MG Series Specifications

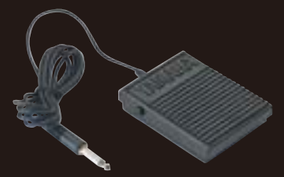
		MG10/2	MG8/2FX	MG12/4	MG12/4FX	MG16/4	MG16/6FX
Total Harmonic Distortion		Less than 0.1 % (THD+N) 20 Hz – 20 kHz @ +14 dBu (ST OUT) *3					
Frequency Response		-3, 0, +1 dB 20 Hz – 20 kHz @ +4 dBu (ST OUT)					
Input Hum & Noise *1		-128 dBu Equivalent Input Noise/-100 dBu Residual Output Noise. 20 Hz – 20 kHz, Rs=150 Ω. Input Gain=Maximum, Input sensitivity=-60 dB *3					
Crosstalk		-70 dB @ 1 kHz					
CH Input	**Mic**	4 (Ch 1 – 2, 3/4, 5/6: XLR)		6 (Ch 1 – 4, 5/6, 7/8: XLR)		10 (Ch 1 – 8, 9/10, 11, 12: XLR)	
	Line	2 (Ch 1 – 2: TRS:Phone)		4 (Ch 1 – 4: TRS:Phone)		8 (Ch 1 – 8: TRS:Phone)	
	Stereo	2 (Ch 3 – 4, 5 – 6: TRS:Phone) * Ch3, 5: L (MONO) 2 (Ch 7 – 8, 9 – 10: TRS:Phone/RCA:Pin)	2 (Ch 3 – 4, 5 – 6: TRS:Phone) * Ch3, 5: L (MONO) 1 (Ch 7 – 8: TRS:Phone/RCA:Pin)	2 (Ch 5 – 6, 7 – 8: TRS:Phone) * Ch5, 7: L (MONO) 2 (Ch 9 – 10, 11 – 12: TRS:Phone/RCA:Pin)		2 (Ch 9 – 10, 11 – 12: TRS:Phone) * Ch9, 11: L (MONO) 2 (Ch 9 – 10, 11 – 12: TRS:Phone/RCA:Pin)	
	Insert I/O	2 (Ch 1 – 2: TRS:Phone = T: Out, R: In, S: Gnd)		4 (Ch 1 – 4: TRS:Phone = T: Out, R: In, S: Gnd)		8 (Ch 1 – 8: TRS:Phone = T: Out, R: In, S: Gnd)	
AUX	**Send**	2 (1/Pre, 2/Post: TRS:Phone)	1 (Effect / AUX)	2 (1/Post-Pre selectable, 2/Post: TRS:Phone)	1 (Post-Pre selectable: TRS:Phone)	2 (1/Post-Pre selectable, 2/Post: TRS:Phone)	2 (1/Pre, 2/Post-Pre selectable: TRS:Phone)
	Return	1 Stereo (L/MONO, R: TRS:Phone)					
EFFECT	**Send**	—	(Same as AUX Send)	—	1 (TRS:Phone)	—	1 (TRS:Phone)
2TR	**In**	1 Stereo (L, R: RCA:Pin)					
REC	**Out**	1 Stereo (L, R: RCA:Pin)					
ST	**Out**	1 Stereo (L, R: TRS:Phone)		2 Stereo (L, R: 2 TRS:Phone & 2 XLR)			
