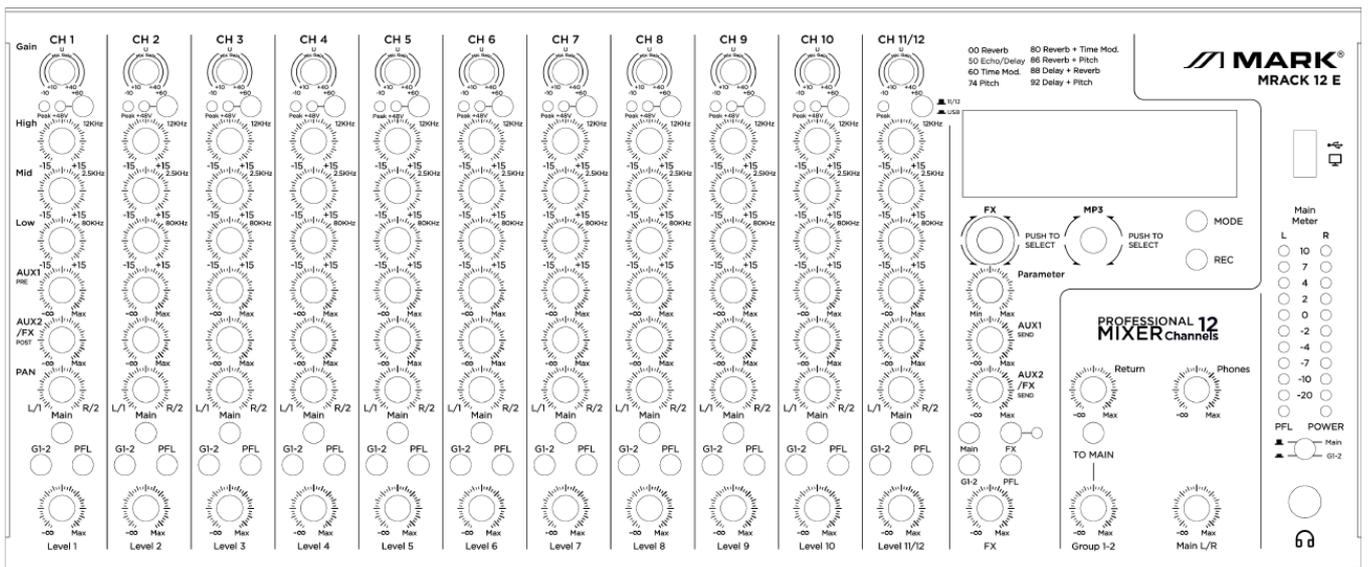


# MRACK 12E

User Manual – Version 1.0



# SAFETY INSTRUCTIONS

1. Read the instructions of this manual.
2. Keep these instructions in a safe place.
3. Heed and follow all warnings and instructions.
4. Please, respect your country safety regulations.
5. Don't use this device close to the water or high humidity places. Clean only with dry cloth.
6. Don't install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat. Make certain that the equipment is always installed so that is cooled and can't overheat.
7. Don't block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
9. Only use attachments/accessories specified by **MARK**.
10. Unplug this device during lightning storms or when unused for long periods of time.
11. The technical service is required when the device 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 device, doesn't operate normally or has been dropped.
12. To completely disconnect this apparatus from the AC mains, disconnect the power supply cord plug from the AC receptacle.
13. The mains plug of the power supply cord shall remain readily operable.
14. **WARNING** – to reduce the risk of fire or electric shock, don't expose this device to rain or humidity.
15. Don't expose this equipment to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the equipment.

# OVERVIEW

**MRACK 12E** is an analog 12 Channel, 10 mono + 1 stereo, Rackmount Mixer. with 3 tone controls per channel and send/return connections.

The input mono channels of the **MRACK 12E** MIC/LINE mixer incorporate phantom power for condenser microphones.

**MRACK 12E** has 2 AUX outputs (AUX1 & AUX2/EX), 2 GROUPS and foot switch connection.

**MRACK 12E** features a USB player/recorder and 99 built-in digital effects.

## Technical Data:

INPUT channels	10 mono MIC/LINE + 1 stereo
OUTPUT channels	2 Main out, Phones, 2 AUX send and 2 GROUP OUT (incl. FX)
EQUALIZATION	
High	Gain: $\pm 15$ dB Frequency: 12kHz
Mid	Gain: $\pm 15$ dB Frequency: 2.5kHz
Low	Gain: $\pm 15$ dB Frequency: 80Hz
PEAK LED	LED turns on when post EQ signal reaches 3 dB below clipping level
Level Meter	Pre Monitor LEVEL 2x10-segment LED meter (+10, +7, +4, +2, 0, -2, -4, -7, -10, -20dB)
Built-in Effect	99 programs, 1 Parameter Control, Foot Switch
USB Player/Recorder	MP3 & WMA
Phantom Power Voltage	48V
Main supply	AC 100 -240 V 50/60 Hz
Dimmensions (W,H,D)	483 x 85 x 208 mm

## Features:

- Audio mixer with 10 mono MIC/LINE channels + 1 stereo channel
- USB player /recorder.
- +48V phantom.
- 99 Effect included.
- 3 tone control on each input channel.
- AUX send/return connectivity.

# CONTROLS & FUNCTIONS

## INPUT CHANNEL (MONO & STEREO)

### 1. MIC/LINE INPUT

Accepts both XLR and TRS connectors.

Connect the microphone or instrument you intent to use.

+ 48V phantom power available on each input Mic socket.

### 2. Stereo input jacks

These line stereo input jacks (unbalanced) for connecting line-level instruments, such as electric keyborads and audio equipment.

### 3. GAIN knob

For adjust the gain of the input signal. To get the best balance between SNR and dynamic range, adjust the gain so that the PEAK indicator lights up only occasionally and briefly on the highest input transients.

### 4. PHANTOM +48V switch and indicator

Turn this switch on to supply DC +48V to the XLR input.

Be sure to leave this switch off if you don't need phantom power

### 5. PEAK indicator

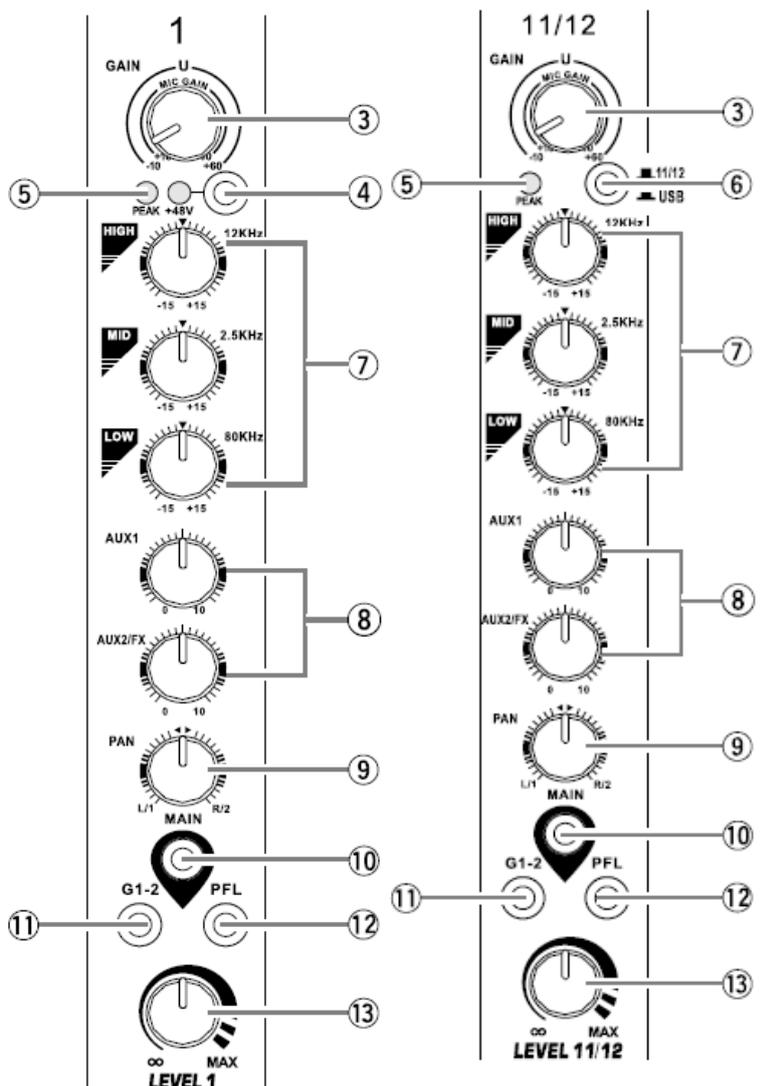
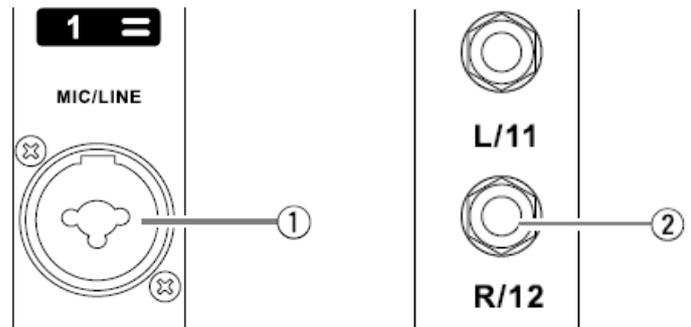
The peak level of the post-EQ signal is detected, and the PEAK indicator lights yellow when the level reaches 3dB bellow clipping.

