



AU-A300 2 Channel Digital Amplifier

RTI Driver User Guide

Version 1.0

Driver developed by



Introduction

This driver has been designed to provide two-way control of the CYP AU-A300 2 channel digital amplifier, via IP or RS232. It has been written and tested using CYP firmware version 1.4.

Driver Installation & Configuration

Open your RTI Integration Designer system file (or use the demo programming file entitled "CYP_A50-300-HBT_Demo.rti"). Select your XP series processor from the **System Workplace** window and choose the **Drivers** tab.

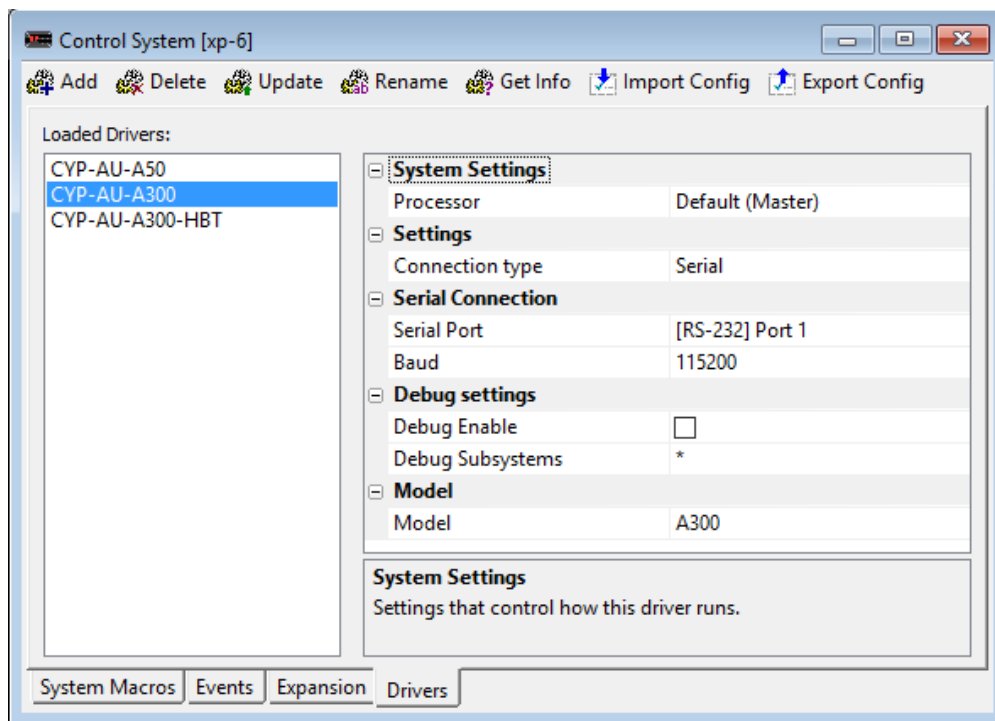


Figure 1: Driver Properties

If the driver does not appear in the **Loaded Drivers** list, select **Add** and choose to open the "A300.rtiDriver" file from the driver package.

The driver features a number of configuration properties that must first be completed:

Section	Setting	Parameters / Description
System Settings	Processor	The XP-series processor running the driver
Settings	Connection Type	Choose "Serial" or "TCP" as the connection type
Serial Connection	Serial Port	Choose the XP serial port to which the amplifier is connected
	Baud	Enter the baud rate to use for serial communication (by default, this is 115200)
TCP Connection	IP Address	Enter the IP address of the amplifier
	Port	Enter the TCP port number for communication with the amplifier (this will almost always be "23")
Debug Settings	Debug Enable	SUPPORT USE ONLY
	Debug Subsystems	SUPPORT USE ONLY
Model	Model	SUPPORT USE ONLY

Table 1: Driver Properties

Note: The Serial Connection or TCP Connection properties will be displayed depending on the chosen Connection Type.

Driver Commands

Below is a table providing an overview of each command supported in the driver:

Command	Description
Power	Switches the amplifier on and off
Switch source	Switch the amplifier to a specified source input
Volume > Adjust Volume	The command "Up" and "Down" alter the volume by 0.5db, "Up Up" and "Down Down" alter it by 2.0db
Volume > Set Volume	Set the volume to a specific value (0-100)
Volume > Mute	Switch mute on or off
Mic Volume > Adjust Volume	Adjust mic volume up or down in 0.5db steps
Mic Volume > Set Volume	Set the mic volume to a specific value (0-100)
Mic Volume > Mute	Set the mode of the mic (normal, phantom, line mode, or off)

Table 2: Driver Commands

Driver Variables

The driver features a number of variables, providing information about the status of the system.

Variable	Description
Connection Status	A Boolean that will display either "Connected" or "Disconnected". If connecting via TCP the device will automatically disconnect 45 seconds after the last command is sent. The connection will be re-established when a command is invoked
Power Status	A Boolean which will display either "On" or "Off"
Source	The name of the currently selected source
HDMI 1	A Boolean which will display either "Selected" or "Unselected" for the HDMI 1 source
HDMI 2	A Boolean which will display either "Selected" or "Unselected" for the HDMI 2 source
OPTICAL	A Boolean which will display either "Selected" or "Unselected" for the OPTICAL source
COAXIAL	A Boolean which will display either "Selected" or "Unselected" for the COAXIAL source
LINE IN	A Boolean which will display either "Selected" or "Unselected" for the LINE IN source
RCA IN	A Boolean which will display either "Selected" or "Unselected" for the RCA IN source
Volume > Volume	The current value of the volume represented as a scale of 0 – 100
Volume > Mute	A Boolean which will display either "On" or "Off"
Mic Volume > Volume	The current value of the mic volume represented as a scale of 0 – 100
Mic Volume > Mode	The name of currently selected mic mode
Mic Volume > Off	A Boolean which will display either "Selected" or "Unselected"
Mic Volume > Normal	A Boolean which will display either "Selected" or "Unselected"
Mic Volume > Phantom	A Boolean which will display either "Selected" or "Unselected"
Mic Volume > Line Mode	A Boolean which will display either "Selected" or "Unselected"

Table 3: Driver Variables