that covers all the commands for your device. The goal is to remain only 1 code for your device, but sometimes they may remain 2 or 3 codes which are identical.
Now you can enjoy the full range of functions of your remote.



Picture 50

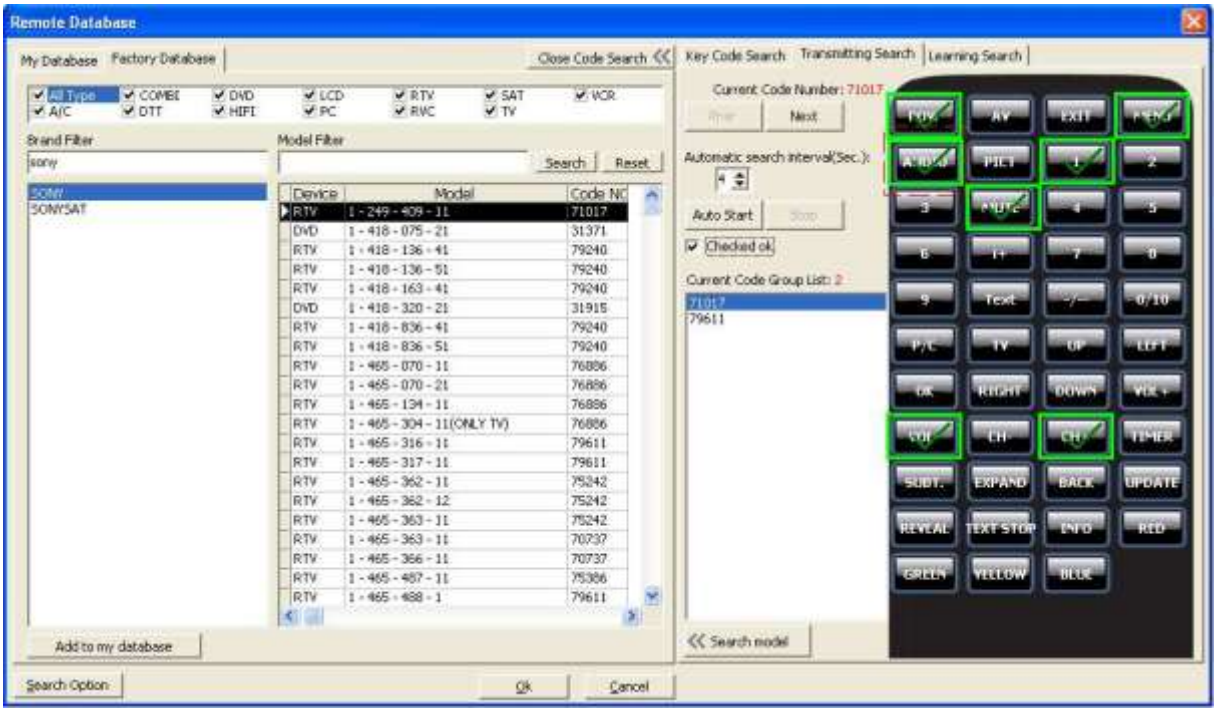
When searching, be careful about the reaction of the device. For example, when the code for switch on/off is transmitted (Power ON / OFF), you should see whether the device turns off or on.



Picture 51

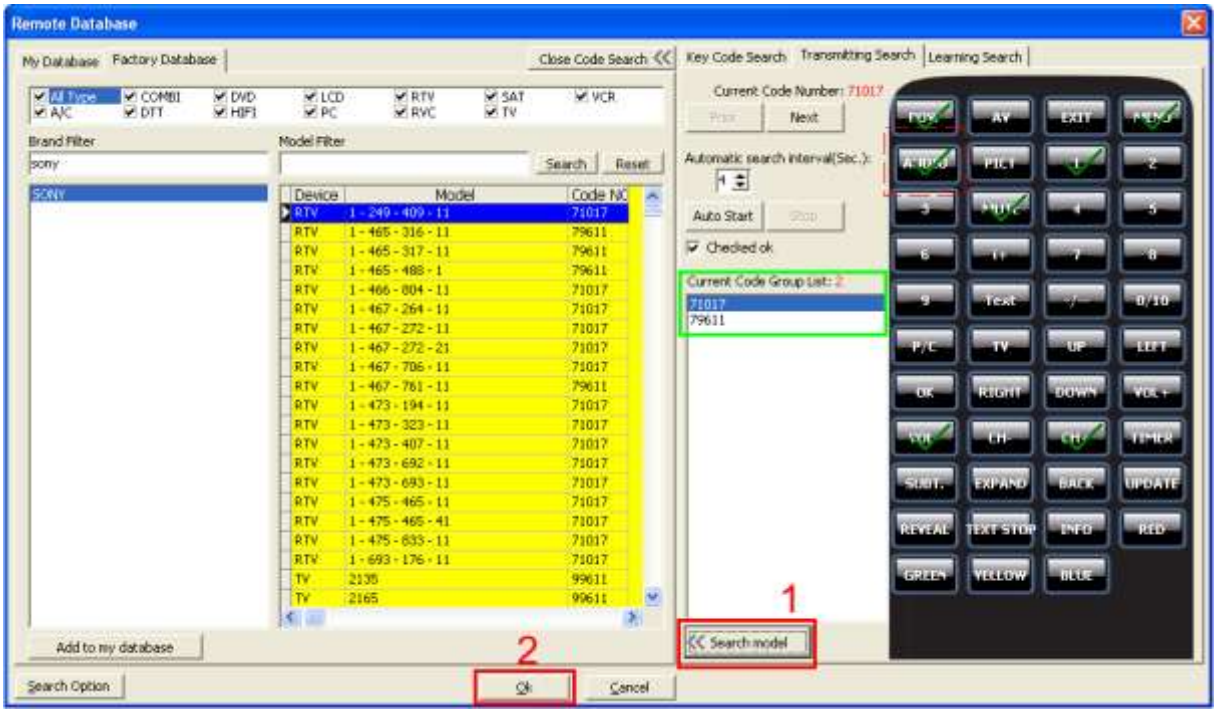
Once you find the first button, select "checked OK". Then choose another search button.