### 6. Stereo INPUT and MP3 player signal switching

Push this switch up, the signal is switched to stereo input (CH11/12), push this switch down the signal switches to USB.

### 7. Equalizer (HIGH, MID and LOW)

Setting the knob to the middle position produces a flat response. Turning the knob to the right amplifies the corresponding Frequency band, while turning to the left attenuates the band.



## 8. AUX1 and AUX(2/FX)

AUX1 knob controls the signal level sent from this channel to AUX1 BUS.

AUX(2/FX) knob controls the adjust of signal level sent to the AUX bus and FX BUS (built-in in effects). The same signal level is sending to the AUX and FX buses connected to these knobs.

## 9. PAN knobs

This knob adjusts the volume balance of each channel sent to the MAIN BUS. If the BUS assign switch (1-2) is pressed, this knob adjusts the volume balance sent to the GROUP BUS.

## 10. MAIN switch

Turn this switch on assigns the channel's signal to the MAIN BUS.

## 11. G(1-2) switch

Assigns the channel's signal to the GROUP 1-2 BUSES.

## 12. PFL switch

When the PFL switch is on the channel pre-knob signal is output to PHONES jack for monitoring. When a PFL switch is turned on the PFL indicator below the level meter flashes.

## 13. Channel knobs

For adjusting the level of the channel signal. Use this controls to adjust the balance between the various channels.

# MASTER BLOCK

## 1. MAIN OUT

These are XLR and TRS balanced output that output the mixed stereo signal.

## 2. GROUP OUT jacks

These impedance-balanced TRS output the (GROUP 1-2) signals. Use those jacks to connect to the input of a multi-track recorder, external mixer, or another similar device.

## 3. AUX jacks

AUX (1-2) are impedance-balanced TRS, these jacks output signals from AUX. You use these jacks, for example, to connect to an external effect device.

## 4. RETURN

These are unbalanced jacks. Signal received by these jacks is sent to the MAIN BUS. These jacks are typically use to receive return from an external effect device (reverb, delay...)

## 5. PHONES jack

Connect a pair of headphones to this TRS phone jack.

## 6. SEND knob AUX(1-2)

For adjusting the level of the signals output to the SEND jack and AUX(1-2).

## 7. RETURN knob

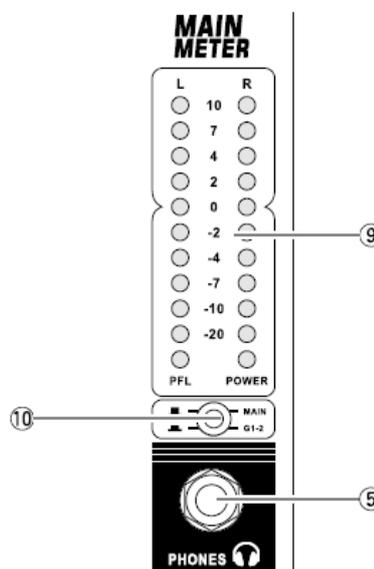
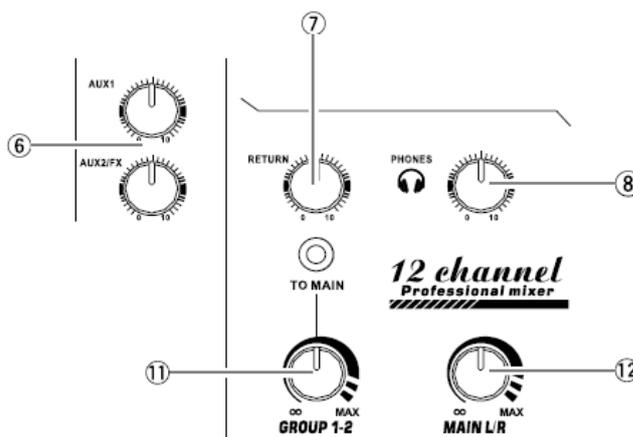
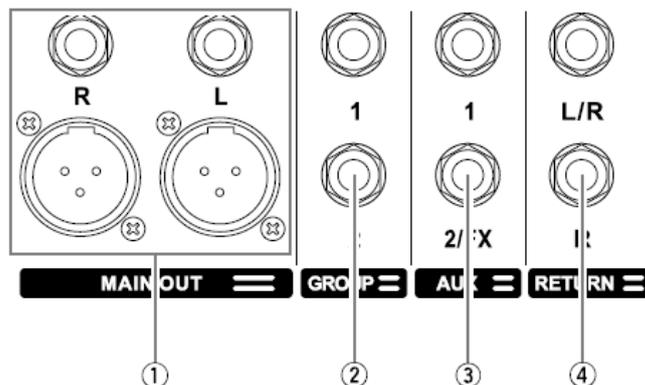
For adjusting the level of the signals sent from the RETURN input jack to the stereo BUS.

## 8. PHONES knob

For adjusting the level of the signals output to the phones.

## 9. POWER level control

The level meter LED shows the level of the signal in the MAIN and GROUP buses or selected PFL channel.



## 10. MAIN(G1/G2)

This switch can switch the output signal of MAIN or GROUP to PHONES.

## 11. GROUP knob

- (GROUP 1-2) knob. For adjusting the level of the signals output to the (GROUP OUT 1,2) jacks.
- (TO MAIN) switch. If it is on, the signals are sent to the MAIN BUS via the (GROUP 1-2) knob.

## 12. MAIN(L-R)

For adjusting the level of the signals output to the MAIN OUT jack.

## BUILT-IN EFFECTS AND MP3 BLOCK

### 1. DISPLAY

### 2. PROGRAM knob

To select an effect turn the knob and press the knob to enable it.

### 3. PARAMETER knob

For adjusting (depth, speed...) for the selected effect. The last value used with each effect type is saved.

### 4. FOOT SW jack

Connect a foot switch to this input jack.

### 5. FX switch

This button turns the corresponding effect on or off. When the function is ON the switch lights red.

### 6. MAIN switch

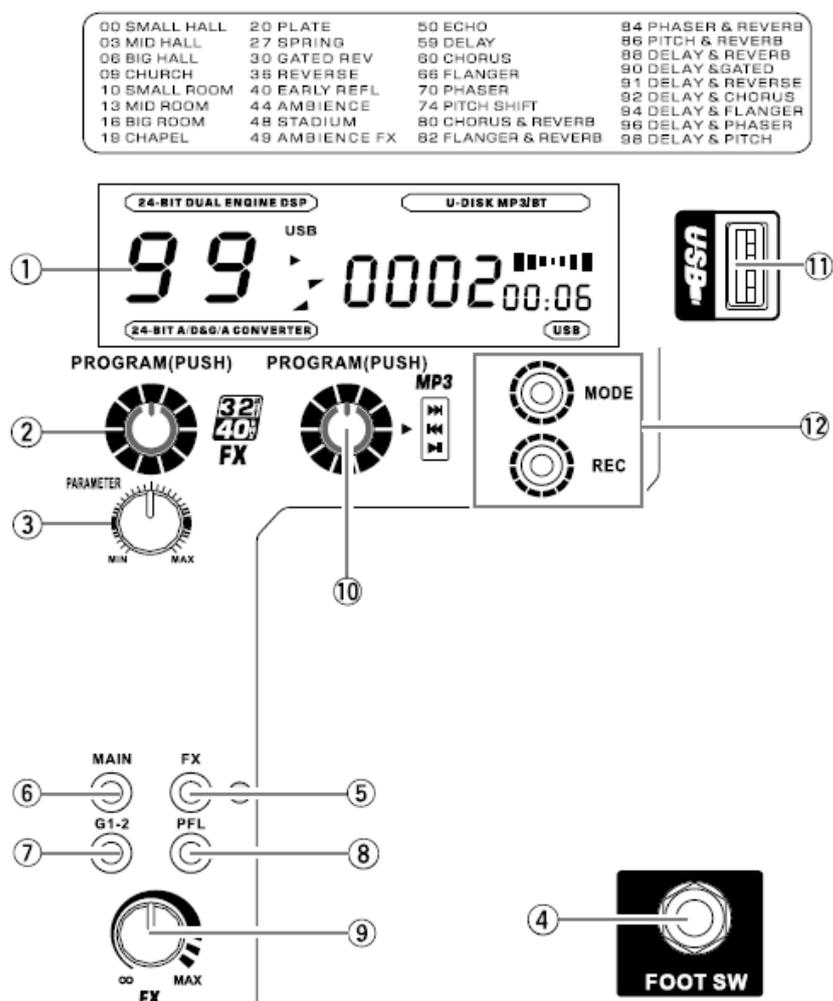
Turn this switch on to output the signals of the built-in effect to the MAIN buses.

