Preliminary Technical Service Manual

# MODEL F-900A 9-Unit Mainframe

dbx Professional Products May 1, 1991





# Introduction

Congratulations on purchasing the dbx F-900A mainframe. Your new F-900A powered mainframe can hold up to nine dbx 900 series modules (as well as those of some other companies).

This owner's manual provides you with the steps you need to connect power to the F-900A and install it with 900-series modules. Basic troubleshooting information is included. For more detailed technical information, a service manual is available by order.

This manual also includes important information for completing the warranty card, supporting your F-900A with dbx customer and factory service, and forms for ordering 900 series service manuals and additional dbx binders.

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# Registration Card, Warranty, Feedback

# **Registration Card**

There are two good reasons for returning the Registration Card shipped with this product.

- 1) It enables us to inform you of new applications, performance improvements, and service aids that are developed, and
- 2) It helps us respond promptly to claims under warranty without having to request a copy of your bill of sale or other proof of purchase.

Please fill in the Registration Card, detach it from the Warranty Certificate, and send the card to us today. If it is lost (or you have purchased this unit used), please photocopy the duplicate below, fill it in, and send it to the address on the inside of the front cover.

		<b>Registration Ca</b>	ard				
Model #	Serial #		Purchase	Date			
Your name			Title				
Company			Telephone				
Street							
City, State, Mail C	ode (Zip), Country						
Purchased from_			Price				
Nature of your pro	duct application						
Please rate the fo	llowing from 1 to 10 (	where 10 is the best po	ssible rating, and 1	is the lowest):			
Performance	Ease of use	Documentation	Cosmetics	Seviceability			
Commonte							

## Warranty

The warranty which can be enjoyed only by the first end-user of record, is stated on the separate Warranty Certificate packed with this manual. Save it for future reference. Details on obtaining factory service are provided on page 11.

## **User Feedback Form**

We are very interested in your comments about this product. Your suggestions for improvement to either the product or the manual will be certainly reviewed. A postpaid User Feedback Form is provided in the back of this manual for your convenience. If it is missing, please write to us at the address on the inside of the front cover. Thank you.



Fig 1: F-900A Rear Panel



CONDUCTOR		WIRE COLOR				
Ŭ		Normal	Alt			
L	LINE	BROWN	BLACK			
N	NEUTRAL	BLUE	WHITE			
Ε	EARTH GND	<b>GREEN-YELLOW</b>	GREEN			

Fig 2: AC Power Cord Color Coding

F900A

Module #	Product Name	Regulated +15V -15v		Unreg +24V	ulated -24V
902	De-Esser	60mA	60mA	30mA	30mA
903	Compressor/Limiter	60mA	60mA	30mA	30mA
904	Noise Gate	60mA	60mA	30mA	30mA
905	Parametric EQ	100mA	100mA	30mA	30mA
906*	Flanger (2-rack spaces)	200mA	200mA	30mA	40mA
907*	Compressor/Limiter	50mA	50mA	20mA	20mA
911	Type I NR	50mA	50mA 50mA		26mA
929	Hiss Reducer	75mA	75mA	65mA	65mA
933	Distribution Amp/Mixer 60mA		60mA	90mA	90mA
941*	Type II NR Dual Encode	e II NR Dual Encode 50mA 50mA		30mA	30mA
942*	Type II NR Dual Decode	50mA	50mA	30mA	30mA
941A	Type II NR Dual Encode	50mA	50mA	26mA	26mA
942A	Type II NR Dual Decode	50mA	50mA	26mA	26mA
408*	Type II NR Decode	40mA	40mA	20mA	20mA
409*	Disc Decoder	40mA	40mA	20mA	20mA
410*	Type I NR Encode/Decode	50mA	50mA	30mA	30mA
411*	Type I NR Encode/Decode	50mA	50mA	30mA	30m A

Tab	le 1: M	lodule	Current	Requirements

\* Indicates Discontinued Modules

- C. Complete ground connections.
  - Connect the circuit ground to chassis ground (if necessary). The chassis ground and circuit ground are not initially connected. In some systems it may be desirable to connect the circuit ground to the chassis ground. This may be accomplished using the chassis ground terminal on the rear panel and any one of the circuit ground terminals on a barrier strip. Since all circuit grounds are common among all modules, when the circuit ground of one module is connected to chassis ground, the circuit ground of each installed module is connected to chassis ground.

