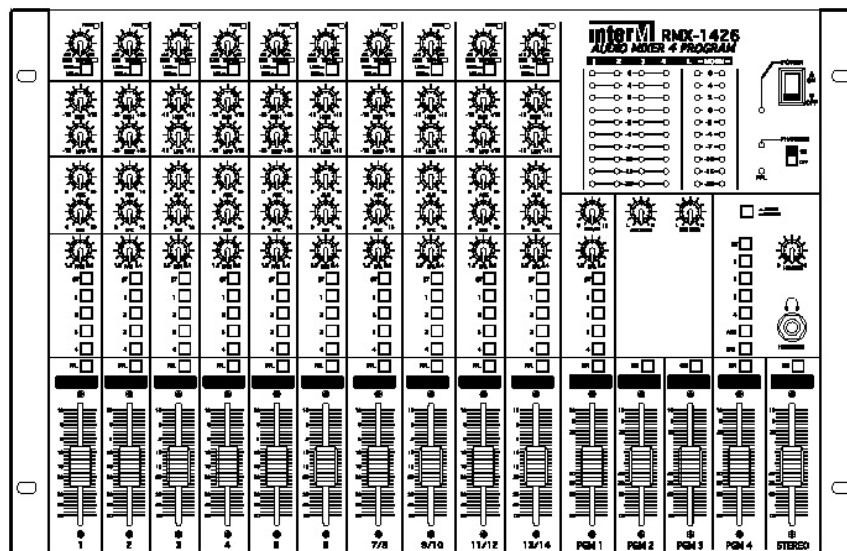


# Operating Manual

## RMX-1426 Multichannel Audio Mixer



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**interM**

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## Welcome

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### **A personal welcome to you from the management and employees of Inter-M**

Thank you for purchasing this fine Inter-M product. All of us here at Inter-M are dedicated to providing you with the highest quality products and the best value.

We sincerely trust this product will provide you with years of satisfactory service, but if anything is not to your complete satisfaction, we will endeavor to make things right.

Welcome to Inter-M, and thank you for becoming a part of our worldwide extended family!

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## Unpacking

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Although your RMX-1426 is neither complicated nor difficult to operate, we recommend you take a few minutes to read this brief manual and familiarize yourself with the important information regarding product features, setup and operation.

As with most electronic devices, we strongly recommend you retain the original packaging. In the unlikely event the product must be returned for servicing, the original packaging (or reasonable equivalent) is required.

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## Warnings

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### **Environment**

Never place this product in an environment that could alter its performance or reduce its service life. Such environments are usually characterized by high levels of heat, dust, moisture, or vibration.

### **Safety**

1. Read these instructions carefully.
2. Follow all instructions.
3. Keep all warnings.
4. Do not operate this apparatus near water.
5. Clean only with a damp cloth.
6. Do not block any of the ventilation openings.
7. Install only in accordance with the instructions in this manual.

8. Do not install near any heat sources such as radiators, heat registers, stoves, or other devices (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades, with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where it is attached to the apparatus.
11. Use only the attachments/accessories specified.
12. Use only with a cart, stand, tripod, bracket, or table specified, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid overturning.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

 <p>CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>	 <p>This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.</p>
<p><b>WARNING</b></p> <p>To prevent fire or shock hazard, do not expose the unit to rain or moisture.</p>	 <p>This symbol is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying the appliance.</p>
<p>Caution: To prevent electric shock do not use this (polarized) plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.</p>	
<p>Attention: Pour prévenir les chocs électriques ne pas utiliser cette fiche polarisée avec un prolongateur, une prise de courant ou une autre sortie de courant, sauf si les lames peuvent être insérées à fond sans en laisser aucune partie à découvert.</p>	
<p>*Do not install this equipment in a confined space such as a book case or similar unit. *The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus. *Worded: "WARNING FOR YOUR PROTECTION PLEASE READ THE FOLLOWING-WATER AND MOISTURE: Unit should not be used near water(e.g. near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc). Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings."</p>	

## Operation

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Make certain that speakers and input sources are properly connected before switching on.

Keep volume levels at minimum gain before switching on.

**NOTE:** The system's operation is delayed by approximately three seconds after pressing the AC Mains power switch. This is due to the built-in protection circuitry, designed to protect speakers and other system components.

## **RMX-1426 Multichannel Audio Mixer**

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### **Features**

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#### **Multiple Inputs and Outputs**

- Six mono and four stereo input channels will accommodate a wide array of sound sources including microphones, instruments, cassette and CD players. Four output channels for routing flexibility.

