

# **Infrared Learner**

**ID# 15364**



**Operation Manual**

## Introduction

The IR Learner is an amazing tool for all your control system design. This compact yet functional device can turn your analog IR signal into digital and store it for many usages. With simple software tool user can combine all remote controllers signal into one desire place and control all devices through that place. IR Learner does not only learn the IR signal it can also send out the learned signal to prove that it learned was correct. The IR Learner is compliant with nominated produce devices for user's convenience.

## Features

- Receive and blast out IR signal to confirm successful learning
- Converting IR signal into digital data for control system usage
- Wide range of IR format and IR frequency acceptance
- Compact USB dongle design
- Simple software installation

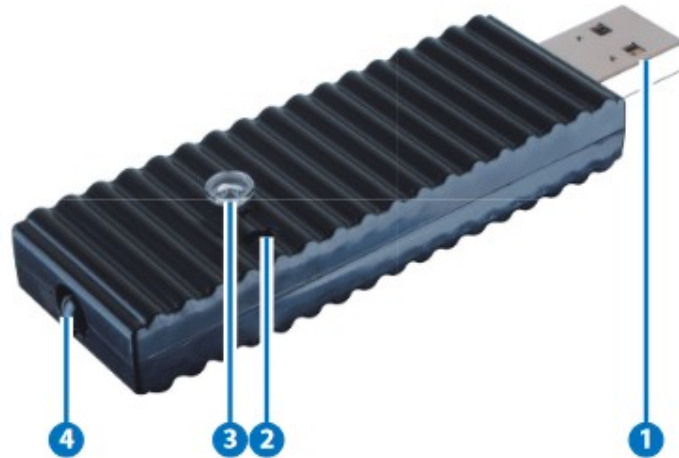
## Applications

- Analog IR signal learning
- IR signal transfer into digital data
- IR signal blasting

## System Requirements

Input remote control with IR signal and output to PC/Laptop.

**Hardware Description**



**1. USB IN**

Connect this port with PC/Laptop for IR signal transferring into data format.

**2. Update**

Press this button with pin and hold it while plug into PC/Laptop for firmware update. Copy the .bin file to your PC/Laptop in a location where you may use later.

**3. IR Receiver**

Send the IR signal that is to be learned by press on the remote control in direct line-of-sight towards this port.

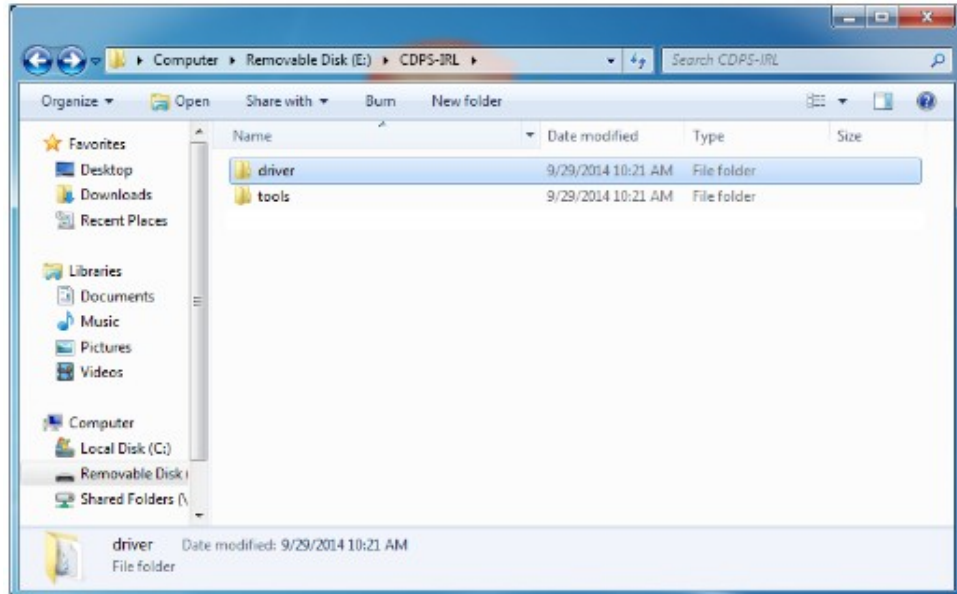
**4. IR Blaster**

This slot can blast out the digital IR signal send from PC/Laptop to confirm the success learning of the received IR signal. Place the IR Blaster in direct line-of-sight of the equipment to be controlled for.