C/R	**Out**	1 Stereo (L, R: TRS:Phone)					
GROUP	**Out**	—		2 (1, 2: TRS:Phone)			4 (1 – 4: TRS:Phone)
Phones		1 (TRS:Phone Stereo)					
Phantom Power		+ 48 V					
CH & ST Ch Input Gain Control		44 dB valiable					
CH & ST High Pass Filter		80 Hz 12 dB/Octave					
CH EQ (MONO) *2 **±15 dB (Max.)**	**High**	10 kHz (Shelving)					
	Mid	2.5 kHz (Peaking)					0.25 – 5 kHz (Peaking)
	Low	100 Hz (Shelving)					
CH EQ (STEREO) *2 **±15 dB (Max.)**	**High**	10 kHz (Shelving)					
	Hi-Mid	—					3 kHz (Peaking)
	Mid	2.5 kHz (Peaking)					—
	Low-Mid	—					800 Hz (Peaking)
	Low	100 Hz (Shelving)					
Graphic Equalizer		—					7-band (125, 250, 500, 1 k, 2 k, 4 k, 8 kHz) ±12 dB (Max.)
Internal Digital Effect		—	16 Programs: Parameter Control	—	16 Programs: Parameter Control	—	16 Programs: Parameter Control
Dimensions	**Height**	65 mm		108 mm			
	Depth	290.5 mm		416.6 mm			
	Width	251 mm		322 mm		423 mm	
Weight		1.8 kg		5.0 kg		5.2 kg	5.5 kg
Power Requirements *4		19 W 120 V/60 Hz 19 W 220 V/50, 60 Hz 19 W 230 V/50 Hz 19 W 240 V/50Hz	20 W 120 V/60 Hz 20 W 220 V/50, 60 Hz 20 W 230 V/50 Hz 20 W 240 V/50 Hz	29 W 120 V/60 Hz 29 W 220 V/50, 60 Hz 29 W 230 V/50 Hz 29 W 240 V/50 Hz	30 W 120 V/60 Hz 30 W 220 V/50, 60 Hz 30 W 230 V/50 Hz 30 W 240 V/50Hz	36 W 120 V/60 Hz 36 W 220 V/50, 60 Hz 36 W 230 V/50 Hz 36 W 240 V/50 Hz	51 W 120 V/60 Hz 51 W 220 V/50, 60 Hz 51 W 230 V/50 Hz 51 W 240 V/50 Hz
Other		Mic Stand Mountable	Foot Switch Jack (ON/OFF) Mic Stand Mountable	Rack Mountable	Foot Switch Jack (ON/OFF) Rack Mountable	Rack Mountable	Rack Mountable
Option		Mic Stand Adapter BMS-10A	Mic Stand Adapter BMS-10A Foot Switch FC5	—	Foot Switch FC5	—	—

