



# ProManager Plus



## USER GUIDE

powersoft\_ProManager\_UG\_en

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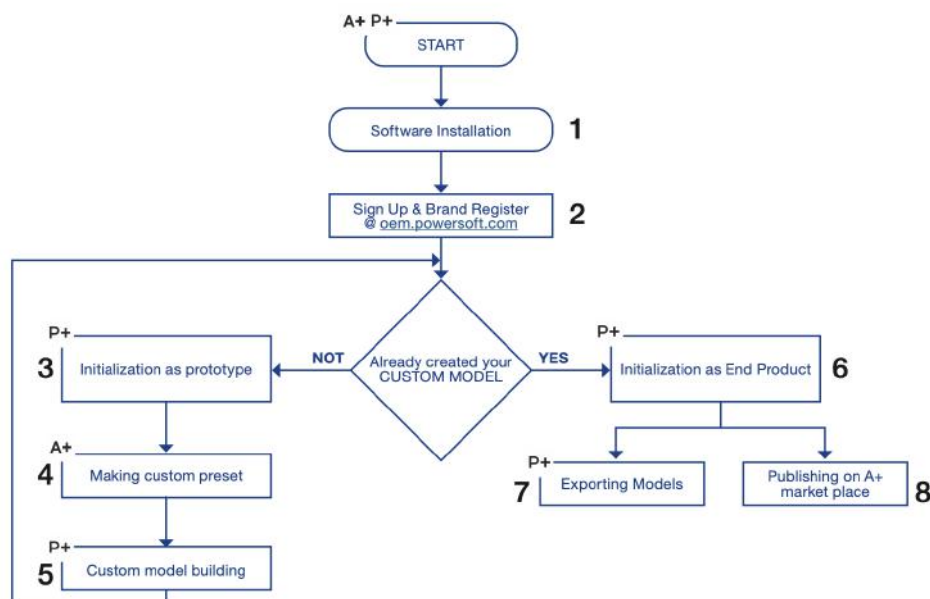
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## Introduction

Pro Manager Plus is a software made by Powersoft, and a dedicated platform for OEM manufacturers. Below you can find the block diagram which describes the work flow for using ProManager and all its capabilities.



In the blocks diagram you can find all the steps for creating your own custom model and how to get and manage it on Armonía Plus.

The custom model is, in practice, the virtualization of your loudspeaker, based on a system composed by Powersoft Amp+DSP, and your selected speakers. When creating a custom model, the manufacturer collects a set of information regarding the filtering of each audio way, signal path, and other settings which are then used by ArmoníaPlus. The custom model building is a mandatory task for managing your own customized loudspeaker on ArmoníaPlus and protect your know how, but also for maximizing the customization of your loudspeaker.

The Custom model building includes specifying info about name, connected amp modules, vectorial picture and associated presets to loudspeakers. Before starting the custom model building, all these information and presets must be collected. Making a custom preset is what we call prototyping, a set of tasks including tuning, limiters setting and files exporting.

Since each DSP and amp module are sent to the manufacturer as an integration kit, the assembly must be initialized before starting the prototyping phase (as Powersoft Model). The DSP must be initialized as it doesn't know what kind of amplifier will be connected on it. This task includes specifying info about FW version, serial number and scale factors.

Once prototyping is done, you will pass to mass production, initializing as custom model for each assembled loudspeaker before it's sold. ProManager takes care of each of the aforementioned tasks.

## Software Installation

Prior to installing ProManager Plus, please make sure you have the latest version of ArmoníaPlus installed on the same PC.

Find the latest ArmoníaPlus download here:

<https://www.powersoft.com/en/software/armoniaplus/>

Download and install the latest version of ProManager Plus here:

<https://www.powersoft.com/en/software/promanager-plus/>

### Note!

ArmoníaPlus and ProManager Plus can run simultaneously on the same PC.

When both software are running, the Communication Interfaces (Ethernet/COM ports) MUST be stopped on ProManager Plus before being activated in ArmoníaPlus, and viceversa.

**A+** Download and install  
ArmoníaPlus

**P+** Download and install  
ProManager Plus



# 3

## Account

Please register your personal account here:

[identity.powersoft.com/login/#/en/login](https://identity.powersoft.com/login/#/en/login)

or press “new user”.