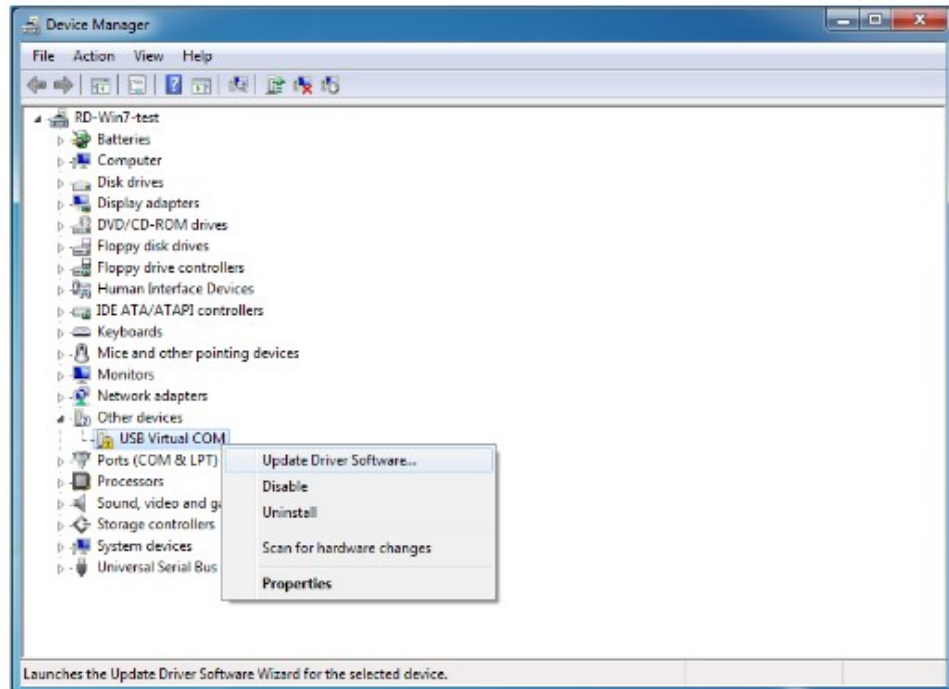
## Software Application and Installation

### Installation

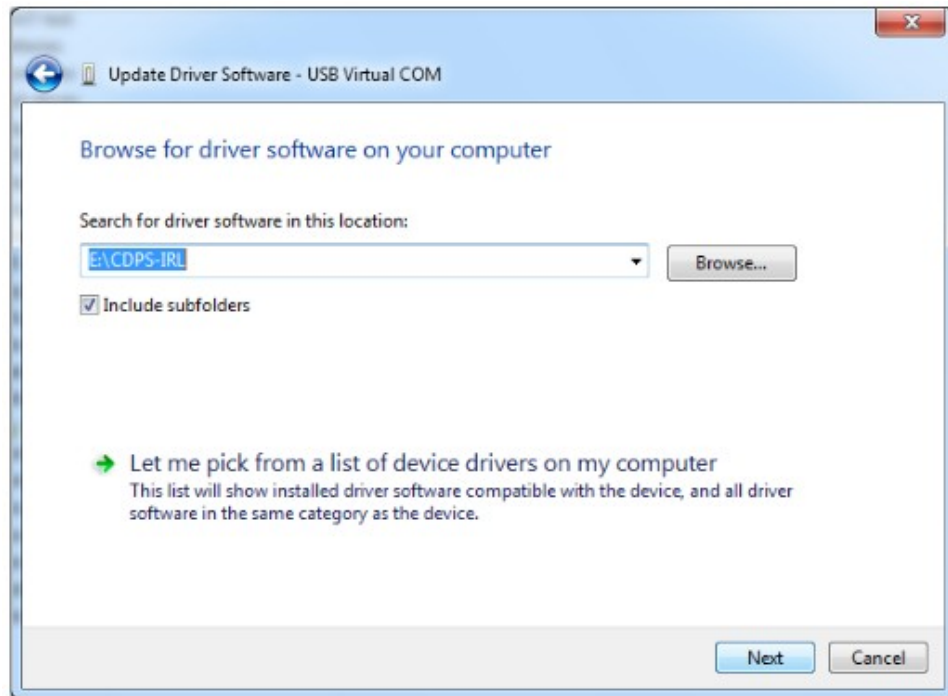
Please contact [sales@converters.com](mailto:sales@converters.com) to download the software file named CDPS-IRL-driver.rar and save it in a directory where you may link with the IR Learner.