### 7. G1-2 switch

Turns this switch on to output signals of the built-in effect to the GROUP 1-2 buses.

### 8. PFL switch

To output the built-in effect signals to the PFL buses, turn this switch on.



#### 9. FX knob

For adjusting the level of the effect sent from to built-in effect to the GROUP 1-2 and MAIN buses.

#### 10. PROGRAM mp3 KNOB

Turn the knob to select the desire music file, press the knob to play/pause/record/confirm the selection.

#### 11. USB player

Insert a USB flash drive with music files such as MP3, WMA into the player's jack and control the playback of the music trough the PROGRAM knob.

#### 12. MODE and REC button

This player has a Bluetooth and recording function. Use MODE button to switching. Press the REC button after inserting the USB flash drive, an then press the "confirm" button to record. The recording content is the main output signal. Long press program knob to stop recording. After recording, press the MODE button to switch to USB MODE or Bluetooth MODE, and pull out USB disk.

# BUILT-IN EFFECT PROGRAMS

No.	Program	Parameter	Range
HALL 00-09			
0	SMALL HALL1	reverb decay	approx.1.0s
1	SMALL HALL2	reverb decay	approx.1.2s
2	SMALL HALL3	reverb decay	approx.1.5s
3	MID HALL1	reverb decay	approx.1.8s
4	MID HALL2	reverb decay	approx.2.0s
5	MID HALL3	reverb decay	approx.2.5s
6	BIG HALL1	reverb decay	approx.2.8s
7	BIG HALL2	reverb decay	approx.3.2s
8	BIG HALL3	reverb decay	approx.4s
9	CHURCH	reverb decay	approx.7s

No.	Program	Parameter	Range
ROOM 10-19			
10	SMALL ROOM 1	reverb decay	approx.0.5s
11	SMALL ROOM 2	reverb decay	approx.0.8s
12	SMALL ROOM 3	reverb decay	approx.1.0s
13	MID ROMM1	reverb decay	approx.1.2s
14	MID ROMM2	reverb decay	approx.1.5s
15	MID ROMM3	reverb decay	approx.1.8s
16	BIG ROMM1	reverb decay	approx.2.0s
17	BIG ROMM2	reverb decay	approx.2.2s
18	BIG ROMM3	reverb decay	approx.2.5s
19	CHAPEL	reverb decay	approx.3s

No.	Program	Parameter	Range
PLATE 20-29			
20	SHORT PLATE	reverb decay	approx.1.0s
21	MID PLATE	reverb decay	approx.1.5s
22	LONG PLATE	reverb decay	approx.2.2s
23	VOCAL PLATE	reverb decay	approx.1.2s
24	DRUMS PLATE	reverb decay	approx.1.0s
25	GOLD PLATE 1	reverb decay	approx.1.2s
26	GOLD PLATE 2	reverb decay	approx.2.0s
27	SHORT SPRING	reverb decay	approx.1.0s
28	MID SPRING	reverb decay	approx.2.0s
29	LONG SPRING	reverb decay	approx.2.5s

No.	Program	Parameter	Range
PLATE 30-39			
30	GATED REV SHORT	gate time	approx.0.8s
31	GATED REV MID	gate time	approx.1.2s
32	GATED REV LONG	gate time	approx.2.0s
33	GATED REV XXL	gate time	approx.3.0s
34	GATED REV DRUMS 1	gate time	approx.0.8s
35	GATED REV DRUMS 2	gate time	approx.1.2s
36	REVERSE SHORT	reverb raise	approx.0.8s
37	REVERSE MID	reverb raise	approx.1.2s
38	REVERSE LONG	reverb raise	approx.2.0s
39	REVERSE XXL	reverb raise	approx.3.0s

No.	Program	Parameter
GATED/REVERSE 40-49		
40	EARLY REFLECTION 1	Short
41	EARLY REFLECTION 2	Medium-short
42	EARLY REFLECTION 3	Medium-long
43	EARLY REFLECTION 4	Long
44	SHIRT AMBIENCE	Short
45	MID AMBIENCE	Medium-short
46	LIVE AMBIENCE	Medium-short
47	BIG AMBIENCE	Medium-short
48	STADIUM	Long
49	GHOST AMBIENCE	Extra-long special FX

No.	Program	Parameter
DELAY 50-59		
50	LONG ECHO	Extra long canyon echo effect
51	SHORT DELAY	Like a short shattering
52	SHORT DELAY	1-2 short impulse(s)
53	SHORT DELAY	1-2 short impulse(s)
54	MID DELAY 1	Classical Delay for up-tempo music(115-125 BPM)
55	MID DELAY 2	Classical Delay for up-tempo music(105-115 BPM)
56	MID DELAY 3	Classical Delay for up-tempo music(95-105 BPM)
57	LONG DELAY 1	Classical Delay for up-tempo music(85-95 BPM)
58	LONG DELAY 2	Classical Delay for up-tempo music(75-85 BPM)
59	LONG DELAY 3	Extra long(nearly infinite)delay effect

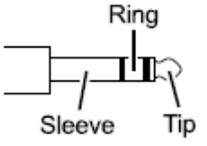
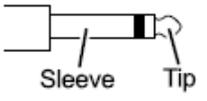
No.	Program	Parameter
CHORUS 60-69		
60	SOFT CHORUS 1	Unobtrusive effect
61	SOFT CHORUS 2	Unobtrusive effect with different color
62	WARM CHORUS 1	Analog sounding
63	WARM CHORUS 2	Analog sounding with different color
64	PHAT CHORUS 1	pronounced chorus effect
65	PHAT CHORUS 2	pronounced chorus effect different color
66	CLASSIC FLANGER	Standard flanger effect
67	WARM FLANGER	More analog touch
68	DEEP FLANGER	Deep modulation impression
69	HEAVY FLANGER	Extremely pronounced effect

No.	Program	Parameter
PHASE/PITCH 70-79		
70	CLASSIC PHASER	Standard phaser effect
71	WARM PHASER	More analog touch
72	DEEP PHASER	Deep modulation impression
73	HEAVY PHASER	Exterme strong effect
74	PITCH SHIFT DETUNE	2-3-time detune for a wider solo voice sound
75	PITCH SHIFT +3	Minor third added voice
76	PITCH SHIFT +4	Major third added voice
77	PITCH SHIFT +7	Quint above added voice
78	PITCH SHIFT -5	Fourth down added voice
79	PITCH SHIFT -12	1 octave down added voice

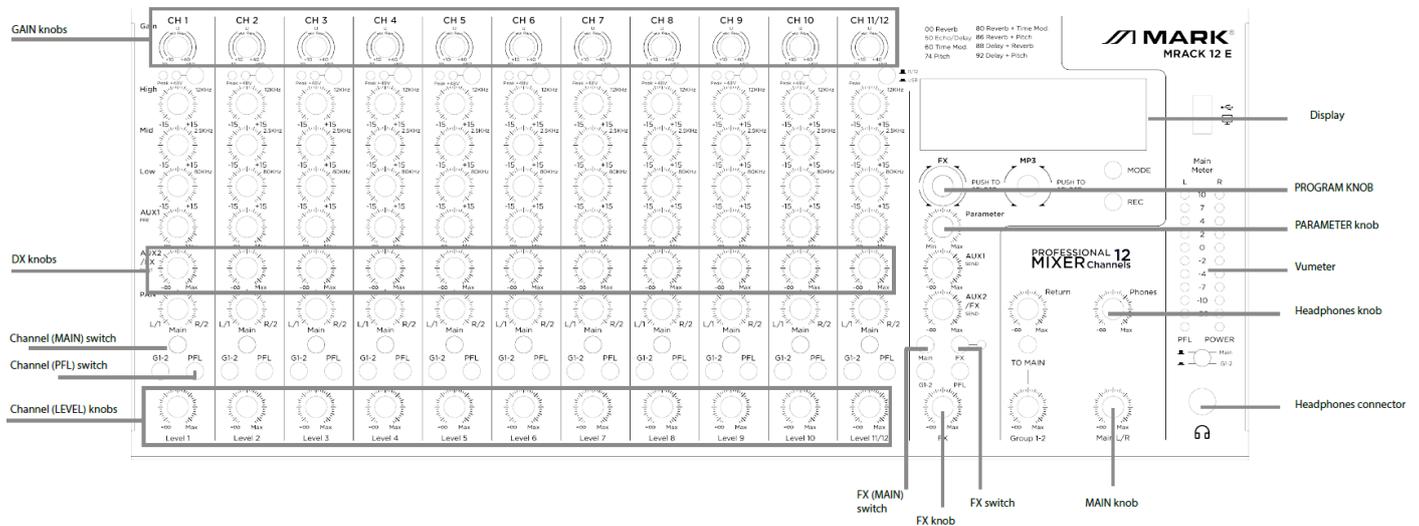
No.	Program	Parameter
MULTL 1 80-89		
80	CHORUS + REVERB 1	Soft chorus + medium-short reverb
81	CHORUS + REVERB 2	Deep chorus + medium-long reverb
82	FLANGER + REVERB 1	Soft flanger + medium-short reverb
83	FLANGER + REVERB 2	Deep flanger + medium-long reverb
84	PHASER + REVERB 1	Soft phaser + medium-short reverb
85	PHASER + REVERB 2	Deep phaser + medium-long reverb
86	PITCH + REVERB 1	Soft voice detuning + medium-short reverb
87	PITCH + REVERB 2	Fourth above interval + medium-long reverb
88	DELAY + REVERB 1	Soft delay + medium-short reverb
89	DELAY + REVERB 2	Medium-long delay + medium-long reverb

