

# AIR-4

ANALOG RADIO MIXER



**AUDIOARTS**

Flexible. Affordable. Built To Last.

# Audioarts AIR-4

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At Audioarts, value engineering is straightforward:

- Define the features our customers require.
- Design cleanly with an eye toward quality and durability.
- Manufacture in an efficient manner, utilizing the best of computer and machine technology.

With the Audioarts AIR-4 radio console we've brought together what is essential for a compact radio console and made it work the way it should. Ideal for smaller stations looking to upgrade as well as larger facilities in need of an auxiliary studio or newsroom console, the AIR-4 demonstrates a basic Audioarts design premise: *Low cost doesn't have to mean low quality.*

## THE FEATURES YOU NEED:

The AIR-4 has four built-in microphone preamps, allowing the use of a host microphone and three guest microphones without the need for external mic preamps. The AIR-4 has

12 input channels, each with A/B source select, plus a 13th fader for call-ins. External machine control, two program busses, cue (with built-in speaker), talkback, mix-minus, and CR, headphone and studio monitor control are all included. Patchable USB connectivity for PC news, production work stations or streaming audio makes the Audioarts AIR-4 perfect for local radio stations and internet broadcasters.

The AIR-4 draws upon Wheatstone Corporation's extensive investment in the latest design, tooling, and manufacturing infrastructure. We design and manufacture our audio consoles right here in New Bern NC, USA, to ensure our reputation for quality, performance, and reliability remains uncompromised.

The Audioarts AIR-4 mixing console delivers top broadcast audio quality and an excellent feature set at a great price.



- 12 stereo input fader channels, each with A and B inputs and remote START logic
- 13th phone caller fader with talkback and auto mix-minus to caller
- Four high performance mic preamps with variable gain trims to precisely match your microphones; preamp outputs jumper to any input fader's A or B input
- Two program busses with balanced outputs (switchable stereo or mono mode)
- Additional external input feeds the monitor section (for live air or pre-delay air monitoring)
- Control Room monitor switchable PGM 1, PGM 2 or external; can mute when CR mic is live
- Split cue — when any fader is in CUE, sends cue audio to left channel and L+R sum of selected source to right channel of monitor output (switchable separately for CR and headphone)
- Tabletop mount, no cutout
- RJ-45 connectors for low cost wiring
- Headphone output with built-in amplifier and concealed jack
- Dual meters: PGM 1 and Switched (PGM 2 or external)
- LED switch illumination
- External power supply
- Front panel ON-AIR LED indicator, plus a closure output to drive an external On-Air light relay.
- Studio output with independent source selection and CR-to-studio talkback button
- Plug in faders and conductive plastic monitor pots for easy replacement
- USB connection is patchable to any of your input faders and internally dipswitchable to pick up PGM 1 or PGM 2 output mixes. Lets the AIR-4 interface with your desktop computer for news, music sweetening functions or to stream audio mixes to and from the console.
- Built-in cue speaker; cue output can automatically interrupt your main stereo monitors



## Modern interface for modern studios

### CONSOLE LOGIC DIPSWITCHES:

SW1 - CUE TO CR - routes the cue signal to the main control room speakers for full range sound.

SW2 - CR SPLIT CUE - sends the cue signal to the left CR speaker and a L+R mono summed program signal to the right CR speaker (an internal jumper can cause the same action in the headphone circuitry).

SW3 - STUDIO DIM - reduces the studio monitor signal feed level when the studio TB button is pressed.

SW4 & SW5 - when activated change Program 1 stereo output to mono (for AM stations).

SW6 & SW7 - do the same for Program 2.

### TRIM POTS:

VU METER TRIMS - separate gain trims for precise calibration of the main program and switched VU meters to your facility's standards.