*1 Hum & Noise are measured with a 6 dB/octave filter @ 12.7 kHz,equivalent to a 20 kHz filter with infinite dB/octave attenuation.
*2 Turn over /roll-off frequency of shelving : 3 dB below maximum variable level.
*3 (CH.1/2: MG10/2C (CH1-4): MG12/4, (CH1-8): MG16/4, MG16/6FX.
*4 Power Supply Adaptor PA-10 (MG10/2,MG8/2FX), PA-20 (MG12/4,MG16/4,MG12/4FX), PA-30 (MG16/6FX).

		MG24/14FX	MG32/14FX
Total Harmonic Distortion		Less than 0.1 % (THD+N) 20 Hz – 20 kHz @ +14 dBu (ST OUT)	
Frequency Response		0 +1, -3 dB 20 Hz – 20 kHz @ +4 dBu (ST OUT)	
Input Hum & Noise *1		-128 dBu Equivalent Input Noise/-99 dBu Residual Output Noise 20 Hz – 20 kHz, Rs=150 Ω, Input Gain=Maximum, Input Pad =OFF, Input sensitivity=-60 dB	
Crosstalk		-70dB @ 1kHz	
CH Input	**Mic**	16+1 (Input A 1 – 16, Talk Back: XLR)	24+1 (Input A 1 – 24, Talk Back: XLR)
	Line	16 (Input B 1 – 16: TRS:Phone)	24 (Input B 1 – 24: TRS:Phone)
	Stereo	2 (Ch 17 – 18, 19 – 20:TRS) * Ch17, 19-L (MONO) 2 (Ch 21 – 22, 23 – 24: TRS:Phone/RCA:Pin)	2 (Ch 25 – 26, 27 – 28:TRS) * Ch25, 27-L (MONO) 2 (Ch 29 – 30, 31 – 32: TRS:Phone/RCA:Pin)
	Insert I/O	16 (Ch 1 – 16: TRS:Phone T: Out, R: In, S: Gnd)	24 (Ch 1 – 24: TRS:Phone T: Out, R: In, S: Gnd)
AUX	**Send**	6 (1 – 2/Post-Pre selectable, 3 – 4/Post-Pre selectable, 5 – 6/Post: TRS:Phone)	
	Return	2 Stereo Sub In (L/MONO, R: TRS:Phone)	
EFFECT	**Send**	2 (1, 2: TRS:Phone)	
2TR	**In**	1 Stereo (L, R: RCA:Pin)	
STEREO	**Insert**	1 Stereo (L, R: TRS:Phone)	
GROUP	**Insert**	4 (1 – 4: TRS:Phone)	
REC	**Out**	1 Stereo (L, R: RCA:Pin)	
ST	**Out**	1 Stereo (L, R: XLR)	
MONO	**Out**	1 (XLR)	
ST SUB	**Out**	1 Stereo (L, R: TRS:Phone)	
GROUP	**Out**	4 (1 – 4: TRS:Phone)	
Phones		1 (TRS:Phone Stereo)	
Phantom Power		+ 48 V	
CH & ST Ch Input Gain Control		44 dB valiable	
CH & ST High Pass Filter		80 Hz 12 dB/Octave	
CH EQ (MONO) *2 **±15 dB (Max.)**	**High**	10 kHz (Shelving)	
	Mid	0.25-5 kHz (Peaking)	
	Low	100 Hz (Shelving)	
CH EQ (STEREO) *2 **±15 dB (Max.)**	**High**	10 kHz (Shelving)	
	Hi-Mid	3 kHz (Peaking)	
	Low-Mid	800 Hz (Peaking)	
	Low	100 Hz (Shelving)	
MONO Out Low Pass Filter		80 – 120 Hz 12dB/octave	
Internal Digital Effect		SPX x 2 (Effect 1: 16 Programs, Effect 2: 16 Programs :Parameter Control)	
Dimensions	**Height**	140 mm	140 mm
	Depth	551 mm	551 mm
	Width	819 mm	1027 mm
Weight		18.5 kg	22 kg
Power Requirements		100 W 120 V/60 Hz 100 W 220 V/50 Hz 100 W 230 V/50 Hz	120 W 120 V/60 Hz 120 W 220 V/50 Hz 120 W 230 V/50 Hz

*1 Hum & Noise are measured with a 6 dB/octave filter @ 12.7 kHz,equivalent to a 20 kHz filter with infinite dB/octave attenuation.
*2 Turn over /roll-off frequency of shelving : 3 dB below maximum variable level

Options



FC-5 Foot Switch
for MG8/2FX, MG12/4FX

BMS10-A
for MG10/2, MG8/2FX

For details please contact:

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MG Series
MIXING CONSOLE

MG10/2
MG8/2FX NEW
MG12/4
MG12/4FX NEW
MG16/4
MG16/6FX
MG24/14FX
MG32/14FX

YAMAHA

Eight Superlative Mixers – Superior Sound & Control In Any Application

NEW
MG8/2*FX*

NEW
MG12/4*FX*

Yamaha is no newcomer to mixing console design. You'll find Yamaha consoles in some of the most respected live venues and production studios in the world. In fact, Yamaha has been innovating, leading, and in many ways defining the development of modern mixing consoles for more than 30 years.

