



NPR Labs PAD Content Programmer v1.03

Getting Started Guide

Introduction

The NPR Labs PAD Content Programmer (referred to hereafter as the application, tool, program, or utility) is a tool to provide PAD/PSD information for HD Radio channels. It is designed to use TCP or UDP and to be used with Importers running Versions 1.1.2 and 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.

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_Processor.jar file. You will be presented with the following screen:

En?	ID3 Tag	Value
<input checked="" type="checkbox"/>	TIT2	Gimme Shelter
<input checked="" type="checkbox"/>	TPE1	The Rolling Stones
<input type="checkbox"/>	TALB	
<input type="checkbox"/>	TCON	...
<input type="checkbox"/>	COMM	
<input type="checkbox"/>	UFID	PADLINK 1

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, select if you are displaying this information on the main program service (MPS) or a supplementary program service (SPS).

Below that, select UDP if using version 2.x of the Importer software or connecting to an Exporter. Use TCP for Importers running version 1.1.2.

In the area below the connection information are fields to set all possible PAD fields. Descriptions of these fields can be found in iBiquity's 1028 reference document (http://www.ibiquity.com/i/SY_IDD_1028s.pdf).

The En check boxes enable that field for use in PAD (don't check the UFID box, for example, if you aren't using UFIDs).

Because current generation receivers don't use COMM, COMR, or UFID fields, it is best to leave them blank, unless you have a specific need to use them.

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)
connection=	Either tcp or udp (Lower case)
autostart=	Either 0 or 1; see description below.
synchsafe=	ID3 Variable used for some PAD; leave -1 if unsure
TIT2en=	Either 0 or 1; enables Title field when 1
TPE1en=	Either 0 or 1; enables Artist field when 1
TALBen=	Either 0 or 1; enables Album field when 1
TCONen=	Either 0 or 1; enables Genre field when 1

COMMen=	Either 0 or 1; enables COMM fields when 1
COMRen=	Either 0 or 1; enables COMR fields when 1
UFIDen=	Either 0 or 1; enables UFID fields when 1
TIT2val=	Text to display in Title field of PAD
TPE1val=	Text to display in Artist field of PAD
TALBval=	Text to display in Album field of PAD
TCONval=	Text to display in Genre field of PAD
COMMval=	Text to display in short Comment field of PAD
COMMLong=	Text to display in long Comment field of PAD
COMRprice=	Price to display in Commercial field of PAD
COMRvalid=	Date to use in Commercial field of PAD
COMRurl=	URL to display in Commercial field of PAD
COMRrxas=	Integer between 0 and 8; Delivery type for Commercial field
COMRdesc=	Description to display in Commercial field of PAD
COMRname=	Item Name to display in Commercial field of PAD
COMRpicpath=	Path to photo to display in Commercial field of PAD
COMRlogo=	Path to logo to display in Commercial field of PAD
UFIDoi=	Owner Identifier for UFID field of PAD
UFIDid=	Integer ID for UFID field of PAD

Setting autostart=1 will automatically “click” the program button when the program starts. This way, you can define all of the fields used for your station, set autostart to 1, and add the program JAR file to your computer’s startup folder in the start menu. Then, after any system restart, PAD will automatically restart. For questions on any other fields used, please see iBiquity’s PSD reference; document number SY_IDD_1028s (http://www.ibiquity.com/i/SY_IDD_1028s.pdf).

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