

# 6100 Broadcast Audio Delay

## A 24-bit digital delay unit for live or syndicated broadcast that prevents unwanted profanity or comments from reaching the airwaves.

### Keep your air clean and seamless.

Engineered by Symetrix, the AirTools 6100 offers advanced delay technology with up to 40 seconds of user-definable delay at a full 20 kHz range of stereo bandwidth. When it comes to advanced broadcast audio delay, the AirTools 6100 offers more of the features you need at a better price.



# FEATURES

- Superb sound quality
- Automation control interface
- Full 20 kHz bandwidth, perfect for music and speech
- ESE TC89 time code input and output for display of 'time in delay'
- Choice of splicing algorithm to fit program style
- AES-3 input and output for use in any studio
- Up to 40 seconds of delay

## www.airtoolsaudio.com

### Easily Get Rid of Unwanted Comments.

When you want to edit a comment, simply push a button. The AirTools 6100 goes to work and your broadcast hits the air minus the offending content.

The AirTools 6100 also includes standard features like an Automation Control Interface and ESE TC89 time code input and output to allow for both real and delay time displays. With a standard AES3 input and output, the AirTools 6100 is versatile enough to use in any broadcast studio.

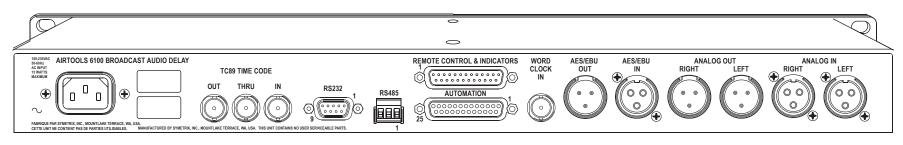
#### Here's how it works:

- Connect the main programming output from any studio console.
- When the show begins, press START. The AirTools 6100 begins digitally stretching the program creating up to 40 seconds of delay.
- You can define a delay between 1 and 40 seconds, allowing a great amount of flexibility when it comes to editing unwanted material.

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• If a guest makes an unwanted comment, or you want to delete content, press DUMP and keep going. The unwanted material, up to the last 40 seconds of your broadcast, disappears while the show goes on.

• Another way to get rid of unwanted content is with COUGH. In the middle of a broadcast, you may need to say something "off air" to your guests, for example, or have a quick drink of water. Press COUGH to edit out unwanted airtime, and then release it when you're finished. The broadcast picks up again.

 If you are a network syndicator, the 6100's Automation Control Interface offers the ability to trigger automation changes or control a router with 'delayed' contact closures.
Four TTL logic inputs on the 6100 digitally tag the audio on input and close the corresponding relay when the tagged delayed audio reaches the 6100's output. It takes all of the mathematical guesswork out of local breaks and switchovers.

• At the end of your program press EXIT and the 6100 gradually leaves the delay mode until you are in real time.

A comparison of the AirTools 6000 and 6100 delays.

	6000	6100
AES-3 digital I/O	No	Yes
Word clock input	No	Yes
Time in delay display (ESE TC89)	No	Yes
RS-232 & RS-485 control ports	No	Yes
TTL contact closure inputs	Yes	Yes
Automation / router relay outputs	Yes	Yes

## Specifications

#### Input/Output

input output	
Inputs	stereo, balanced bridging
Outputs	stereo, electronically balanced
Input Connectors	XLR, BNC (Word Clock, ESE time code)
Output Connectors	XLR, BNC (ESE Time Code)
Polarity	Pin 2 high
Maximum Input Level	+28 dBu
Maximum Output Level	+28 dBu into 100k ohms
Input Common Mode Rejection	>40 dB @ 1 kHz
Performance Data	
Frequency Response	20 Hz to 20 kHz *, +/- 1 dB @ +4 dBu output
Harmonic Distortion	less than 0.01% with +4 dBu input, +4 dBu output, 40 second delay and a 1 kHz test signal.
Dynamic Range, A/D	-110 dB (A-wieghted)
Dynamic Range, D/A	-115 dB (A-wieghted)
A/D and D/A Conversion	24-bit sigma delta
Internal Sample Rate	48 kHz
External Digital Sync Range	30 to 50 kHz, AES3 and Work Clock
Maximum Delay	40 seconds
Physical	
Size (HWD)	1.72 in. x 19 in. x 8.2 inches 4.37 cm x 48.30 cm x 17.145 cm
Shipping Weight	8 lbs, 3.64 kg
Electrical	
Power Requirements	100 - 240 VAC, 50 Hz to 60 Hz, 25 W
* A high pass filter is engaged during b	puild and exit modes when using the gap detect

\* A high pass filter is engaged during build and exit modes when using the gap detect or gap detect+catchup algorithms. During build and exit modes when using either of these algorithms, the frequency response will be down about -3 dB at 100 Hz.

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## Applications

AM and FM

All music formats

News and talk radio

- Call-in shows and guest oriented broadcasts
- Sports radio and live sports broadcasts
- Live or unknown taped content

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