After verifying a few buttons that operate correctly on your device there remains one or more correct codes.



Picture 52

In this case there are two codes remaining (71017 and 79611).
In the “Search model” button (1) on the left columns in yellow are colored all brands and models of devices that command both codes.

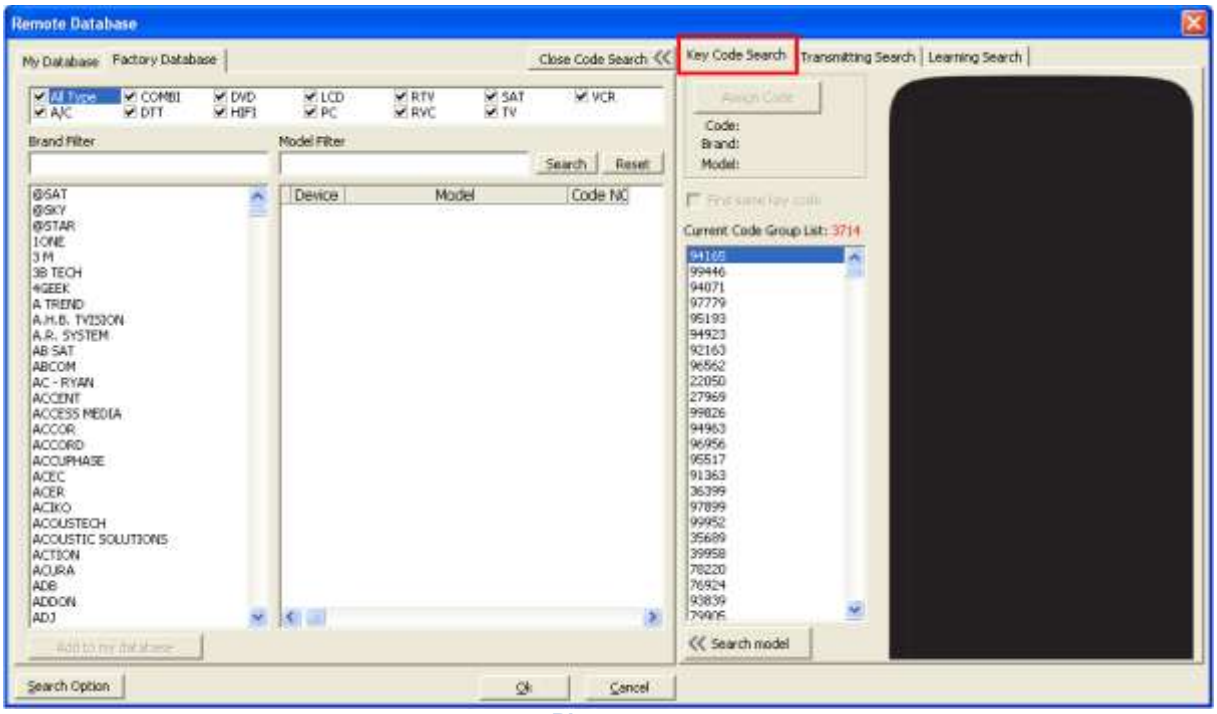


Picture 53

Choose two models and confirm with the “OK” button(2)
Now you can program the chosen code (p.5)

