



IMPORTANT SAFETY INSTRUCTIONS

1. READ these instructions.
2. KEEP these instructions.
3. HEED all warnings.
4. FOLLOW all instructions.
5. DO NOT use this apparatus near water.
6. CLEAN ONLY with dry cloth.
7. Install in accordance with the manufacturer's instructions.
8. DO NOT install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. ONLY USE attachments/accessories specified by the manufacturer.
10. REFER all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
11. DO NOT expose this apparatus to dripping or splashing.

WATCH FOR THESE SYMBOLS:

 The exclamation point, within an equilateral triangle, is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

 The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electrical shock to persons.

CAUTION: To be installed by instructed, or skilled, persons only.

WARNING: This product is intended to be operated ONLY from the voltages listed on the product, user's manual, or the recommended, or included power supply of the product. Operation from other voltages other than those indicated may cause irreversible damage to the product and void the product's warranty. If you are unsure of the correct operational voltage, please contact your local distributor and/or retailer. If the product is equipped with a detachable power cord, use only the type provided, or specified, by the manufacturer or your local distributor.

WARNING: 45°C / 113°F is maximum ambient operating temperature. Avoid exposure to extreme heat or cold.

WARNING: To be powered by a Limited Power Source (LPS) only.

FCC AND CANADA EMC COMPLIANCE INFORMATION:

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.

CAN ICES-3 (B)/NMB-3(B)

FCC SDOC SUPPLIER'S DECLARATION OF CONFORMITY:

HARMAN Professional, Inc. hereby declares that this equipment is in compliance with the FCC part 15 Subpart B.

NOTE: 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.

Approved under the verification provision of FCC Part 15 as a Class B Digital Device.

Caution: Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this device.



此标识适用于在中华人民共和国销售的电子信息产品。标识中间的数字为环保实用期限的年数。

This logo applies to electronic information products sold in the People's Republic of China. The number in the middle of the logo is the number of years of environmental utility.

EU COMPLIANCE INFORMATION:

Hereby, Harman Professional, Inc. declares that the equipment type IRIS2 is in compliance with the following: European Union EMC Directive 2014/30/EU; European Union Restriction of Hazardous Substances Recast (RoHS2) Directive 2011/65/EU and as amended by 2015/863;

The full text of the EU declaration of conformity is available at the following internet address: https://www.amx.com/en/support_downloads/download_types/certification

WEEE NOTICE:

The WEEE Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE), which entered into force as European law on 14/02/2014, resulted in a major change in the treatment of electrical equipment at end-of-life.

The purpose of this Directive is, as a first priority, the prevention of WEEE, and in addition, to promote the reuse, recycling and other forms of recovery of such wastes so as to reduce disposal. The WEEE logo on the product or on its box indicating collection for electrical and electronic equipment consists of the crossed-out wheeled bin, as shown below.

This product must not be disposed of or dumped with your other household waste. You are liable to dispose of all your electronic or electrical waste equipment by relocating over to the specified collection point for recycling of such hazardous waste. Isolated collection and proper recovery of your electronic and electrical waste equipment at the time of disposal will allow us to help conserving natural resources. Moreover, proper recycling of the electronic and electrical waste equipment will ensure safety of human health and environment.

For more information about electronics and electrical waste equipment disposal, recovery, and collection points, please contact your local city center, household waste disposal service, shop from where you purchased the equipment, or manufacturer of the equipment.

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IREEDIT2 Infrared Control Capture Software

Overview

The IREEDIT2 program works with the IRIS2 USB IR Capture device to create AMX .irl files for use in AMX Control Systems. These .irl files are used by AMX IR ports to control devices by emulating the original IR hand control. The .irl files are typically packaged with the control system's other important files necessary for the implementation of a control system solution.

IREEDIT2 does not contain a database or other organizational structure for housing .irl files. Housing .irl files for later use can be accomplished with NetLinx Studio, IREEDIT v1, or any other repository the user cares to employ.

Supported Platforms

IREEDIT2 is a Python application and will run on many different platforms. It has been tested on Windows 10, Mac OSX 12.4

The IREdit2 Work Area

IREEDIT2 is a simple, purpose-built application made for the capture of IR control codes from the IRIS2 USB IR Capture Device. The simplified UI contains only a menu bar, a collection of icons for common menu tasks, and two tabs used in the capture of IR control codes.

IREdit2 Tabs

IREEDIT2 divides the work of capturing IR codes in to two tabs. The Properties tab for general information, and the Functions tab for the button by button details.

Properties Tab

When the IREEDIT2 application is started, the user is presented with the Properties Tab containing some default data.