#### **Flexible Routing Architecture**

- Four output assign switches on each input channel.

#### **Input and Output Monitoring**

- PFL function on input channels for convenient headphone monitoring, plus switches for selectable output monitoring.

#### **EFX and Aux Sends and EFX Returns**

- For connecting external processing equipment, an EFX Send and AUX Send are provided, as well as a stereo EFX Return.

#### **Two-Band EQ**

- Two band equalization on all input channels.

#### **On-Board Phantom Power**

- Built-in +48VDC phantom power for condenser microphones.

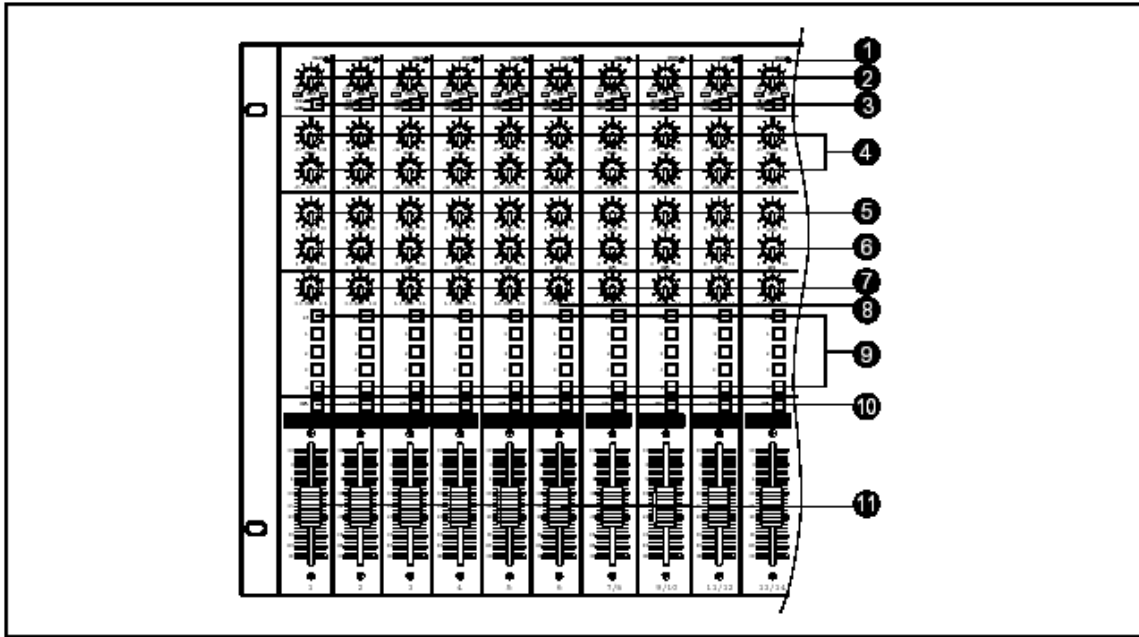
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## Front Panel Controls

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### Input Section

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#### 1. Peak Indicators

These LED indicators light when the input signal to the associated channel is 3dB below clipping. If the indicator is lit steadily, reduce the channel's Trim level (1) to avoid distortion.

#### 2. Channel Gain Controls

These knobs control of gain level for the associated input channel.

#### 3. Input Selector Switches

These switches select the input source for the associated channel.

When MIC is selected, the input source will be the rear-panel MIC (balanced XLR) connector.

When LINE is selected, the input source will be the rear-panel LINE (balanced 1/4" phone) connector.

#### 4. EQ Controls

These knobs control the equalization for the associated input channel. Two bands of equalization are provided:

Low: 80Hz,  $\pm 15$ dB, Shelving type

High 12kHz  $\pm 15$ dB, Shelving type

### 5. Aux Send Controls

These knobs control the Aux Send level for the associated input channel. Rotating the knob clockwise increases the amount of signal sent to the AUX buss. The Aux Send is pre-fader, and is not affected by the channel's fader position.

### 6. EFX Send Controls

These knobs control the EFX Send level for the associated input channel. Rotating the knob clockwise increases the amount of signal sent to the EFX buss. The EFX Send is post-fader, and is directly affected by the channel's fader position.

### 7. Balance Controls

These knobs control the L/R balance position for the associated stereo input channel. Depending on which output sources are selected with the channel's Assign Switches (9), the Balance Controls will pan the signal between Left and Right on the stereo buss, and/or between PGM 1/3 and 2/4 on the Program busses.