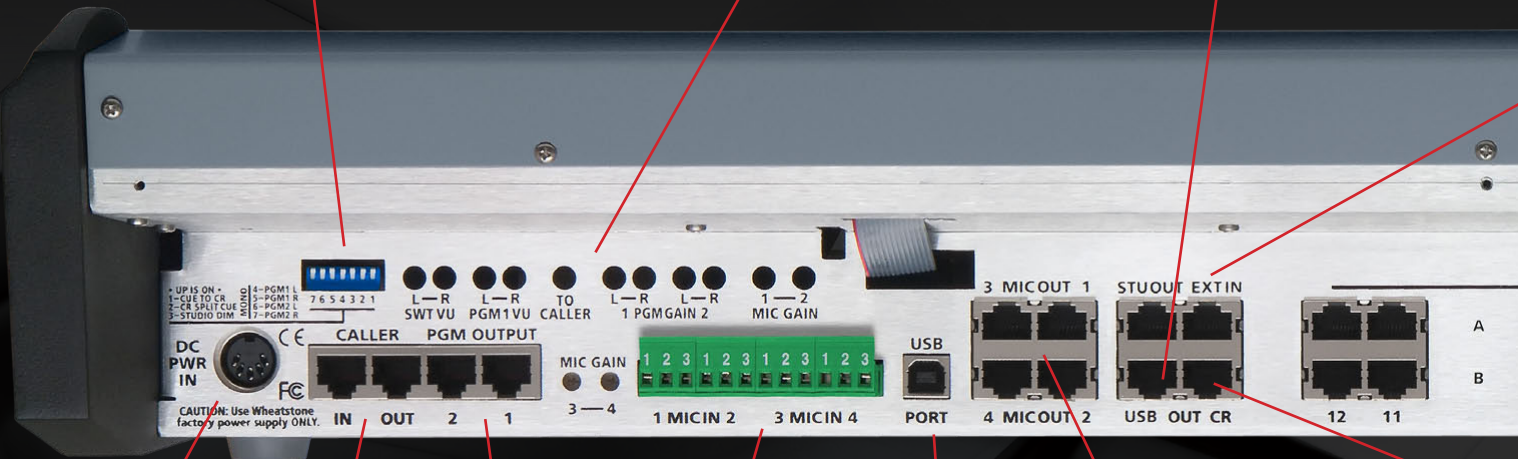
CALLER GAIN TRIM to accurately match the signal level required by your caller interface device.

PROGRAM GAIN TRIMS provide optimal gain adjustability.

MIC GAIN - these four trimmers optimally adjust the built-in mic preamplifiers to your microphones.

### USB ANALOG OUT:

May be patched to any of the console's 24 stereo RJ45 inputs, or looped to outboard processing gear. Internally dipswitchable to pick up Program 1 or Program 2 output mixes.



### DC POWER IN:

Remote power supply keeps hum and noise away from the console.

### PROGRAM OUTPUTS:

Separate electronically balanced RJ45 connectors for program 1 and program 2 output mixes.

### CALLER PORTS:

Separate electronically balanced RJ45 input and output connectors link to your telephone interface device.

### MIC 1-4 INPUTS:

(electronically balanced) Plug-in screw terminal connectors accept low level microphone signals and input them to the console's four microphone preamplifier circuits.

### USB PORT:

Lets the AIR-4 interface with your desktop computer for news, music sweetening functions or to stream audio mixes to and from the console.

### MIC 1-4 OUTPUTS:

The outputs of the AIR-4's low noise mic preamplifiers can be patched directly to any of the console's 13 fader channels or be looped through outboard processing gear.

# Interfacing AIR-4

The AIR-4 is the most flexible analog mixer in its class. Its rear panel is laid out in a straight-forward and intuitive manner that makes interfacing it a snap. Once wired, a rear-panel cover protects your work and streamlines its appearance.



AIR-4 with rear panel cover in place

## STUDIO OUTPUT:

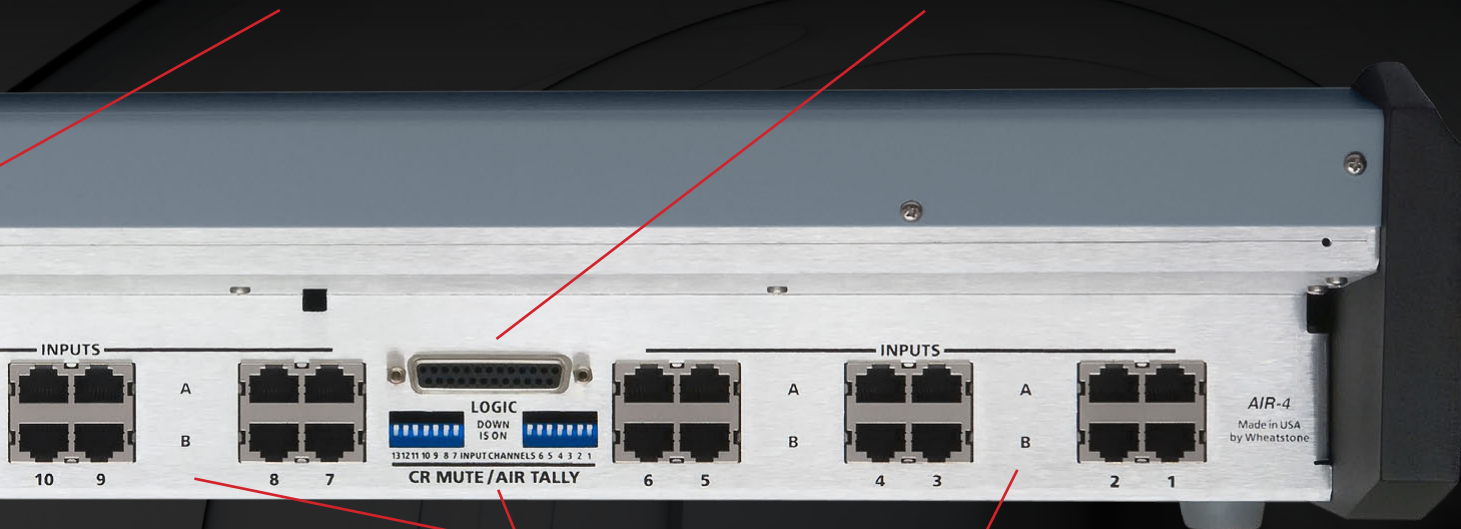
Independent studio output normally wires to your studio monitor speaker amplifier.

