### Mini Mixer

# Model MN12 Owner's Manual



Thank you for purchasing our Fostex product.

Model MN12 is a maximum 12 input 2 output mini mixer and despite its small size, can mix a multitude of sound sources and it also contains an AUX send/return connector for effect processing. In channels 1~4, trim controls are provided to allow handling line/mic inputs, and LO/HI equalizers are also provided.

Channels 5~12 are exclusively for line inputs and, both monaural and stereo sound sources can be connected. Before proceeding to operate it, please carefully read this manual for correct operation.



### **CAUTION**

RISK OF ELECTRIC SHOCK DO NOT OPEN



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.

### **CAUTION:**

TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

### **ATTENTION:**

POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU' AU FOND.



The lightning flash with arrowhead symbol, within an equilateral triangle, 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.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

### "WARNING"

"TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE."

### SAFETY INSTRUCTIONS

- 1. Read Instructions All the safety and operating instructions should be read before the appliance is operated.
- 2. Retain Instructions The safety and operating instructions should be retained for future reference.
- 3. Heed Warnings All warnings on the appliance and in the operating instructions should be adhered to.
- 4. Follow Instructions All operating and use instructions should be followed.
- 5. Water and Moisture The appliance should not be used near water for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.
- 6. Carts and Stands The appliance should be used only with a cart or stand that is recommended by the manufacturer.



An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

- 7. Wall or Ceiling Mounting The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
- 8. Ventilation The appliance should be situated so that its location or position dose not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.

- 9. Heat The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
- 10. Power Sources The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
- 11. Grounding or Polarization The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.
- 12. Power Cord Protection Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
- 13. Cleaning The appliance should be cleaned only as recommended by the manufacturer.
- 14. Nonuse Periods The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
- 15. Object and Liquid Entry Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
- 16. Damage Requiring Service The appliance should be serviced by qualified service personnel when:
  - A. The power supply cord or the plug has been damaged; or
  - B. Objects have fallen, or liquid has been spilled into the appliance; or
  - C. The appliance has been exposed to rain; or
  - D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
  - E. The appliance has been dropped, or the enclosure damaged.
- 17. Servicing The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

### Important Notes in Operation

### \* Avoid using headphones for long hours at high volume levels.

Doing so can result in hearing failure. Any sudden increase in headphone sound levels must also be avoided. This could result in damage to your hearing.

## \* Turn down all sound volume controls when switching on power to this mixer.

Also, turn all volume controls when switching on/off power to the MN12. Otherwise, a sudden loud noise could have a bad affect on you ears and your hearing.

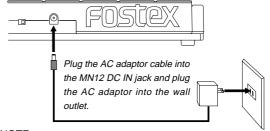
## \* Turn down the sound volume control when plugging or unplugging the headphone into the PHONES jack.

Always turn down the sound volume control when connecting or removing the headphone plug from the PHONES jack. Doing so with the volume control turned up, could result in hurting your ears.

## \* Switch off power to the mixer when interconnecting it to external equipment.

Always be sure to switch off the MN12 power when interconnecting external equipment to the MN12.

### Connecting the AC adaptor



<NOTE>

Unplug the AC adaptor from the wall outlet if the MN12 is not to be used for long hours or extensive periods of time.

The schematic is indicates that the outer sheath is minus polarity, and the power supply is DC 12V.



### Names and Functions

### 1. DC IN jack

The AC adaptor included with the MN12 is connected here.

#### 2. Power switch

Switches ON-OFF (STANDBY) power to this mixer.

### 3. AUX RTN jacks

This is connected to the effector output and the effector processed signals sent to the stereo L, R connectors. Input signals are adjusted with the AUX RTN knob. If the effector output is stereo, they are respectively connected to L and R, and if output in mono, it is input to L/MONO.

### 4. AUX SEND jack

This is connected to the effector input and the signals for effecting are controlled with the AUX SEND knobs on their respective channels and then output.

### 5. STEREO OUT jacks

The mixed signals is output to inputs of the MTR and Mixer. The output level is controlled with the MASTER fader.

### 6. LED level meter

Signals levels from the STEREO OUT jacks are indicated by these LED'S.

### 7. AUX RTN knob

Signals effect processed are adjusted by this knob and sent to stereo L and R.

### 8. PHONES knob

Adjusts sound of the headphones.

### 9. MASTER fader

This fader controls the signal that is output from STEREO OUT L, R jacks.

### 10. PHONES jack

Monitor headphone is plugged in here.

### 11. INPUT fader

Adjusts input level of the sound source signal applied to input jack 1-12.

### 12. INPUT jacks

External sound sources are input here.

INPUT 1~4 complies to mic/line and levels controlled with the TRIM knobs to match the input. INPUT 5~12 are exclusively for line level inputs and are in stereo. If monaural sound sources are to be input, they should be connected to the MONO marked 5, 7, 9 and 11 jacks, and for stereo, to the 5-6, 7-8, 9-10 and 11-12 jacks.

#### 13. AUX send knobs

The AUX send knobs determine the level of the input signal that will be sent to AUX SEND jacks. The signal adjusted by these knobs can be sent to an external device, such as an effect unit.