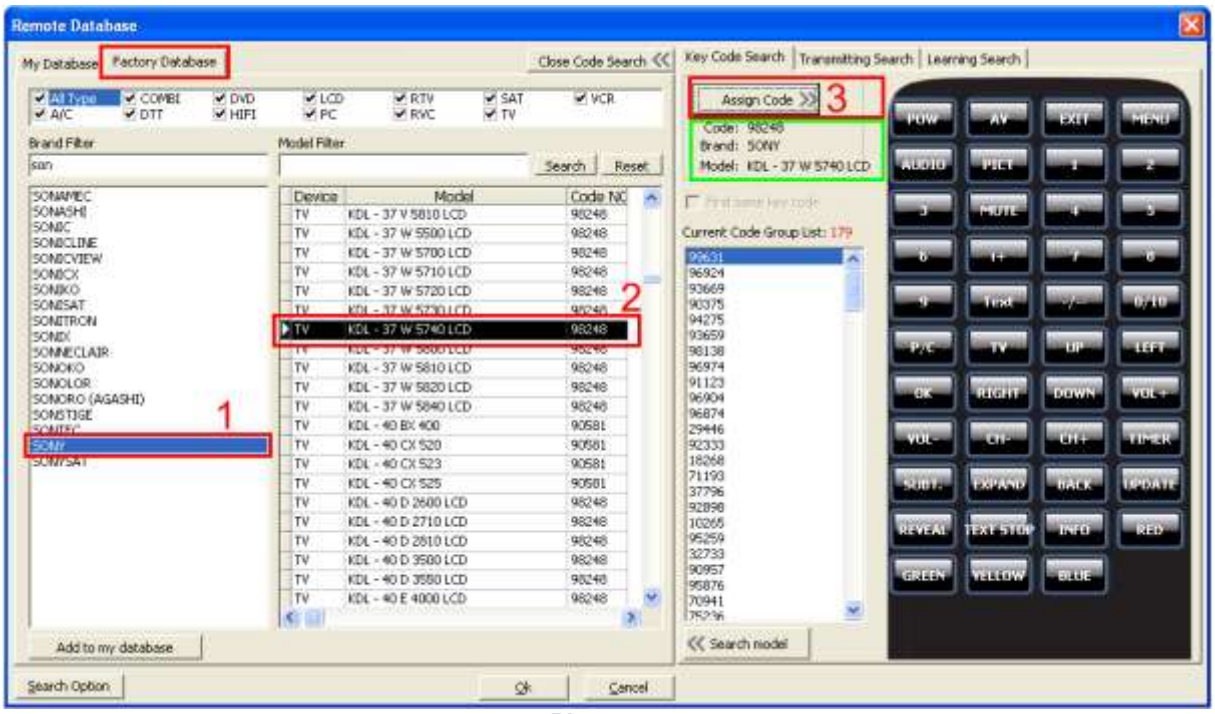
8.3. KEY CODE SEARCH

To load this option for comparing remotes press the button "Search", then click on “Open Code Search” and the first submenu "Key Code Search" It is used to compare a chosen code(remote) with the other codes(remote) in the database. Look the image below.



Picture 54

5. Search for the desired code(remote) from "My Database" or "default database".
   (1) Select the brand of the device.
   (2) Select the device model.
   (3) Press "Assign code" to load the desired remote in the virtual remote control.



