

1700C



Six Channel Mainframe Mixer/Preamplifier

COMMERCIAL

General Product Description

The **Electro-Voice® 1700C** Mixer/Preamplifier is a six channel user-configurable mainframe preamplifier. By selecting from the large array of system component options, the **1700C** can become a six-in/one-out microphone mixer or a one-in/six-out distribution preamplifier.

The basic mainframe has six ports which can be input or output. When configuring with **Electro-Voice's 1781A** or **1781AT** Programmable Input modules, the mainframe becomes a powerful six channel mixer. Multiple **1700C** mainframes can be linked together for situations where more than six input/output ports are required.

Built-in features include a top panel trap-door for easy access into the unit, compressor/limiter, low and high frequency shelving equalizers, muting, remote volume control capability, and a tone generator which produces four different sounds.

Input Modules: The **Electro-Voice 1781A/1781AT** Programmable Input module accepts either mic or line level signals through a wide variety of connector interfaces. Further detail on these modules is given later in this document.

Output Modules: The **Electro-Voice 1783** Line Output module allows the user to interface with other professional equipment. Further detail on this module is given later in this document.

The **Electro-Voice** model **1700C** mixer/preamplifier systems respond to most design tasks with the ease and versatility of systems costing much more. As a result, it *is the choice* for use in professional installations requiring high quality, flexibility in design, and low cost.

Architects' and Engineers' Specifications

The mixer/preamplifier shall have six configurable ports and be capable of operating from 100, 120, 200, 220, or 240 Vac, 50/60 Hz line, or from ± 48 VDC. Each port shall be usable with a microphone or other high level device. The mixer/preamplifier mainframe shall include a compressor/



limiter, low and high frequency shelving equalizers, and a tone generator capable of producing general purpose and emergency warning signals.

The preamplifier shall meet the following performance criteria: Frequency Response: 30 Hz to 20 kHz, ± 1 dB (main output). Source Impedance: 150 ohms to 250 ohms nominal with a microphone preamplifier, 600 ohms with a bridging transformer, 150 ohms to 600 ohms with a line matching transformer, and greater than 30 kohms with a tape preamplifier. Equivalent Input Noise: < -120 dB_r with a low impedance microphone preamplifier. Output Noise: < -85 dBm (with all controls off).

The mixer/preamplifier shall be rack mountable and finished in black. The amplifier's dimensions shall be 5¼" (H) x 19" (W) x 12¼" (D) and its net weight shall be 24.2 lbs.

The plug-in accessory modules shall be the **1781A** or **1781AT** Input modules and the **1783** Line Output module (the **1786** Output Isolation transformer is used with the **1783** Line Output module). The accessory transformer usable with the modules shall be the **1786** Output Isolation transformer. The connector subassemblies shall be the **1791** female XLR, **1792** male XLR, **1793** dual phono, and the **1794** 5-lug screw terminal connector.

The mixer/preamplifier shall be the Electro-Voice Model 1700C.

Specifications:

Rated Output Level: (Ref. 1 kHz)

Main Output: (balanced, LINE position) + 10 dBm
(balanced, MIC position) -40 dBm

Preamp Output: (unbalanced) 0 dBm

Link Output: (unbalanced) 100 mVrms (-18 dBu), 10 kohm load

Signal-to-Noise Ratio:

Main Output: >85dB
(rated output, A-weighted, EQ defeated, compressor/limiter off)

Preamp Output: >75 dB
(rated output, A-weighted, EQ defeated, compressor/limiter off)

Link Output: >75 dB
(rated output, A-weighted)

Minimum Load Impedance:

Main Output: Line Level balanced: 600 ohm minimum

Mic Level balanced: 600 ohm minimum

Preamp Output: unbalanced: 600 ohm minimum

Link Output: unbalanced: 2 kohm minimum

Equalization: (Shelving type) Bass: ± 12 dB at 100 Hz

Treble: ± 12 dB at 10 kHz

Compressor/Limiter: Feedforward Topology

Threshold: -20 dB to +20 dB

Continuously variable (Ref. 100 mVrms on Link input)

Compression Ratio: 1:1 to ∞ :1, Continuously variable

Release Time: 50 msec to 5 sec., Continuously variable

Tone Generator: Electronically produced

Tones: Buzzer, siren, single-tone chime, & repeating tone chime

Control: . All tones are initiated by external switch closures

Level Adjustment: Rear panel

Front Panel Controls:

Input: 6 - Input Level adjust

EQ Controls: 1 - Bass adjust, 1 - Treble adjust,
1 - EQ In/Defeat switch

Output: 1 - Master Level adjust

Compressor/Limiter: 1 - Release Time adjust
(screwdriver slotted)

