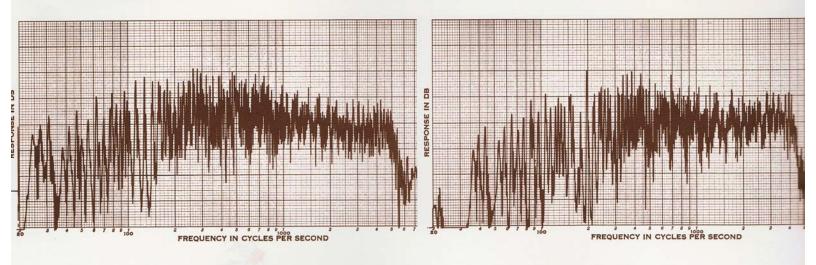


The World Leader in

http:/bustedgear.com



**Electronic Reverberation** 





A studio quality reverb for "top-of-the-line" applications. Six different springs, counter wound, coupled then placed in parallel where each set of springs corrects each others' deficiencies. A full rich, sweet sound of reverb throughout the audio frequency range.



A new three spring reverb, small in size but yet a full rich reverb sound matching any others in the industry of equal size. Each spring in parallel to eliminate peaks and valleys that are found in reverbs where the springs are in series.

Input Impedance		Output Impedance		Decay Time		Connectors		Locking Device		Mounting Plane	
10 Ohm	Α	600 Ohm	А	Short	1	Input Grounded Output Grounded	Α	No Lock	1	Horizontal Open Side Up	Α
190 Ohm	В	2575 Ohm	В	Medium	2	Input Grounded Output Insulated	В			Horizontal Open Side Down	В
240 Ohm	С	12000 Ohm	С	Long	3	Input Insulated Output Grounded	С			Vertical Connectors Up	С
310 Ohm	D					Input Insulated Output Insulated	D			Vertical Connectors Down	D
800 Ohm	Ε					10" Leads No Outer Channel	Е			On End Input Up	Е
1925 Ohm	F					3" Leads No Outer Channel	F			On End Output Up	F

Design Your Own

## **Model Number System**

The Accutronics numbering system enables you to order either the type 9 or type 8 model with the exact specifications you desire.

Example:

### Select Reverb Type

8

В

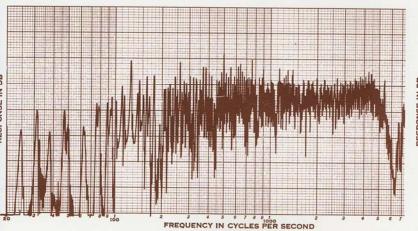
Output

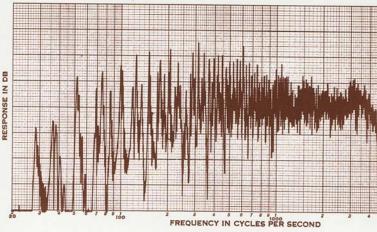
then

Input

C

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The standard of the industry for many years and still manufactured the same as Hammond's original design. A four spring reverb set in parallel mode that made the Fender Twin Reverb most popular years ago as well as the present. A sound charac'teristic that worldwide competition has been trying to duplicate for many years with no success.



Type

A small low cost unit with good frequency response and reverb sound characteristics. Ideally suited for low cost student amps and organs. A two spring reverb in parallel mode designed for application where cost is a major factor.

Input Impedance		Output Impedance	Output Impedance		Decay Time		Connectors		ice	Mounting Plane	
8 Ohm	Α	500 Ohm	Α	Short	1	Input Grounded Output Grounded	А	No Lock	1	Horizontal Open Side Up	А
150 Ohm	В	2250 Ohm	В	Medium	2	Input Grounded Output Insulated	В	Pin Lock	2	Horizontal Open Side Down	В
200 Ohm	С	10000 Ohm	С	Long	3	Input Insulated Output Grounded	С	Wire Form Lock	3	Vertical Connectors Up	С
250 Ohm	D					Input Insulated Output Insulated	D	Option 2 & 3		Vertical Connectors Down	D
600 Ohm	E					10" Leads No Outer Channel	Е	available for Type 4 Reverb only. Specials		On End Input Up	Е
1475 Ohm	F					3" Leads No Outer Channel	F	available upon request.		On End Output Up	F

Design Your Own

# Model Number System The Accutronics numbering system

The Accutronics numbering system enables you to order either the type 4 or type 1 model with the exact specifications you desire.