If the knob is rotated to the center, the channel's signal will be sent equally to the stereo Left and Right, PGM 1/2 and PGM 3/4 busses.

If the knob is rotated fully counter-clockwise (to the left), the channel's signal will be sent only to the stereo Left, PGM 1 and PGM 3 busses.

If the knob is rotated fully clockwise (to the right), the channel's signal will be sent only to the stereo Right, PGM 2 and PGM 4 busses.

### 8. Pan Controls

These knobs control the L/R balance position for the associated mono input channel. Depending on which output sources are selected with the channel's Assign Switches (9), the Balance Controls will pan the signal between Left and Right on the stereo buss, and/or between PGM 1/3 and 2/4 on the Program busses.

If the knob is rotated to the center, the channel's signal will be sent equally to the stereo Left and Right, PGM 1/2 and PGM 3/4 busses.

If the knob is rotated fully counter-clockwise (to the left), the channel's signal will be sent only to the stereo Left, PGM 1 and PGM 3 busses.

If the knob is rotated fully clockwise (to the right), the channel's signal will be sent only to the stereo Right, PGM 2 and PGM 4 busses.

### 9. Channel Output Assign Switches

These buttons assign the channel's input signal to the stereo output buss, or to the PGM 1/2 or PGM 3/4 busses. Any combination of output busses may be chosen.

### 10. PFL Switches

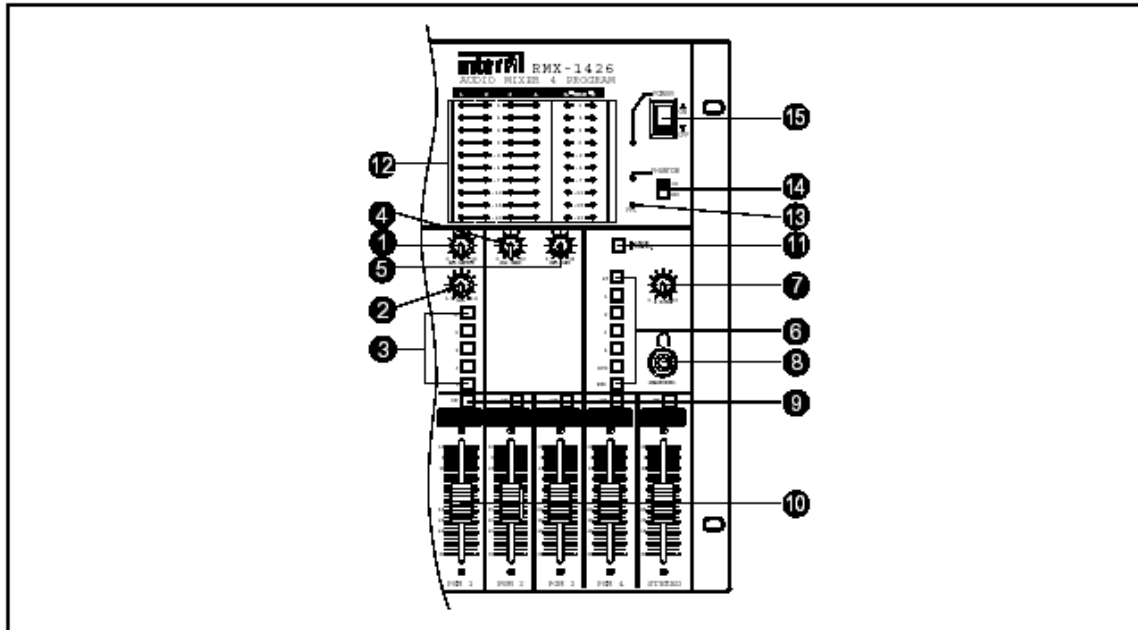
These buttons are used to monitor each channel's output status via the headphone jack.

When monitoring the channel's input signal, PFL position allows you to hear the input at a level unaffected by the position of the channel's Output, FX Send and Pan settings. AFL position will allow you to hear the input as it appears in the final mix, with Output, FX Send and Pan settings as selected for the channel.

### **11. Channel Faders**

These faders control the output level (the level sent to the output buss) for the associated input channel. Faders on unused channels should be set to the minimum setting.

## Output Section



### 1. EFX Return Level

This knob controls the EFX Return buss level. The EFX Return is the sum of all signals from the EFX Sends of Channel Inputs (6).

### 2. EFX Return Balance

This knob controls the EFX Return balance, panning the EFX Return buss signal within the stereo buss or PGM 1/2 and PGM 3/4 busses.