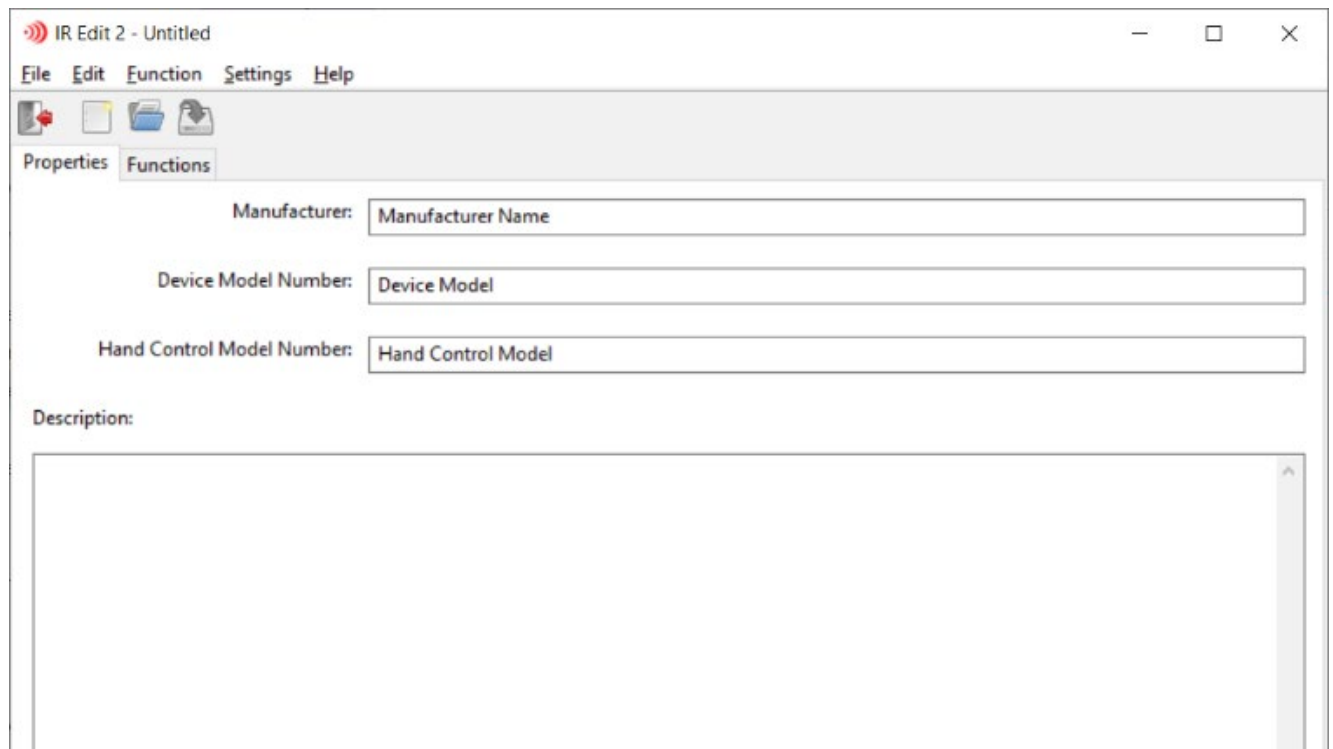


Fig 1 – The IREEDIT2 starting view

There are four fields for identifying the IR Hand Control being captured:

1. Manufacturer – The brand of device being captured

2. Device Model Number – The specific device being captured
3. Hand Control Model Number – The mode of the remote being captured. Some remotes are shared between device models.
4. Description – Essentially the release notes for the .irl file. User input is accepted, and some automated comments are made.

Functions Tab

The Functions tab is where the work of capturing the individual IR control codes happens.