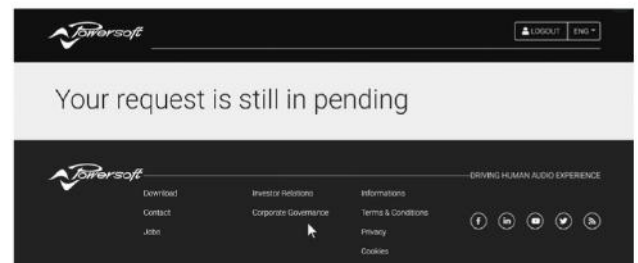
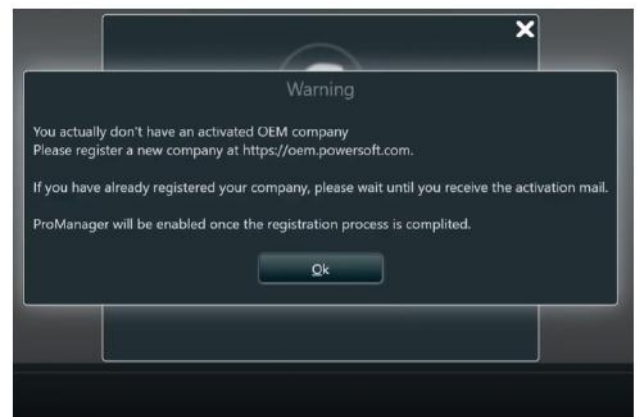
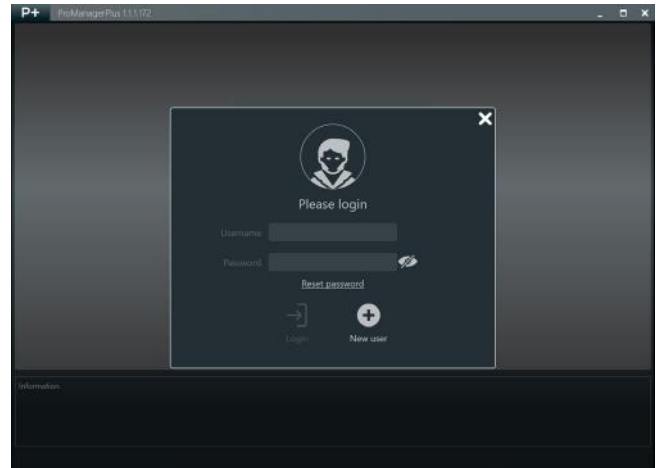
After activating a personal account, the same credentials can be used for logging in both ArmoníaPlus and ProManager Plus.

If you haven't registered any brand yet, please follow the instructions to register it on the ProManager database

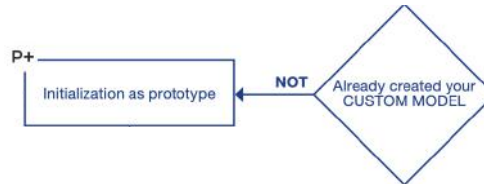
Press ok, you will be redirected to <https://oem.powersoft.com/portal/> where you can register your own brand before starting your ProManager experience.

N.B. Please note that, your request needs to be activated by the ProManager team before you log-in for the first time. The activation is usually done within 24 h.

Sign Up & Brand Register  
@ oem.powersoft.com



## Initializing Prototypes

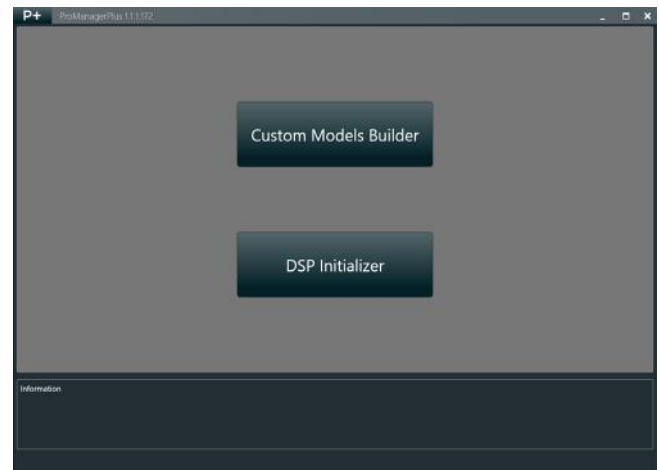


Following the block diagram, after the software installation and brand registration, you need to ask yourself the question: have you already created a custom model? If you haven't, proceed with the prototyping of your system DSP+AMP

At your first login, ProManager offers two choices: building custom model or DSP initialization.

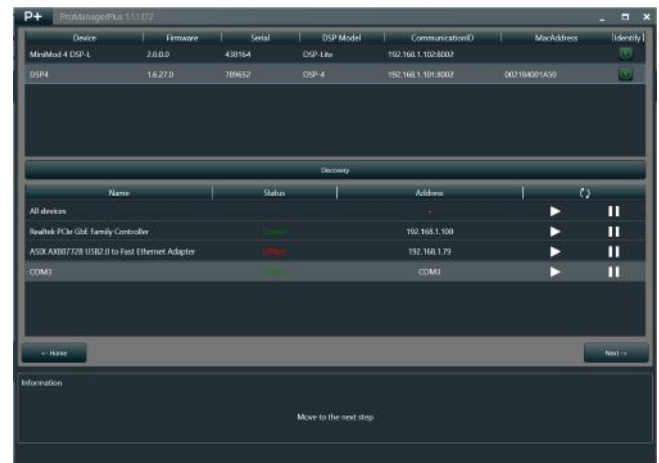
Press DSP Initializer to proceed to all DSP initializing operations.

While hovering over any button, toggle or checkbox, an information box will appear with the description of the function.