### 3. EFX Return Assign Switches

These switches assign the output of the EFX Return signal to any combination of the Stereo buss, or PGM 1/2 and PGM 3/4 busses.

### 4. Aux Send Level

This knob controls the combined Aux Send output level.

### 5. EFX Send Level

This knob controls the combined EFX Send output level.

### 6. Monitor and Headphone Assign Switches

These buttons assign the master output signal to the stereo output buss, or to the PGM 1/2 or PGM 3/4 busses. Any combination of output busses may be chosen.

### 7. Headphone and Monitor Level

This knob controls the signal monitoring level and headphone level. It is independent from the master output level (10).

**8. Headphone Output Jack**

This is a stereo output on balanced 1/4" phone jack, for monitoring the signal of the master output buss. When the PFL switch is activated on an input channel, the signal present at this jack is the input signal of the associated input channel.

**9. Output Buss Switches**

These switches switch on the output to the associated output buss. Separate switches are provided for the main Stereo buss, PGM 1/2 and PGM 3/4 busses.

**10. Master Output Fader**

This fader controls the output level to the selected output busses.

**11. Meter Select Switch**

The Output Meters (12) are dual-function LED meters whose source is selected with this switch.

When the Meter Select Switch is set to OFF, the meters display the Stereo L/R output level.

When the Meter Select Switch is set to ON, the meters display the headphone or monitor output level.

**12. Output Level Meters**

These 10-segment LED meters display the output level as selected by the Meter Select Switch (11).

**13. PFL Indicator LED**

This LED lights when any of the Input Channel PFL switches are activated.

**14. Phantom Power Switch and Indicator**

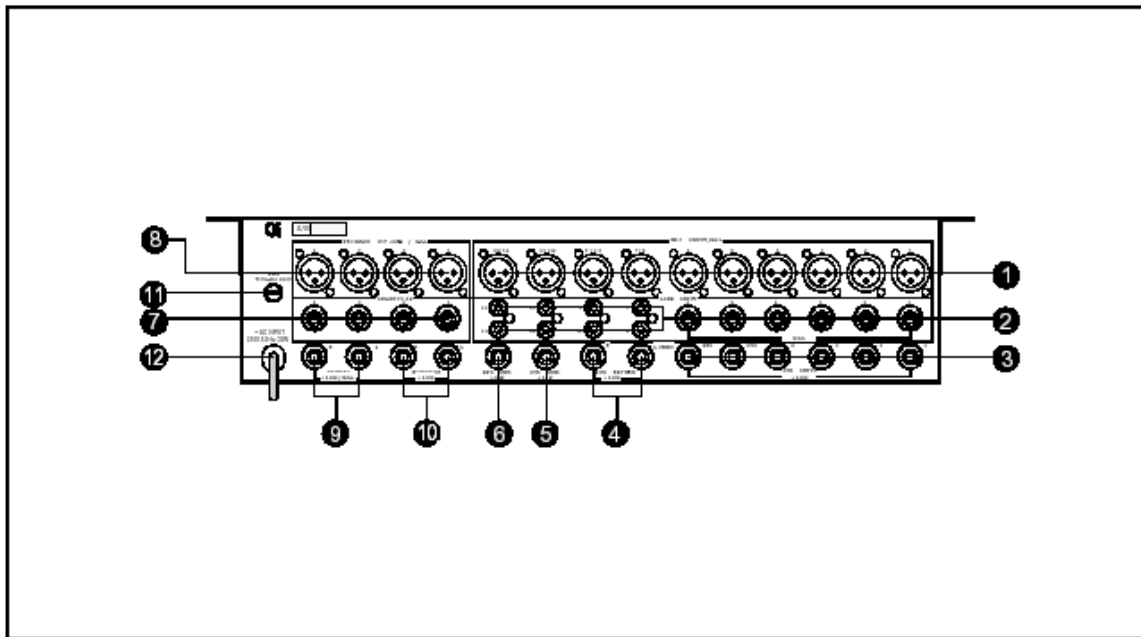
Pressing this switch activates the +48VDC phantom power supply to all Input Channels, for use with condenser mics requiring external power. When Phantom Power is active, the LED indicator lights.

**NOTE:** It is safe to connect most modern dynamic microphones or line level devices to the channel inputs when phantom power is activated. However, some older ribbon microphones may be damaged by phantom power, and certain unbalanced line level devices may malfunction or produce an audible hum when phantom power is active.

**15. Power Switch**

This switch is used to switch the unit on and off. When the unit is on, the adjacent Power Indicator LED is lit.