Connect the IR Learner to PC/Laptop and search it from the Device Manager.

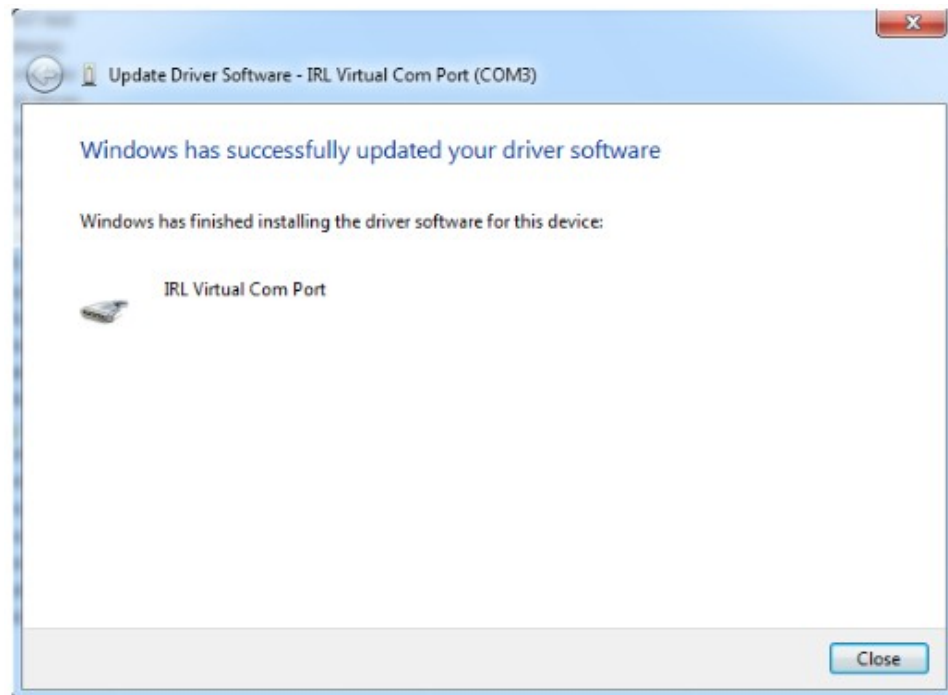


Click on USB Virtual COM with mouse's right button and select Update Driver Software...



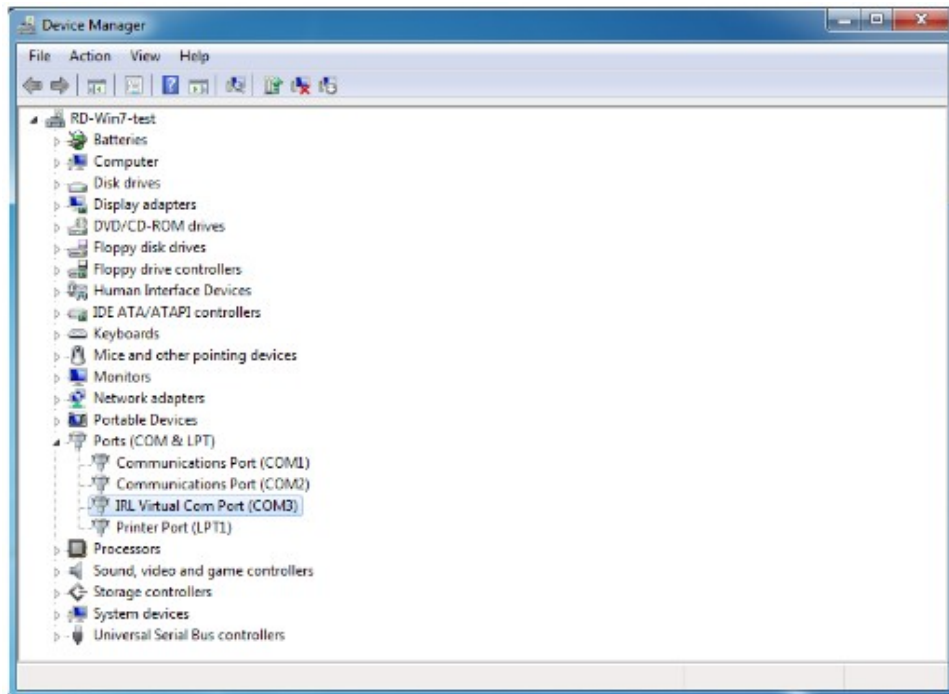
Click on Browse for driver software and direct the downloaded software location.