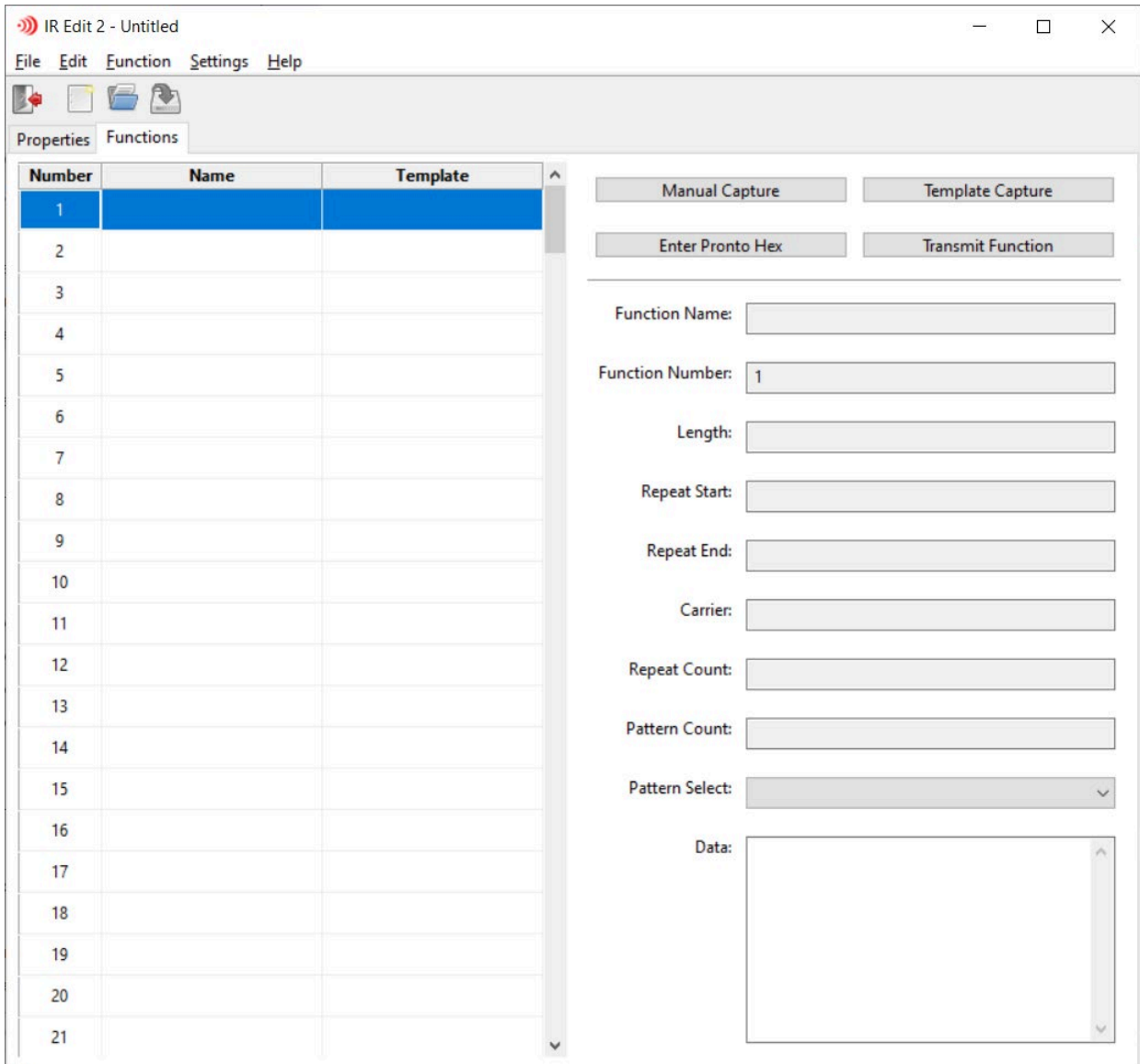


Fig 2 – The IREDIT2 Functions Tab

In NetLinx and Axxess control systems, the IR control codes are sent by number. Each function is numbered from 1-255 to allow actuation by a NetLinx or Axxess program by Channels. The numbered Channels are turned on to send the codes and turned off to cease transmitting.

Each numbered Channel has an associated Name to label the individual function codes. NetLinx Studio can use these names to create a set of numerical constants to make the IR functions easier to use within the NetLinx programming environment. Additionally, AMX .irl files have a standard order in which the most commonly used IR functions reside. Use of the standard order ensures easy swapping of IR controlled devices for other similar devices. For example, Power Toggle is captured at Channel 9, so every IR file that is captured in the standard order can be actuated on Channel 9 to toggle the power of the connected device. The Template and Template Capture functions are used to make adhering to the standard order easy.

Basic Operations

IRIS2 Capture unit

Most of the following steps will require the use of an IRIS2 USB IR Capture device (P/N AMX-CAC0002). This compact IR Capture device connects to the PC running IREDIT2 over a USB connection. A connection needs to be established with the IRIS2 to capture any IR control codes from an IR remote with IREDIT2. To connect to an IRIS2 that is currently plugged in to your PC, select Settings > Device Select from the IREDIT2 menu.