## EXTERNAL IN:

A balanced external input to feed either the control room or studio monitor sections. It is generally wired to an off-air signal source.

## DB-25 LOGIC CONNECTOR:

Provides logic ports for all 13 of your fader machine starts, on-air tally relay port, guest TB to CR logic function, as well as a cue output for an optional external cue amplifier.



## CR OUTPUT:

Feeds CR monitor speaker amplifier so the operator can listen to PGM 1, PGM 2 or EXT IN, or even the CUE feed if dipswitch selected.

## CR MUTE/TALLY:

13 dipswitches, one for each console fader. When activated cause the CR speakers to mute (preventing open mic feedback) and send an on-air tally signal to activate an external On-Air light relay.

## INPUTS:

24 stereo balanced RJ45 inputs provide A and B sources for the twelve fader channels. Mic preamps jumpered to these inputs will automatically feed both left and right inputs when an RJ patch cord is inserted. (Note the 13th phone module fader is a mono channel, but can also receive a mic preamplifier signal.)

# Using AIR-4

## INPUTS SECTION

### SOURCE SELECT

Selects between two analog stereo sources: A or B

### PROGRAM ASSIGN

Assigns the source signal to the console's two stereo Program outputs

### CUE BUTTON

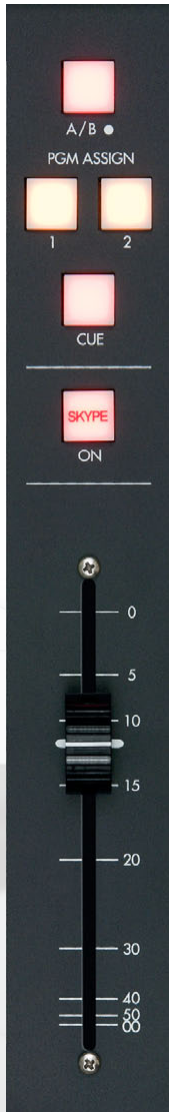
Places the channel's signal on the console's cue bus.

### ON BUTTON

Turns the channel on and off by means of electronic switching; can simultaneously start external source machines.

### FADER

Sets the channel's signal level.



## CALLER INPUT SECTION

### PROGRAM ASSIGN

Output switches assign the caller to the console's two Program outputs to permit live call-ins.

### CUE BUTTON

Allows interviewing the caller prior to airing by placing the caller's voice on the console's cue bus, where it may be heard on the meterbridge mounted cue speaker.

### TB BUTTON

When the momentary action TB switch is pressed, Mic 1 will interrupt the regular caller signal, allowing the DJ to talk to the caller prior to airing.

### ON BUTTON

Turns the phone channel ON and OFF.

### FADER

Sets the caller's signal level.

## CR AND HEADPHONE MONITOR SECTION

### CUE LEVEL CONTROL

Sets the level of the built-in cue speaker.

### EXT SWITCH

Pressing the EXT switch allows the operator to pick up an external input (typically used for off-air monitoring).

### PROGRAM SELECT

Pressing either of the two program switches allows the operator to listen to the selected output bus.

### CR (CONTROL ROOM LEVEL CONTROL)

Determines the level of the signal being sent to the Control Room speakers.

### METER SELECT BUTTONS

Select the source for the switched meter pair.

### HDPN (HEADPHONE LEVEL CONTROL)

Determines the overall loudness of the headphone output signal.



