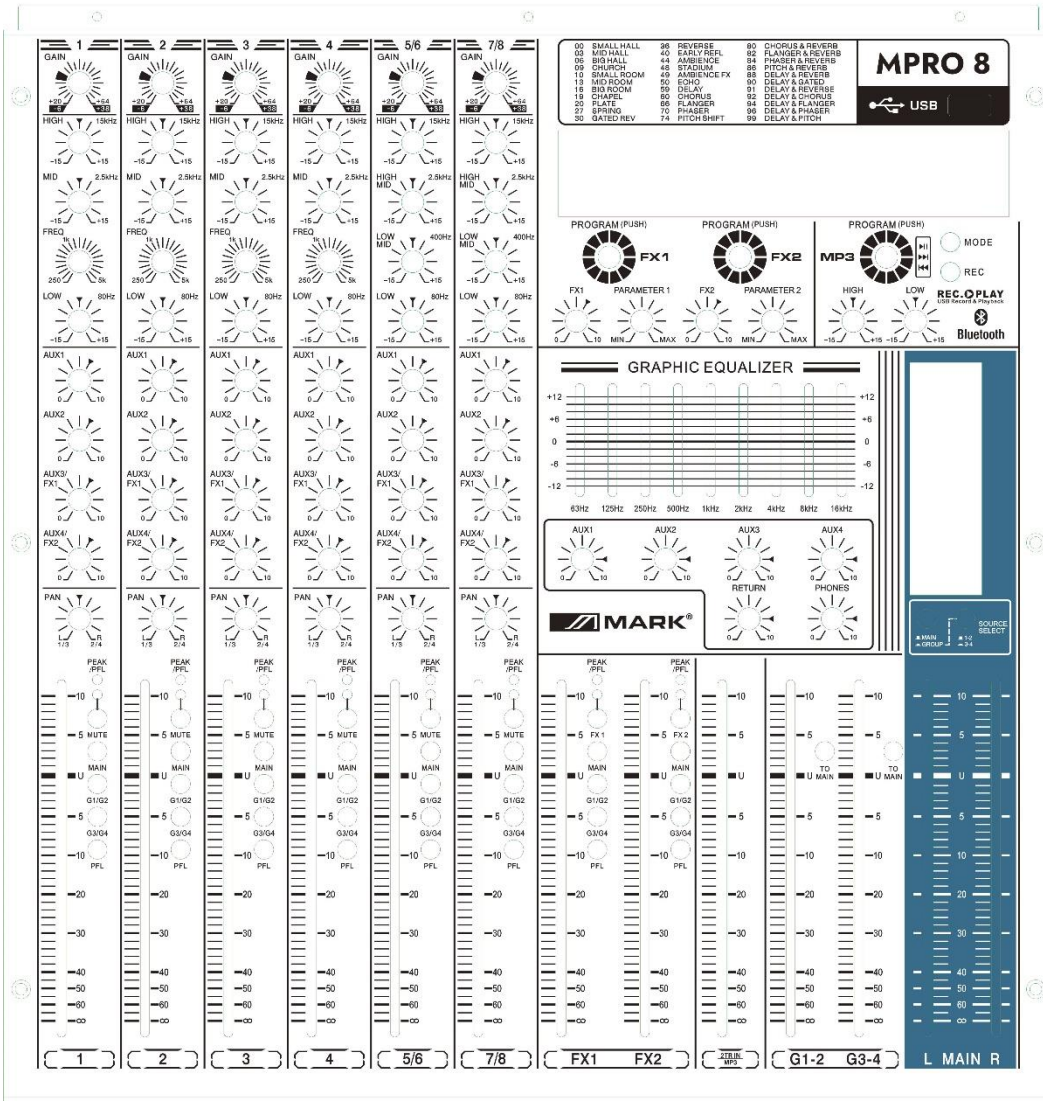# MARK®

MPRO SERIES (MPRO 8 / MPRO 12 / MPRO 16)

User Manual – Version 1.0 ENGLISH

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

MPRO Series is a professional mixer range with several features making them a good choose for live shows or studio.
The series has 3 references according to the number of mono inputs: MPRO 8, MPRO 12 and MPRO 16, from 4 mono channel to 12 mono channel and including 2 stereo inputs all of them.

The MIC inputs has phantom power for condenser microphones and three band tone control with frequency adjustment and parametric in stereo channels.