No.	Program	Parameter
MULTL 2 90-99		
90	DELAY + GATED REV	Short delay + medium-long gated reverb
91	DELAY + REVERSE	Medium-short delay+medium-long reverse reverb
92	DELAY + CHORUS 1	Short delay + soft chorus
93	DELAY + CHORUS 2	Medium-long delay + deep chorus
94	DELAY + FLANGER 1	Short delay + soft flanger
95	DELAY + FLANGER 2	Medium-long delay + deep flanger
96	DELAY + PHASER 1	Short delay + soft phaser
97	DELAY + PHASER 2	Medium-long delay + deep phaser
98	DELAY +PITCH 1	Short delay + fourth down interval
99	DELAY +PITCH 2	Medium-long delay + minor third above interval

# JACK AND CONNECTOR LIST

Jacks and Connectors	Polarities	Configurations
MIC/LINE, MIC, MAIN OUT	Pin 1: Ground Pin 2: Hot (+) Pin 3: Cold (-)	<p>INPUT      OUTPUT</p>  <p>XLR Jack</p>
MIC/LINE*, AUX SEND, GROUP OUT MAIN OUT	Tip: Hot (+) Ring: Cold (-) Sleeve: Ground	 <p>TRS Phone Connector</p>
PHONES	Tip: L Ring: R Sleeve: Ground	
LINE (stereo input channels)	Tip: Hot Sleeve: Ground	 <p>TS Phone Connector</p>

# INSTALLATION



## QUICK INSTALLATION GUIDE

### Step 1 preparing the power supply

1. Make sure that the power switch of the unit is set to the "0" position (off) in the rear panel.
2. Connect the socket of the included power cord to the [AC IN] jack on the rear panel.
3. Plug the power cord into a power outlet.

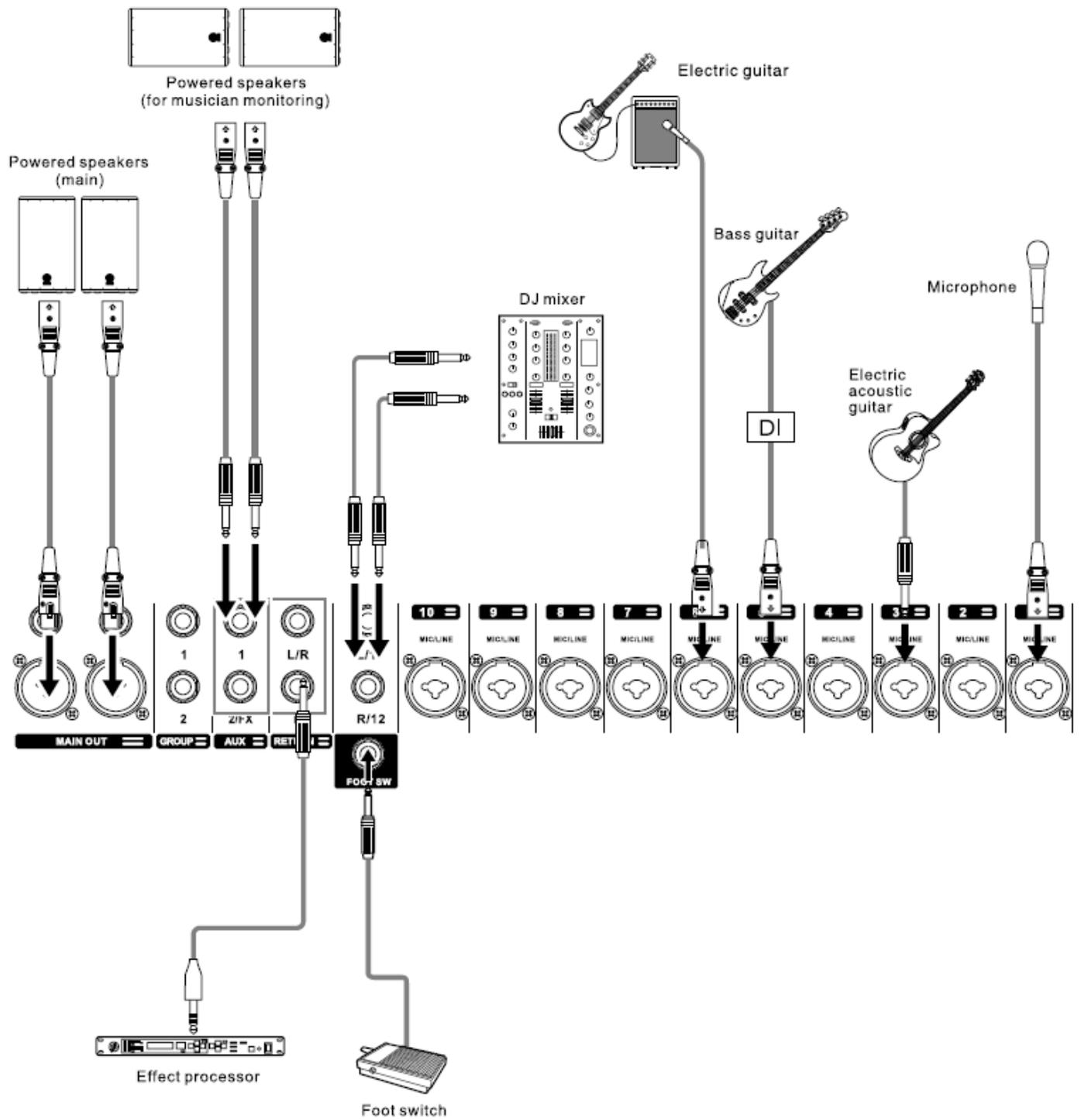
### Step 2 Making Connections

1. Turn all the knobs and [GAIN] knobs completely down.
2. Connect the microphones, instruments or speakers you intend to use.

### Step 3 Powering Us the System

To prevent an unwanted burst of noise from the speakers, power up the devices in the following order: peripheral devices > mixing console > power amps (or powered speakers). Reverse this order to power off. If you are using condenser microphones that require Phantom power, switch on before turning on the power to the power amps or powered speakers.

# SETUP EXAMPLE



# CAUTIONS

Prevention of electric shock

The electrical connection must only be carried out by qualified personal. Before installing, make sure you use the same power voltage marked in the device (100-240V/50-60Hz). Each device must be properly grounded and installed in accordance with the relevant standards. Don't use the device in a lightning storm or wet environment.

### To prevent burning of fire

1. Never install the device directly on the surface of ordinary combustible material.
2. The equipment must be installed away from inflammable and explosive materials.
3. Keep at last 0,5 m around the unit for ventilation purposes.
4. Do not replace with non-original spare parts. Contact your **MARK** dealer.

### Unpacking

Note: Before unpacking, check it for possible damage that might have occurred during transportation. If you find any damage, please do not use the unit and contact the **MARK** dealer.