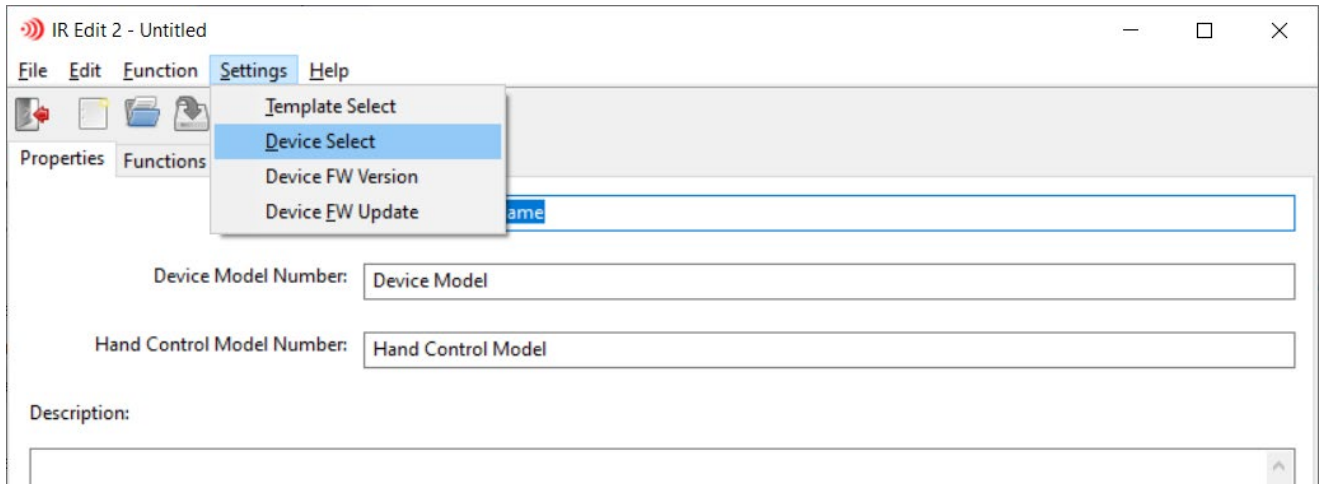


Fig 3 – Select the Settings > Device Select option from the menu to discover connected IRIS2 capture devices

If there is an IRIS2 device connected to the system, a dialog box will appear to confirm the selection of the IRIS2 unit. In the unlikely event of multiple IRIS2 units being connected to the same PC, you will be asked to choose the specific unit you wish to connect to.

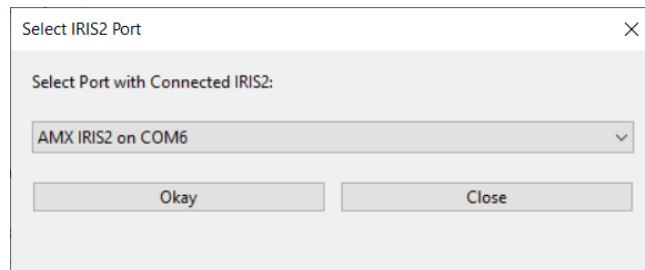


Fig 4 – Select the detected IRIS2 for use in capturing IR codes from an IR Hand Control

Select Okay to use the detected IRIS2 unit.

A confirmation dialog box will appear which includes the firmware version of the connected IRIS2.

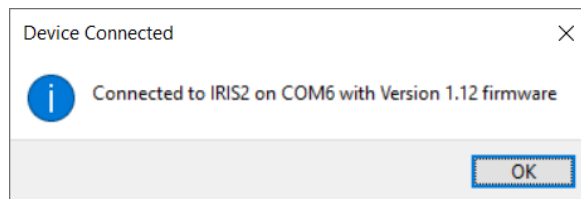


Fig 5 – Confirmation of successful communication with the IRIS2 capture unit

Creating a new Hand Control file

IREEDIT2 contains no large IR file management system. To create a new .irl file, click the 'New' icon or select File > New or click the 'New' icon

Capturing an .irl file

First, fill out the general information in the Properties tab of your new IR file.