Example:

## Select Reverb Type

4 0

or 1

then

F

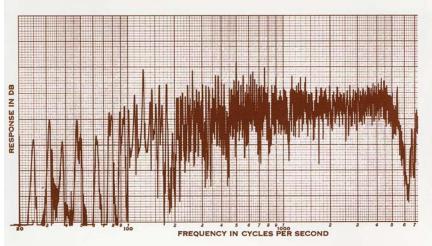
B

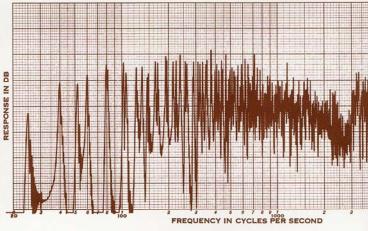
1 A Conn.

1

C

http:/bustedgear.com







This reverb is designed for offstage application where shock and vibration is not encountered, such as rack mount mixers. Basically it has the Type 4 sound characteristics and spring construction but mounted in a smaller, lower profile case.



If you require reverb at extremely low cost, this reverb will solve your pricing problems. Two springs in parallel and of small size but still give you reverb effect. A narrower frequency response range is characteristic due to short spring arrangement.

Input Impedance				Output Impedance		Decay Tin	ne	Connectors		Locking De	vice	Mounting Pla	ne
Type 3 & 6		Type 3 & 6	Type 3 & 6		Type 3 Only		Type 3 Only		Type 3 Only				
8 Ohm	Α	500 Ohm	Α	Short	1	Input Grounded Output Grounded	Α	No Lock	1	Horizontal Open Side Up	Α		
	_		Б			Input Grounded Output Insulated	В			Horizontal	D		
150 Ohm	В	2250 Ohm	В	Medium	2	Input Insulated Output Grounded	С			Open Side Down	В		
200 Ohm	С	10000 Ohm	С	Long	3	Input Insulated Output Insulated	D			Vertical Connectors Up	С		
	_					Type 6 Only				Vertical			
250 Ohm	D					2½" Leads	Α			Connectors Down	D		
600 Ohm	Е		1			10" Leads	В			On End Input Up	E		
						2½" Suspended	С						
1475 Ohm	lF					10" Suspended	D			On End Output Up	۱F		

Design Your Own

## **Model Number System**

The Accutronics number system enables you to order either the type 3 or type 6 model with the exact specifications you desire.

Example:

### Select Reverb Type

3

or

6 then









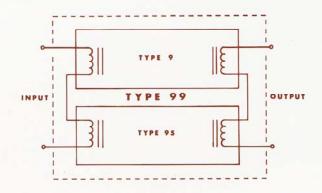


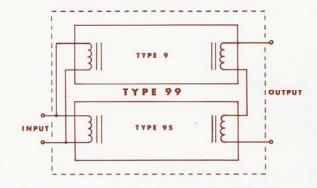
http:/bustedgear.com

## **New Applications**

The high quality of the Type 9 reverb has opened up new applications for low cost spring reverberation. Used singly as a replacement for the Type 4, the 9 brings new levels of performance to the individual instrument. If the 9 is used in a special pair configuration, a low cost reverb system's performance can approach that of the best studio artificial reverberation devices. The Type 99, basically

a standard Type 9 and a special Type 9, provides six different delay paths for a high density of resonant frequencies. Input and output connectors on the pair are isolated from the chassis in order that the transducer coils may be connected in one of the configurations shown below.