MPRO mixers include 24-bit DSP with 99 integrated effects in dual preparation with parameters adjustment. Also, they integrate a USB and Bluetooth functionality. The mixer includes USB 2.0 connection to link the mixer with a PC and to play files from it, working as a sound card.

It 100 mm faders offer a perfect control of each channel and the different buses (MAIN, GROUPS with 4 different, and AUX sends), ensure a perfect performance.

Technical Data:

|	MPRO 8	MPRO 12	MPRO 16
INPUT			
Mono MIC/LINE	4	8	12
Mono/stereo MIC/LINE	2	2	2
Stereo LINE	2	2	2
OUTPUT			
Main Out	2	2	2
Phones	1	1	1
AUX Send	4	4	4
Group	4	4	4
Rec	1	1	1
EQUALIZATION			
High	±15 dB, 15kHz		
Low	±15 dB, 80Hz		
Mid	±15 dB, 2.5kHz (peak)		
Built-in effects	Dual 99 programs, 2x PARAMETER control		
Phantom power	+48V DC		
Main supply	AC 100 – 240V 50/60 Hz		
Dimensions	394 x 491 x 132 mm	506 x 491 x 132 mm	618 x 491 x 132 mm
Weight	8,2 kg	10 kg	11,8 kg

Features:

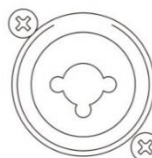- Audio mixers with:
    - 4 /8 /12 mono MIC/LINE channels + 2 stereo channels
    - USB player /recorder.
- Bluetooth functionality
- +48V phantom.
- 99 Effects included.
- 2 tone control on each mono channel.
- USB 2.0 port for PC connection (sound card operation)
- Headphone output.
- 100 mm faders

MARK®

CONTROLS & FUNCTIONS

## INPUT CHANNEL SECTION
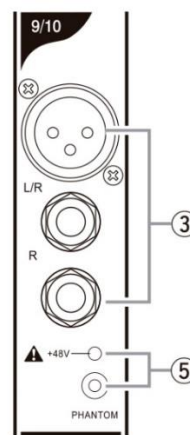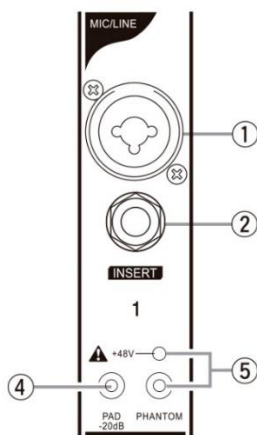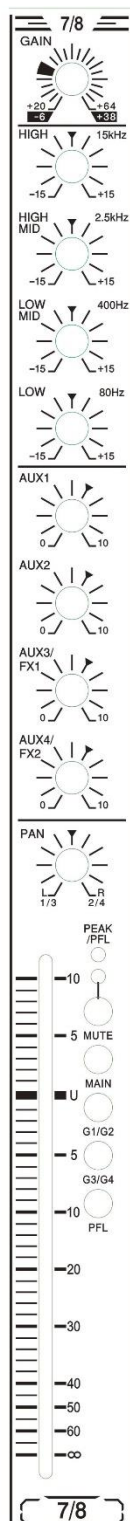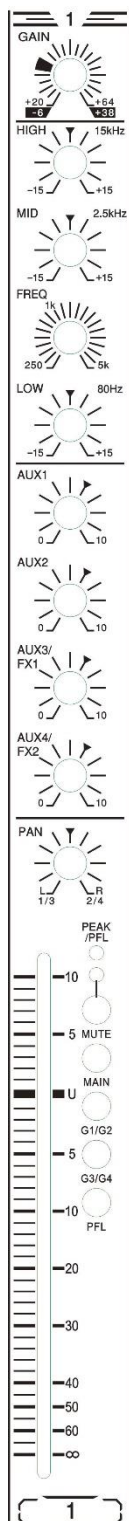
1. MIC / LINE INPUT (1, 2)

Connect a microphone, instrument, or audio device (CD player, etc.). It accepts XLR3 and jack ¼".
+ 48V phantom power available on each input Mic socket.

2. INSERT

Each of these jacks provides an insert point between the respective input channel equalizer and attenuator. The insert jacks can be used independently as graphic equalizers, compressors, or noise filters and other devices to access the appropriate channel. These jacks are TRS (tip, ring, sleeve) phone jacks that carry both the send signal and return signal.