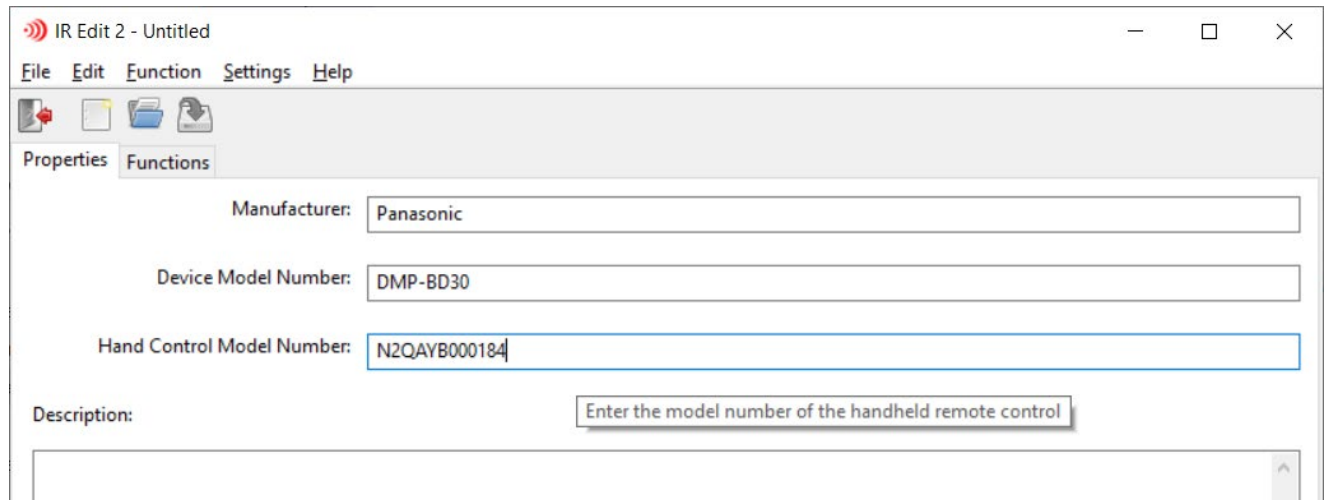


Fig 6 – The Properties Tab with some example information

Next, click the Functions tab to proceed with the capture of the IR Hand Control. IR Hand Control Capture falls in to three types: Template Capture, Manual Capture, and Discrete IR code import (Pronto RAW format). See the following sections for details on each of these capture methods.

Applying a Template

To perform Template Capture, selection of a Template is required. Template Capture assures that the standard order of IR capture is adhered to. This allows devices to be swapped easily if the IR codes that are used in a program are codes that are a part of the standard order. Common functions like power and input selection are part of the standard order for this reason.

To select a Template for your IR file, choose Settings > Template Select

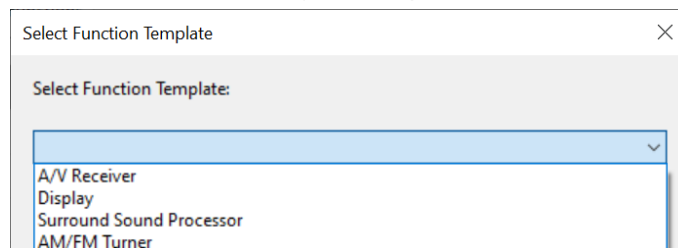


Fig 7 – Choose a device type template to guide the capture of the IR Hand Control

Once a Template is applied, the IR code list in the Functions tab will be populated with the names of all of the codes that are part of the standard order.

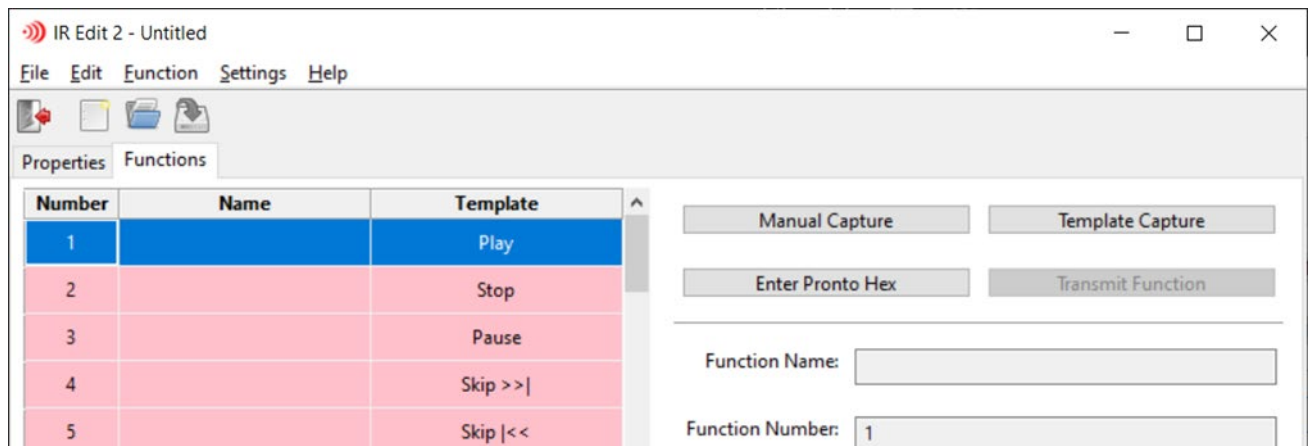


Fig 8 – A Template applied to a new IR file capture

These template names provide a guide to capturing the new IR file. These will be the default names for the functions captured and will enforce the standard order.

Performing Template Capture

With the first IR code selected as in Fig 8, click the Template Capture button to begin.