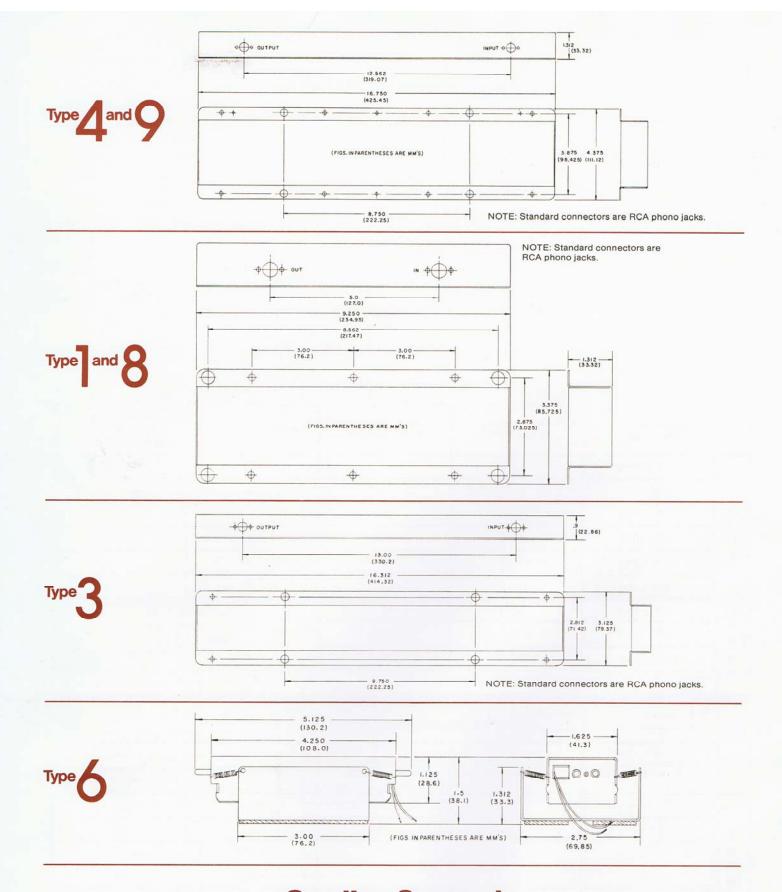


#### **Electrical Specifications Type 9 & 8**

	Impedance @ 1 KHz ±10%	Inductance In MH ±10%	DC Resistance In Ohms ±10%	Number Of Turns	Recommended AC Drive MA For Approx. 3.5 A-T			
	10 Ohm	1.5	.81	124	28.0			
1	190 Ohm	30.0	26	538	6.5			
N	240 Ohm	38.0	27	600	5.8			
P	310 Ohm	48.0	36	688	5.0 3.1			
Т	800 Ohm	150.0	58	1100				
	1925 Ohm	300.0	200	1700	2.0			
QU	600 Ohm	94.0	42	Typical Dec	CALL MILLS CONTROL			
Ť	2575 Ohm	2575 Ohm 400.0		Short = 1.2 to 2.0 Sec Medium = 2.0 to 3.0 Sec				
Ÿ	12000 Ohm	1900.0	800	Long = 3.0 to 4.0 Sec				

#### Electrical Specifications Type 4, 1, 3 & 6

	Impedance @ 1 KHz ±10%	Inductance In MH ±10%	DC Resistance In Ohms ±10%	Number Of Turns	Recommended AC Drive MA For Approx. 3.5 A-T		
	8 Ohm	1.3	.81	124	28.0		
	150 Ohm	23.0	26	538	6.5		
N	200 Ohm	32.0	27	600	5.8		
PU	250 Ohm	40.0	36	688	5.0		
Т	600 Ohm	95.0	56	1100	3.1		
	1475 Ohm	235.0	200	1700	2.0		
Ų	500 Ohm	80.0	42	Typical Dec	ay Time		
ř	2250 Ohm	235.0	200		1.2 to 2.0 Sec = 2.0 to 3.0 Sec		
Ÿ	10000 Ohm	1586.0	800	Long = 3.0 to 4.0 Sec			



# **Quality Control**

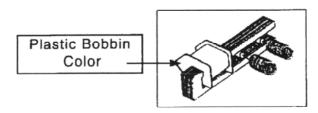
Mechanical construction of reverbs is a delicate, precise, controlled process not only for quality product in its construction and reliability but of major importance—its sound quality. An electrical/mechanical device producing a sound characteristic demands superior quality control processes and components.

The major portion of the components of our reverb product line are manufactured within our four company divisions. Purchase of

parts outside of our company is done only after thorough review of our source of supply. Our incoming inspection and supplier surveys assures us of a quality purchased component.

A reverb, by nature of its construction, is a delicate instrument. In our application notes we make our suggestions on proper mounting in your equipment. These suggestions should be reviewed at initial design of your instrument.