Windows Security will show warning message, click on Install anyway to continue the installation process.



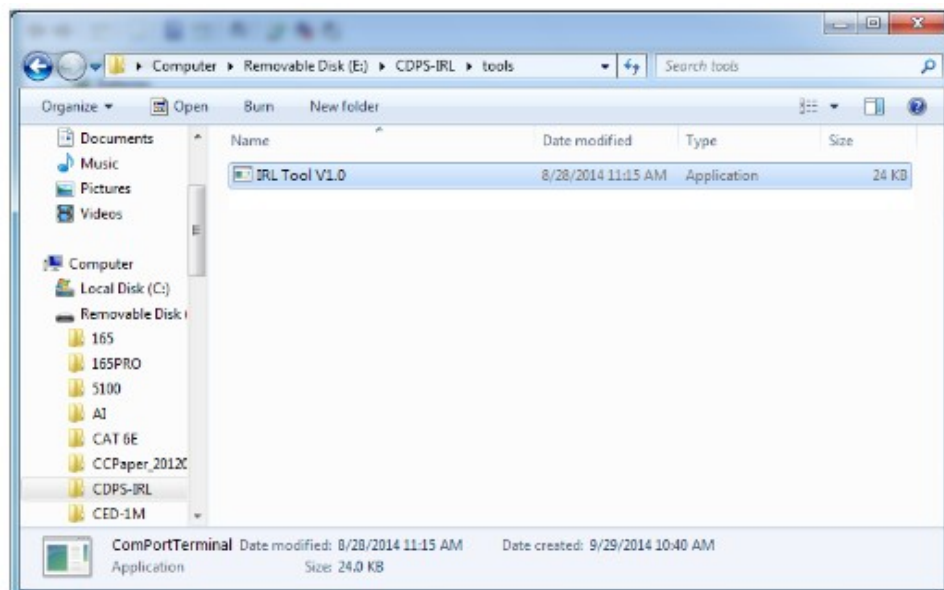
Close the dialogue to finish the installation.

Now the IR Learner will be renamed as IRL Virtual Com Port in the Device Manager.