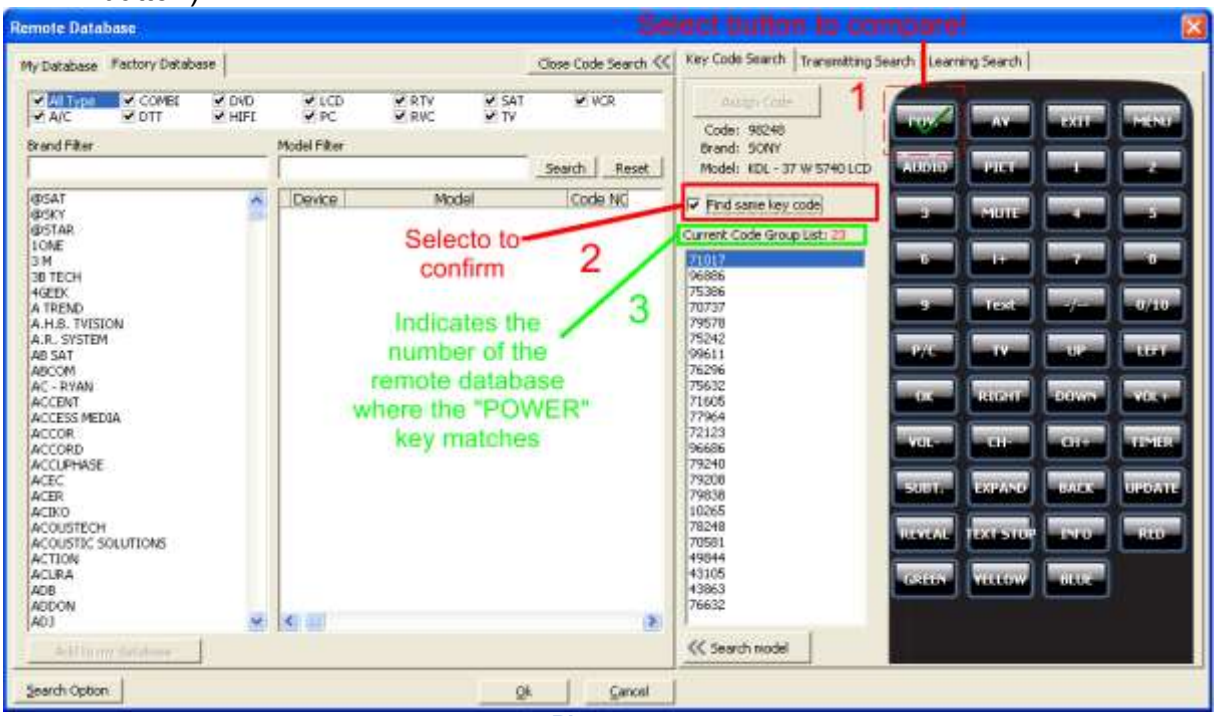
Picture 55

Once loaded the remote information is displayed in the green square.
Code number, brand and model of the loaded remote are shown.
They are cleared by brand and model filter.
"Current Code Count" shows how many remotes have the same code for the button like the chosen remote control. In the case of image bellow, at the beginning it will be compared with 3714 remote codes.

Picture 56

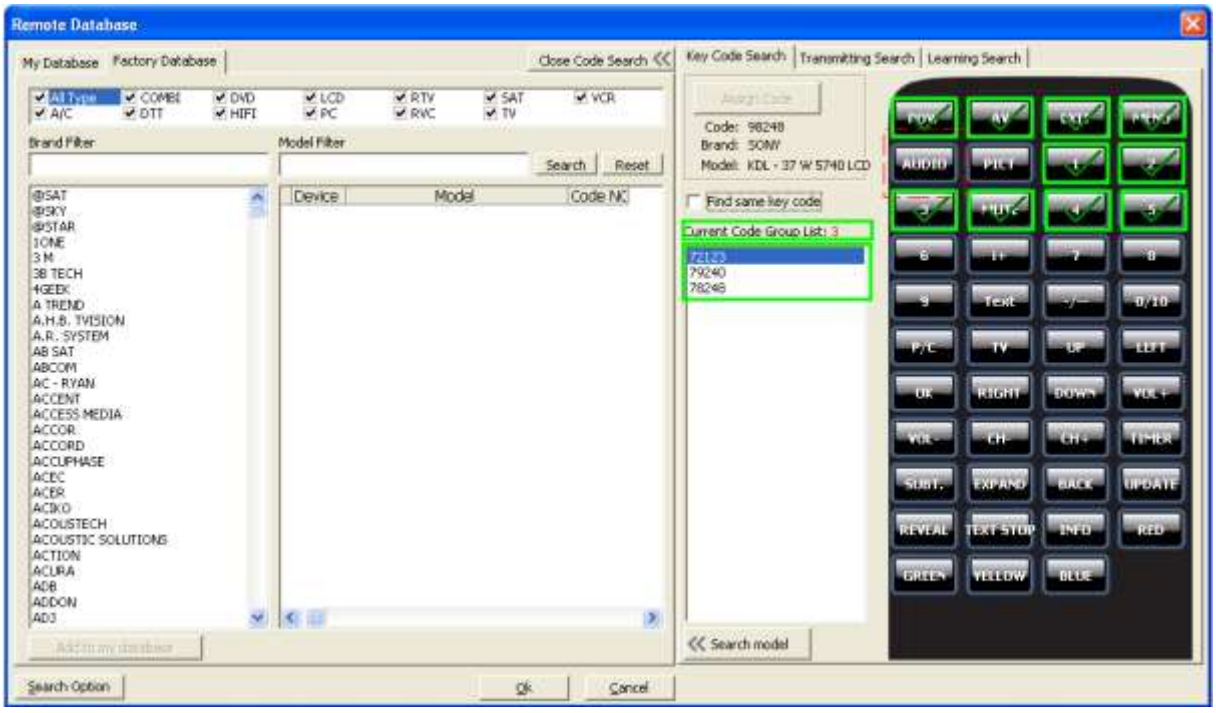
(1) A button from the virtual remote control is chosen.
(2) For conformation you have to mark “Find Same key Code"
(3) The number, which remains in Current Code Count is the number of remotes that contain the same data for the Power button on the LCD SONY KDL - 37

W 5740.
In this example, there are 23 remotes left(which have the same Power on/off button).



Picture 57

We can compare other button matches so we can reduce the count of the codes, which are identical.



Picture 58

Once there are three codes left from database(72123, 79240, 78248), which have the same buttons as 98248 (POWER, AV, EXIT, MENU, AUDIO, 1, 2, 3, 4, 5 and MUTE).