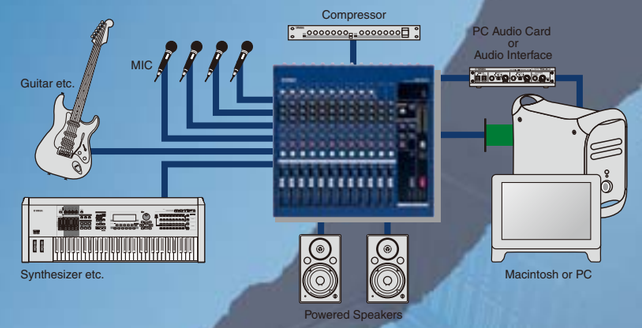
And now we are proud to introduce the Yamaha MG-series mixing consoles, featuring eight models ranging in size from a small 8-channel/2-bus unit right up to a very flexible 32-channel/14-bus type with an impressive selection of built-in effects. No matter what your application – from production to sound reinforcement – there's a Yamaha MG mixer that will give you everything need … and more. There have been no compromises. These mixers are built for great sound, total control, and superior reliability. In fact, they undergo the same rigorous quality and reliability tests as our world-class PM-series mixing consoles. But, by taking full advantage of the latest Yamaha technology and manufacturing techniques, we have been able to pack these superlative mixers with more value than you'll find anywhere else. In short, they offer extraordinary performance and mixing power at remarkable prices.

If you need a high-performance analog mixer for music production or sound reinforcement, the Yamaha MG Series is the first – and last – place you should look.

Application Examples

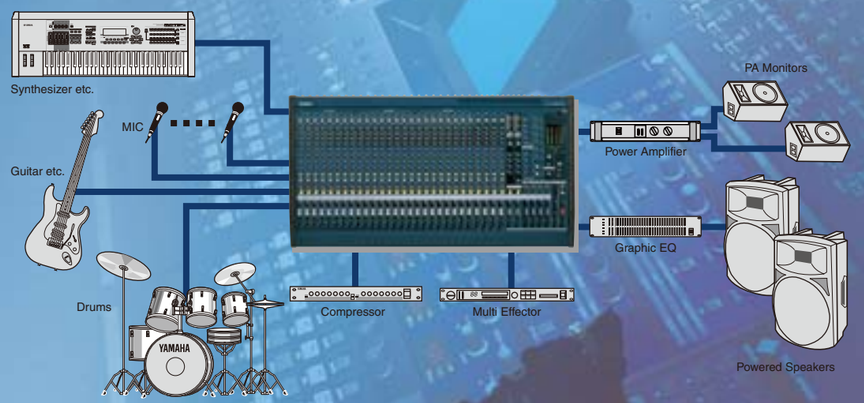
1. Music Production

The current trend is toward computer-based music production, but you still need a good mixer to combine your sources in order to feed your computer's audio interface, as well as for monitoring. The mid-size MG mixers — the MG12/4, MG12/4FX, MG16/4, and MG16/6FX are ideal for this type of application.
Mono sources such as guitar and vocal as well as stereo sources such as synthesizers, samples, and rhythm machines can be combined at the console. The four or six group buses can feed the system's sound card or audio interface. The outputs from the computer are returned to the mixer for monitoring. The MG16/6FX internal effects can be a valuable sound-design tool, while lightening the computer processing load at the same time. AUX and effect sends can be used to feed external processing devices, and the insert patch points are ideal for independent channel processing.



2. A Small Sound Reinforcement System

A sound reinforcement system using the MG24/14FX or MG32/14FX is ideal for small clubs, churches, meeting rooms and similar venues. Mono sources such as guitar, vocal and drum mics, as well as stereo sources such as synthesizers, samples, and rhythm machines can be combined at the console. The main stereo mix is sent to a pair of powered speakers (in this example graphic equalizers are used for room voicing). The AUX send signals can be sent to amplifiers and speakers for on-stage monitoring. Signal processing can be provided by the internal effects, or eternal processing gear fed by the effect sends. Insert patch points allow compressors and other processing gear to be applied to specific channels.



MG10/2
MIXING CONSOLE

NEW

MG8/2*FX*
MIXING CONSOLE

Just the Basics … With Class

If you simply need to mix a few sources to stereo – but insist on the finest audio quality available – the MG10/2 or MG8/2FX is probably the way to go. They're compact and convenient to use, but won't compromise your signal in any way. With an optional adaptor the MG10/2 can even be mounted on a microphone stand for totally flexible positioning and easy access. And the MG8/2FX's built-in effects can take your music to a new dimension. For demo and music production, small sound reinforcement applications, or simply as a super utility mixer for any application, you can't lose with these compact performers.