### 4:1.Remote Entities

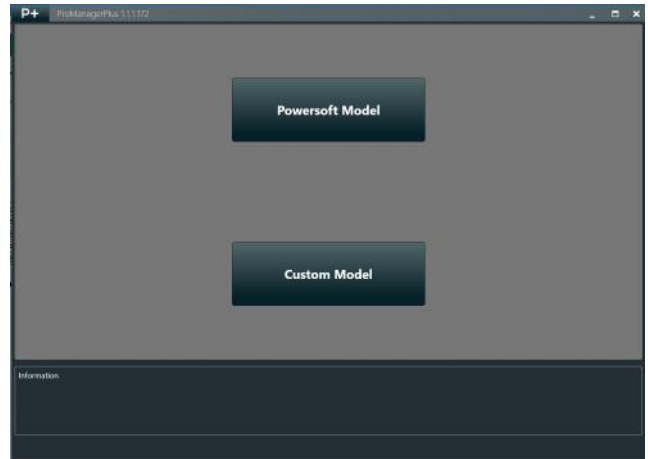
The first step is remotely discovering the connected DSP+AMP device. Turn on the network card where you have connected the device, or the virtual COM if the DSP communicates via serial port. Select the discovered entity and then press next to access the following step.





## 4:2.Which Model

When a Powersoft Model is used to initialize the device, the DSP+AMP will be initialized with factory settings. After that, the assembly will be ready to be enabled and discovered on Armonia Plus for tuning and prototyping.



## 4:3.Loto

### 4:3.1.General

#### Operating Mode

1. Initialize the DSP board. The procedure also includes optional firmware update.

2. Perform a firmware update and skip the initialization procedure.

#### Settings

3. Select the number of Analog inputs according to the connected input interface PCB.

4. Configure Loto for user interface, Led+Push Buttons or Display.

5. Select ON to enable the AES3 input, select OFF to disable the AES3 input (only available on Loto Advanced).

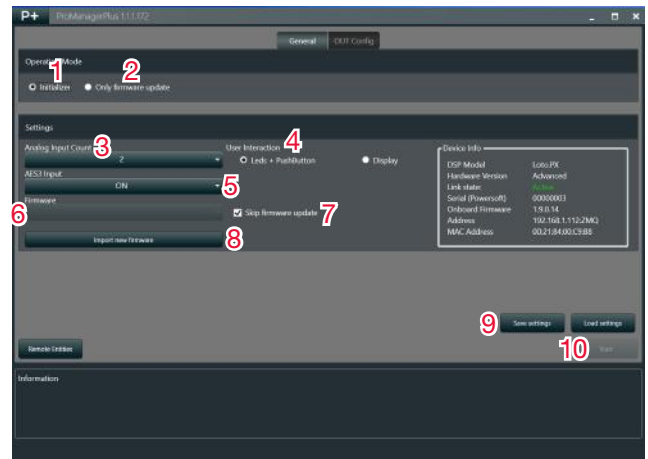
6. Select the firmware version for Loto, ProManager checks for new firmware at startup, please make sure your PC is online.

7. Choose to skip the firmware update process if not required.

8. Manually import firmware

9. Save and Load the parameter entered for this DSP for future initialization

10. Start the initialization process



### 4:3.2.Output Configuration

#### Amplifier(s) selection

1. Select the number of amplifiers connected to Loto

2. Select the amplifier model connected to the DSP

3. Select the amplifier's output configuration

4. Press apply after selecting

#### Physical Output selection

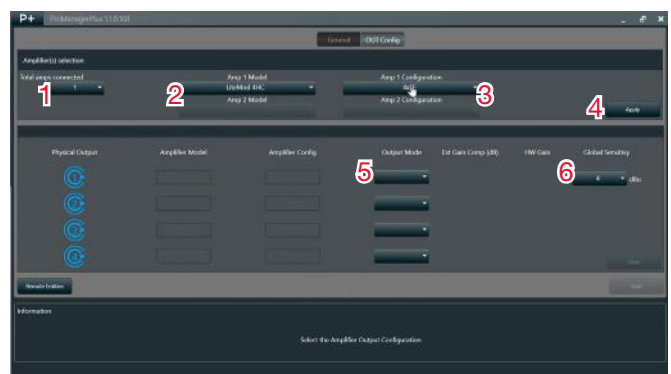
1. Output Mode:

Amp Mode = output to amplifier.

Line-Level = output to XLR (requires external line-level driver/buffer, refer to Loto documentation for designer's guidelines).

Off = output not used

2. Define Analog input level for amplifier(s) maximum output, applies to amplifier outputs only



## 4:4.DSP-L/DSP-D/D-Cell

### Operating Mode

1. Initialize the DSP board. The procedure also includes optional firmware update.

2. Perform a firmware update and skip the initialization procedure.

### Settings

3. Enter the model of the desired product.

4. Enter the 6 digits of the Serial Number shown on the back of the DSP Board in the form SNXXXXX.

5. Enter the model of the desired product.

6. Select the firmware version that you want to store on the DSP.

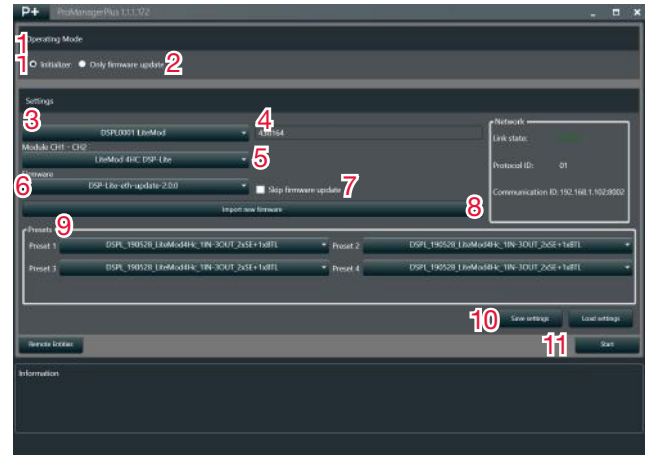
7. Skip FW update during initialization.

