



# NPR Labs PAD Variable Programmer

## Getting Started Guide

### Introduction

The NPR Labs PAD Variable Programmer (referred to hereafter as the application, tool, program, or utility) is a tool to test PAD/PSD variables on HD Radio channels. It is designed to be used with Importers running 2.0.1 and higher of the iBiquity Importer software. It can also be used on a main program service with Exporters running version 2.3.3 of iBiquity's Exporter software. This tool is made for quick and dirty testing and should not be used for any production purpose.

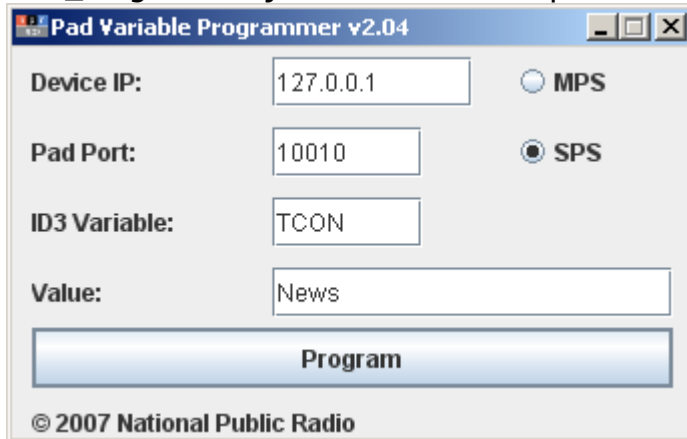
### Prerequisites

To use the utility, you must have the following:

- The Java Runtime Environment Version 1.5 or higher installed
- Network access to the Importer for SPS or Exciter for MPS

### Operation

The program can be run on the Importer itself or on a separate computer with network access to the Importer. To run it, double click on the PAD\_Programmer.jar file. You will be presented with the following screen:



In the Device IP field, enter the IP address of the Importer (or Exporter if using for PAD on your HD-1 channel.) If running the program on the Importer itself, use the IP 127.0.0.1. In Pad Port, enter the UDP port used by your MPS or SPS PAD. For MPS, this number will be 10000. For SPS, check the setting inside the iBiquity SPS Client's settings. 10010 is typical for an HD-2 channel.

In the two radio buttons to the right of IP/Port, select if you are displaying this information on the main program service (MPS) or a supplementary program service (SPS).

In the area below the connection information are fields to set PAD fields. Enter a valid PAD/ID3 tag name in the Variable field and the value for that variable in the value field. Descriptions of these fields can be found in iBiquity's 1028 reference document ([http://www.ibiquity.com/i/SY\\_IDD\\_1028s.pdf](http://www.ibiquity.com/i/SY_IDD_1028s.pdf)).

This program does not check if a field is valid, so be sure you are using proper ID3 variable names and values.

Once all desired settings are defined, click the Program button. Assuming all the settings are valid, the program will exit and PAD information should show up on radios in 8 seconds for an MPS channel or about 30 seconds for a SPS channel.

### *Setting Defaults*

To ease in restarting the software, a defaults\_PAD\_PROCESSOR.ini file is included. In this file, all the fields that exist in the program can be pre-configured here. See the table below for settings:

Line	Description
ip=	The IP of the Importer/Exporter
port=	TCP or UDP Port of PAD Service on Importer/Exporter
service=	Either mps or sps (Lower case)
autostart=	Either 0 or 1; see description below.
id3var=	Variable name to use for PAD
value=	Variable value

Setting autostart=1 will automatically "click" the program button when the program starts.

If you have any questions about this tool, please contact Matt Burrough at [mburrough@npr.org](mailto:mburrough@npr.org) or 202.513.2463. NPR Labs does not guarantee a response to questions.