# INDICACIONES DE SEGURIDAD

1. Lea detenidamente las siguientes instrucciones y preste atención a éstas.
2. Guarde en un lugar seco y seguro este manual.
3. Siga una a una todas las instrucciones.
4. Respete las instrucciones de seguridad de su país **cuando** instale este dispositivo.
5. No use este dispositivo cerca del agua o zonas altamente húmedas. A la hora de limpiarlo, utilice un paño seco.
6. No instale el dispositivo cerca de ninguna fuente de calor o fuego tales como calefactores, estufas o incluso amplificadores que produzcan calor. Asegúrese de que, una vez instalado el dispositivo, esté en un lugar fresco y seco.
7. No obstruya ninguna de las salidas. Cuando instale el dispositivo hágalo tal y como lo indican estas instrucciones.
8. Proteja el cable de alimentación para no ser pisado o manipulado, particularmente en los conectores (mural y de entrada a la unidad).
9. Utilice únicamente accesorios especificados por **MARK**.
10. Desconecte el dispositivo si no va a ser utilizado durante largos periodos de tiempo.
11. El dispositivo será reparado por el servicio técnico oficial cuando esté dañado, el cable esté deteriorado o el conector estropeado, así como si el dispositivo ha entrado en contacto con líquidos o no opera correctamente.
12. Para desconectar totalmente la unidad de la red eléctrica principal desconecte el cable de la toma mural eléctrica.
13. El conector principal debe poder conectarse y desconectarse de la red eléctrica de manera fácil.
14. **ATENCIÓN.** Para reducir el riesgo de fuego o shock eléctrico, no exponga este dispositivo bajo la lluvia o la humedad.
15. No exponga este equipo a líquidos, ni salpicaduras, así como evite ubicarlo cerca de recipientes o posibles fuentes con líquidos.

# VISTA GENERAL

**MRACK 12E** es un mezclador analógico de montaje en bastidor de 12 canales, 10 mono + 1 estéreo, con 3 controles de tono por canal y conexiones de envío/retorno.

Los canales mono de entrada del mezclador **MRACK 12E** MIC/LINE incorporan alimentación phantom para micrófonos de condensador.

El mezclador **MRACK 12E** dispone de 2 salidas AUX (AUX1 & AUX2/EX), 2 GROUPS y conexión para pedalera.

**MRACK 12E** incorpora un reproductor/grabador USB y 99 efectos digitales integrados.

## Datos Técnicos:

Canales de ENTRADA	10 mono MIC/LINE + 1 estéreo
Canales de SALIDA	2 salidas Principales, Auricular, 2 envíos AUX y 2 salidas GRUPOS (incl. FX)
ECUALIZACIÓN	
Agudos	Gain: $\pm 15$ dB Frequency: 12kHz
Medio	Gain: $\pm 15$ dB Frequency: 2.5kHz
Bajo	Gain: $\pm 15$ dB Frequency: 80Hz
LED PICO	LED turns on when post EQ signal reaches 3 dB below clipping level
Medidor de nivel	Pre Monitor LEVEL 2x10-segment LED meter (+10, +7, +4, +2, 0, -2, -4, -7, -10, -20dB)
Efectos incorporado	99 programs, 1 Parameter Control, Foot Switch
Reproductor/grabador USB	MP3 & WMA
Tensión de alimentación Phantom	48V
Alimentación principal	AC 100 -240 V 50/60 Hz
Dimensiones (An,Al,Pr)	483 x 85 x 208 mm

## Características:

- Mezclador de audio con 10 canales mono MIC/LINE + 1 canal estéreo
- Reproductor / grabador USB.
- +48V phantom.
- 99 Efectos incluidos.
- 3 controles de tono en cada canal de entrada.
- Conectividad AUX de envío/retorno

# CONTROLES y FUNCIONES

## CANALES DE ENTRADA (MONO Y ESTÉREO)

### 1. ENTRADA DE MICRÓFONO/LÍNEA

Acepta conectores XLR y TRS. Conecte el micrófono o instrumento que desee utilizar. Alimentación phantom de +48 V disponible en cada toma de entrada de micrófono.

### 2. Tomas de entrada estéreo

Estas tomas de entrada estéreo de línea (no balanceadas) permiten conectar instrumentos con nivel de línea, como teclados eléctricos y equipos de audio.

### 3. Botón GAIN

Para ajustar la ganancia de la señal de entrada. Para obtener el mejor equilibrio entre SNR y rango dinámico, ajuste la ganancia de forma que el indicador PEAK se ilumine sólo ocasional y brevemente en los picos de entrada más altos.

### 4. Interruptor e indicador PHANTOM +48V

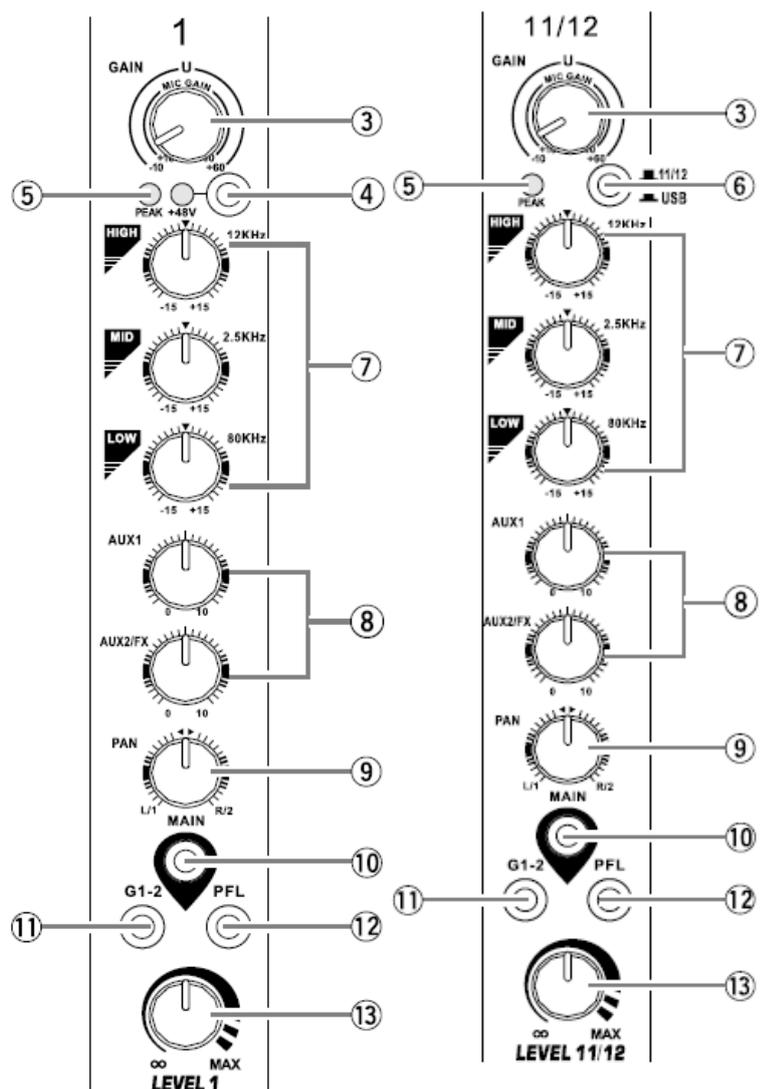
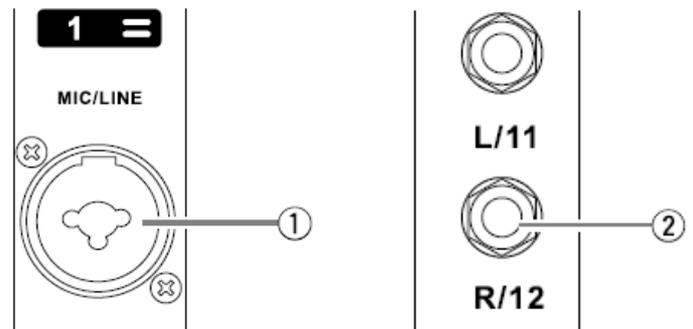
Active este conmutador para suministrar +48V CC a la entrada XLR. Asegúrese de dejar este conmutador desactivado si no necesita alimentación phantom.

### 5. Indicador PEAK

Detecta el nivel de pico de la señal post-EQ, y el indicador PEAK se ilumina en amarillo cuando el nivel alcanza 3dB por debajo de la saturación.

### 6. Conmutación de señal de entrada estéreo y reproductor MP3

Pulse este conmutador hacia arriba para cambiar la señal a la entrada estéreo (CH11/12), pulse este conmutador hacia abajo para cambiar la señal a USB.



## **7. Ecualizador (ALTO, MEDIO y BAJO)**

Ajustando los mandos a la posición media se produce una respuesta plana. Girando el mando a la derecha se amplifica la banda de frecuencia correspondiente, mientras que girando a la izquierda se atenúa la misma.

## **8. AUX1 y AUX(2/FX)**

El mando AUX1 controla el nivel de señal enviado desde este canal al BUS AUX1.

El mando AUX(2/FX) controla el ajuste del nivel de señal enviado al bus AUX y al BUS FX (efectos incorporados). Se envía el mismo nivel de señal a los buses AUX y FX conectados a estos mandos.

## **9. Mandos PAN**

Este mando ajusta el balance de volumen de cada canal enviado al BUS PRINCIPAL. Si el conmutador de asignación de BUS (1-2) está pulsado, este mando ajusta el balance de volumen enviado al BUS DE GRUPO.