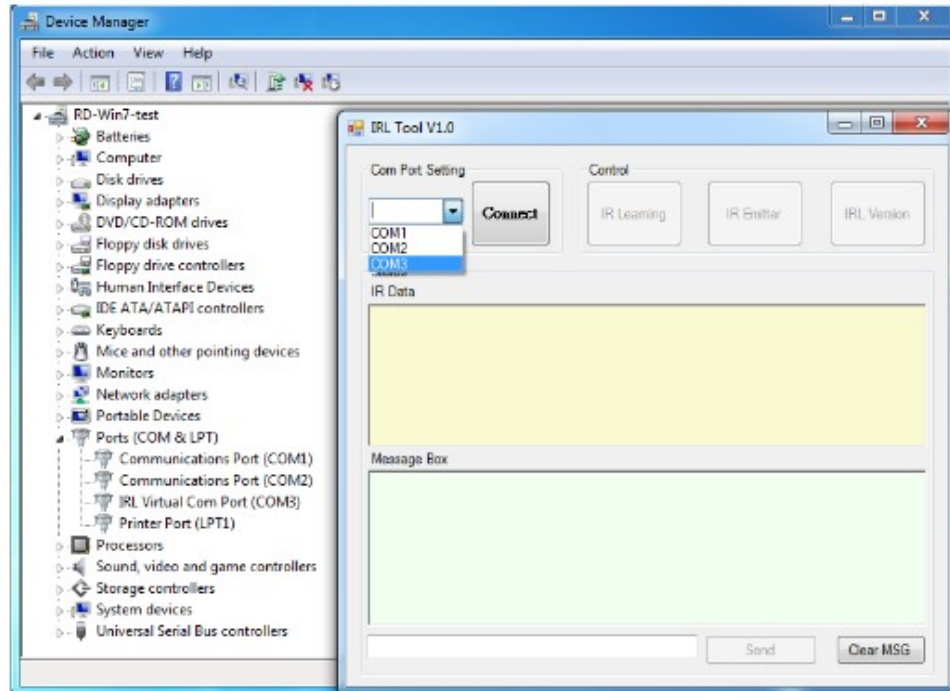


### Using the IR Learner Application

Now your PC/Laptop has install successful the IR Learner and you may start to use with the IR learner with IR Learning Tool by opening the IRL Tool from the download file.