8. Click to browse your PC and locate the firmware file.

9. Select the starting Preset that you want to store on the DSP.

10. Save and Load the parameter entered for this DSP for future initializations.

11. Start the initialization process.



## 4:5.Ipa1Mod/M-Drive

1. Enter the model of desired product.

2. Enter the 6 digits of the serial number on the back of the DSP board in the form SNXXXXXX.

3. Select the firmware version that you want to store on the DSP.

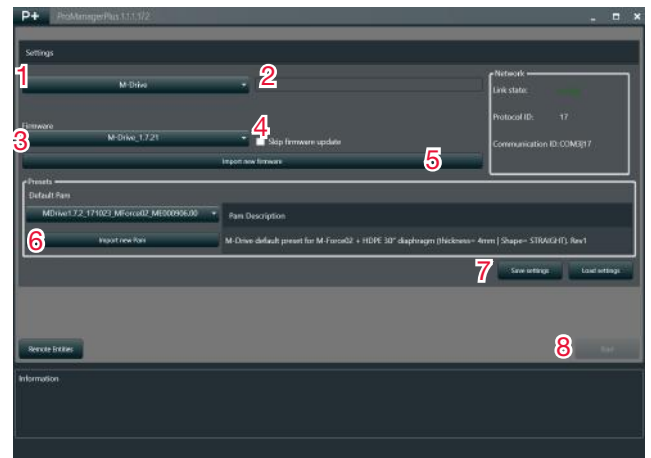
4. Enable to skip the firmware update process if not required.

5. Manually import firmware.

6. Select default pam.

7. Save and Load the parameter entered for this DSP for future initialization.

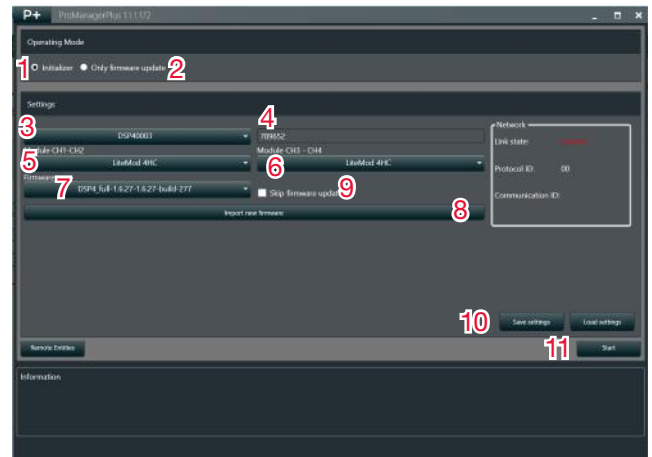
8. Start the initialization process.



## 4:6.DSP-4

### Operating Mode

1. Initialize the DSP board. The procedure also includes optional firmware update.
2. Perform a firmware update and skip the initialization procedure. Settings.
3. Enter the model of the desired product.
4. Enter the 6 digits of the Serial Number shown on the back of the DSP Board in the form SNXXXXX.
5. Enter the model of the desired product for CH1-CH2.
6. Enter the model of the desired product for CH3-CH4.
7. Select the firmware version that you want to store on the DSP.
8. Click to browse your PC and locate the firmware file.
9. Skip FW update during initialization.
10. Save and Load the parameter entered for this DSP for future initializations.
11. Start the initialization process.
12. Go back to the list of DSP board currently connected.



## Making Custom Presets

### 4 Making custom preset

After you have finished the initialization, the DSP+Amp assembly is going to be discovered by ArmoniaPlus, from which you can start to make custom presets.

ArmoniaPlus provides the best user interface for managing the algorithms available on any Powersoft DSP.

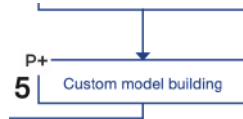


Loudspeaker tuning is done when one you reach the desired performance of the loudspeaker. At this point you may proceed to save all settings by exporting a custom preset. A custom preset is an exported file from the loudspeaker entity, this file is a sort of snapshot that describes the acoustic performances of the loudspeaker.

More than one custom presets can be exported, but the number of custom presets available locally depends on the DSP type.