## **Electrical Specifications**



	Impe	dance 1K	Hz-10%	Plastic Bobbin	DC Resistance	Normal Drive Current
		9 or 8	4 or 1	Color of Coil	(in Ohms=10%)	(in AC mA)
	Α	10	8	White	.81	28.0
l n	В	190	150	Black	26	6.5
p	С	240	200	Violet	Violet 27	
u	D	310	250	Brown	36	5.0
t	Ε	800	600	Orange	58	3.1
	F	1925	1475	Red	200	2.0
O t	Α	600	500	Green	42	
u p	В	2575	2250	Red	200	
u t	С	1200	1000	Yellow	800	

### Design Your Own Model Number System

The Accutronics numbering system enables you to order

Type 9, 8, 4, or 1 model with the exact specifications you desire.

### Select Reverb Type

9	or 8	or	4 or	1	then
F	B	1 decay	A conn.	1 lock	C

Type 9 and 8 impedances are higher due to longer lamintations. However, the coil is the same. (example: the 10 ohms "A" coil for a Type 9 is the same coil as the "A" 8 ohms Type 4 coil.)

Туре	Input Impedan (in Ohms	ce	Output Impedan (in Ohms	ce	Decay tin	ne	Connecto	rs	Locking device	1	Mountin plane *	g
4 or 1 9 or 8	8	Α	500	Α	short 1.2 to 2.0 seconds	1	input grouded output	Α	no lock	1	Horizontal open side up	Α
4 or 1	150	В	2250 2575	В	medium 1.75 to 3.0 seconds	2	grounded input grouded output grounded	В			Horizontal open side down	В
4 or 1 9 or 8	200	С	10000	С	long 2.75 to 4.0 seconds	3	input insulated output grounded	С			Vertical connectors up	С
4 or 1 9 or 8	250 310	D					input insulated output insulated	D			Vertical connectors down	D
4 or 1 9 or 8	600 800	Ε					10" leads no outer channel	Ε			on end input up	E
4 or 1 9 or 8	1475 1925	F	•				3" leads no outer channel	F			on end output up	F

\* Mounting Plane



Horizontal Open Side up A Open Side down B

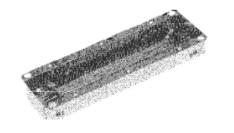


Vertical
Connectors up C
Connectors down D

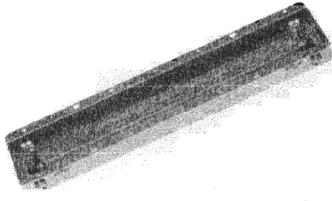


On end input up E On end output F

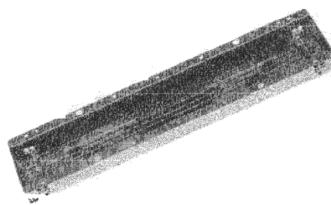
### Reverbs Units



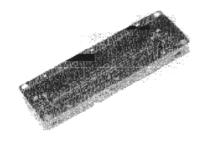
type1 A small low cost, two spring unit designed for application where price is a major factor. Idealy suited for low end practice amps.



type4 The standard of the industry for years, still manufactured using Hammond's original design. Four counter-wound and coupled springs deliver superior mechanical performance and the classic sound that helped make the Fender Twin Reverb Amps famous.



type9 Six springs, counter wound, coupled and placed in parallel, create our fullest, richest, reverb effect throughout the full range of musical sound. Ideally suited for keyboard, sound reinforcement and pedal steel applications.



type8 Designed for applications where overall sound quality is important and a compact package is required. Small in size, this three spring reverb approaches the rich textural quality of our larger reverb units.

## ACCUTRONIC



PRINTED CIRCUITS DIVISION Printed Circuit Boards 225 N. First Street Cary, IL 60013, U.S.A. Tel. (312) 639-2102 TWX: 910-237-1680 METALS/ PLASTICS DIVISION Werner Division 225 N. First Street Cary, IL 60013, U.S.A. Tel. (312) 639-2345 TWX: 910-237-1680



REVERB DIVISION Sound Reinforcement 628 North Street Geneva, IL 60134, U.S.A. Tel. (312)-232-2600 TWX: 910-237-1680

OSCILLATOR DIVISION Crystal Oscillator 628 North Street Geneva, IL 60134, U.S.A. Tel. (312)-232-2600 TWX: 910-237-1680