INPUT SECTION

8 or 10 Input Channels

The MG10/2 features a total of 10 input channels: two mono microphone/line inputs and four stereo line inputs, two of which offer mono microphone input capability. The MG8/2FX has two mono microphone/line inputs and three stereo line inputs, two with mono microphone input capability. Gain trim covers a wide -60dB ~ -16dB range for microphone input, and -34dB ~ +10dB for line input.

A Variety of Input Connectors

Balanced XLR connectors are provided on both mono inputs and two of the stereo inputs (a total of four XLR connectors), in addition to phone jack connectors. Two of the stereo channels can accept mono microphone input either via the XLR or phone jack connectors. The remaining stereo input on the MG8/2FX, and the remaining two stereo inputs on the MG10/2, feature both phone jack and pin jack inputs for broad connectivity. A separate stereo 2TR input with pin-jack connectors is provided for independent input of signals from CD players or similar sources.

Four Low-noise, High-precision Mic Preamps

The microphone preamps provided on the two mono channels and two of the four stereo channels would be worth the price of the entire mixer if packaged separately. These are high-performance head amplifiers that will bring out the best in any dynamic or condenser microphone.

Phantom Power

So you can take advantage of the superior sonic quality of professional-class studio condenser microphones, all four high-performance mic preamps feature switchable phantom power. A single switch turns phantom power on or off for all four channels.

Insert I/O

Mono input channels feature insert I/O patch points so you can add compressors or EQ for vocals, a noise gate on a guitar channel, or other extra signal processing to individual channels as required.

3-band Channel EQ & HPF

Designed for smooth, "musical" response, the 3-band equalizers provided on all input channels are one more sonic tool you can use to create clean, professional mixes. All mono microphone input channels also feature a switchable high-pass filter that can be used to cut out unwanted low-frequency noise.

MASTER SECTION

One or Two Aux Sends & Stereo Aux Return

These mixers are also fully equipped to handle external effects and monitor systems. Use the post-fader auxiliary send on the MG8/2FX or the two sends on the MG10/2 in conjunction with the stereo auxiliary returns to add reverb, delay, or other external effects to the mix, and the pre-fader sends to feed a separate mix to your monitor system.

Stereo, Control Room, Rec, and Headphone Outputs

In addition to the main L and R phone-jack stereo outputs, these versatile mixers also offer phone-jack control room, pin-jack recording, and stereo phone-jack headphone outputs. You have plenty of outputs for a wide range of applications – monitoring, master recorder feed, etc.

12-segment Meters for Accurate Visual Monitoring

Output level monitoring is made accurate and easy with high-visibility 12-segment level meters.

EASE OF USE

Compact, Portable Design

Weighing in at a mere 1.8 kg (MG8/2FX), this mixer can easily be carried just about anywhere. You get top-quality mixing performance in the rehearsal studio, club, outdoors … wherever you need it.

Optional Mic Stand Mount

What could be more convenient than having your mixer mounted on a microphone stand for freedom of placement and easy access? With the optional BMS-10A Mic Stand Adaptor you can do just that, and have your sonic control center within easy reach all the time. This can be particularly handy when using the mixer as a drum sub-mixer or as a cue box in a recording situation.

Easy Operation and High Reliability

All switches and controls used in these mixers have been chosen for smooth, reliable operation as well as easy visual confirmation.

Features Found Only on the MG8/2FX

Top-quality Digital Multi Effects Built In

It may be small, but the MG8/2FX is packed with a surprising amount of signal-processing power. Renowned Yamaha multi-effect technology brings you a range of reverb, delay, chorus, flanger, phaser, distortion, and other effects built in – a total of 16 types in all (Same as MG12/4FX). Each effect program has a number of editable parameters as well as effect on/off switching and return level control. Additional convenience is provided by a footswitch jack to which you can connect an optional footswitch for effect on/off switching.