DSP Model	Local Presets Available
Loto	Up to 24 local presets
DSP-4	Up to 10 local presets
DSP-L/DSP-D/D-CellDSP	Up to 4 local presets
IpalMod/M-Drive	1 local preset

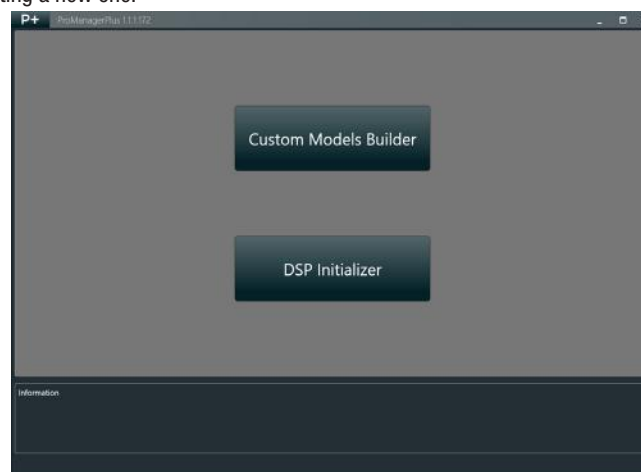
## Custom Model Building



The custom presets just created are ready to be associated to a custom model, you can create your own in the section called Custom Model Builder. The custom model you are going to create will be saved in the cloud, after which it will be always available for modifying or exporting in a different PC where ProManager Plus is installed, as long as the correct log-in credentials are used.

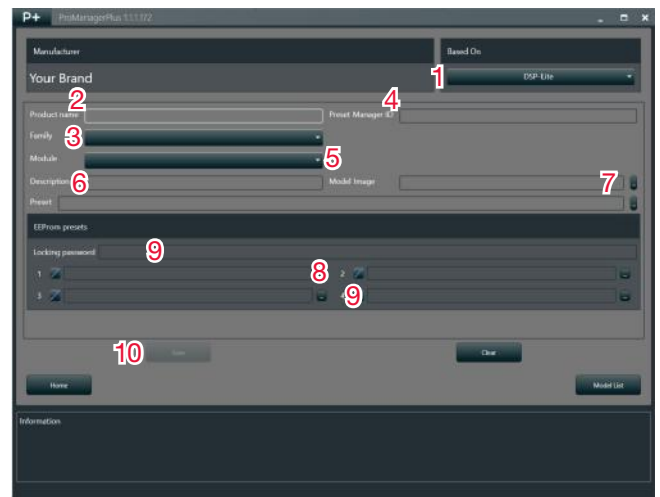
What you can do in terms of customization depends on the kind of DSP, for example DSP-Lite doesn't have the same customization capabilities than Loto and of course each custom model accepts only presets exported from a Powersoft Model (prototype) based on the DSP chosen when building the custom model.

At the opening window of ProManager Plus, select 'Custom Model Builder'. Once opened, you will see the custom model list where all saved models are shown. Press 'New Model' for creating a new one.



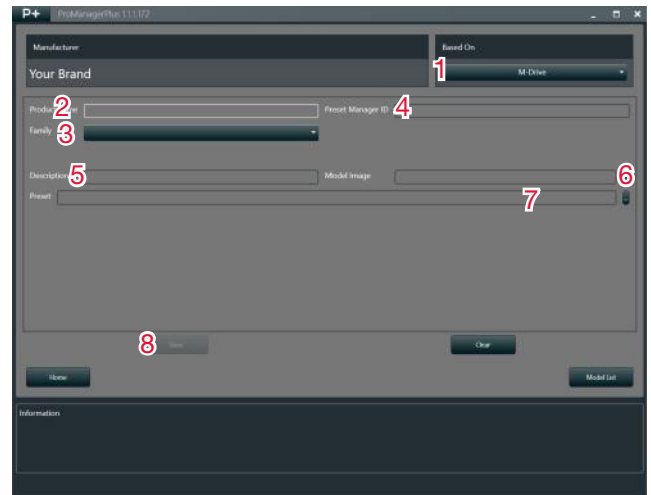
### 6:1.DSP-L/DSP-D/D-CELL

1. Select the DSP model for your speaker.
2. Enter the Product Name.
3. Enter a Family or choose an existing one.
4. Preset Manager ID, this field could be the same of Product Name, is the exclusive ID that the Preset Manager uses to define the preset associated to a product.
5. Choose the connected amp module.
6. Enter a short description like "2-way loudspeaker".
7. Import the image for your product. This will represent your custom model in ArmoníaPlus.
8. Import custom presets previously exported.
9. Set the locking slot state and put a locking password.
10. Save model.



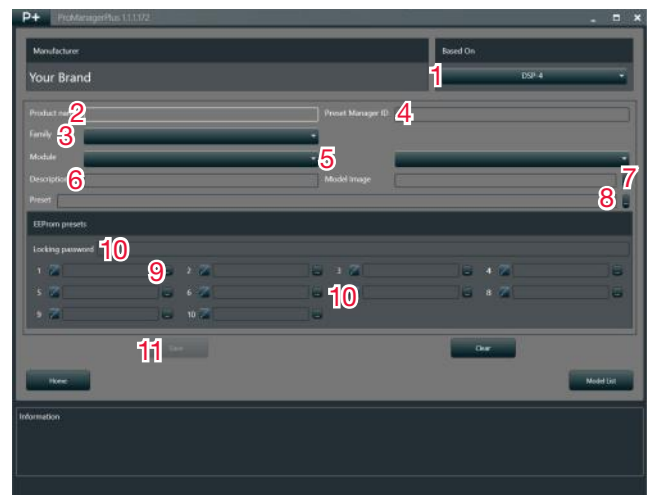
## 6:2.IpalMod/M-Drive

1. Select the DSP model for your speaker.
2. Enter the Product Name.
3. Enter a Family or choose an existing one.
4. Preset Manager ID, this field could be the same of Product Name, is the exclusive ID that the Preset Manager uses to define the preset associated to a product.
5. Enter a short description like “2-way loudspeaker”.
6. Import the image for your product. This will represent your custom model in ArmoníaPlus.
7. Import custom presets previously exported.
8. Save model



