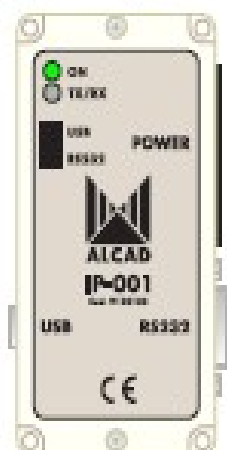## Technote 12: How to Upgrade Firmware using IP-001
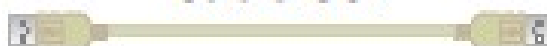
1. Installing IP-001

The connection between IP-001 and your PC can be through a USB or RS-232 interface. We recommend using a USB connection.

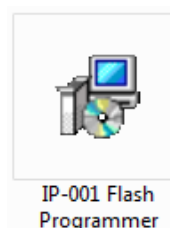### 2. Installation of IP Programming software

You will need to install the USB driver and software program. This is available from the CD that comes with the IP-001 or you can download the latest version from the Alcad website
http://www.alcad.net/en/support/downloads.php

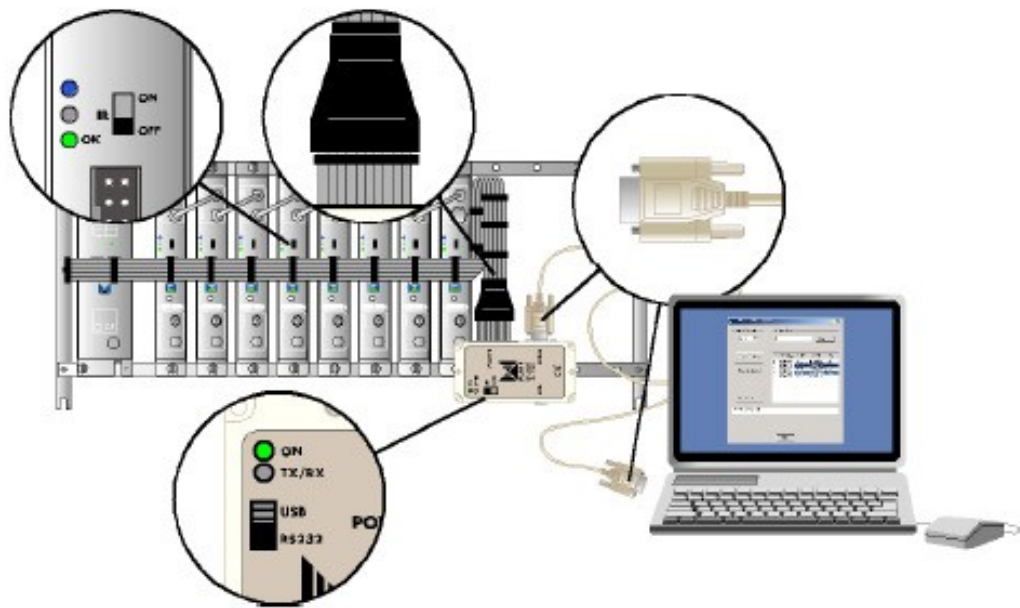Select the menu "**TV Equipment firmware upgrade**" for the program.

Install the software by clicking the "install.exe" file.

3. Connecting IP-001

Once USB driver and Flash Programmer Software have been installed on your PC, please reboot you PC to enable USB driver has been installed.

