

ProNet-485 Quick User Guide: IS modules



The ProNet-485 will add two important features to any DigiMod module with a DSP:

- ▶ Direct module programming (**ProNet**) without the need for any accessory programming board
- ▶ Networking capabilities (**ProNet**) via Armonía to allow remote operability .

Before beginning to use the ProNet-485, please install the latest version of Powersoft's Armonía Pro Audio Suite. In order to do so, download the latest version at:

<http://www.powersoft-audio.com/en/armonia-support-forum.html> (forum registration required)

I Armonía installation:

I.1 First Installation

If no other version of Armonía has been previously installed, double click on the icon and follow the on screen instructions to install the software.

I.2 If An Older Version Of Armonía Has Been Previously Installed:

- ▶ Uninstall the current version of Armonía that you have in your PC in the window "Add and Remove Programs" following this route:
- ▶ For Windows XP:
 - ▶ My Computer → Control Panel → Add and Remove Program
- ▶ For Windows 7 or Vista:
 - ▶ My Computer → Control Panel → Uninstall a Program
- ▶ A window with a list of all installed software will appear: search for Armonía and double click on the icon
- ▶ Follow the onscreen instructions for the uninstall procedure
- ▶ Delete the Powersoft folder that contains files that are now obsolete. The folder can be found at:
 - ▶ My Computer → Hard disk C: → Programs → Powersoft
- ▶ Double click on the Armonía con and follow the istructions to install the software.

Connecting the ProNet-485 to a computer requires a USB/RS485 adapter. Please install the adapter drivers *before* attempting to connect the module to the computer via the ProNet-485. Download the drivers at the following link, selecting the one compatible with your operating system.

<http://www.ftdichip.com/Drivers/VCP.htm>

Please refer to your operating system user guide to see how to install drivers for third party hardware.

2 Connecting The Pronet-485 To The IS Module And Setting It Up For Operations:

- ▶ Screw the two spacers included with the ProNet-485 on the

front side of the IS module interface at the sides of the 20 pin DIL connector. Use a 5.5 tubular key and the included cut washer (the two nuts included are intended for a more permanent assembly of the ProNet-485 to the IS module which requires the removal of the interface block from the IS panel).



FIGURE 1: The IS module front panel. Where to position the spacers

- ▶ Insert the ProNet-485, label facing down towards the Powersoft logo, on the 20 pin DIL male connector on the IS module. Note that the ProNet-485 has 24 pins and the interface has 20 pins. The interface allows the connection because the four extra pins at sides of ProNet485 are not used and connected.

2.1 Connectig The IS Module With The Pronet-485 Inserted To A Pc:

- ▶ Take the RJ45/RS485 cable and connect the RS485 end to the RS485/USB adapter and the RJ45 end to the ProNet-485 attached to the IS module (either RJ45 port is fine)
- ▶ Connect the RS485/USB adapter to the USB port of the PC

2.1.1 When you want multiple modules connected in a daisy-chain:

- ▶ Take an Ethernet patch cable (such as this one: http://www.maritv.net/Public/data/Rudok70/20111030121343_patch.jpg) and insert it in the free Ethernet port of the first ProNet-485 in the daisy chain.
- ▶ Use other Ethernet patch cables to connect all other ProNet-485s mounted on other DigiMod amp modules.

2.2 Setting the ProNet-485 ID for networking

In order for a ProNet-485 to be part of a network, it must have a

unique network ID to distinguish it from all other entities on the network.

Using a flat head screwdriver, set the ProNet's ID number using the labeled rotary trimmers on top of the device: one sets the tens and one the units.



FIGURE 2: The ProNet485 ID number selection dials

For example:

If there are three modules in the network, a possible numbering configuration could be the following:

Module 1: Tens = 1 / Units = 0 --> ID number = 10

Module 2: Tens = 1 / Units = 1 --> ID number = 11

Module 3: Tens = 1 / Units = 2 --> ID number = 12

Each ProNet-485 MUST have its unique ID number and no ID number can be "00"

You will see each ProNet-485 ID number in Armonía, associated to the module that you have set.

Should there be two modules (or more) with same ID number, Armonía will display an erratic behavior while trying to connect with these. The system will remain stable, but all the same-ID-number modules will not be managed correctly by the software.

3 Using The Module In Armonía:

- ▶ Launch Armonía
- ▶ Set the COMs port using the Communication Manager
- ▶ Turn on the amp module(s) in your system
- ▶ Click on the discovery button in Armonía once (please wait a few seconds)
- ▶ All your connected DigiMods should appear in the "Remote Entities" window. The ProNet485 and USB converter LEDs should be blinking
- ▶ Drag and drop the device from the "Remote Entities" window to the "Workspace" window to start using it.

4 Using the Communication Manager

4.1 Getting Started

The Communication Manager is a new tool in the Armonía Suite (starting from version 2.3.0). Its main purpose is to improve the interaction with the network communication stack. The Communication Manager allows the end user detailed control of all installed and active communication interfaces (network and serial) on the PC.