## **10. Interruptor MAIN**

Accionando este conmutador se asigna la señal del canal al BUS PRINCIPAL.

## **11. Conmutador G(1-2)**

Asigna la señal del canal a los buses GRUPO 1-2.

## **12. Conmutador PFL**

Cuando el conmutador PFL está activado, la señal de previo del canal se envía a la toma PHONES para su monitorización. Cuando el interruptor PFL está activado el indicador de debajo del medidor de nivel parpadea.

## **13. Mandos de nivel del canal**

Para ajustar el nivel de la señal del canal. Utilice estos mandos para ajustar el volumen entre los distintos canales.

# BLOQUE MASTER

## 1. SALIDA PRINCIPAL (MAIN OUT)

Son salidas balanceadas XLR y TRS que suministran la señal estéreo mezclada.

## 2. SALIDAS DE GRUPOS (GROUP OUT)

Estas salidas TRS con impedancia balanceada emiten las señales (GRUPO 1-2). Utilice estas tomas para conectarlas a la entrada de una grabadora multipista, un mezclador externo u otro dispositivo similar.

## 3. Tomas AUXILIARES (AUX)

AUX (1-2) son conexiones TRS de impedancia balanceada, estos jacks dan salida a las señales AUX. Puede utilizar estas tomas, por ejemplo, para conectar un dispositivo de efectos externo.

## 4. RETORNOS (RETURN)

Son jacks no balanceados. La señal recibida por estas tomas se envía al BUS PRINCIPAL. Estos jacks se utilizan normalmente para recibir el retorno de un dispositivo de efectos externo (reverb, delay...)

## 5. Toma AURICULARES (PHONES)

Conecte sus auriculares a esta toma TRS.

## 6. Control ENVÍO Y AUXILIAR [SEND AUX(1-2)]

Para ajustar el nivel de las señales de salida a los envíos SEND y AUX(1-2).

## 7. Control de nivel RETORNO (RETURN)

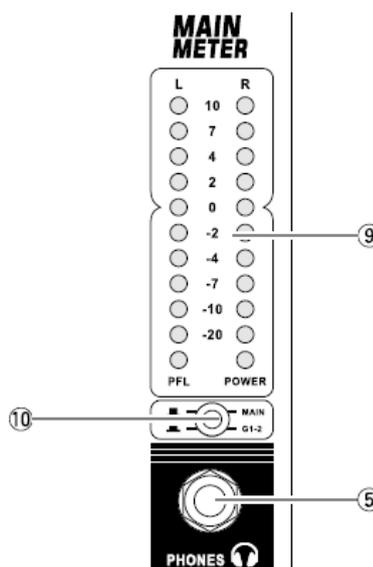
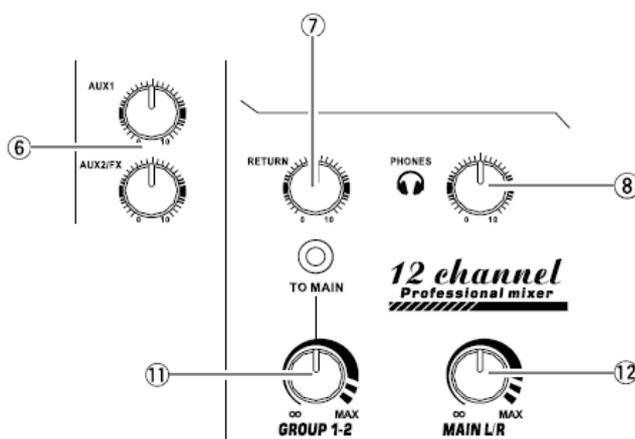
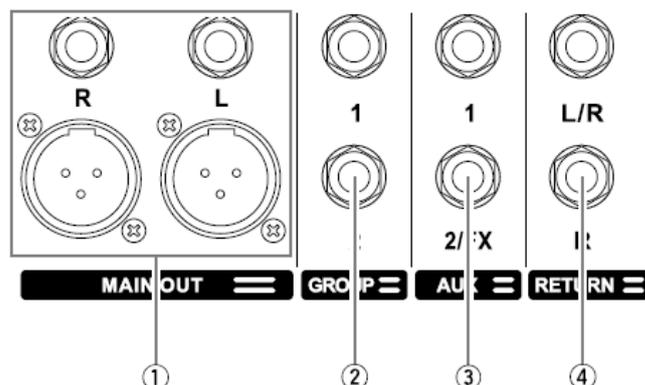
Para ajustar el nivel de las señales retornadas desde la toma de entrada RETURN al BUS estéreo.

## 8. Control de nivel AURICULARES (PHONES)

Para ajustar el nivel de las señales enviadas a los auriculares.

## 9. Control de Nivel de POTENCIA (LEVEL POWER)

El LED del medidor de nivel muestra el nivel de la señal en los buses MAIN y GROUP o en el canal PFL seleccionado.



## 10. MAIN(G1/G2)

Este interruptor puede conmutar la señal de salida de MAIN o GROUP a PHONES.

## 11. Control de nivel GROUP

- (GRUPO 1-2). Para ajustar el nivel de las señales de salida a las tomas de los grupos (GROUP OUT 1,2).

- Interruptor (TO MAIN). Si está activado, las señales se envían al BUS PRINCIPAL a través del mando (GROUP 1-2).

## 12. Control de nivel PRINCIPAL [MAIN(L-R)]

Para ajustar el nivel de las señales de salida a la salida principal (MAIN OUT).

# EFFECTOS INCORPORADOS Y MP3

## 1. PANTALLA

## 2. Control PROGRAMA (PROGRAM)

Para seleccionar un efecto gire el mando y pulse para activarlo.

## 3. Control PARÁMETRO (PARAMETER)

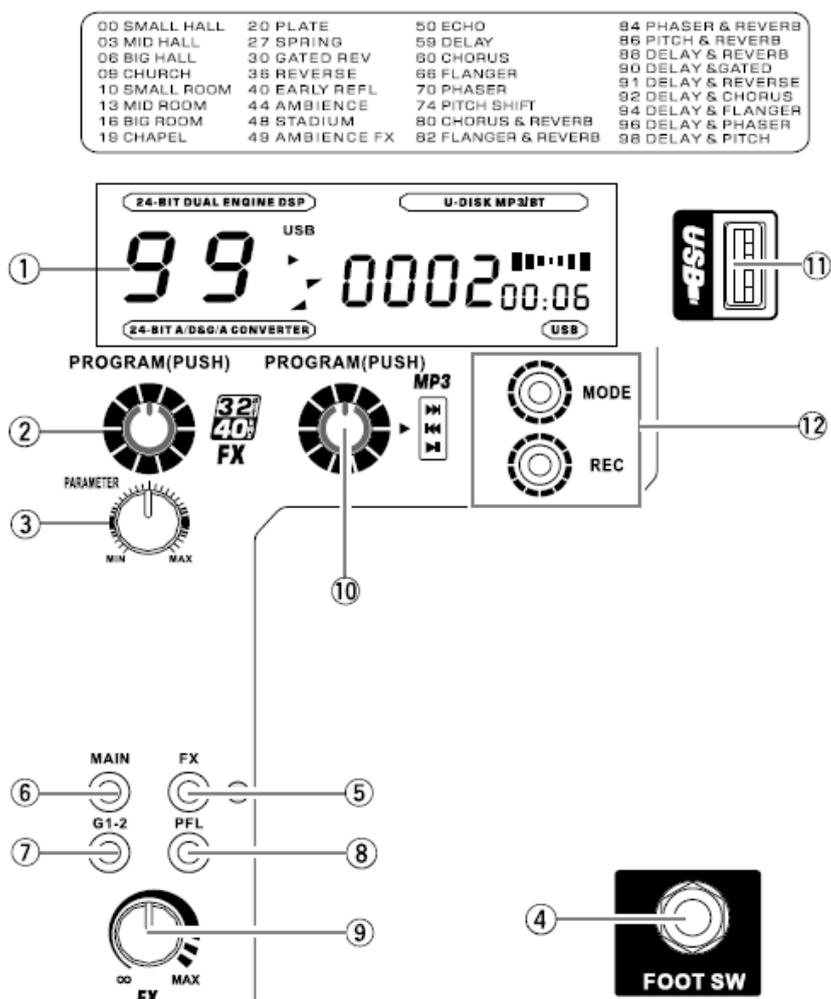
Para ajustar (profundidad, velocidad...) el efecto seleccionado. Se guarda el último valor utilizado con cada tipo de efecto.

## 4. Toma PEDALERA (FOOT SW)

Conecte una pedalera a esta toma de entrada de tipo jack.

## 5. Interruptor EFECTOS (FX)

Este botón activa o desactiva el efecto correspondiente. Cuando la función está activada, el interruptor se ilumina en rojo.