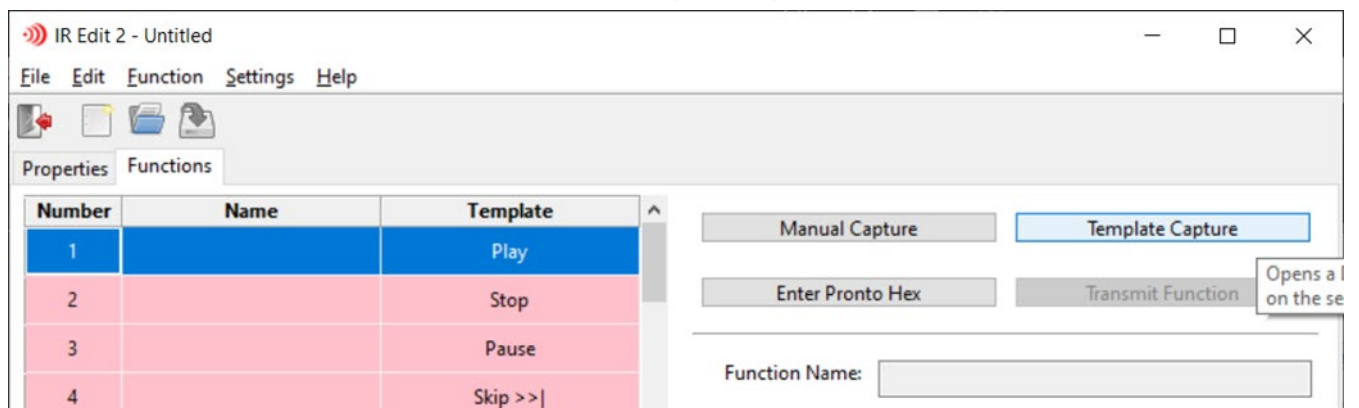


Fig 9 – Press Template Capture button to begin the template capture process

A dialog box will appear for the selected IR function. At this time, the multi-color LED on the IRIS2 should be white, indicating an idle state.

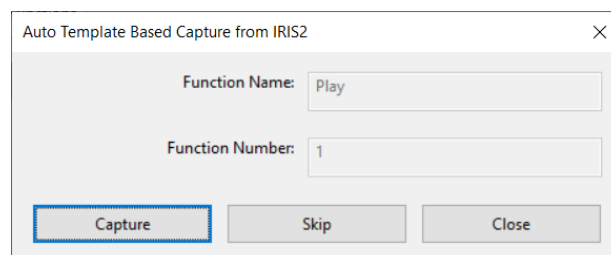


Fig 10 – The first template-provided entry. Play is given Channel 1 in the standard order. If the selected template does not contain transport controls, it will start after 1.

Click on Capture. The LED will change to blue, indicating the IRIS2 is ready to capture a new IR code.

Press the button on the remote that you wish to capture while pointing it at the set of two LEDs on the side of the IRIS2 unit. Release after the IRIS2 LED changes color.

If the capture was successful, the IRIS2 LED will change to green, and the Template Capture will advance to the next function.

If the capture was not successful, the IRIS2 LED will change to red and a dialog will appear asking if you would like to try again.

Repeat this process until the template-provided functions are exhausted.

Auto Template Based Capture from IRIS2

Function Name: REMOTE SPECIFIC BELOW

Function Number: 110

Capture Skip Close

Fig 11 – The last template-provided entry. Codes captured here and below are specific to the remote and not part of the template.

Using Manual Capture

Not all IR codes will fit in the standard order. IR functions specific to the controlled device need to be captured manually. Since they are not part of the standard order, it is unlikely for these codes to be common across multiple remotes.

To initiate Manual Capture, select the IR function code (or empty position) in the main list of IR Functions, then click Manual Capture.