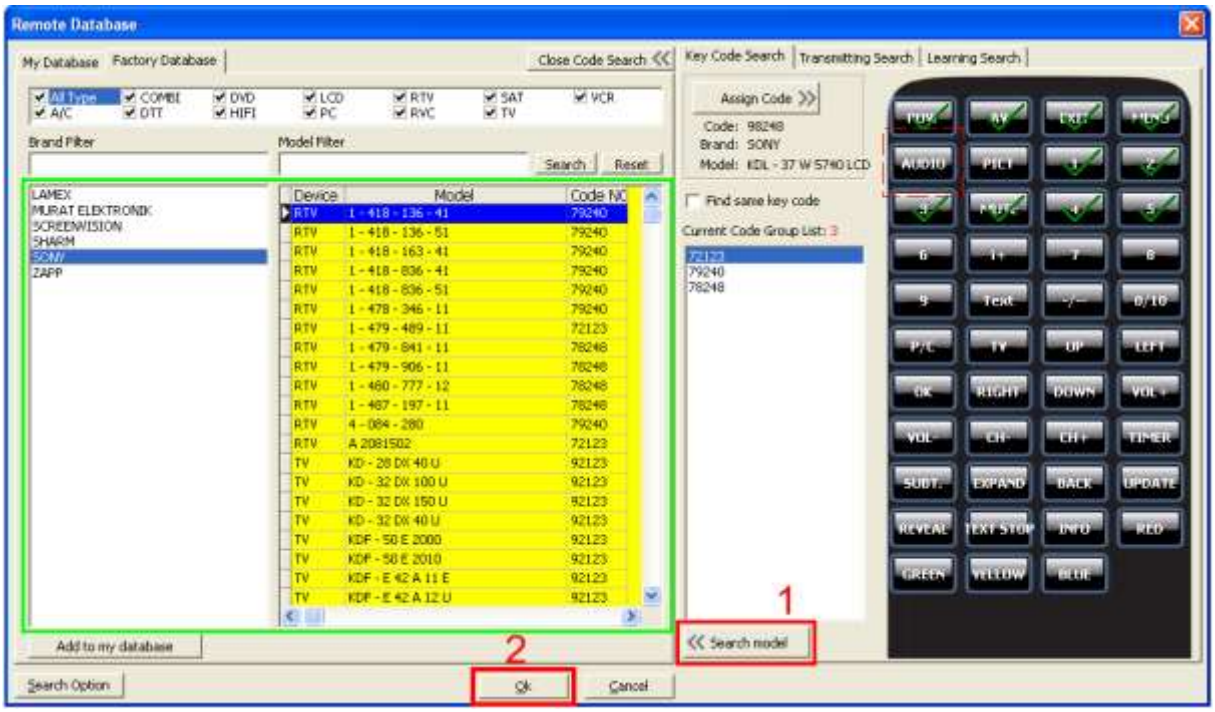
(1) “Apply scope” is pressed, so the database can check which brands and models these codes belong to.

The results from the comparison are shown in the green rectangle.

The three codes would command devices from the following brands:

- Lamex, Murat Elektronik, Screen Vision, Sharm, Sony and Zapp.

After we choose the brand, in yellow are painted the models of the devices and the relevant code.



Picture 59

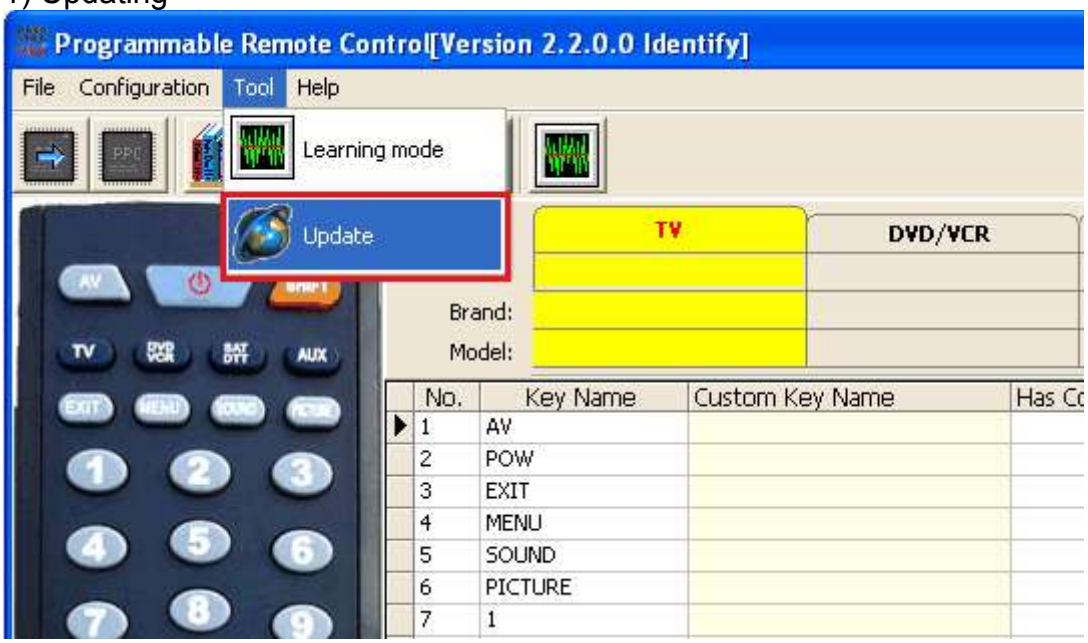
(2) After you see models and brands, choose a code from the yellow field and press “OK” button.