6. **Interruptor PRINCIPAL (MAIN)**  
Encienda este interruptor para emitir las señales del efecto incorporado al bus principal MAIN.
7. **Interruptor G1-2**  
Activa este interruptor para dar salida a las señales del efecto incorporado a los buses de grupo GROUP 1-2.
8. **Conmutador PREESCUCHA (PFL)**  
Activa este interruptor para activar la preescucha de los efectos incorporados.
9. **Control EFECTOS (FX)**  
Para ajustar el nivel del efecto enviado desde el efecto incorporado a los buses GROUP 1-2 y MAIN.
10. **Control mp3 de programa**  
Gire el mando para seleccionar el archivo de música deseado, pulse el mando para reproducir/pausar/grabar/confirmar la selección.
11. **Reproductor USB**  
Inserte una unidad flash USB con archivos de música MP3 o WMA en la toma del reproductor y controle la reproducción de la música a través del mando PROGRAM.
12. **Botón MODE y REC**  
Este reproductor tiene función Bluetooth y de grabación, utilice el botón MODE para cambiar entre estos. Pulse el botón REC después de insertar la unidad flash USB y a continuación pulse el botón "confirmar" para grabar. El contenido de la grabación será la señal de salida principal. Pulse prolongadamente el botón PROGRAM para detener la grabación.  
Tras la grabación, pulse el botón MODE para cambiar a MODO USB o MODO Bluetooth, y extraiga la unidad flash USB.

# PROGRAMAS DE EFECTOS INTEGRADOS

No.	Program	Parameter	Range
HALL 00-09			
0	SMALL HALL1	reverb decay	approx.1.0s
1	SMALL HALL2	reverb decay	approx.1.2s
2	SMALL HALL3	reverb decay	approx.1.5s
3	MID HALL1	reverb decay	approx.1.8s
4	MID HALL2	reverb decay	approx.2.0s
5	MID HALL3	reverb decay	approx.2.5s
6	BIG HALL1	reverb decay	approx.2.8s
7	BIG HALL2	reverb decay	approx.3.2s
8	BIG HALL3	reverb decay	approx.4s
9	CHURCH	reverb decay	approx.7s

No.	Program	Parameter	Range
ROOM 10-19			
10	SMALL ROOM 1	reverb decay	approx.0.5s
11	SMALL ROOM 2	reverb decay	approx.0.8s
12	SMALL ROOM 3	reverb decay	approx.1.0s
13	MID ROOM1	reverb decay	approx.1.2s
14	MID ROOM2	reverb decay	approx.1.5s
15	MID ROOM3	reverb decay	approx.1.8s
16	BIG ROOM1	reverb decay	approx.2.0s
17	BIG ROOM2	reverb decay	approx.2.2s
18	BIG ROOM3	reverb decay	approx.2.5s
19	CHAPEL	reverb decay	approx.3s

No.	Program	Parameter	Range
PLATE 20-29			
20	SHORT PLATE	reverb decay	approx.1.0s
21	MID PLATE	reverb decay	approx.1.5s
22	LONG PLATE	reverb decay	approx.2.2s
23	VOCAL PLATE	reverb decay	approx.1.2s
24	DRUMS PLATE	reverb decay	approx.1.0s
25	GOLD PLATE 1	reverb decay	approx.1.2s
26	GOLD PLATE 2	reverb decay	approx.2.0s
27	SHORT SPRING	reverb decay	approx.1.0s
28	MID SPRING	reverb decay	approx.2.0s
29	LONG SPRING	reverb decay	approx.2.5s

No.	Program	Parameter	Range
PLATE 30-39			
30	GATED REV SHORT	gate time	approx.0.8s
31	GATED REV MID	gate time	approx.1.2s
32	GATED REV LONG	gate time	approx.2.0s
33	GATED REV XXL	gate time	approx.3.0s
34	GATED REV DRUMS 1	gate time	approx.0.8s
35	GATED REV DRUMS 2	gate time	approx.1.2s
36	REVERSE SHORT	reverb raise	approx.0.8s
37	REVERSE MID	reverb raise	approx.1.2s
38	REVERSE LONG	reverb raise	approx.2.0s
39	REVERSE XXL	reverb raise	approx.3.0s

No.	Program	Parameter
GATED/REVERSE 40-49		
40	EARLY REFLECTION 1	Short
41	EARLY REFLECTION 2	Medium-short
42	EARLY REFLECTION 3	Medium-long
43	EARLY REFLECTION 4	Long
44	SHIRT AMBIENCE	Short
45	MID AMBIENCE	Medium-short
46	LIVE AMBIENCE	Medium-short
47	BIG AMBIENCE	Medium-short
48	STADIUM	Long
49	GHOST AMBIENCE	Extra-long special FX

No.	Program	Parameter
DELAY 50-59		
50	LONG ECHO	Extra long canyon echo effect
51	SHORT DELAY	Like a short shattering
52	SHORT DELAY	1-2 short impulse(s)
53	SHORT DELAY	1-2 short impulse(s)
54	MID DELAY 1	Classical Delay for up-tempo music(115-125 BPM)
55	MID DELAY 2	Classical Delay for up-tempo music(105-115 BPM)
56	MID DELAY 3	Classical Delay for up-tempo music(95-105 BPM)
57	LONG DELAY 1	Classical Delay for up-tempo music(85-95 BPM)
58	LONG DELAY 2	Classical Delay for up-tempo music(75-85 BPM)
59	LONG DELAY 3	Extra long(nearly infinite)delay effect

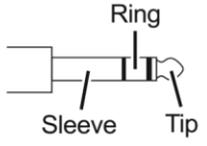
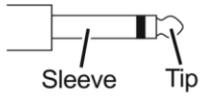
No.	Program	Parameter
CHORUS 60-69		
60	SOFT CHORUS 1	Unobtrusive effect
61	SOFT CHORUS 2	Unobtrusive effect with different color
62	WARM CHORUS 1	Analog sounding
63	WARM CHORUS 2	Analog sounding with different color
64	PHAT CHORUS 1	pronounced chorus effect
65	PHAT CHORUS 2	pronounced chorus effect different color
66	CLASSIC FLANGER	Standard flanger effect
67	WARM FLANGER	More analog touch
68	DEEP FLANGER	Deep modulation impression
69	HEAVY FLANGER	Extremely pronounced effect

No.	Program	Parameter
PHASE/PITCH 70-79		
70	CLASSIC PHASER	Standard phaser effect
71	WARM PHASER	More analog touch
72	DEEP PHASER	Deep modulation impression
73	HEAVY PHASER	Exterme strong effect
74	PITCH SHIFT DETUNE	2-3-time detune for a wider solo voice sound
75	PITCH SHIFT +3	Minor third added voice
76	PITCH SHIFT +4	Major third added voice
77	PITCH SHIFT +7	Quint above added voice
78	PITCH SHIFT -5	Fourth down added voice
79	PITCH SHIFT -12	1 octave down added voice

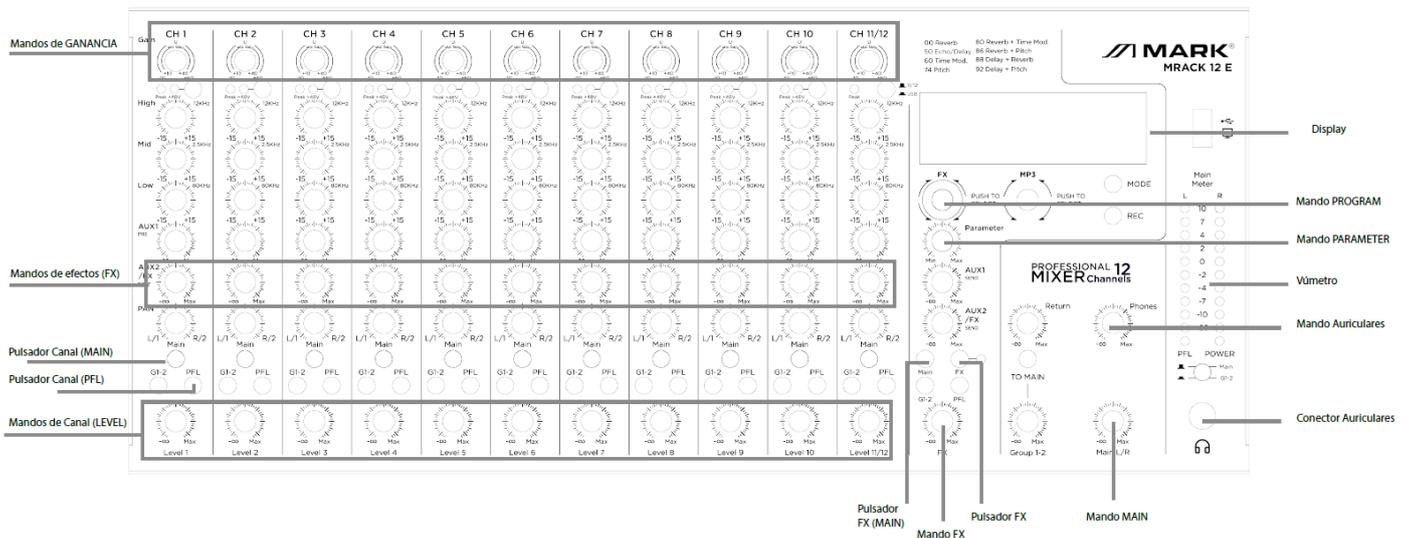
No.	Program	Parameter
MULTL 1 80-89		
80	CHORUS + REVERB 1	Soft chorus + medium-short reverb
81	CHORUS + REVERB 2	Deep chorus + medium-long reverb
82	FLANGER + REVERB 1	Soft flanger + medium-short reverb
83	FLANGER + REVERB 2	Deep flanger + medium-long reverb
84	PHASER + REVERB 1	Soft phaser + medium-short reverb
85	PHASER + REVERB 2	Deep phaser + medium-long reverb
86	PITCH + REVERB 1	Soft voice detuning + medium-short reverb
87	PITCH + REVERB 2	Fourth above interval + medium-long reverb
88	DELAY + REVERB 1	Soft delay + medium-short reverb
89	DELAY + REVERB 2	Medium-long delay + medium-long reverb