3. STEREO INPUT
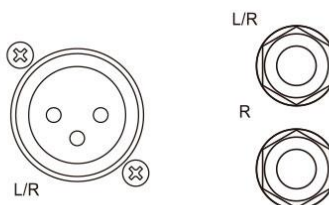
MIC: Balanced XLR microphone input jack
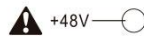LINE (L/R,R): Unbalanced phone type line stereo input jacks

4. PAD SWITCH

PAD
-20dB

When this switch is pressed (▬) will attenuate the input signal from the MIC/LINE jacks of the mono input by -20 dB.

5. PHANTOM +48 switch & indicator

⚠ +48V ─○

PHANTOM

This switch toggles phantom power on and off. Press the switch (▬) to supply DC+48V to the XLR input jacks. The indicator lights when the switch is on. Turn this switch on when using one phantom-powered condenser microphone.
NOTE

Be sure to leave the switch off (▪) if you do not need phantom power.

When turning phantom power on (▬), pay careful attention to the following to prevent damage or noise in the mixing console or connected equipment.
-   Turn this switch off if equipment that does not use phantom power is connected to the XLR input.
-   Do not disconnect XLR connector cables while this switch is on.
-   Set output control such as the MAIN master fader and GROUP fader to their minimum levels before turning phantom power on or off.

6. GAIN
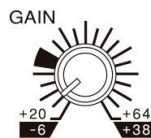
GAIN
+20   +64
-6   +38

Fort adjusting 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.

7. TONE CONTROLS (EQUALIZER)
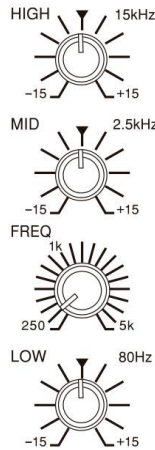
Control the equalization of each channel. The mono and stereo inputs have different functions. Therefore, mono inputs allow to control the HIGH, LOW and MID frequencies. This last band has parametric control, and we can use the FREQ button allows to select the frequency and the MID control to adjust the gain.

The stereo inputs have four controls too. HIGH, HIGH/MID, LOW/MID and LOW. Always set this control to the 12 o'clock position, but you can adjust according to the speaker, the conditions of listening position and listener's preferences. Clockwise rotation of the control increases level.
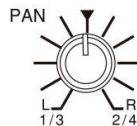
8. AUX (1-4), AUX 3/FX1, AUX 4/FX2
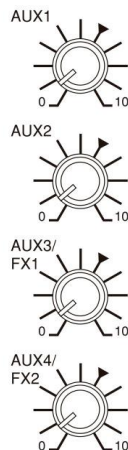
AUX knobs control the signal level sent from these channels to AUX 1-4 buses.
NOTE: AUX3/FX1, AUX4/FX2 knobs are used to adjust the signal level sent to the FX1/FX2 buses (built-in effects) and AUX bus. The same signal level is sent to the FX1/FX2 buses connected to these knobs.

9. PAN

This knob adjusts the volume balance of each channel sent to the MAIN L/R bus. When the knob is set to the 12 o´clock position, the channel´s sound will be sent to the L and R of the MAIN L/R bus at the same volume. If the bus assign switch (1-2) or (3-4) is pressed, this knob adjusts the volume balance sent to the GROUP bus. If the knob is turned completely to the left, the signal is sent to the GROUP 1 or GROUP 3 bus only; if the knob is turned completely t the right, the signal is sent to GROUP 2 or GROUP 4 bus only.

10. MAIN switch

MAIN

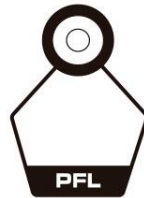Turn this switch on (▬), assigns the channel´s signal to the MAIN L/R buses.

11. G (1-2/3-4) switch

G1/G2   G3/G4

(1-2) switch: assigns the channel´s signa to the GROUP 1-2 buses.
(3-4) switch: assigns the channel´s signa to the GROUP 3-4 buses.

12. PFL switch

PFL

When the PFL switch is on (▬), the channel pre-fader signal is output to the PHONES jack for monitoring. When the PFL switch is turned on, the PFL indicator next to the fader is light.