## 6:3.DSP-4

1. Select the DSP model for your speaker.
2. Enter the Product Name.
3. Enter a Family or choose an existing one.
4. Preset Manager ID, this field could be the same of Product Name, is the exclusive ID that the Preset Manager uses to define the preset associated to a product.
5. Choose the connected amp module.
6. Enter a short description like “2-way loudspeaker”.
7. Import the image for your product. This will represent your custom model in ArmoníaPlus.
8. Import the .pam file containing the product's default parameters.
9. Import custom presets previously exported.
10. Set the locking slot state and put a locking password.
11. Save model.

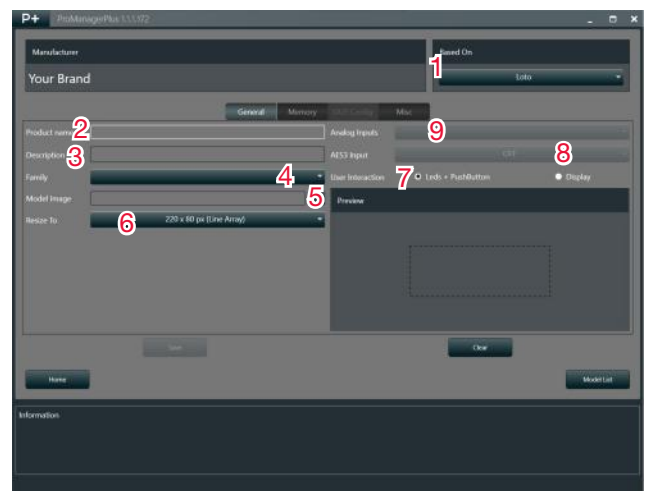


## 6:4.LOTO

### 6:4.1.General

1. Select the DSP model for your speaker.
2. Enter the Product Name.
3. Enter a short description like “2-way loudspeaker”.
4. Enter a Family or choose an existing one.
5. Load an icon for your loudspeaker. This will represent your custom model in ArmoníaPlus.
6. Select the resize option that best suits your loudspeaker.
7. Configure for LEDs+Push Button interface or Display.
8. Recap Analog inputs, not editable.
9. Recap AES3 input, not editable.

The last two points depend from the associated factory default snapshot.



## 6:4.2.Memory

1. Select memory banks, up to 6x banks, 4 presets each. The active banks must all be filled with presets.

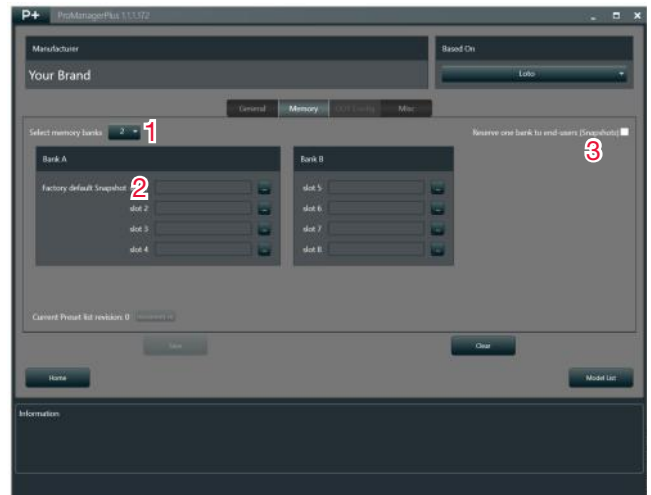
2. Factory default Snapshot: Load a snapshot (.pam), containing a valid Powered-speaker-preset.

The Powered-speaker-preset portion will be recalled when selecting memory Slot 1. The entire Snapshot will be recalled at Factory default Reset.

3. Reserve one bank to end-user (snapshots) .

OFF = end-user can only recall factory-defined presets.

ON = end-user can recall factory-presets and save/recall snapshots.



## 6:4.3.Misc

1. Memory Navigation:

Bank Mode = click to navigate preset in a bank.

List Mode = click to navigate all presets in all bank.

2. External RGB LED.

Define the loudspeaker front-mount RGB LED Color.

3. Memory Bank Color.

Define the Preset-LEDs color for each memory bank.

4. Spare Button.

OFF = disabled.

Ext RGB LED on/off = Click to toggle Ext LED on/off.

Energy-save = long press to toggle E-save mode on/off.

Energy-save + Ext RGB LED on/off = long press to toggle E-save, click to toggle ext LED.

5. Energy-save mode: define the amplifier behavior when in Energy-save mode:

Mute = PWM OFF (higher consumption, short wakeup time).

SDPWS = Power Supply OFF (lower consumption longer wakeup).