## STUDIO MONITOR SECTION

### TB (TALKBACK) BUTTON

Lets the operator's microphone signal interrupt the normal feed to the studio speakers, allowing the operator to talk to the performers in the Studio.

### EXT SWITCH

Pressing the EXT switch sends an external balanced input to the studio monitor speakers.

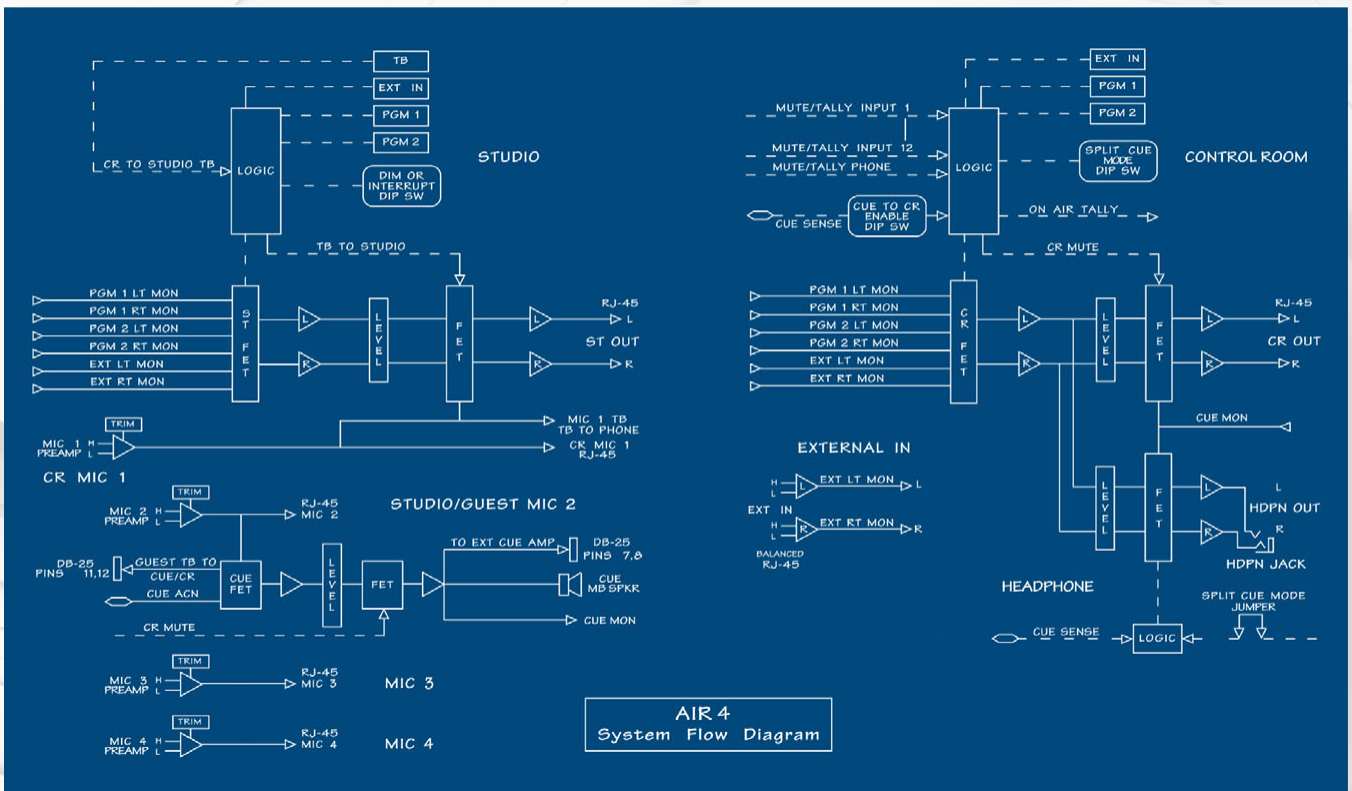
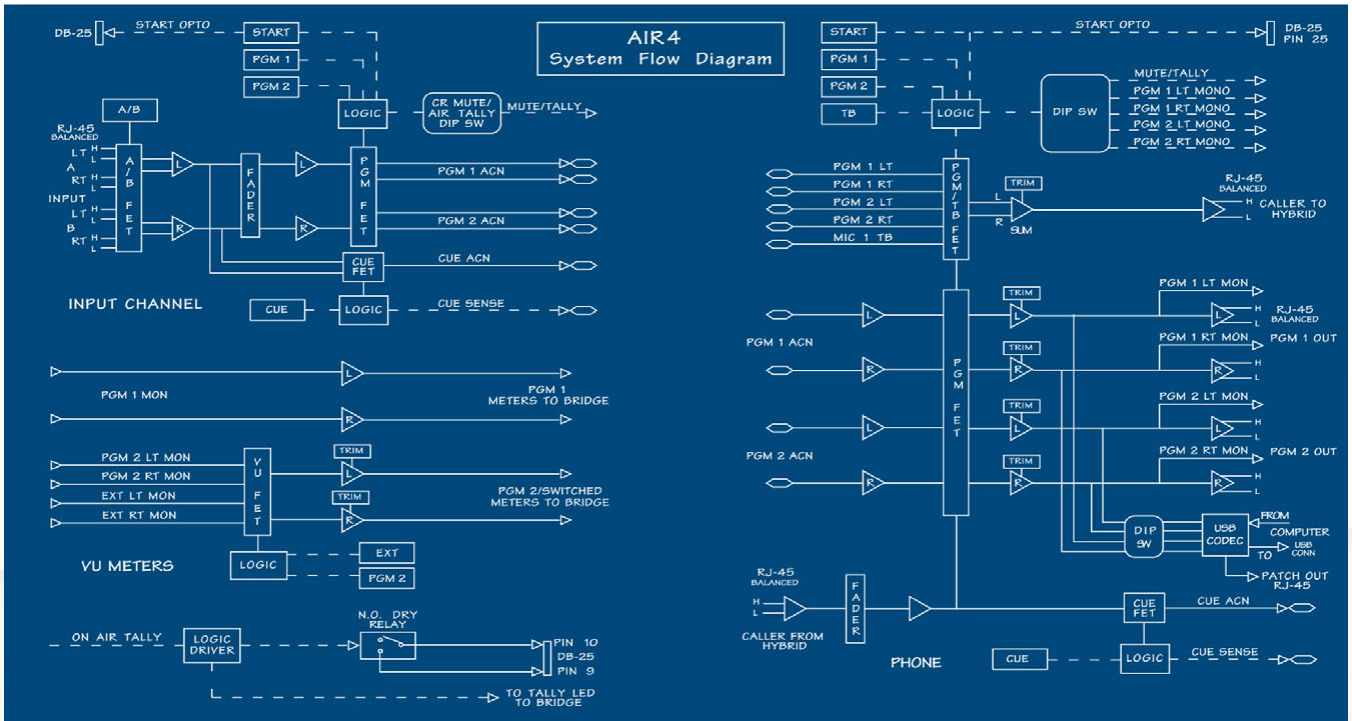
### PROGRAM SELECT

