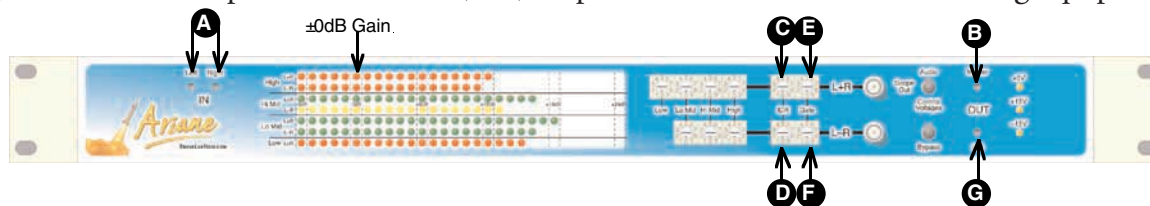


# Ariane Quick Start

- 1) Connect cables for power, audio in and audio out.
- 2) Power up the *Ariane*, and send it audio.
- 3) Using your greenie, adjust *Ariane's* input level controls ("A") so that on average, the LED meters indicate about 6 LEDs from the left ( $\pm 0$  dB gain).
- 4) Set Master Output level control ("B") to provide a useful level to following equipment.



To *tweak* the settings:

- 1) Using mono programming, balance the *input* controls for equal *output* levels.
- 2) Set the upper (L+R) IDR rotary control ("C") to "4", or higher number for more open sound, lower number to be more aggressive.
- 3) Set lower (L-R) IDR control ("D") to "3", or higher for more open stereo control, lower for more aggressive control.
- 4) Set the *Gate* controls ("E" and "F") to "0" to bring up most low level material. Set to a *higher* number to be less sensitive to low levels.
- 5) Set L-R Output control ("G") for the amount of stereo *space* you desire.

See the *Ariane* User's Manual for details about these and other procedures.

*IDR* switch settings:

Switch	IDR	Switch	IDR
"0"	1.5dB	"5"	9.0dB
"1"	3.0dB	"6"	10.5dB
"2"	4.5dB	"7"	12.0dB
"3"	6.0dB	"8"	13.5dB
"4"	7.5dB	"9"	15.0dB

*Gate* switch settings:

Switch	Gate	Switch	Gate
"0"	-35dB	"5"	-25dB
"1"	-33dB	"6"	-23dB
"2"	-31dB	"7"	-21dB
"3"	-29dB	"8"	-19dB
"4"	-27dB	"9"	-17dB

## All About **Gain**, and the Ariane's **LED multi-band gain metering array**, in a nutshell

When an amplifier's *input* level *equals* its *output* level, the **gain** of the amplifier is said to be  $\pm 0$  ('plus or minus zero') or **zero gain**. When the output is made *stronger* than input, there is said to be **positive gain**. When output is *weaker* than input, there is **negative gain** (also called *loss*).

The *Ariane* is like seven amplifiers, each of whose gain is varied *automatically* to make the output level more uniform. Very soft sounds are made louder by automatically *increasing* the gain and very loud sounds are made softer by automatically *decreasing* the gain.

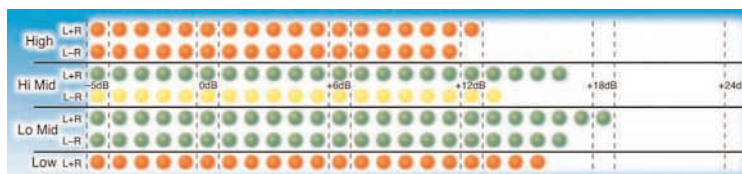
To visualize the *Ariane's* automatic gain control process, we created the **LED multi-band gain metering array**.

### More LEDs, more gain

The *Ariane* uses one horizontal row of LEDs to represent each of its seven bands (four bands of *L+R* and three bands of *L-R*).

The quantity of LEDs shows the amount of **gain** in each band.

When the gain of any band in the *Ariane* is at **zero gain**, its 'meter' shows six lighted LEDs in a row. So, when incoming audio is already at the proper level, there is zero gain, and therefore six LEDs will light.



When the audio level goes lower, the *Ariane* *adds gain* to make up for lower-level programming. As it adds *more gain*, it lights *more LEDs*.

If, instead, the incoming audio goes *higher* in level than our **zero gain** reference, the *Ariane* *reduces* gain and *less* LEDs will be lit.

The scale of our meter is **one LED = one decibel**. For every dB of gain *added* there's an LED *added*; for every dB *less* gain, the number of lit LEDs is *reduced* by one. So, when a record fades, you see the number of LEDs increase as the gain of all the bands increases. When the loud-mouth announcer comes in, just a few LEDs will light.

### Stop! Hold! Go!

The color indicates the control status of each band. There are three possibilities: Green, Yellow (amber) and Red.

Green means **Go!** The *Ariane* has determined that the gain needs to be higher, so while the gain is changing, the color stays green.

Amber, (**Hold** where you are). The audio is where it should be, and the gain is holding steady with no change.

Red (means **Stop!**), the audio is below the *Gate* threshold, and the gain should not be increased. So the gain holds steady. After 10 seconds, the *Gated* gain will return to  $\pm 0$ , **zero gain**, with six LEDs lighted.