1 - Threshold adjust (screwdriver slotted)

1 - Compression Ratio adjust (screwdriver slotted)

1 - On/Off switch

Miscellaneous: 1 - AC Power switch

Rear Panel Controls:

Tone Generator: 1 - Output Level adjust
(screwdriver slotted)

Output: 1 - Output level select switch (MIC or LINE)

Indicators:

Front Panel: .. 6 - Green LED's (Nominal Input level), 6 - Red

LED's (Peak Input level), 1 - Red LED (Main Output clip), 1 -

AC Power ON

Connectors:

Inputs:

Link Input: 1 - RCA phono receptacle

Battery: 1 - 3-terminal barrier strip

Outputs:

Main Output: 1 - Male XLR connector

1 - 3-terminal barrier strip

Preamp Output: 1 - RCA phono receptacle

Control:

Mute and Tone Generator: Screw terminals (7)

Power Requirements:

(Ref. 1 kHz, rated output with no modules installed)

AC Mains: 100, 120, 200, 220 or 240 VAC, 50/60 Hz

Battery: ± 48 VDC bipolar, 0.5 amps maximum

Power Consumption

and Heat Produced: 17 watts consumed, 57.5 BTU/hour

Operating Temperature Range: Up to 50°C (122°F)

Dimensions:

Width: 19 inches (48.3 cm)

Height: 5¼" inches (13.3 cm) (3 standard rack units)

Depth: 13 inches (33.0 cm)

Net Weight: 15 lbs (6.8 kg)

Finish Color: Black

Accessories included with Mainframe:

Operating/Service Instructions, 1780A/AT, 1781A/AT and 1783

4 - Rubber Feet (installed)

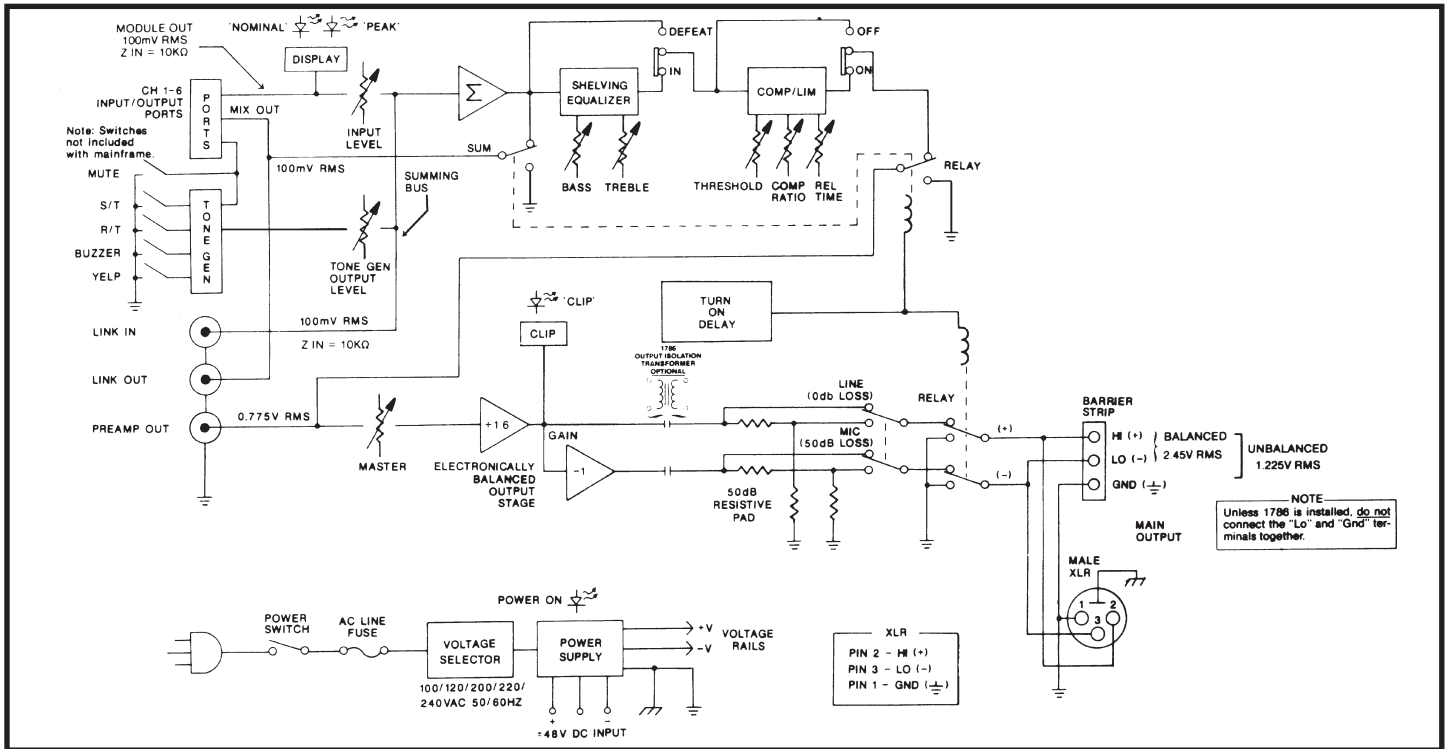
1 - System Configuration Label installed on top cover