13. MUTE switch

MUTE

Press the switch, the channel will stop sending signals to all buses (except PFL monitoring), all outputs have no signal output.
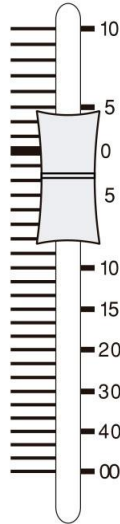
14. PEAK indicator

PEAK
/PFL

The peak level of the post-EQ signal is detected, and the PEAK indicator lights yellow when the level reaches 3 dB below clipping.
(Peak monitoring and PFL monitoring share this indicator light).
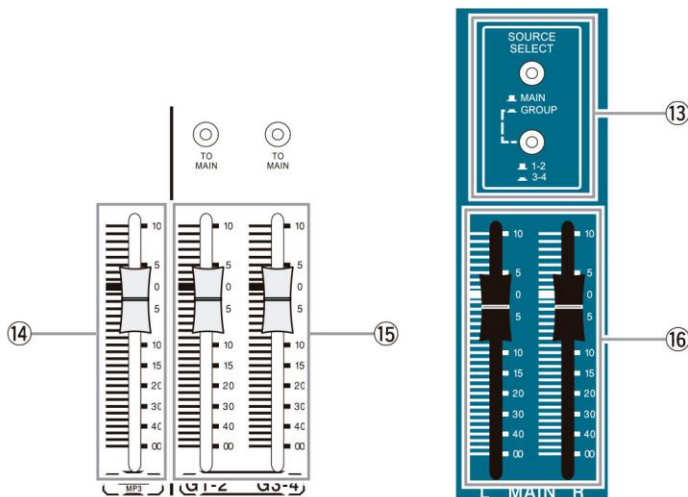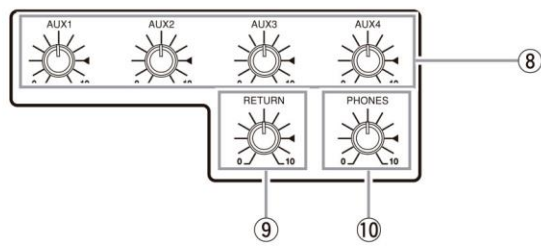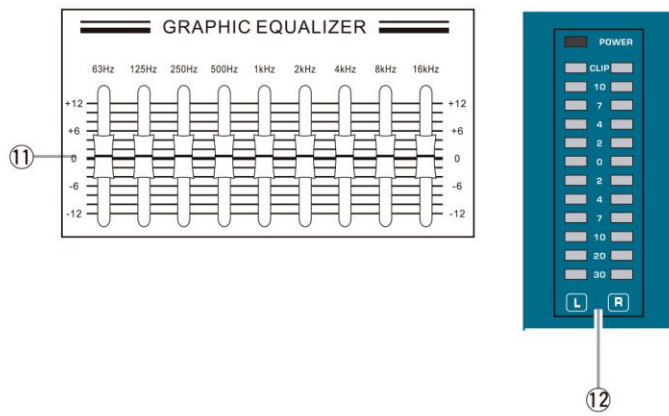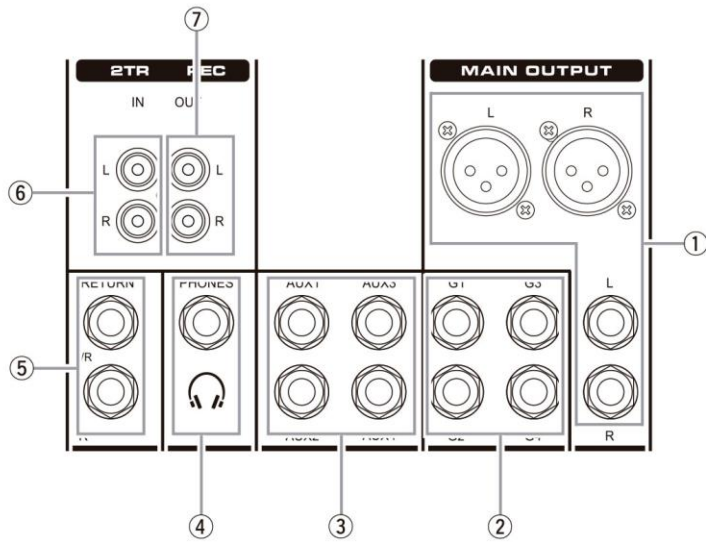
15. Channel fader

For adjusting te level of the channel signal. Use the se control to adjust the balance between the various channels.
NOTE: To minimize noise, set the fader slider for any unused channels all the way down.