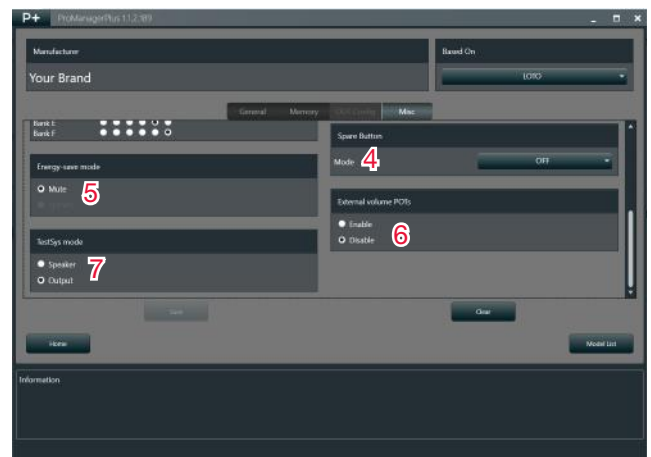
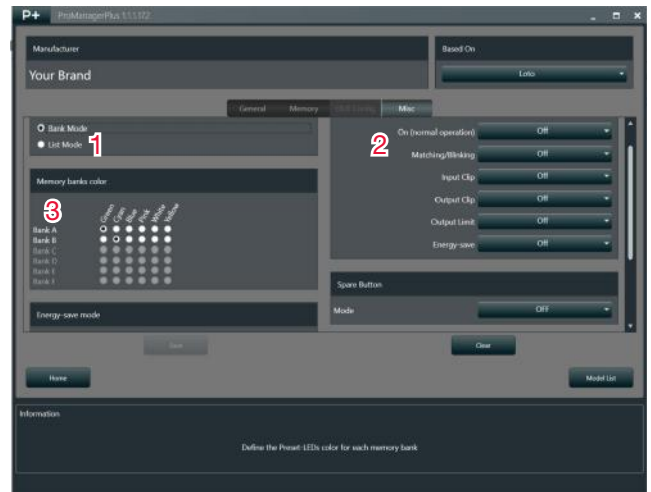
6. External volume POTs.

Enable/Disable VCA inputs for speakers' volume control.

7. TestSys mode: define internal generator for TestSys in ArmoníaPlus.

Speaker = mute/unmute of the entire speaker.

Output = mute/unmute of different ways in a speaker.



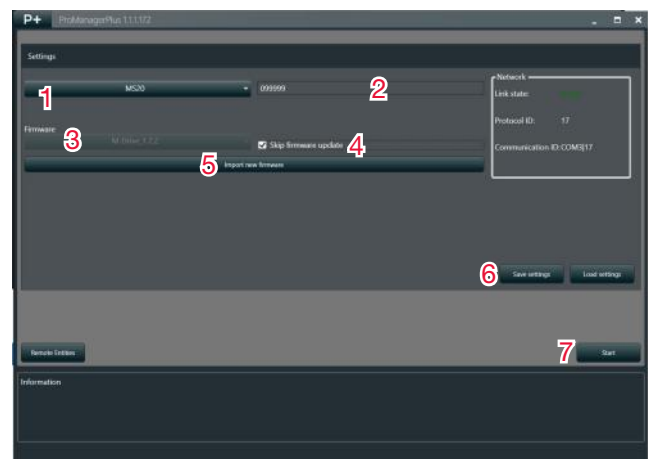
## Initialization as End Product



After creating your own Custom Model, you can initialize the DSP as a Custom DSP. This task is inactive until you have created a custom model based on the DSP that you want to initialize.

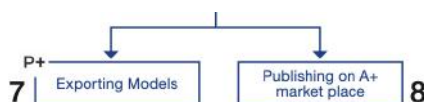
Back to the first window, ProManager Plus offers two choices: building custom model or starting DSP initialization. Press DSP Initializer to access all DSP initializing operations. Select the device you want to initialize (the same DSP used for building the custom model) and press Next, the button Custom Init will now be activated.

1. Enter the model of the desired product.
2. Enter the 6 digits of the Serial Number shown on the back of the DSP Board in the form SNXXXXX.
3. Select the firmware version that you want to store on the DSP.
4. Click to browse your PC and locate the firmware file.
5. Skip FW update during initialization.
6. Save and Load the parameter entered for this DSP for future initializations.
7. Start the initialization process.





## Publishing Custom Models



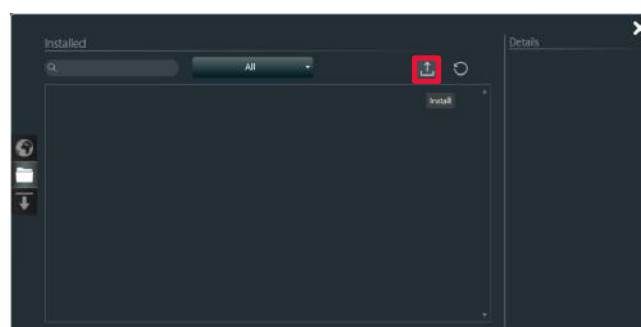
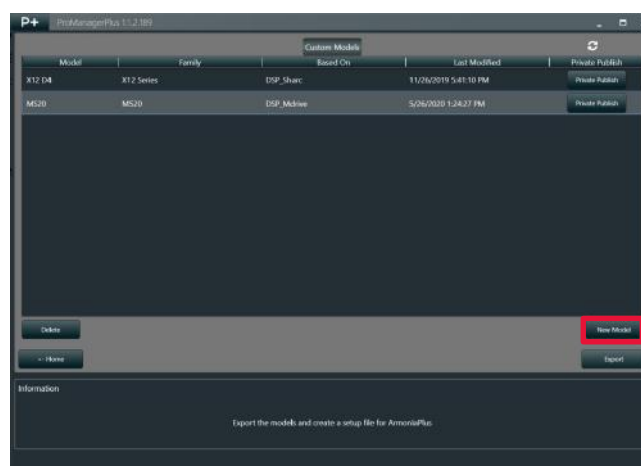
The publishing consists in making a single custom model available or a bundle of custom models for the end-user that wants to manage different loudspeakers in ArmoníaPlus. Since your products have been initialized using custom settings, it is necessary that the end-user installs these settings first before discovering the devices, otherwise your product will appear as an “unknown model”.