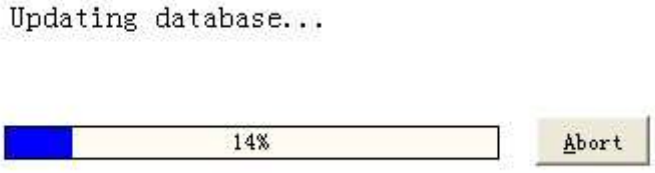
9. Some useful skills

1) Reset to factory setting
Fill in “test” in the brackets, then program to remote control.
2) Test if the programmed code into remote is correct.
In order to test if the remote is fine, please follow the instructions below.
(a) Reset to factory settings.
(b) Restart software and make sure the key table is blank.
(c) Use “Code Learn”(Item 5) to learn each key code to key table.
(d) Save to IR file. Refer to Item 5-5) output to PC hard disk. Name its file to be “Test-new.txt”
(e) Identify (Read) the remote code, or save “Test” code into PC file, also name it to be “Test.txt”.
(f) open “text.txt” and “Text-new.txt”, compare its content, check if the key codes inside are the same.
(Note: Above is only an example. User can use other codes to test and compare. This method is either to test remote control, or to test the content inside the remote)

10. Others

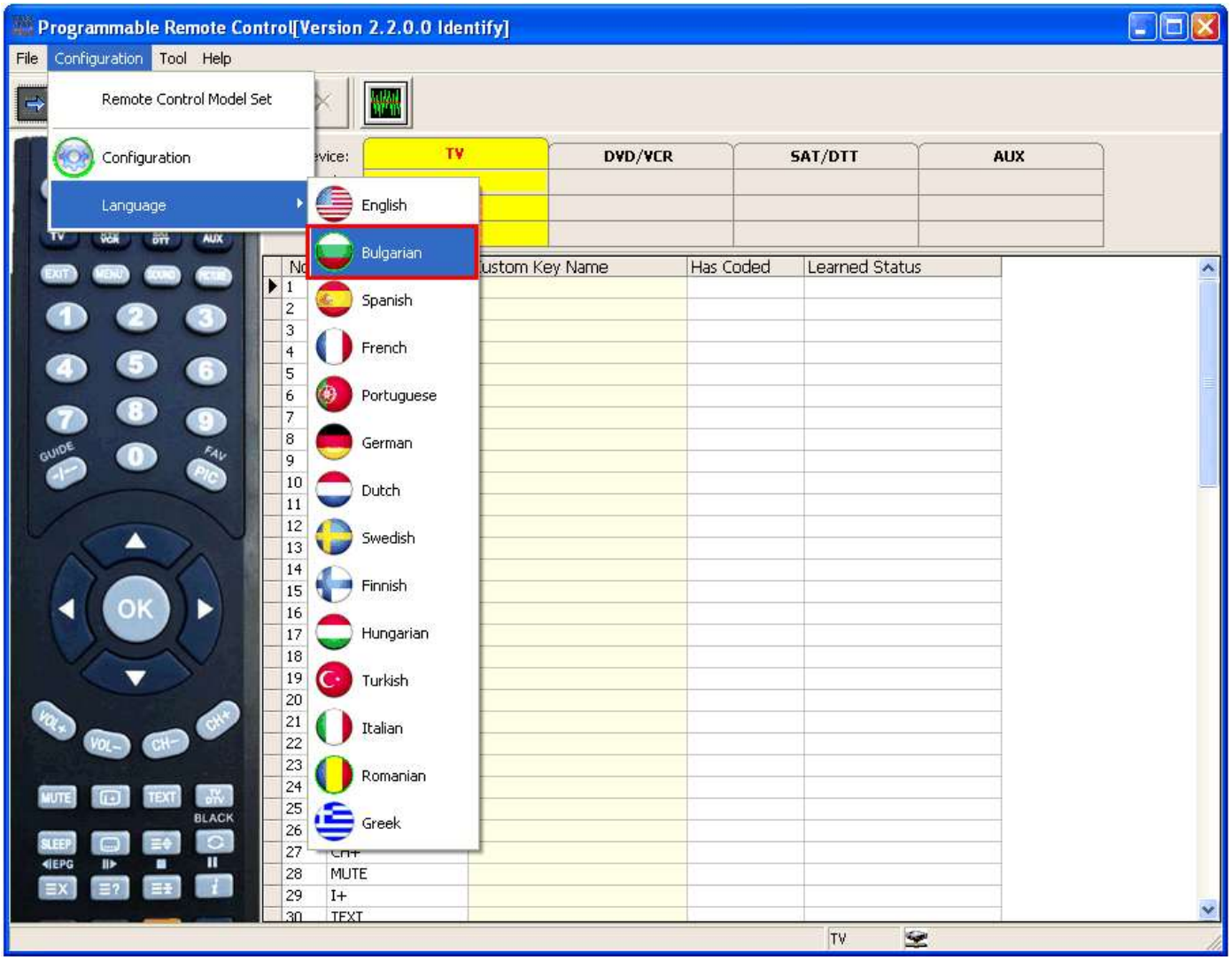
1) Updating

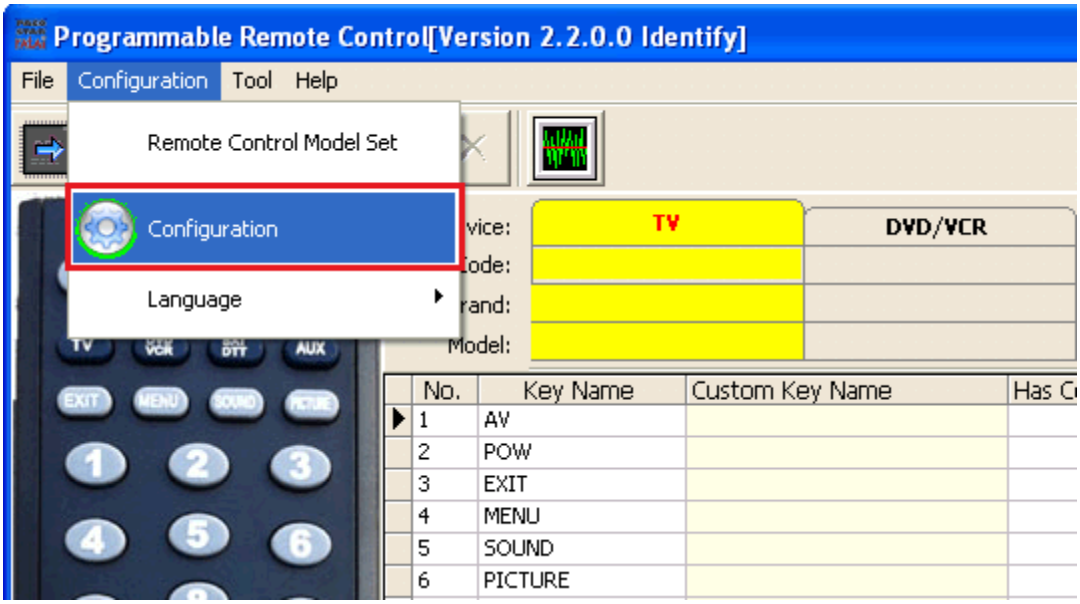




2) About

3) Language

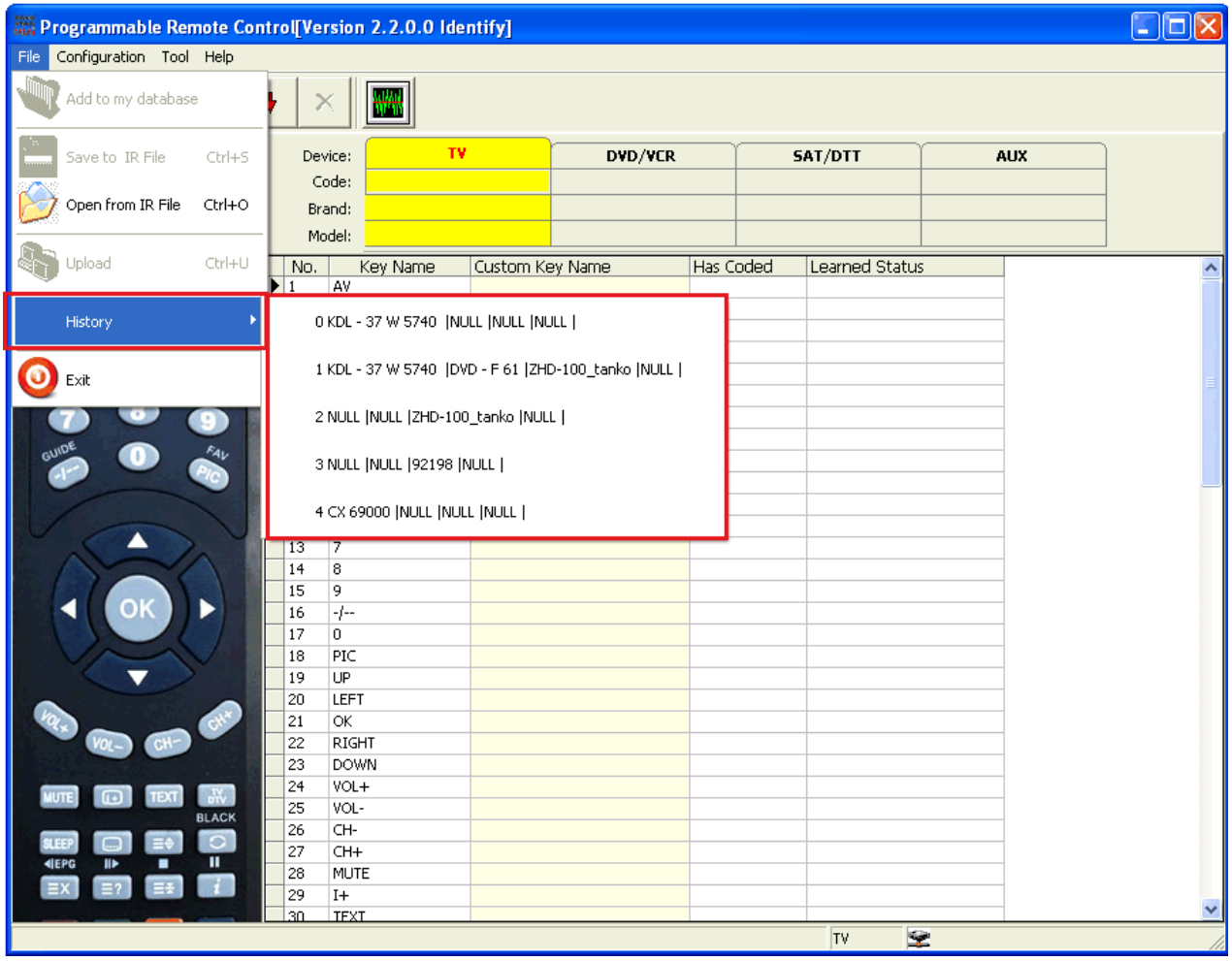