MASTER SECTION

1. MAIN OUT (L / R)
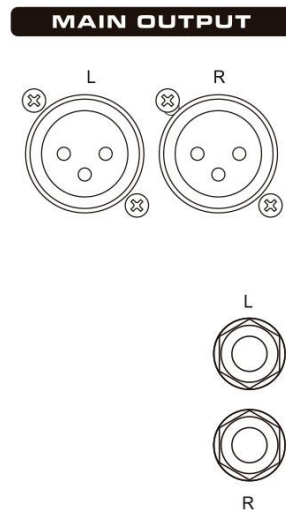
These are XLR and TRS balanced output jacks that output the mixed stereo signal. The signal level is adjusted by the MAIN master fader. You can use these jacks, for example, to connect to the power amplifier driving your main loudspeakers.

2. GROUP OUT
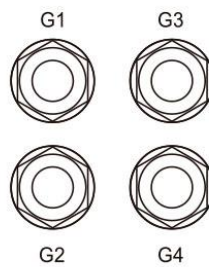
These balanced TRS jacks output the GROUP 1-2 and 3-4 signals. Use these jacks to connect to the inputs of a multi-track recorder, external mixer, or another similar device.

3. SEND AUX (1-4)
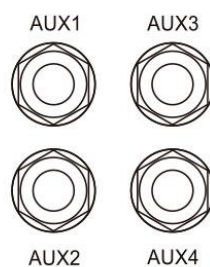
These are balanced TRS jack which output signals from AUX. You can use them, for example, to connect to an external effect device or stage/studio monitoring system.

4. PHONES jack

Connect a pair of headphones to this TRS jack.

5. RETURN L/R jacks

These are unbalanced TRS jacks. The signal received by these jacks is sent to the MAIN L/R bus and AUX bus. They are typically used to receive a return from an external effect device (reverb, delay, etc.)
NOTE:
These jacks can also be used as an auxiliary stereo input. If you connect to the L/R jack, the mixer will recognize the signal as mono signal to both the L and R jacks to send the same signal.

6. 2 TRK IN jack

These RCA kacks can be used to input stereo sources. Use these jacks when you want to connect a CD player directly to your mixer.
NOTE:
The signal level can be adjusted by using the 2 TRK IN/MP3 fader in the main control section.

7. REC OUT

These RCA jacks can be connected to external recorders such as the MD recorder to record the same information as the MAIN OUT jack.

8. **SEND knob**
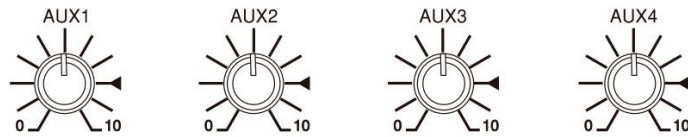
For adjusting the level of the signals output to the SEND jack and AUX (1-4).

9. **RETURN knob**

For adjusting the level of the signals sent from the RETURN input jack (L/R and R) to the stereo bus.

10. **PHONES knob**

For adjusting the level of the signals output to the PHONES jack

11. **Graphic Equalizer**
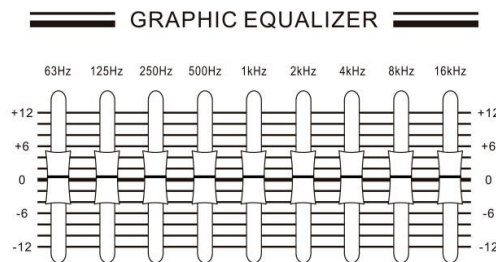
This 9-band graphic equalizer adjusts the sound signal sent to the MAIN OUT jack.

12. **Power level control**
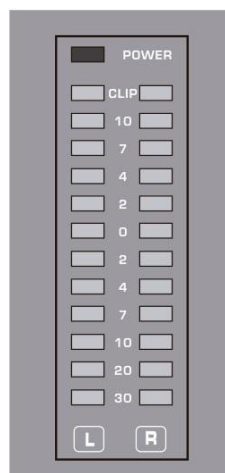
POWER indicator
This indicator lights up when the mixer's power is on

Level meter
The LED vumeter shows the level of the signal in the MAIN L/R and GROUP buses or selected with (PFL) switches. The segment marked as "0" correspond to the nominal output level. The level PEAK indicator lights when output reaches the clipping level.