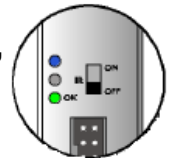Connect the IP-001 Flash Interface to the 20 pin power supply line which can be seen below.
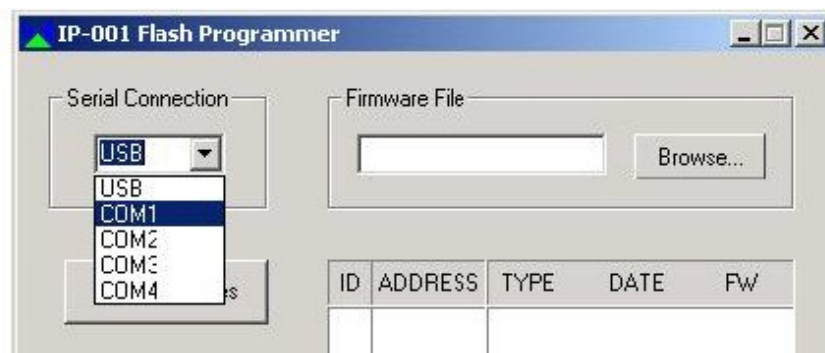
4. **Programming the Modules**

   Once you have connected the Flash programmer please ensure the following:

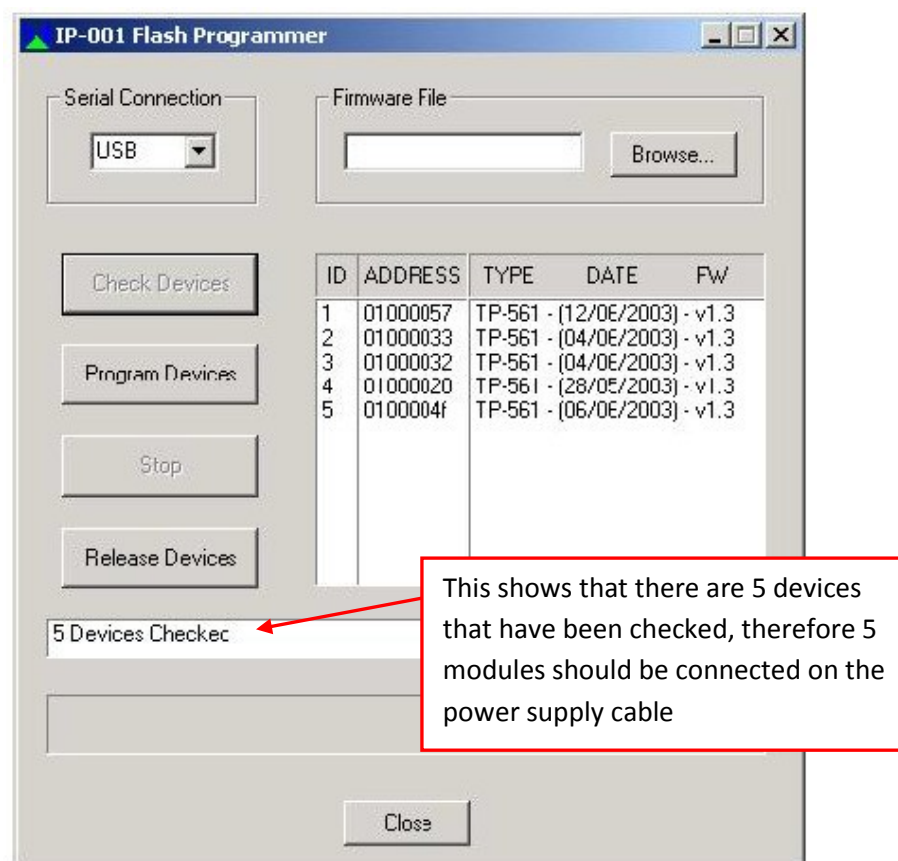   **Ensure IR communicator slide switch is set to the "OFF" position, amber LED will be off.**

   Open the IP-Flash programmer application and the window below will pop up on your screen.
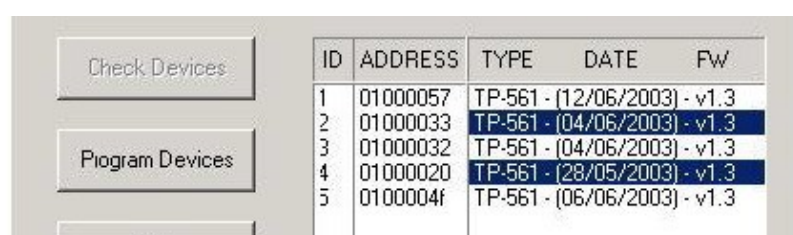
   IP-001 Flash Programmer