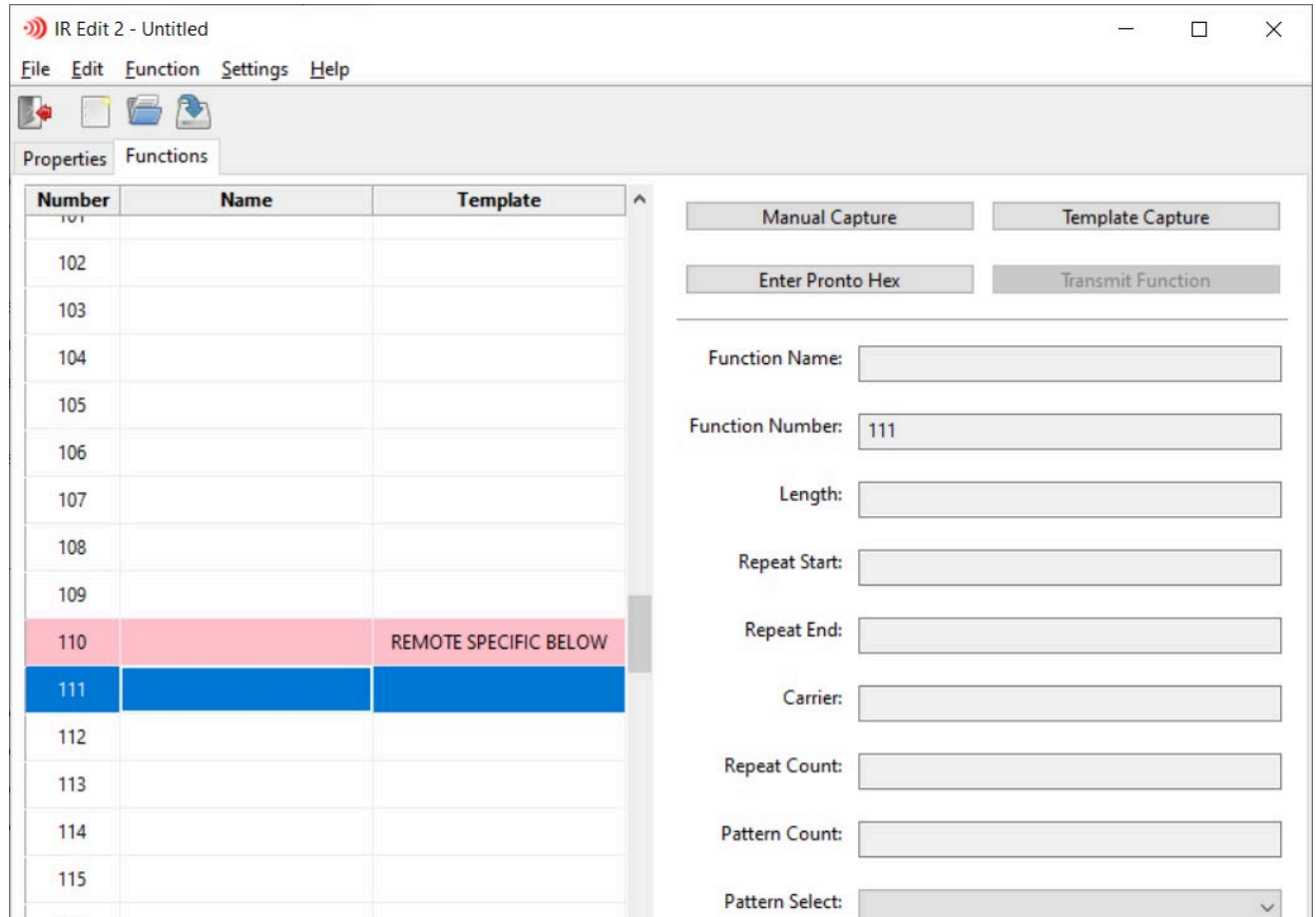


Fig 12 – Starting the Manual Capture process

Click Manual Capture to begin the process.

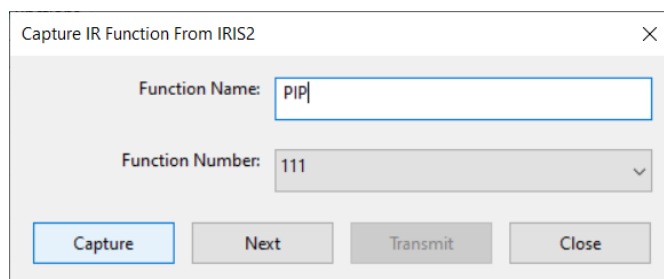


Fig 13 – The Manual Capture dialog. Unlike the Template Capture dialog, it allows for the unique naming of a function.

Enter the desired name, then click Capture. The IRIS2 LED should turn blue to indicate the readiness to learn a new IR code.

Point the IR hand control being captured at the array of 2 LEDs on the side of the IRIS2 and press the button to be learned. Release the button when the IRIS2 LED changes.

If the capture was successful, the IRIS2 LED will turn green. Click Next to move on to the next available IR code slot.

If the capture was not successful, the IRIS LED will turn red. A dialog will appear, asking if you would like to try again.

Repeat this process for all the remaining buttons on the IR Hand Control that you wish to capture.

Adding a Pronto Raw Hex Code

Not all of the IR codes that a device will respond to are available on the included IR Hand Control. Some are omitted to simplify the remote or are functions that are not expected to be used outside of an automation context. For example: most remotes include a Power Toggle button because they expect the user to observe the state of the device and hit the button only if they want it to change. In an automation context, having a function that only turns the device on no matter how many times the command is sent is quite desirable. To this end, manufacturers often publish IR codes that are not available on the remote. The most common format to relay these IR Codes is the Pronto Raw Hex Code format, which encapsulates the carrier frequency, repeat characteristics, and individual transition timings that make each code unique. IREDIT2 can accept data of this format and incorporate it in to the resulting .irl file for use in an AMX Control System.

To use a Pronto Raw (often called a Discrete Hex Code) in IREDIT2, do the following:

Select the IR Code Channel that the code will be applied to. In this example, the Power On function will be entered.