13. SOURCE SELECT
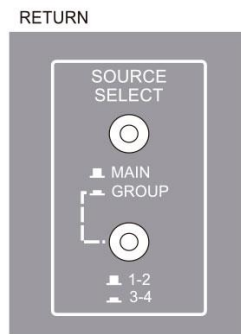
Sets the signal sent to the MAIN OUT jack, PHONES jack and level meter. You can use this switch to select the signal from the MAIN L/R buses, Group 1-2 buses, or GROUP 3-4 buses.
NOTE
MAIN L/R buses: (MAIN)

GROUP 1-2 buses: (GROUP) (1,2)

GROUP 3-4 buses: (GROUP) (3,4)

14. 2TR IN/MP3 fader
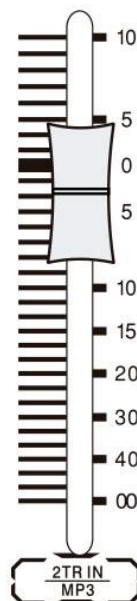
For adjusting the level of the signals output to the 2TR IN jack and MP3.

15. GROUP fader
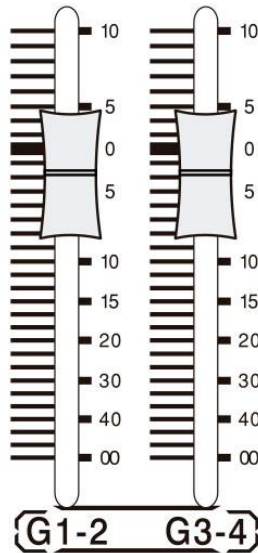
(GROUP 1-2) fader
For adjusting the level of the signals output to the GROUP OUT 1, 2 jacks.
(GROUP 3-4) fader
For adjusting the level of the signals output to the GROUP OUT 3,4 jacks.
NOTE:

If the TO MAIN switch is on (▬), the signals are sent to the MAIN L/R bus via the GROUP 1-2, 3-4 faders.

16. MAIN (L, R) master fader
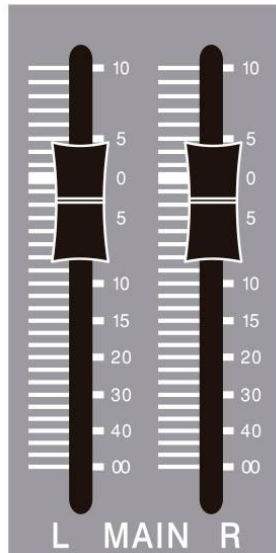
For adjusting the level of the signals output to the (MAIN OUT) jack.

BUILT-IN EFFECT AND MP3 SECTION

00	SMALL HALL	36	REVERSE	80	CHORUS & REVERB
03	MID HALL	40	EARLY REFL	82	FLANGER & REVERB
06	BIG HALL	44	AMBIENCE	84	PHASER & REVERB
09	CHURCH	48	STADIUM	86	PITCH & REVERB
10	SMALL ROOM	49	AMBIENCE FX	88	DELAY & REVERB
13	MID ROOM	50	ECHO	90	DELAY & GATED
16	BIG ROOM	59	DELAY	91	DELAY & REVERSE
19	CHAPEL	60	CHORUS	92	DELAY & CHORUS
20	PLATE	66	FLANGER	94	DELAY & FLANGER
27	SPRING	70	PHASER	96	DELAY & PHASER
30	GATED REV	74	PITCH SHIFT	99	DELAY & PITCH

1. Display

2. (PROGRAM 1, 2) knob

Select one of the 99 built-in effects. Turn the knob to select the desired effect, and then press the knob to enable it.
The number flashes during selection; however, if several seconds pass without a selection being made, the program returns to the last number selected.
NOTE
You can also select the desired effect by turning the knob while holding it down.
FX1, FX2 knob for adjusting the level of the signals output the SEND jack and FX1, FX2.

3. (PARAMETER) knob
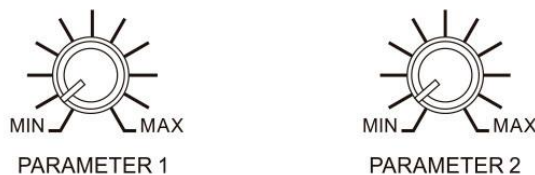
For adjusting the parameter (depth, speed, etc.) for the selected effect. The last value used with each effect type is saved.
NOTE
When you change to a different effect type, the mixer automatically restores the value that was previously used with the newly selected effect (regardless of the current position of the (PARAMETER) knob.

4. (FX 1, FX 2) knobs

For adjusting the level of the signals output to the FX1 and FX2 effect.