### 14. Panpot knobs

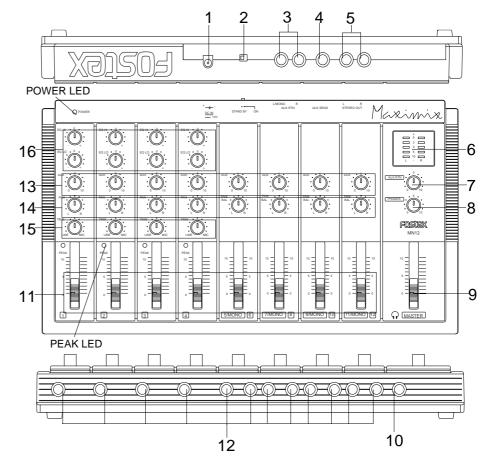
Adjusts the sound position when signals input to each input jack is output to the STEREO OUT (L, R) jacks.

### 15. Input trim knobs

These are adjusted to match the output level of the sound sources connected to INPUT 1~4 (adjusting range is -60dBV~-10dBV). If the PEAK LED blinks, the levels with this knob.

### 16. Equalizer control knobs

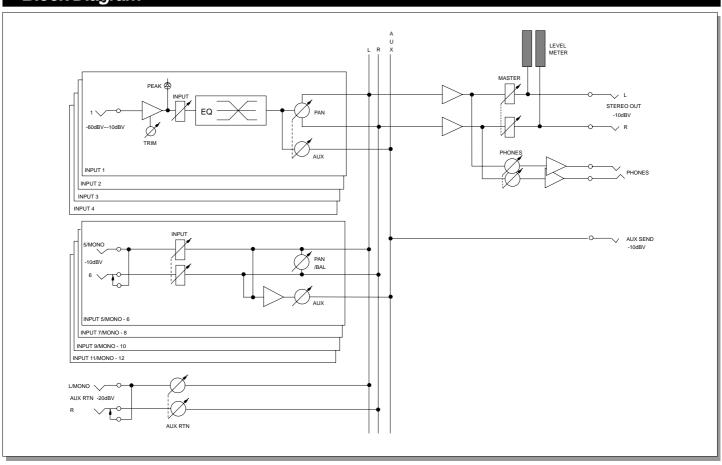
These knobs control the low frequency range (100Hz, +/-13dB) and high frequency range (10kHz, +/-13dB) of the input signals of INPUT  $1{\sim}4$  jacks.



### Connecting the External Equipment

As shown in example below, by interconnecting MN12 as a sub mixer with a multitracker having few input ports, a multiple of sound sources can then be mixed and recorded by the multitracker. If the effector output is monaural, connect to L/MONO of the Effect Unit AUX RTN jack. MN12 Maximix Multitracker 0 0 0 0 00000 0 0 0 0 0 0 0 0 (1) 0 0  $\bigcirc$ 0 :0 Sound source 10 Sound Sound Sound Sound Sound source 9 source 1 source 3 source 5 Sound Sound Sound source 2 source 4 source 8 Stereo Outputs are used as examples, in the above, for sound sources 5 and 7. Mics should be connected to channels 1~4. Ø6mm phone plugs, shown above, must be used at the input/output jacks (except for the headphones) of MN12.

### Block Diagram



### **Specifications**

#### INPUTS/OUTPUTS

<INPUT 1~4>

Connector :  $\emptyset$ 6mm phone jack ( x 4) Input level :  $-60dBV \sim -10dBV$ 

Input impedance :  $20k\Omega$  or more

<INPUT 5~12>

Connector : Ø6mm phone jack ( x 8)

Input level : -10 dBVInput impedance :  $8k\Omega$  or more

AUX RTN (L/MONO, R)

Connector : Ø6mm phone jack ( x 2)

Input level : -20 dBVInput impedance :  $8k\Omega$  or more

STEREO OUTPUT (L, R)/AUX SEND

Connector : Ø6mm phone jack ( x 3)

Output level : -10dBV Output impedance :  $10k\Omega$  or more

PHONES OUTPUT

Connector : Ø6mm stereo phone jack (Å~1)

 $\begin{array}{ccc} \textit{Maximum Output level: 40mW (at $32\Omega)} \\ \textit{Load impedance} & : 16\Omega \text{ or more} \\ \textit{Equalizer} & \textit{HI} & : 10\textit{kHz} + \textit{/-}13\textit{dB} \\ \textit{LO} & : 100\textit{Hz} + \textit{/-}13\textit{dB} \end{array}$ 

Input conversion noise voltage: -120dBV (IHF-A) Frequency Response : 20Hz ~ 20kHz

Distortion Rate (T. H. D.) : 0.05%

**GENERAL** 

Dimensions : 356 (W) x 200 (D) x 52 (H) mm

Weight : Approx. 1.3 kg (without AC adaptor)

Power supply : DC12V (Exclusive AC adaptor)

Power consumption : Approx. 170mA

Accessories : AC adaptor x 1, Owners Manual x 1

\* Specifications and appearance are subject to change without notice for product improvement.

### **Declaration of EC Directive**

This equipment is compatible with the EMC Directive (89/336/EEC) - Directive on approximation of member nation's ordinance concerning the electromagnetic compatibility and with the Low Voltage Directive (73/23/EEC) - Directive on approximation of member nation's ordinance concerning electric equipment designed to be used within the specified voltage range.

### The Affect of Immunity on This Equipment

The affect of the European specification EN50082-1 (coexistence of electromagnetic waves - common immunity specification) on this equipment are as shown below.

\* In the electrical fast transient / burst requirements, radiated electromagnetic field requirements and static electricity discharging environment, this could be affected by generation of noise and distortion in some cases.

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