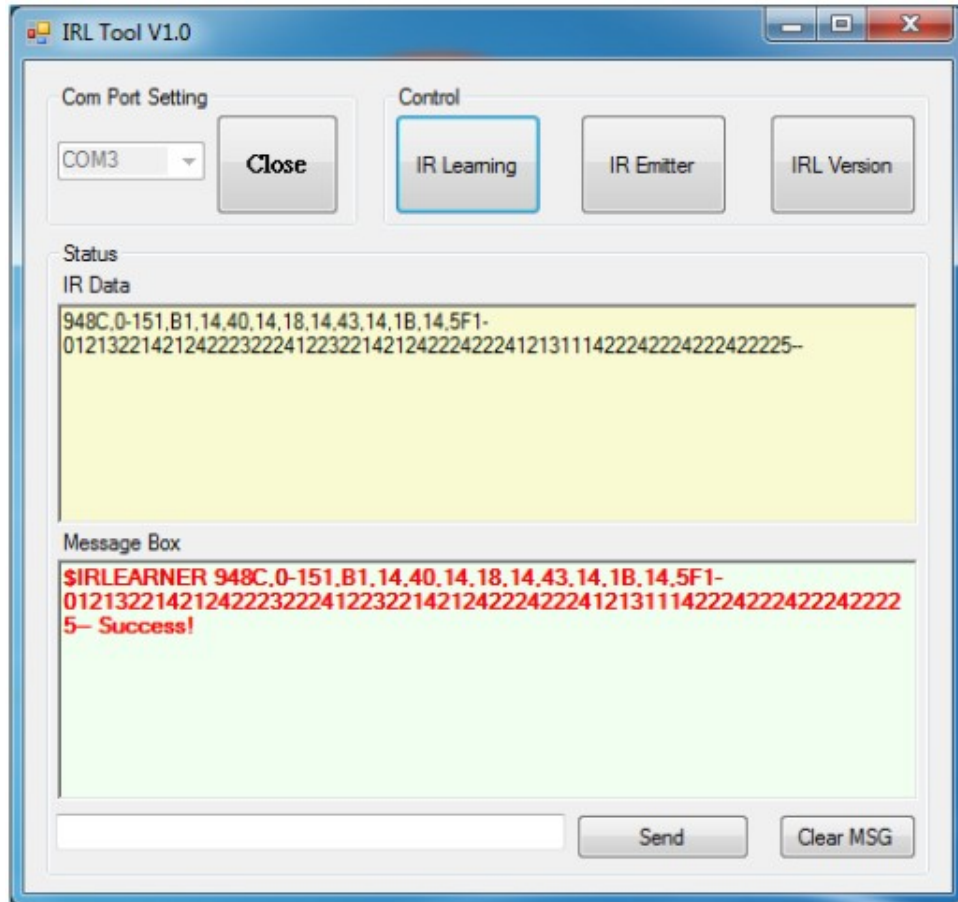


Double click on IRL Tool



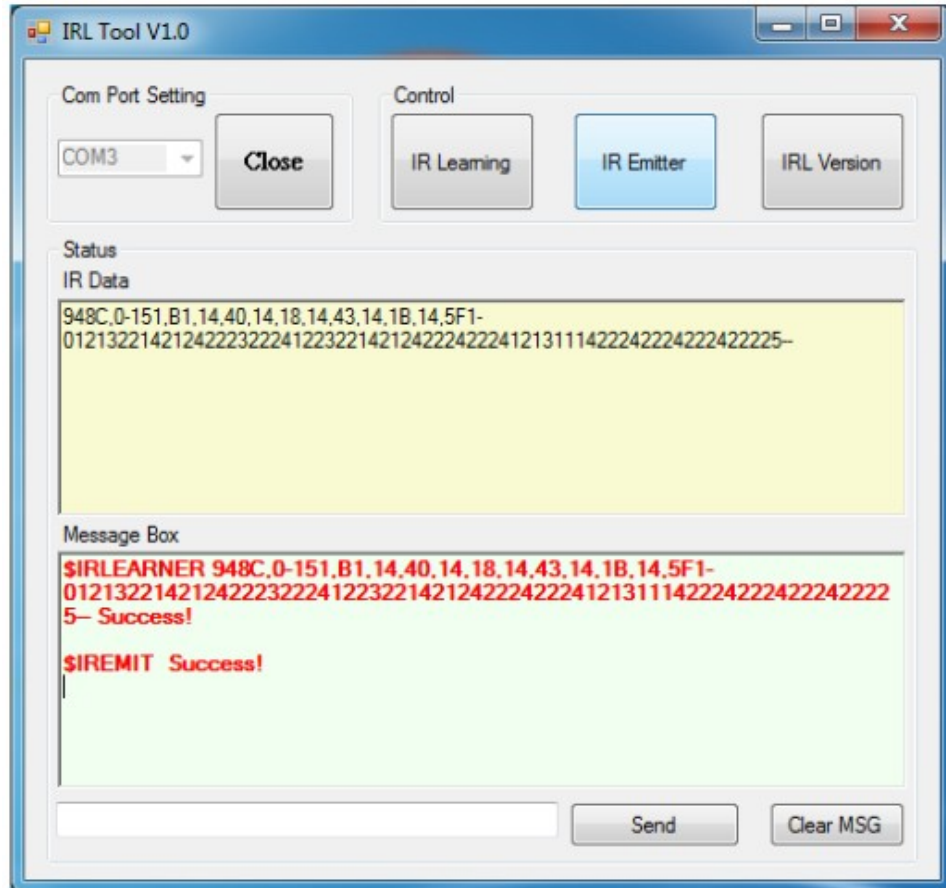
Select the Com Port according to IRL Virtual Com Port from the Device Manager and click on Connect.

To start IR signal learning, click on IR Learning and press the remote control with the direct line-of-sight towards the IR Learner's Receiver lens until the IR code has been learned and show Success from the IRL Tool.