## Rear Panel Controls



### 1. Mic Inputs 1-14

Mic-level inputs on balanced three-pin XLR connectors.  
 Channels 1-6 are provided at nominal input level of  $-60\text{dB}$  (mono).  
 Channels 7-10 are provided at nominal input level of  $-50\text{dB}$  (stereo).

### 2. Line Inputs 1-14

Line-level inputs.  
 Channels 1-6 are provided on balanced 1/4" phone connectors.  
 Channels 7-14 are provided on unbalanced RCA connectors.

### 3. Sub Inputs 1-6

Line-level inputs on unbalanced 1/4" phone connectors. These are provided for input of signal from a sub-mixer or other external device.

### 4. EFX Return (L/MONO, R)

Line-level inputs on unbalanced 1/4" phone connectors. These are provided as stereo inputs. If only the L jack is used, the input signal will be seen as mono and sent equally to both L and R channels of the master buss.

### 5. Aux Send

Line-level outputs on unbalanced 1/4" phone connectors. These are provided for connection to an external processor or other line-level input.

### 6. EFX Send

Line-level outputs on unbalanced 1/4" phone connectors. These are provided for connection to an external processor or other line-level input.

**7. Insert I/O**

These unbalanced 1/4" TRS jacks are provided for input and output of an audio source before the master fader. The Insert signal is unaffected by the Channel Input levels.

**8. PGM Outputs 1-4**

Line-level outputs on unbalanced 1/4" phone connectors. These are provided for output of signal routed to the PGM output busses.

**9. Stereo Outputs L/R**

Line-level outputs on unbalanced 1/4" phone connectors. These are provided for output of signal routed to the Stereo L/R output busses.

**10. Monitor Outputs**

Line-level outputs on unbalanced 1/4" phone connectors. These are provided for output of signal routed to the Monitor output busses.

