

Aragon Control Protocol Guide

Rev 01192015

RS-232 Control Specifications

The Aragon 8008 and Iridium Audio Amplifiers use a standard RS-232 (DB-9) connection. A Null Modem Cable must be used to connect to the RS-232 connector located on the back of the amplifier. The RS-232 Control system is functional right out of the box.

For Serial Control via the RS-232 port, the **SERIAL** must be selected on the web interface, set via the Ethernet port. The default setting is: **SERIAL** control interface. The Web Interface can enable or disable the RS-232 control port. *Please refer the Aragon 8008 and Iridium Amplifier User Guide for more details about how to select the Ethernet and Serial Control via the Web interface.*

DB-9 Serial Pin Out

PIN	TYPE
2	TX DATA (Transmit)
3	RX DATA (Receive)
5	GND (Ground)

Serial Communication Format

FORMAT	SETTING
Baud Rate	9600
Data Bits	8
Stop Bit	1
Parity	NO
Flow Control	NO

The Aragon 8008 and Iridium Audio Amplifiers are design to receive serial commands and execute upon receiving the command. This simple format allows for very efficient communication between the amplifier and the control system.

The command table is shown below:

COMMAND TYPE	VALUE (HEX)	VALUE (DECIMAL)	ASCII SYMBOL
POWER TOGGLE	61	97	a

The response to each command is a proprietary hex code used for Aragon Control system and should be ignored by the external control system.

SEND CMD FORMAT: XX (XX is the Value in Hex, Decimal, or ASCII Symbol per table)

EXAMPLE

SEND CMD: 61 (61 – The Power will toggle.)

Ethernet Based Control Specifications

This amplifier is also designed to receive external control commands via the Ethernet port. All commands use UDP Protocol (User Datagram Protocol) format for transmission over a standard IP network. A unique status table is also available via XML format on the on the device. The Ethernet port on the amplifier should be connected to the router. The external control system should also be connected to the same router via wired or wireless connection.

UDP Format / Initial Settings

All UDP control devices will require the IP Address of the Amplifier and the UDP Control Port. The IP Address can be different depending on the setup of the installation.

IP ADDRESS	DHCP or STATIC
UDP PORT	26482

Default Ethernet Control settings are listed in the table below:

DEFAULT SETTINGS	
8008 IP ADDRESS	192.168.1.242
Iridium Right Hand IP Address	192.168.1.243
Iridium Left Hand IP Address	192.168.1.244
DHCP	ON
UDP PORT STATE	OFF (CLOSED)

UDP Control Setup

The following steps have been outlined to simply configuring the amplifier for UDP control from an external source. You have to know the IP Address, UDP Port number, and Enable the UDP Port on the amplifier to control the device via UDP. Once these three steps are complete, you can issue the UDP commands via an external control system.

Please refer the Aragon 8008 and Iridium Amplifier User Guide for more details about how to discover and setup DHCP or set a static IP address.

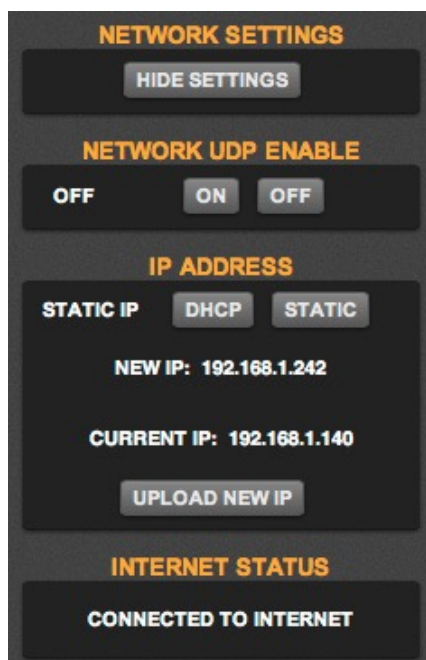
1. **Identify the IP Address of the amplifier** (Recommended: Set a Static IP when setting up an external control system or disable DHCP on the network. Doing this will prevent the network router from changing the IP address)
2. **Identify the UDP Port of the amplifier.** The UDP port is: **26482**

3. **Enable UDP Port on the amplifier.** This can only be done via the web interface on the amplifier through a web browser. The address would be:

http:// IP ADDRESS/settings.html **Example:** <http://192.168.1.240/settings.html>

Browse down to the Web Control and Select “ON”. Ensure that Web Control is “ON” or “ENABLED”.

Next, browse down to the Advanced Settings button and Select “SHOW SETTINGS”. Ensure that NETWORK UDP ENABLE is “ON”. All settings are stored in memory and will be retained even if the amplifier loses power.



UDP Command Table

The table below outlines the command structure available for UDP control. *Note the MUTE commands will only execute when the amplifier is powered in the “ON” state.*

COMMAND TYPE	CMD (HEX)
POWER ON	01 FE 11 FF 00 00 00
POWER OFF	01 FE 11 FF 01 00 00
MUTE ALL CHANNELS ON	01 FE 12 FF 01 00 00
MUTE ALL CHANNELS OFF	01 FE 12 FF 00 00 00