



# 626 Digital Signal Processor



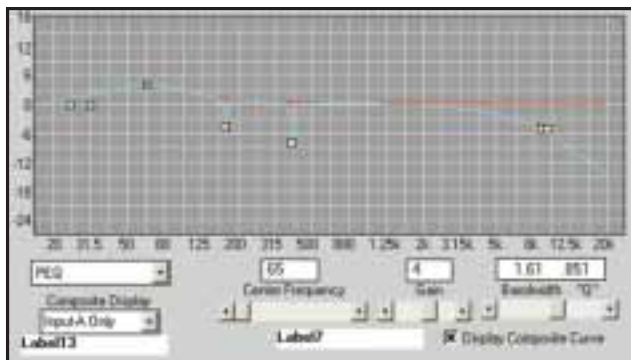
Ivie's new full-function digital signal processor provides many signal processing functions in one package. The Model 626 Digital Signal Processor is fully integrated with Ivie's award winning AudioNet+® software. Easily configurable and intuitive to use, the 626 offers solutions to most of today's exacting professional signal processing requirements.

The 626 is a natural, evolutionary step in the development of innovative, results-oriented products from Ivie Technologies. The 626 is designed to meet the varied and demanding needs of consultants, professional contractors and installers. Versatile in its ability to be configured in many variations of functional combinations, the 626 provides ultra-high quality, multiple digital signal processing functions to precisely address almost any application, from simple to very complex.

Ivie's user friendly and intuitive ANSW software sets up and programs the 626, along with any other AudioNet® or AudioNet+® hardware. Controlling automatic mixers, matrix mixers, conventional analog EQ and digital signal processing all from the same integrated software cuts installation and adjustment time, simplifies control, and speeds system programming.

- 2 x 6 Signal Router
- Pre and Post EQ Signal Feeds
- Parametric EQ Filters
- Shelving, Hi/Lo Cut, Horn EQ
- Extended PEQ Functions
- Compression/Limiting Delay
- 2 and/or 3-Way Crossovers
- User Definable Configuration
- Built-in Pink Noise/Sine Wave Generator
- Programmable Using Ivie ANSW+ Software
- Field Upgrade Using Flash ROM
- Compatible with AMX® and Crestron® Touch Panels

# 626 DIGITAL SIGNAL PROCESSOR



## PEQ:

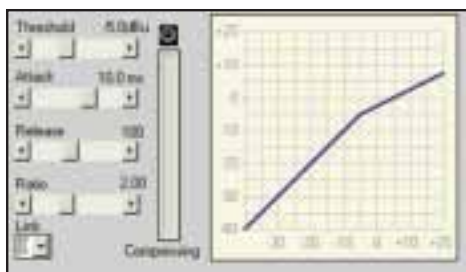
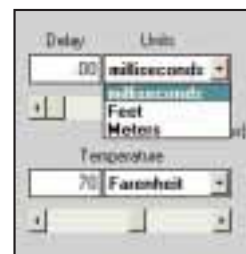
The 626 provides parametric filters for use on either inputs, or outputs or both. A total of 50 filters are available for assignment which provides tremendous flexibility in effecting broad and narrow-band shaping and filtering. Filters can be selected to operate as Lo-shelf, Lo-cut, Hi-shelf, Hi-cut, tunable parametric, extended parametric or Constant-Directivity Horn Correction. Filter color coding (the "composite" is always shown in blue) by the ANSW+ software makes filter adjustment fast and intuitive.

Low and Hi cut filters are fixed, 6dB/Oct. filters. The action of the shelving filters is similar to that of the cut filters, except they do not continue to roll-off as do the cut filters. However, they are used in much the same manner.

Constant-Directivity Horn Correction filtering provides standard correction roll-off slopes often used when C-D horns are employed. The "knee" or starting point of the filter can be selected to customize for the brand and size of the horn and driver.

## DELAY:

Delay may be added on either input or output of the 626. Up to 1365 milliseconds of delay is available for allocation. Delay can be increased or decreased in 1 millisecond increments, and/or 2 microsecond increments. Using the ANSW+ Software in either the 626 Main Control Screen, or the Delay pop-up control window, clicking on the up/down arrows adds delay in 1 millisecond increments. Holding down the "Shift" key while clicking on the up/down arrows adds delay in 2 microsecond increments.



## COMPRESSOR/LIMITER:

Compression and Limiting can be added to any 626 input or output. Compressor attack and release times are fully programmable, as well as compressor threshold and ratio. The ANSW+ software allows these parameters to be set using either slider controls, or by clicking on the compression graphic to set threshold at the spot of the click. After the threshold has been set, clicking at the top end of the compressor curve and then dragging and releasing sets the ratio. The slider controls will move to reflect the changes made by clicking and dragging.

## Ivie 626 Spec Briefs

Parameter	Specification	Limit	Units	Comments
Gain	0.0	+/- 0.5	dB	Levels set for Unity Gain
Frequency Response	20 Hz to 20 KHz	+0/-1	dB	
THD + Noise	<0.05	.01	%	+4 dBu, 1 KHz
Dynamic Range	100		dB	A-Wt, re +20 dBu, 20Hz-20KHz
IM Distortion	<0.01	.01	%	60 Hz / 7 KHz, 4:1, +4 dBu
Propagation Delay	1.0	1%	msec	Displayed in delay times
Crosstalk	-82	typ.	dB	1 KHz bandpass, any signal
Inputs: Type	Active Balanced			
- connectors	Euroblock			
- impedance	10K each leg	1%	ohms	
- maximum level	20	1	dB	
- common mode rej.	>46	1	dB	20 Hz to 20 KHz
- signal present	-20	1	dBu	@ 1 KHz
- overload	17	2	dBu	@ 1KHz, 3 dB before clip
Outputs: Type	Active Balanced			
- connectors	Euroblock			
- impedance	100 each leg	1%	ohms	
- maximum level	20	1	dBu	2k ohms load
- signal present	-20	2	dBu	@ 1 KHz, 3 dB before clip
- overload	17	2	dBu	@ 1 KHz, 3 dB before clip
Input Trim Range	+31 to -20	0.15	dB	Min 1/2 dB steps
Output Trim Range	0 to -84	0.01	dB	Min 1 dB steps
Master Output Range	0 to -84	0.01	dB	Min 1 dB steps
Input & Output RFI	yes			
A/D Converters	20 bit			48 KHz sample rate
Processing	24 bit & higher			
Comm. Interface	RS232 or AudioNet			RS232 or RS485
- cable length	4000 ft			With RS485
Memory	NOVRAM			non-volatile, no batteries
Pink Noise Type	Pseudo Random			1/2 dB error
- word length	>100	typ.	days	
- crest factor	4.9	typ.		
Sine Wave Gen.	20 - 20,000	Hz		1 Hz steps channels 1 & 2 phase coherent

Unless otherwise noted, all settings are "flat," thresholds set at minimum, ratios set at maximum



1605 NW State Street  
Lehi, Utah 84043  
Phone: (801) 766-7600  
Fax: (801) 766-8282  
Internet: [www.ivie.com](http://www.ivie.com)  
Email: [ivie@ivie.com](mailto:ivie@ivie.com)