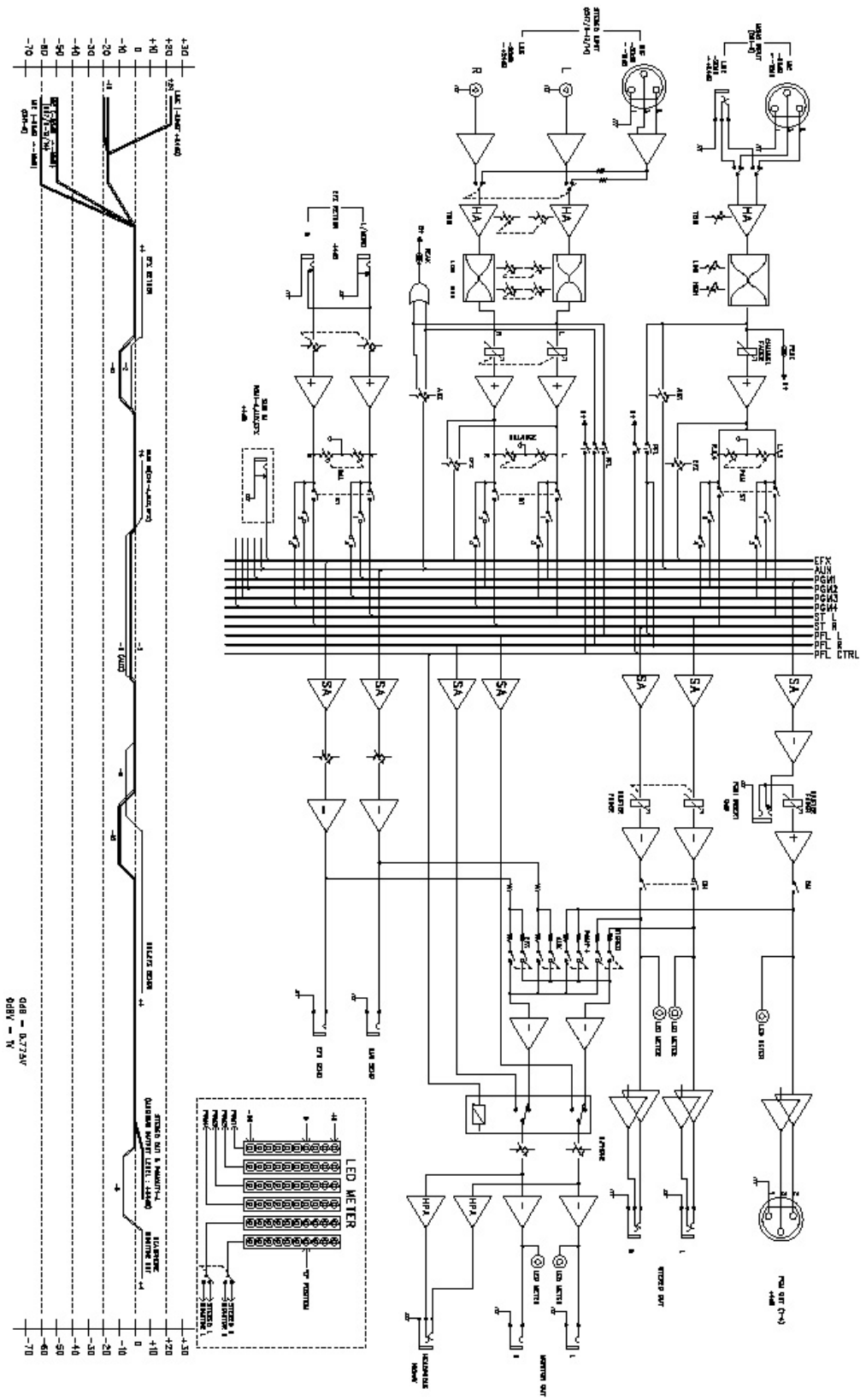
**11. AC Fuse Holder**

This holder contains the AC overload protection fuse. If the fuse has blown out, replace it with a fuse of the same type and rating. If the fuse continues to blow, refer servicing to a qualified service technician.

**12. AC Connector**

Plug this cable into an active AC power supply.

# Block Diagram



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## Specifications

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### ELECTRICAL

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#### Input Sensitivity/Impedance

<b>Mic Input 1-6</b>	-60dB/600Ω Balanced
<b>Mic Input 7-14</b>	-50dB/600Ω Balanced
<b>Line Input 1-6</b>	-20dB/10kΩ Balanced
<b>Line Inputs 7-14</b>	-20dB/10kΩ Unbalanced
<b>EFX Returns</b>	+4dB/10kΩ Unbalanced
<b>Sub Inputs (PGM 1-4, Aux, EFX)</b>	+4dB/10kΩ Unbalanced

#### Output/Impedance

<b>Stereo, PGM 1-4 Output</b>	+4dB/600Ω Balanced
<b>AUX, EFX Send</b>	+4dB/600Ω Unbalanced
<b>Monitor Output</b>	+4dB/600Ω Unbalanced
<b>Headphone Output</b>	100mW/40kΩ

#### Frequency Response (+1/-2dB)

20Hz-30kHz

#### T.H.D (20Hz – 20kHz)

Less than 0.1%

#### Equalization

<b>High</b>	±15db, 12kHz
<b>Low</b>	±15db, 80Hz

#### Buss Noise

Less than -78dB

#### EIN

Less than -128dB

#### Crosstalk

Less than -70dB

#### Maximum Voltage Gain

<b>Mic(Mono CH) to ST/PGM1~4</b>	84dB
<b>Mic(Mono CH) to AUX</b>	76dB
<b>Mic(Mono CH) to EFX</b>	86dB
<b>Mic(Mono CH) to Monitor</b>	70dB
<b>Mic(St CH) to ST/PGM1~4</b>	74dB
<b>Mic(St CH) to AUX</b>	66dB
<b>Mic(St CH) to EFX</b>	76dB
<b>Mic(St CH) to Monitor</b>	60dB
<b>EFX Return(St CH) to ST/PGM1~4</b>	16dB
<b>SUB In(St CH) to PGM1~4</b>	10dB

#### Phantom Power

+48V

**GENERAL**

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<b>Power Source</b>	100 –240VAC, 50/60Hz
<b>Power Consumption</b>	36W
<b>Weight</b>	735 Kg (16.5 lbs)
<b>Dimensions</b>	482(W) x 104(H) x 310(D) mm 19(W) x 4(H) x 12.2(D) in.

*Specifications and design subject to change without notice for improvements.*



Inter-M, Ltd. (Korea) began operations in 1983.

Since then, Inter-M has grown to become one of the largest manufacturers of professional audio and commercial sound electronics equipment in the world.

Inter-M has gained worldwide recognition for its own branded products, as well as private label manufacturing of electronics sold under other names (OEM).

The company is no longer just a Korean company, but rather a global company that is truly international in scope, with factories and offices in Korea and China, and sales and marketing operations located in Japan, Europe, and the U.S.A.

With more than 850 employees around the globe, Inter-M is well-poised for further growth and expansion.

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