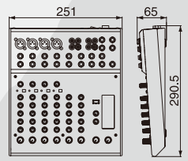
Effect List

MG8/2*FX*

1. REVERB HALL 1
2. REVERB HALL 2
3. REVERB ROOM 1
4. REVERB ROOM 2
5. REVERB STAGE 1
6. REVERB STAGE 2
7. REVERB PLATE
8. DRUM AMBIENCE
9. KARAOKE ECHO
10. VOCAL ECHO
11. CHORUS 1
12. CHORUS 2
13. FLANGER
14. PHASER
15. AUTO WAH
16. DISTORTION

DIMENSIONS

MG8/2*FX* **MG10/2**



MG12/4
MIXING CONSOLE 10U

MG16/4
MIXING CONSOLE 10U

MG12/4

MG16/4

Extensive Creative Control In the Studio Or On Stage

The mid-range MG models go beyond the basics to give you extensive control for a wide range of applications – with the no-compromise Yamaha sonic quality that makes the MG mixers the finest in their class. Whether music is a hobby or profession, these mixers will deliver total satisfaction. If you don't need effects, or already have an arsenal of outboard favorites, the MG12/4 or MG16/4 may offer all the capacity and capabilities you need.

INPUT SECTION

12 or 16 Input Channels

The MG12/4 feature a total of 12 input channels: four mono microphone/line inputs and four stereo line inputs, two of which offer mono microphone input capability. The MG16/4 feature eight mono microphone/line inputs and four stereo line inputs, two with mono microphone input capability. Gain trim covers a wide -60dB ~ -16dB range for microphone input, and -34dB ~ +10dB for line input.

A Variety of Input Connectors

Balanced XLR connectors are provided on all four or eight mono inputs and two of the stereo inputs (a total of six XLR connectors on the MG12/4 models, and ten on the MG16/4), in addition to phone jack connectors. Two of the stereo channels can accept mono microphone input either via the XLR or phone jack connectors. The remaining two stereo inputs feature both phone jack and pin jack inputs for broad connectivity. A separate stereo 2TR input with pin-jack connectors is provided for independent input of signals from CD players or similar sources.

Six or Ten Low-noise, High-precision Mic Preamps

Six high-performance head amplifiers in the 12-channel modes or ten in the 16-channel models will bring out the best in any dynamic or condenser microphone.

Phantom Power

All high-performance mic preamps in these consoles feature switchable phantom power for studio condenser microphones. A single switch turns phantom power on or off for all channels.

Insert I/O

Mono input channels feature insert I/O patch points so you can add compressors or EQ for vocals, a noise gate on a guitar channel, or other extra signal processing to individual channels as required.

3-band Channel EQ & HPF

Smooth, "musical-response" 3-band equalizers are provided on all MG12/4 and MG16/4 input channels. All mono microphone input channels also feature a switchable high-pass filter that can be used to cut out unwanted low-frequency noise.

Four Buses (Stereo and Group)

In addition to the main stereo bus, the MG12/4 and MG16/4 feature a stereo group bus and outputs that can be used for convenient channel grouping. Stereo and group bus assign switches are located above each channel fader. You could, for example, mix your instrument sources to the stereo buss while creating separate groups for the main vocal and chorus channels … or any bus configuration you need for your application.

MASTER SECTION

Aux and Effect Sends & Stereo Aux Return

The MG12/4 and MG16/4 have one post-fader AUX send and one pre/post switchable AUX send. Whichever model you choose you have plenty of flexibility for external signal processing and monitoring. A stereo auxiliary return is also provided.

A Comprehensive Selection Of Output Connectors

In addition to the main L and R XLR and phone-jack stereo outputs, these versatile mixers also offer phone-jack control room, pin-jack recording, and stereo phone-jack headphone outputs. You have plenty of outputs for a wide range of applications – monitoring, master recorder feed, etc. Phone-jack group outputs are also provided to allow independent output of the group bus mixes.