5. (MAIN) switch

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

6. G (1-2/3-4) switch

(G1-2) switch: Turn this switch on to output signals of the built-in effect to the GROUP 1-2 buses.

(G3-4) switch: Turn this switch on to output signals of the built-in effect to the GROUP 3-4 buses.

7. PFL switch
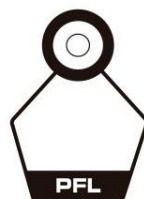
Turn this switch is on to output the built-in effect signals to the PFL buses.

8. (FX1, FX2) switches

This button turns the corresponding built-in effect on or off. When the function is on $\left(\underline{\quad} \right)$, the Switch lights red.

NOTE

If this switch is on and the foot switch (FOOT SW) jack is used to turn off the built-in effect, the switch flashes.

9. (FX1, FX2) faders
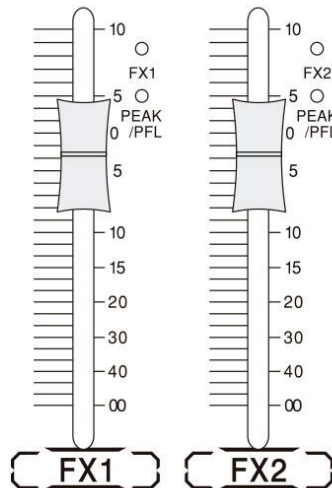
For adjusting the level of the effect sent from the built-in effect to the GROUP 1-2, 3-4 and MAIN L/R buses.

10. (FOOT SW) jack
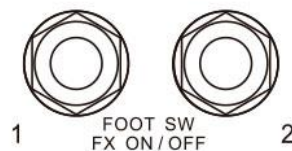
Connect a foot switch to this input jack. The switch lights in red when on.

11. (PROGRAM) MP3 knob

Turn the knob (left or right), to select the desired music file. Press the knob to play/pause/record/confirm the selection.

12. USB player

Insert a USB flash drive with music files such as MP3, WMA into the port and control the playback through the PROGRAM knob.

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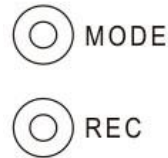
This player has Bluetooth and recording functions. Use MODE button to switch. Press the REC button to operate the recording. Press it after inserting the USB flash drive, and then press the "confirm" button to record. The recording content is the main output signal. Long press program knob to stop recording.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

14. High, Low knobs
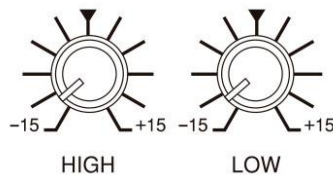
These knobs adjust the MP3/2TR IN/USB 2.0 high and low frequency bands.

15. 2TRE IN/MP3 fader
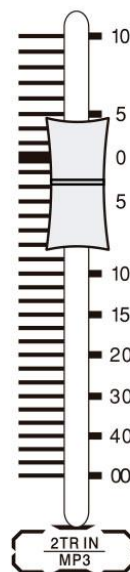
For adjusting the level of the signals output to the 2TR IN jack and MP3.

USB Section
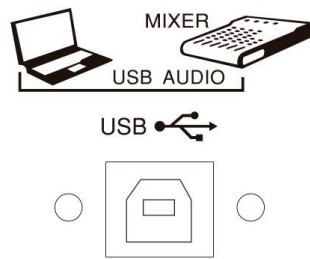
USB 2.0 port
Connects to a computer via a USB cable. The signal from the MAIN L/R buses is output to the computer.
CAUTIONS:
Use an A/B type USB cable. The cable should be no more than 1.5 m long. An USB 3.0 cable cannot be used.
Be sure the computer is not in sleep/suspend/standby mode before making a connection with the mixer.
Connect the mixer to the computer before turning the mixer power on.
Allow at least 6 seconds between turning the mixier on or off and plugging or unplugging the USB cable.

Power section

In the rear side of the mixer are located the main power input through an IEC connector. Use the included cable to connect the mixer to an adequate power output. This connector includes a fuse.

Here is located too the switch on /off. Remember, rapidly turning unit on and off in succession can cause it to malfunction. After turning off, wait for at least 6 seconds before turning it on again.