Programmable Remote Control[Version 2.2.0.0 Identify]
File
Configuration
Tool
Help
Remote Control Model Set
Configuration
Language
English
Bulgarian
Spanish
French
Portuguese
German
Dutch
Swedish
Finnish
Hungarian
Turkish
Italian
Romanian
Greek
TV
DVD/VCR
SAT/DTT
AUX
Custom Key Name
Has Coded
Learned Status
OK


Programmable Remote Control[Version 2.2.0.0 Identify]
File
Configuration
Tool
Help
Remote Control Model Set
Configuration
Language
TV
DVD/VCR
No.
Key Name
Custom Key Name
1 AV
2 POW
3 EXIT
4 MENU
5 SOUND
6 PICTURE

4) Internet proxy setting

Only when updating, PC has to be connected to the internet. If no proxy is set, it uses direct mode to connect to web server. Otherwise a proxy parameter needs to be set.

5) History


Programmable Remote Control[Version 2.2.0.0 Identify]
File
Configuration
Tool
Help
Add to my database
Save to IR File Ctrl+S
Open from IR File Ctrl+O
Upload Ctrl+U
History
Exit
Device:
Code:
Brand:
Model:
TV
DVD/VCR
SAT/DTT
AUX
No.
Key Name
Custom Key Name
Has Coded
Learned Status
0 KDL - 37 W 5740 |NULL |NULL |NULL |
1 KDL - 37 W 5740 |DVD - F 61 |ZHD-100_tanko |NULL |