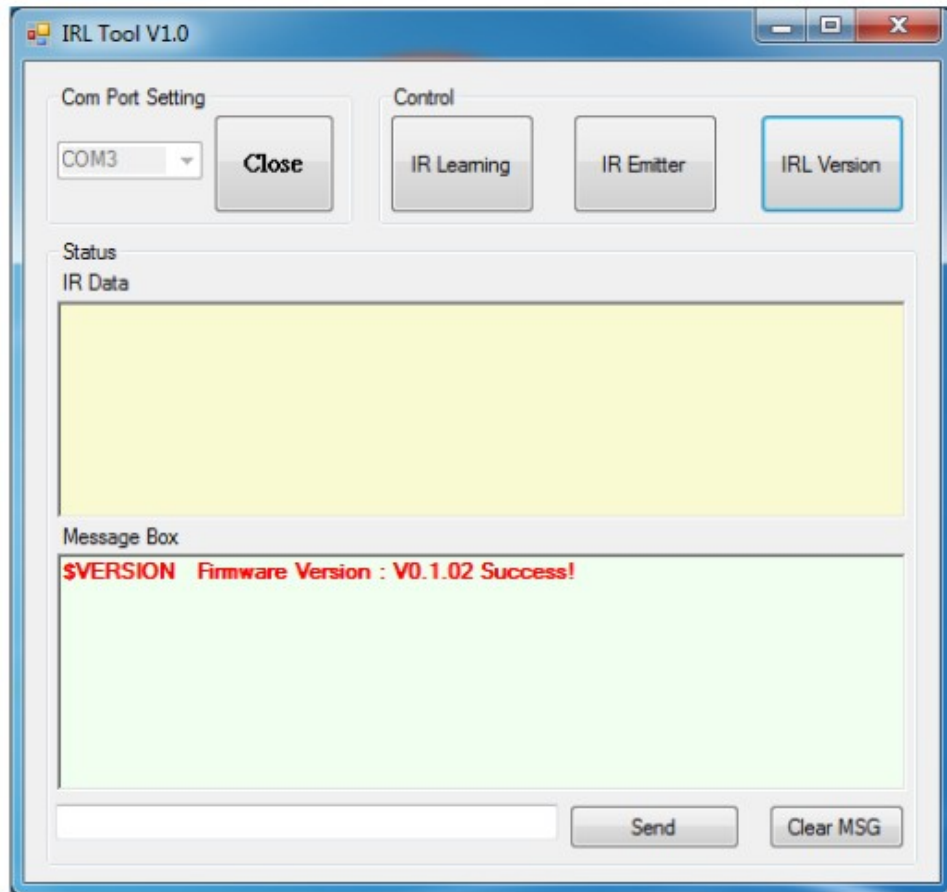


Then click on IR Emitter with IR Learner's Blaster in direct line-of-sight towards the remote device to confirm if the learning is correct (or activate).



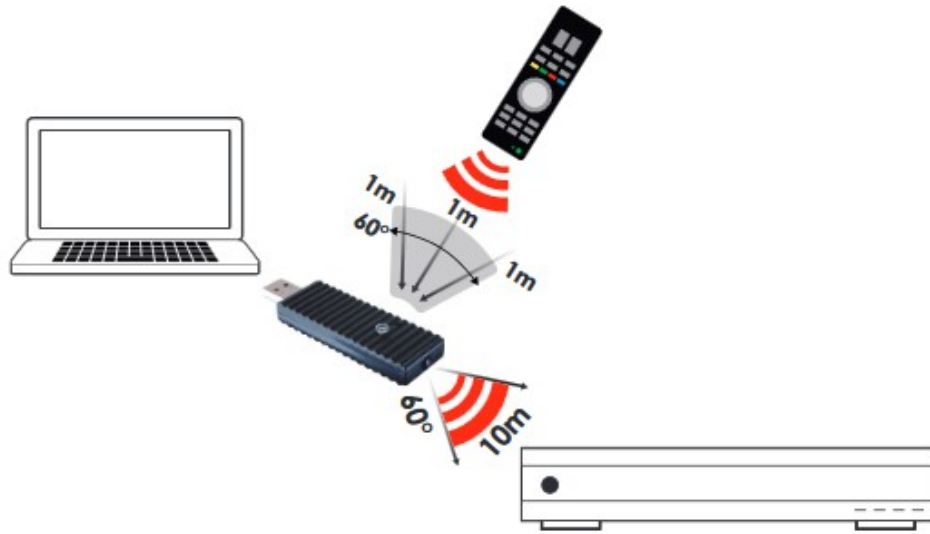


This IR code/data then may be stored in another control system/application for future usage or may be utilized in many other forms. (Copy the IR code from IR Data box)



Click on IRL Version to see the IRL Tool's version update status. Type \$HELP to list all the IRL commands and use the command through RS-232 to control the IR Learning Tool. To clear the message in message box simply click on Clear MSG.

## Connection Diagram



## Specifications

Input Port	1 x IR
Output port	1 x IR 1 x USB
IR Frequency	20~60kHz
IR Input Signal Distance	Up to 1M
IR Blaster Out Distance	Up to 10M
ESD Protection	Human Body model: ± 8kV (air-gap discharge) ± 4kV (contact discharge)
Dimensions	85.5mm (W) x 25mm (D) x 12mm (H)
Weight	14g
Chassis Material	Plastic
Silkscreen Color	Black
Operating Temperature	0°C ~ 40°C / 32°F ~ 104°F
Storage temperature	-20°C ~ 60°C / -4°F ~ 140°F
Relative Humidity	20~90% RH (no condensation)