1 - International 220/240 VAC voltage decal

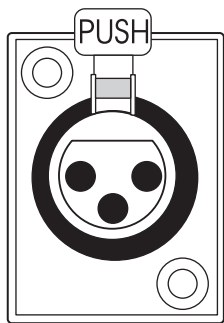
1 - International Fuse decal

1 - Fuse for International use

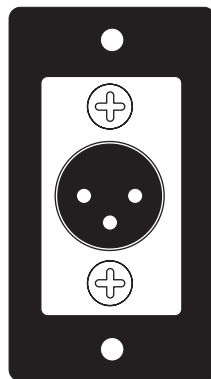
1 - Rack mount hardware kit



1700C Block Diagram



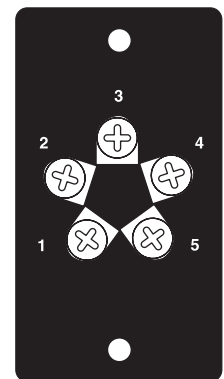
1791



1792



1793



1794

Connectors for use with 1783

USA 12000 Portland Ave South, Burnsville, MN 55337, Phone: 952-884-4051, FAX: 952-884-0043
Canada 705 Progress Avenue, Unit 46, Scarborough, Ontario, Canada, M1H2X1, Phone: 416-431-4975, 800-881-1685, FAX: 416-431-4588
Switzerland Kellenstrasse 11, CH-2563 IPSACH, Switzerland, Phone: 41/32-331-6833, FAX: 41/32-331-1221
Germany Hirschberger Ring 45, D94315, Straubing, Germany, Phone: 49 9421-706 392, FAX: 49 9421-706 287
France Parc de Courcerin, Alle Lech Walesa, Lognes, 77185 Marne La Vallee, France, Phone: 33/1-6480-0090, FAX: 33/1-6480-4538
Australia Unit 23, Block C, Slough Business Park, Slough Avenue, Silverwater, N.S.W. 2128, Australia, Phone: 61/2-9648-3455, FAX: 61/2-9648-5585
Hong Kong Unit E & F, 21/F, Luk Hop Industrial Bldg., 8 Luk Hop St., San PO Kong, Kowloon, Hong Kong, Phone: 852-2351-3628, FAX: 852-2351-3329
Japan 2-5-60 Izumi, Suginami-ku, Tokyo, Japan 168, Phone: 81-3-3325-7900, FAX: 81-3-3325-7789
Singapore 3015A Ubi Rd 1, 05-10, Kampong Ubi Industrial Estate, Singapore 408705, Phone: 65-746-8760, FAX: 65-746-1206
Mexico Av. Parque Chapultepec #66-201, Col. El Parque Edo. Mex. 53390, Phone: (52) 5358-5434, FAX: (52) 5358-5588
UK 4, The Willows Centre, Willow Lane, Mitcham, Surrey CR4 4NX, UK, Phone: 44 181 640 9600, FAX: 44 181 646 7084
Africa, Mid-East 12000 Portland Ave South, Burnsville, MN 55337, Phone: 952-887-7424, FAX: 952-887-9212
Latin America 12000 Portland Ave South, Burnsville, MN 55337, Phone: 952-887-7491, FAX: 952-887-9212

www.electrovoice.com • Telex Communications, Inc. • www.telex.com

© Telex Communications, Inc. 02/2001
Part Number 38109-873 Rev A



Electro-Voice®

U.S.A. and Canada only.

For customer orders, contact the Customer Service department at
800/392-3497 Fax: 800/955-6831

For warranty repair or service information, contact the Service
Repair department at 800/685-2606

For technical assistance, contact Technical Support at 866/78 AUDIO

Please refer to the Engineering Data Sheet for warranty information.
Specifications subject to change without notice.