2 NULL |NULL |ZHD-100_tanko |NULL |
3 NULL |NULL |92198 |NULL |
4 CX 69000 |NULL |NULL |NULL |
1 AV
2 POW
3 EXIT
4 MENU
5 SOUND
6 PICTURE
7
8
9
-/--
0
PIC
UP
LEFT
OK
RIGHT
DOWN
VOL+
VOL-
CH-
CH+
MUTE
TEXT
BLACK
SLEEP
EPG
GUIDE
FAV

6) Help

Programmable Remote Control[Version 2.2.0.0 Identify]
File
Configuration
Tool
Help
Help
About
TV
DVD/VCR
Brand:
Model:
No.
Key Name
Custom Key Name
1 AV
2 POW
3 EXIT
4 MENU
5 SOUND
6 PICTURE

11. FAQ

1) How to test the remote control to be fine?
Answer: Refer to item 8-2)
2) Why doesn't the LED flash when pressing some keys?
Answer: It is correct, because there are no key codes in some keys.
3) How to get more support?
Answer: Please contact your direct supplier.
How to find more codes which are not included in database by yourself?
Answer: There are many ways.
Find a universal remote control, if you can find one code which can control your device, then you can learn it into PC software and adjust its key position.
Find other PC programmable remote control, search it and learn it into "My database".
If you know its brand and make, you can search it in website.