### 8:1.Exporting Models

When clicking on the ‘Export’ button, ProManager Plus creates a package compatible with Armonía Plus. The package contains the information on all created custom models available in the list, so it is not possible to export a single model or separate models one-by-one..

In order to install the package, open ArmoníaPlus and move to MarketPlace under the Option menu (click on the A+ icon on the top-left corner). Click on install and search the package using the browser. After that, the package will be installed and the devices will be discovered.

Now you can release the ArmoníaPlus Package package to whomever you want, via the channels you prefer.



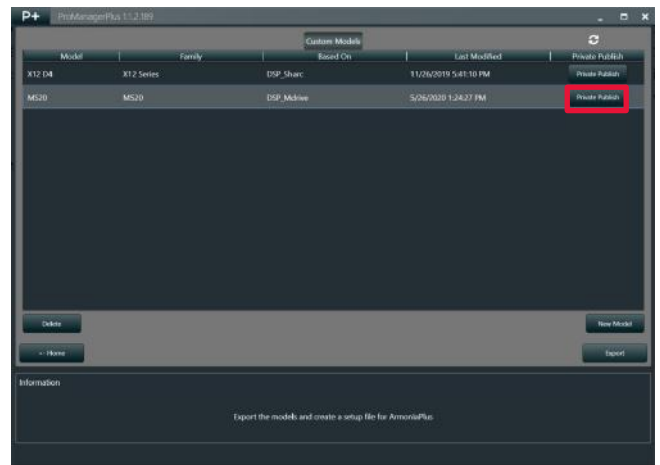
## 8:2.Publishing on A+ MarketPlace

ProManager Plus gives manufacturers the possibility to release their own custom models by publishing them on ArmoniaPlus MarketPlace. MarketPlace is a common space where end users can search and find the custom models they want from any given manufacturer who has published at least one custom model for it.

### 8:2.1.Private Publishing

This kind of publishing allows the custom model to be available just for the users that belong to the same brand manufacturer, so logged in ArmoniaPlus and OEM database; usually a kind of user or end user that the manufacturer has invited to collaborate in the product development.

If the custom model is published as private, it will not be available globally for each end user, but just to users who collaborate with the manufacturer who is publishing the custom model. In order to publish a private custom model, click on the button “Private Publish”. before publishing is advisable to allow tracking of updates and release versions



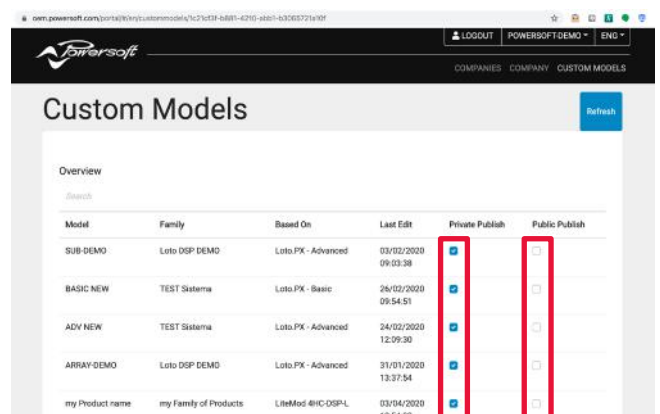
In order to unpublish the custom model, log-in to the OEM database and go to the “Custom Model” section. Uncheck the box “Private Publish” corresponding to the custom model you want to unpublish.

### 8:2.2.Public Publish

The Public Publish allows to make the custom model available to all users that have log-in credentials on ArmoniaPlus. Once you have published the custom model in private, go to the Custom Models section in the OEM database and check the box “Public Publish”.

Just like unpublishing a private custom model, you can unpublish a public custom model by unchecking the box corresponding to it.

Prior to publishing a custom model like Public, you must always publish the model as Private; as soon as the custom model is published as Public, the button Private returns available. Making a Private Publishing when the custom model is published as “Public”, overwrites the current publishing. Checking the box “Public Publish” in the OEM data base is required for publishing for all user.



In order to unpublish the custom model, log-in to the OEM database and go to the “Custom Model” section. Uncheck the box “Private Publish” corresponding to the custom model you want to unpublish.

For additional information, please refer to video tutorials available in the official [Powersoft channel](#).





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