4.2 Accessing The Communication Manager

In order to access the Communication Manager, click on the Armonía logo in the upper left hand corner. Click on the options button.

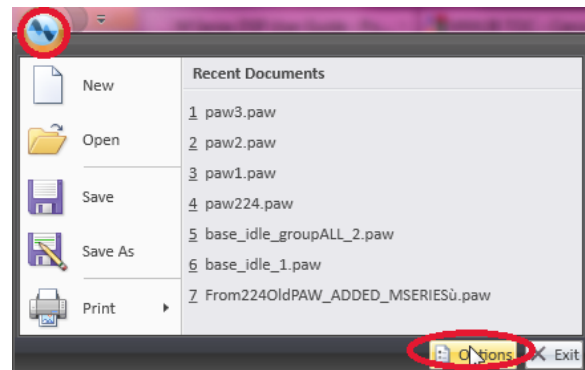


FIGURE 3: The upper left hand corner logo and the option button

The following will appear:

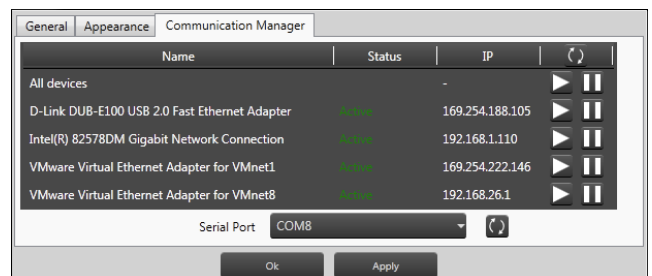


FIGURE 4: How the Communication Manager appears at start-up

Please keep in mind that any time Armonía is launched the Communication Manager strategy will:

- ▶ use only active interfaces (correctly loaded and connected by the host OS)
- ▶ remember the last serial port used in the previous session
- ▶ start using all active and connected network interfaces on your system

4.3 Communication Manger Functions

The figure below explains the main functions provided by the Communication Manager.

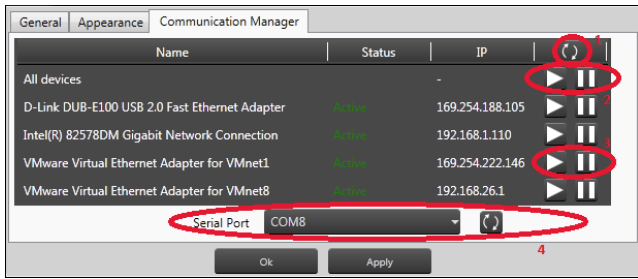


FIGURE 5: The functions of the communication manager

Refresh all the network interfaces on your system. For example, if you start Armonía with a disconnected ethernet cable, the devices may not be discovered.

1. Start/stop all the connected ethernet interfaces on your PC.
2. Start/stop a single connected interface on your PC.
3. Handle the serial communication according to Armonía defaults¹

NOTE: By pressing a start/pause button, the selected interface(s) will be stopped/started immediately.

4.4 Shutting Down The Network Communication

If you want to shutdown all ethernet communication, it is possible to pause all the network interfaces at once by pressing the general pause button shown in the figure below.

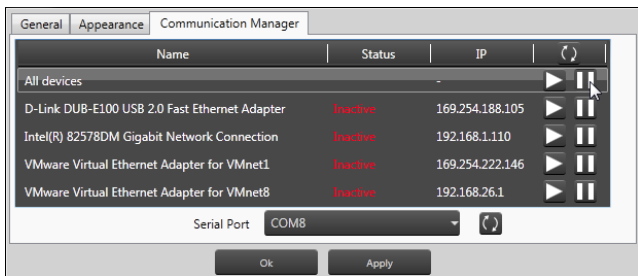


FIGURE 6: Halt the entire communication network by pausing all network interfaces

All interfaces are now inactive and all the devices are offline. To restart the network, simply press the general play button.

4.5 Starting/Stopping A Single Network Interface

In order to start/stop a single network interface, press the play/pause button of the corresponding interface.

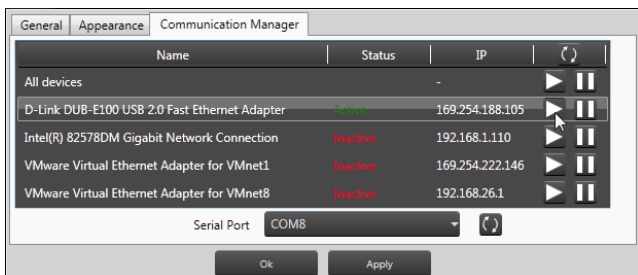


FIGURE 7: Start communication with a single network interface

¹ Bear in mind that the ProNet485 uses serial communication only

4.6 Changing The Serial Port

At the time of writing, the Communication Manager only supports a single serial interface at time. It is possible to change the interface by selecting the desired interface in the combo box. By selecting none in the combo box, all serial communication can be stopped. To apply the changes, press the **Apply** or the **OK** button.