You then need to select the type of communication you are using "USB" or "COM1" "COM2"........ This selection can be made by clicking on the drop down box **"Serial Connection"** which can be seen below.
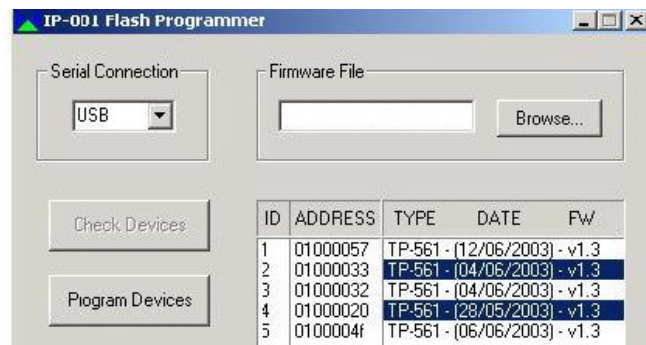

Once you have selected the serial connection click on "Check Devices" which talks to each module that is on the power supply line and brings up position of device, address, date, firmware version and obviously the type of device.

This shows that there are 5 devices that have been checked, therefore 5 modules should be connected on the power supply cable
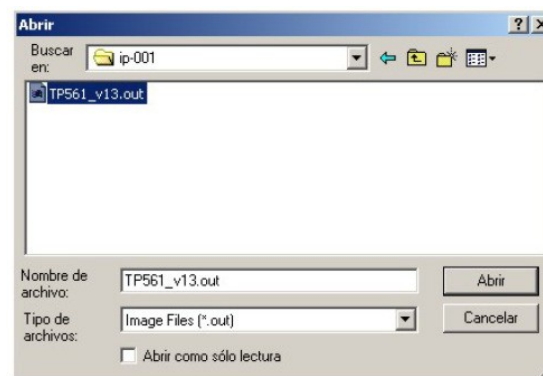
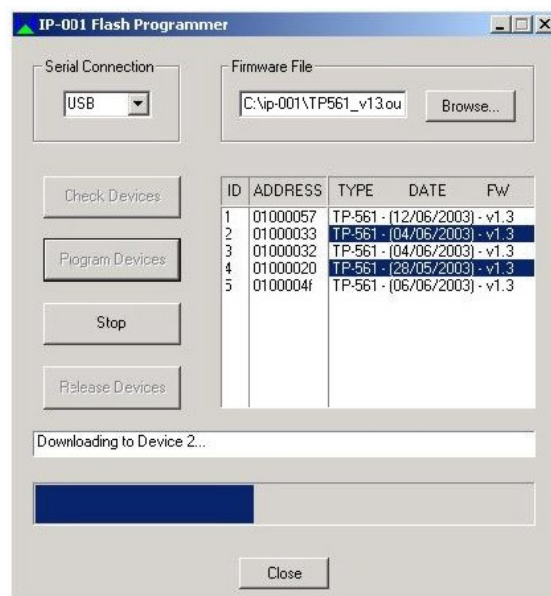Select the devices you wish to upgrade

Once the modules you would like to upgrade firmware to have been selected you will need to navigate to where the firmware file is located on your computer by clicking on the "Browse" button.

Once the "Browse" button is selected a navigation window pops up to allow you to locate where firmware file is located.

Once this has been selected the press the "programming devices" button which will start the firmware upgrade.

Indicator bar shows percentage of upgrade process.

Once all the modules have been fully programmed a message will be displayed "**Devices Programmed Successfully".**
WARNING: If power or connection is lost during updating process modules will jam or become corrupt. Modules need to be sent back to ALCAD for repair.