Allows the selected output bus to be heard in the studio.

### STUDIO LEVEL CONTROL

Determines the level of the signal being sent to the Studio speakers.

# Inside AIR-4



# Specifications

## AUDIO INPUT

Mic	Direct wire plug terminals, balanced Electronic differential, >2K $\Omega$ bridging Adjustable sensitivity, max. input -6dBu
Line (Caller, External)	RJ-45 balanced, >10K $\Omega$ bridging +4dBu = 0VU, max. input +24dBu

## AUDIO OUTPUT

Program & Caller	RJ-45 connectors, balanced Electronic differential, 100 $\Omega$ source Impedance to drive >600 $\Omega$ 0VU = +4dBu, max. output +24dBu
CR & Studio Monitor	RJ-45 connectors, unbalanced
Headphone	Stereo 1/4" TRS connector to directly drive typical broadcast style headphones >200 $\Omega$
Cue	Cue speaker in meterbridge DB-25 female connector output to drive external power amp

## LOGIC

On-Air	DB-25 female connector Low current closure to drive external on-air light relay
Channel Start Out	DB-25 female connector Opto-isolated output closure to remote start external devices

## PERFORMANCE

Frequency Response	$\pm$ 0.1dB 20Hz-20kHz (mic & line)
Dynamic Range	Line (unity gain) 113dB Mic (54dB gain) 100dB
Headroom	24dB above -4dB
Noise	Mic -128dB EIN Line -87dB ref 0VU
THD+N	Mic <0.02% @-50dBu in, +4dBu out Line <0.003% @-4dBu in, +4dBu out
Bus Crosstalk	-90dB @1kHz
Stereo Separation	-60DB @1kHz
Off Isolation	-115dB @1kHz

## PHYSICAL

Dimensions	28.4" / 72.1cm wide 15.4" / 39.1cm deep 4.4" / 11.2cm height (rear) 1.6" / 4.1cm height (front)
Weight	17 lbs / 7.7kg
Shipping Weight	25 lbs / 11.3kg
Power	100-240VAC / 50-60Hz / 50W

*Specifications and features subject to change without notice.*

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