No.	Program	Parameter
MULTL 2 90-99		
90	DELAY + GATED REV	Short delay + medium-long gated reverb
91	DELAY + REVERSE	Medium-short delay+medium-long reverse reverb
92	DELAY + CHORUS 1	Short delay + soft chorus
93	DELAY + CHORUS 2	Medium-long delay + deep chorus
94	DELAY + FLANGER 1	Short delay + soft flanger
95	DELAY + FLANGER 2	Medium-long delay + deep flanger
96	DELAY + PHASER 1	Short delay + soft phaser
97	DELAY + PHASER 2	Medium-long delay + deep phaser
98	DELAY +PITCH 1	Short delay + fourth down interval
99	DELAY +PITCH 2	Medium-long delay + minor third above interval

## LISTADO DE CONECTORES

Conectores	Polaridad	Configuración
MIC/LINE, MIC, MAIN OUT	Pin 1: Masa Pin 2: Hot (+) Pin 3: Cold (-)	<p>ENTRADA    SALIDA</p>  <p>XLR Jack</p>
MIC/LINE*, AUX SEND, GROUP OUT MAIN OUT	Tip: Hot (+) Ring: Cold (-) Sleeve: Masa	 <p>Conectores Jack TRS</p>
AURICULARES	Tip: L Ring: R Sleeve: Masa	
LINE (canales de entrada estéreos)	Tip: Hot Sleeve: Masa	 <p>Conectores Jack TS</p>

# INSTALACIÓN



## GUÍA RÁPIDA DE INSTALACIÓN

### Paso 1 preparación de la fuente de alimentación

1. Asegúrese de que el interruptor de alimentación de la unidad está en la posición "0" (apagado) en el panel trasero.
2. Conecte el enchufe del cable de alimentación incluido a la toma [AC IN] del panel posterior.
3. Conecte el cable de alimentación a una toma de corriente.

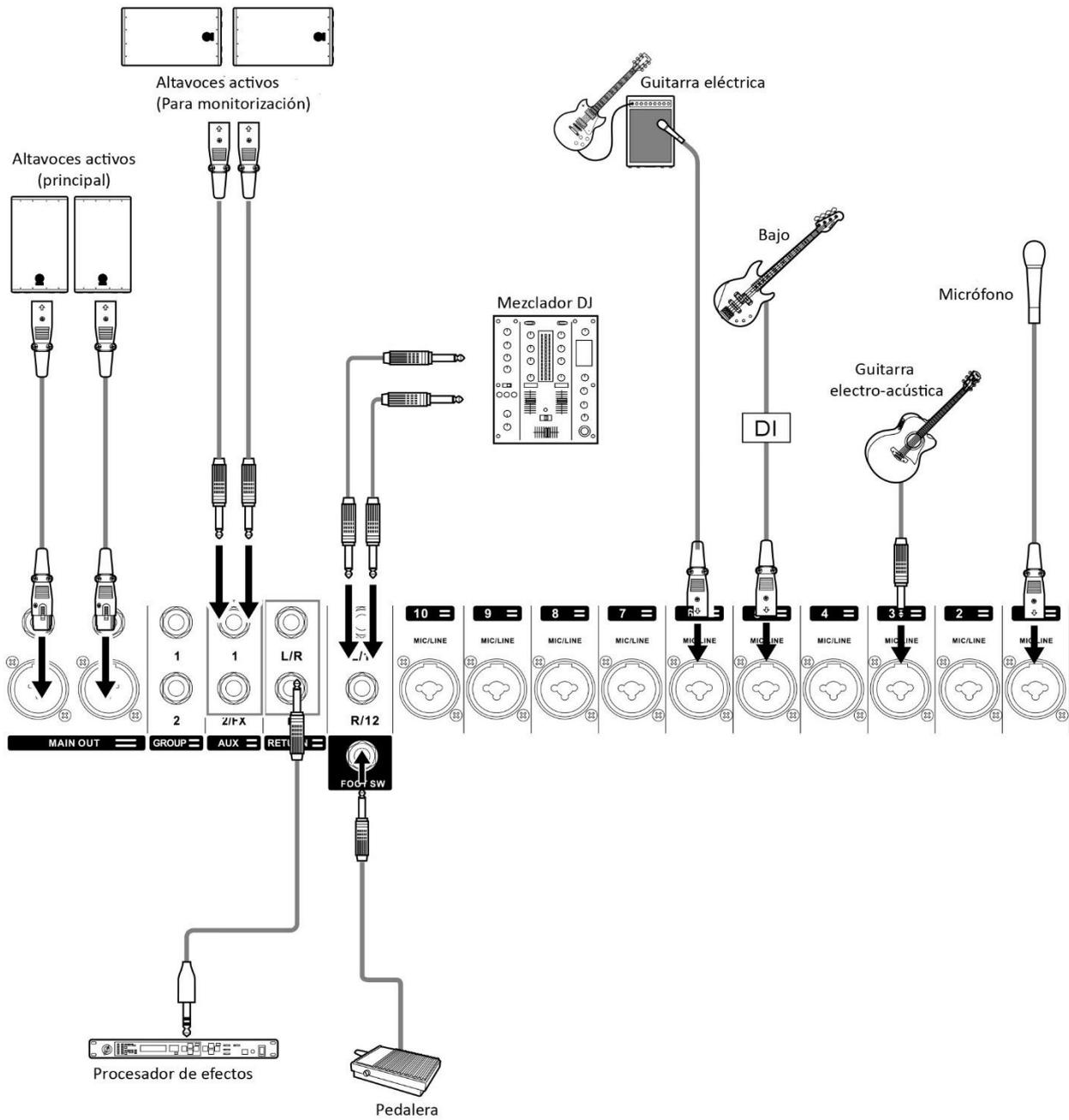
### Paso 2 Realización de las conexiones

1. Gire todos los mandos y el mando [GAIN] completamente hacia abajo.
2. Conecte los micrófonos, instrumentos o altavoces que desee utilizar.

### Paso 3 Encendido del sistema

Para evitar ruidos no deseados en los altavoces, encienda los dispositivos en el siguiente orden: dispositivos periféricos > mesa de mezclas > etapas de potencia (o altavoces autoamplificados). Invierta este orden para apagar. Si utiliza micrófonos de condensador que requieren alimentación Phantom, enciéndalos antes de encender los amplificadores o los altavoces autoamplificados.

# EJEMPLO DE CONFIGURACIÓN



# PRECAUCIONES

## Prevención frente a shock eléctrico

La conexión eléctrica al dispositivo debe ser realizada por personal cualificado. Antes de instalar, asegúrese de conectarla a una red eléctrica que trabaje bajo los mismos parámetros (100-240V/50-60Hz). Cada dispositivo debe ser adecuadamente conectado a una toma de tierra de acuerdo con las normas establecidas. No use la unidad durante una tormenta eléctrica.

## Prevención frente incendios

1. Nunca instale el dispositivo cerca de una fuente de combustión.
2. El equipo debe instalarse lejos de materiales inflamables y explosivos.
3. Deje al menos 0,5 m alrededor de la unidad para su ventilación.
4. Si cambia alguna de las partes del dispositivo hágalo siempre con repuestos originales. Para ello contacte a su proveedor **MARK**.

## Desempaquetado

Nota: Antes de desembalar compruebe si ha habido daños y se han debido al transporte o no. Si encuentra algún daño, no utilice este dispositivo y póngase en contacto con el distribuidor de **MARK**.



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