F-900A Teminals	902 De-Esser	903/907 Comp/Limiter	904 Noise Gate	905 Paramet- ric	906 Flanger	929 Hiss Reducer	941/941A 942/942A Type II NR	408 Type II NR	409 Disc Decoder	410/411/911 Type I NR	
+] A _]	Audio Input				Input	Ch. A Input	Ch. A Input	Input		Decode Input	
- ≟ - +] B -]	Audio Output				Output	Ch. A Output	Ch. B Output	Master Gain		Encode Output	
+]	Not Detector Input Key Not				Ext. CV	Ch. B	Ch. B	Not Used		Encode	
C   _ 」   _≟ _	Not Used	(907: AUX IN)		Used	Input	Input	Input	Remote	e Bypass	Input	
- <del>-</del> - + ] 	Control Voltage Output Not				Mix	Ch. B		Output		Decode Output	
- J	Control Voltage Input			Output	Output						

# Table 2: Hookup Information\*

\* Audio Output negative (-) terminals are internally connected to circuit ground.

# Technical Support, Factory Service

# Technical Support

If you require technical support, contact dbx customer service. Be prepared to accurately describe the problem. Know the serial number (and 'M' number, if any) of your F-900A — these are printed on a label attached to the rear of the F-900A unit.

or Write

Telephone: or FAX: or Telex: (1) 415/351-3500 (1) 415/351-0500 285481 Customer Service dbx Professional Products a division of AKG Acoustics, Inc. 1525 Alvarado Street San Leandro, CA 94577 USA

#### Factory Service

Always contact Customer Service before returning a product to the factory for service. Often, a problem is relatively simple and can be quickly fixed after telephone consultation.

Products can be returned to the factory for service *only* after Customer Service has issued a Return Authorization number. This number flags the returned unit for priority treatment when it arrives on our dock, and ties it to the appropriate information file.

Please refer to the terms of your Limited Two-Year Standard Warranty, which extends to the first end-user. After expiration of the warranty, a reasonable charge will be made for parts, labor, and packing if you choose to use the factory service facility. In all cases, you are responsible for transportation charges to the factory. dbx will pay return shipping.

## Shipping Instructions

Use the original packing material if it is available. If it is not, use a sturdy, double-walled carton no smaller than  $22 \times 16 \times 8$  inches ( $56 \times 41 \times 21$  cm) with a minimum bursting test rating of 200 pounds (91 kg). Place the chassis in a plastic bag (or wrap it in plastic) to protect the finish, then pack it in the carton with at least 1.5 inches (4 cm) of cushioning on all sides of the unit. 'Bubble' packing sheets, thick fiber blankets, and the like are acceptable cushioning materials; foam 'popcom' and crumpled newspaper allow the unit to shift in transit and will *not* protect it adequately. Wrap cushioning materials tightly around the unit and tape them in place to prevent the unit from shifting out of its packing. Close the carton without sealing it and shake vigorously. If you can hear or feel the unit move, use more packing. Seal the carton with 3-inch (8 cm) reinforced fiberglass or polyester sealing tape, top and bottom in an 'H' pattern. Narrower or parcel-post type tapes will not withstand the stresses applied to commercial shipments.

Mark the package with the name of the shipper, and with these words in red:

### DELICATE INSTRUMENT, FRAGILE!

Insure the package properly. Ship prepaid, not collect. Do not ship parcel post. Your Return Authorization number must be shown on the label, or the package will not be accepted.