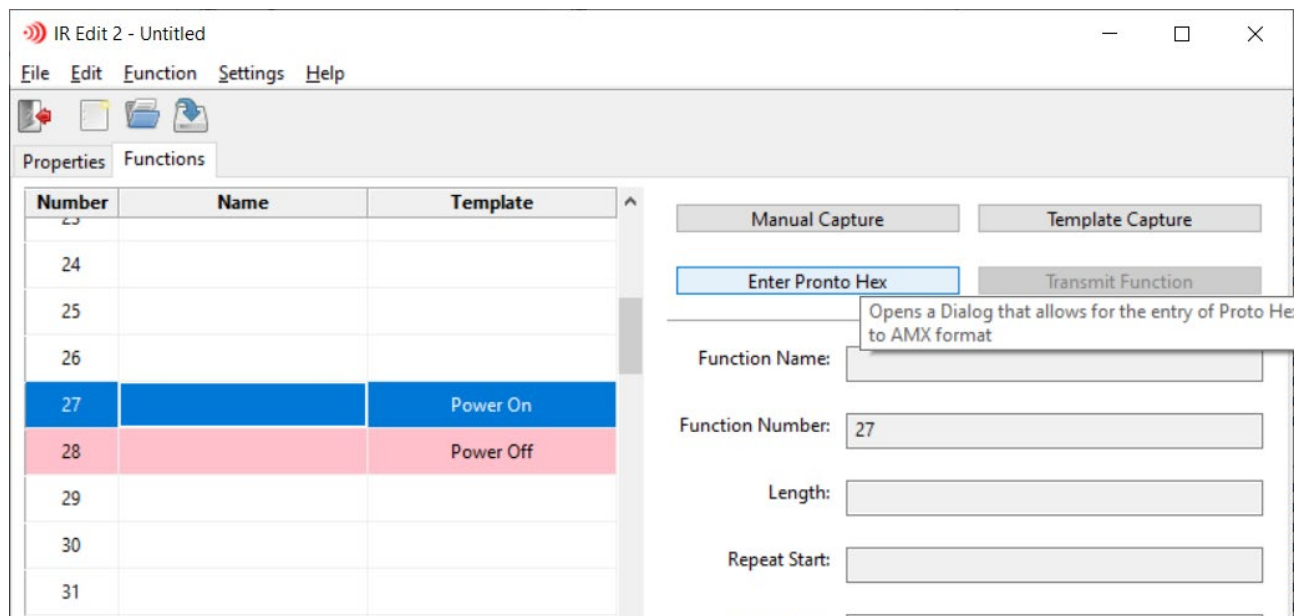


Fig 14 – The Power On function is selected, ready for the Pronto Hex data.

Click the Enter Pronto Hex button to initiate the process. Paste the Pronto Raw formatted data in to the dialog box. Pronto Raw data always starts with 0000.

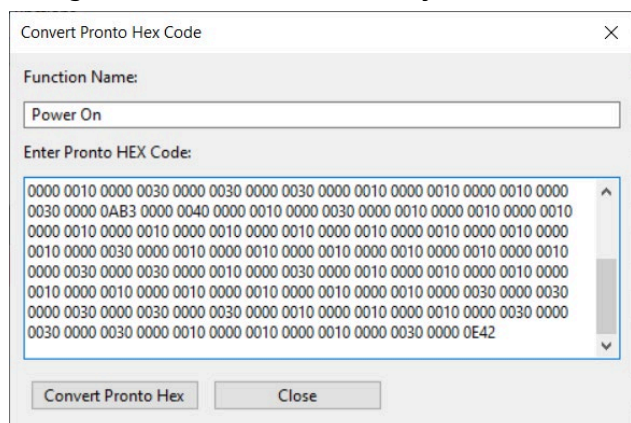



Fig 15 – The Pronto Hex Code import dialog box, filled with a discrete power on command.

Click Convert Pronto Hex to import and validate the new IR code.

Repeat for each function to be imported in to the .irl file.

Saving the IR file

All of the data including the IR codes and make and model information are only stored in the IREDIT2 program until the IR file has been saved. Make sure to save the .irl file to save your work and allow the captured codes to be used in an AMX Control System.

Choose File > Save or click the Save icon  to preserve your work.

Transmitting IR from the IRIS2

The IRIS2 has the ability to send IR codes without an AMX Control System. This can be a valuable tool for verifying the functionality of the captured IR Code. If the device that is to be controlled by the IR capture file is available, the IR code can be send and the device observed to look for the desired function.

To send a function through the IRIS2, select the IR code you would like to send.

Point the 2 LED array towards the device that is to be controlled.

Click Transmit Function to start sending the IR code from the IRIS2.