Effect programs

No	PROGRAM	PARAMETER
	HALL 00-09	
0	SMALL HALL 1	Reverb 1 s
1	SMALL HALL 2	Reverb 1,2 s
2	SMALL HALL 3	Reverb 1,5 s
3	MID HALL 1	Reverb 1,8 s
4	MID HALL 2	Reverb 2 s
5	MID HALL 3	Reverb 2,5 s
6	BIG HALL 1	Reverb 2,8 s
7	BIG HALL 2	Reverb 3,2 s
8	BIG HALL 3	Reverb 4 s
9	CHURCH	Reverb 7 s

No	PROGRAM	PARAMETER
	DELAY 50 - 59	
50	LONG ECHO	Extra long echo
51	SHORT DELAY	
52	SHORT DELAY	
53	SHORT DELAY	
54	MID DELAY 1	115 - 125 BPM
55	MID DELAY 2	105 - 115 BPM
56	MID DELAY 3	95 - 105 BPM
57	LONG DELAY 1	85 - 95 BPM
58	LONG DELAY 2	75 - 85 BPM
59	LONG DELAY 3	Extra long delay

No	PROGRAM	PARAMETER
	ROOM 10 - 19	
10	SMALL ROOM 1	Reverb 0,5 s
11	SMALL ROOM 2	Reverb 0,8 s
12	SMALL ROOM 3	Reverb 1 s
13	MID ROOM 1	Reverb 1,2 s
14	MID HALL 2	Reverb 1,5 s
15	MID ROOM 3	Reverb 1,8 s
16	BIG ROOM 1	Reverb 2 s
17	BIG ROOM 2	Reverb 2,2 s
18	BIG ROOM 3	Reverb 2,5 s
19	CHAPEL	Reverb 3 s

No	PROGRAM	PARAMETER
	CHORUS 60 - 69	
60	SOFT CHORUS 1	
61	SOFT CHORUS 2	
62	WARM CHORUS 1	
63	WARM CHORUS 2	
64	PHAT CHORUS 1	
65	PHAT CHORUS 2	
66	CLASSIC FLANGER	
67	WARM FLANGER	
68	DEEP FLANGER	
69	HEAVY FLANGER	

No	PROGRAM	PARAMETER
	PLATE 20 - 29	
20	SHORT PLATE	Reverb 1 s
21	MID PLATE	Reverb 1,5 s
22	LONG PLATE	Reverb 2,2 s
23	VOCAL PLATE	Reverb 1,2 s
24	DRUMS PLATE	Reverb 1 s
25	GOLD PLATE 1	Reverb 1,2 s
26	GOLD PLATE 2	Reverb 2 s
27	SHORT SPRING	Reverb 1 s
28	MID SPRING	Reverb 2 s
29	LONG SPRING	Reverb 2,5 s

No	PROGRAM	PARAMETER
	PHASE / PITCH 70 -79	
70	CLASSIC PHASER	
71	WARM PHASER	
72	DEEP PHASER	
73	HEAVY PHASER	
74	PITCH SHIFT DETUNE	
75	PITCH SHIF +3	
76	PITCH SHIF +4	
77	PITCH SHIF +7	
78	PITCH SHIF -5	
79	PITCH SHIF -12	

No	PROGRAM	PARAMETER
	PLATE 30 - 39	
30	GATE REV SHORT	gate time 0,8 s
31	GATE REV MID	gate time 1,2 s
32	GATE REV LONG	gate time 2 s
33	GATE REV XXL	gate time 3 s
34	GATE REV DRUMS 1	gate time 0,8 s
35	GATE REV DRUMS 2	gate time 1,2 s
36	REVERSE SHORT	gate time 0,8 s
37	REVERSE MID	gate time 1,2 s
38	REVERSE LONG	gate time 2 s
39	REVERSE XXL	gate time 3 s

No	PROGRAM	PARAMETER
	MULTI 1 80 - 89	
80	CHORUS+REVERB 1	
81	CHORUS+REVERB 2	
82	FLANGER + REVERB 1	
83	FLANGER + REVERB 2	
84	PHASER+ REVERB 1	
85	PHASER+ REVERB 2	
86	PITCH + REVERB 1	
87	PITCH + REVERB 2	
88	DELAY + REVERB 1	
89	DELAY + REVERB 2	

No	PROGRAM	PARAMETER
	GATE / 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
	MULTI 2 90 - 99	
90	DELAY + GATE	
91	DELAT + REVERSE	
92	DELAY + CHORUS 1	
93	DELAY + CHORUS 2	
94	DELAY + FLANGER 1	
95	DELAY + FLANGER 2	
96	DELAY + PHASER 1	
97	DELAY + PHASER 2	
98	DELAY + PITCH 1	
99	DELAY + PITCH 2	

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.

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