12-segment Meters for Accurate Visual Monitoring

Output level monitoring is made accurate and easy with high-visibility 12-segment level meters on the stereo and group buses as well as the 2TR inputs.

EASE OF USE

Reliable 60-millimeter Faders & Illuminated Switches

Reliable, high-performance 60-millimeter faders provide smooth, noise-free level control. while original Yamaha illuminated ON (ST buss assign), PFL (Pre-Fader Listen), and phantom power switches provide easy visual confirmation of critical console settings.

Compact, Portable Design

Compact and surprisingly light in weight, these mixers can easily be carried just about anywhere. You get top-quality mixing performance in the rehearsal studio, club, outdoors … wherever you need it.

Rack Mount Adaptors Included

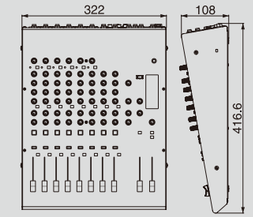
Use your MG mixer on a desktop or mounted in a rack — the rack mount adaptors are provided.

Easy Operation and High Reliability

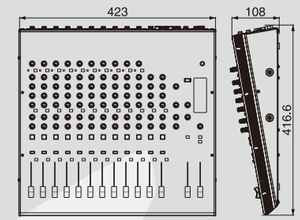
All switches and controls used in these mixers have been chosen for smooth, reliable operation as well as easy visual confirmation.

DIMENSIONS

MG12/4



MG16/4



NEW

MG12/4FX
MIXING CONSOLE 10U

MG16/6FX
MIXING CONSOLE 10U

MG12/4FX

MG16/6FX

All The Effect Processing You Need Built In

If the idea of having some of the finest effects available built right into the console appeals to you, then consider the effect-enabled models: the MG12/4FX or MG16/6FX. You get the same type of versatile mixing power and superior audio performance that is provided by the non-effect models, plus leading Yamaha signal processing quality all in one console.

INPUT SECTION

12 or 16 Input Channels
The MG12/4FX feature a total of 12 input channels: four mono microphone/line inputs and four stereo line inputs, two of which offer mono microphone input capability. The MG16/6FX feature eight mono microphone/line inputs and four stereo line inputs, two with mono microphone input capability. Gain trim covers a wide -60dB ~ -16dB range for microphone input, and -34dB ~ +10dB for line input.

A Variety of Input Connectors
Balanced XLR connectors are provided on all four or eight mono inputs and two of the stereo inputs (a total of six XLR connectors on the MG12/4FX model, and ten on the MG16/6FX), in addition to phone jack connectors. Two of the stereo channels can accept mono microphone input either via the XLR or phone jack connectors. The remaining two stereo inputs feature both phone jack and pin jack inputs for broad connectivity. A separate stereo 2TR input with pin-jack connectors is provided for independent input of signals from CD players or similar sources.

Six or Ten Low-noise, High-precision Mic Preamps
Six high-performance head amplifiers in the 12-channel modes or ten in the 16-channel models will bring out the best in any dynamic or condenser microphone.

Phantom Power
All high-performance mic preamps in these consoles feature switchable phantom power for studio condenser microphones. A single switch turns phantom power on or off for all channels.

Insert I/O
Mono input channels feature insert I/O patch points so you can add compressors or EQ for vocals, a noise gate on a guitar channel, or other extra signal processing to individual channels as required.

3-band Channel EQ & HPF (MG12/4FX)
Smooth, "musical-response" 3-band equalizers are provided on the MG12/4FX input channels. All mono microphone input channels also feature a switchable high-pass filter that can be used to cut out unwanted low-frequency noise.

Versatile EQ for Effective Sound Shaping (MG16/6FX)
Mono channels feature 3-band equalizers with HIGH (10 kHz), LOW (100 Hz), and MID (250 Hz ~ 5 kHz mid-sweep) bands. High-pass filters are also provided on all microphone inputs. Stereo channels have 4-band equalizers with HIGH (10 kHz shelving), HI MID (3 kHz peaking), LOW MID (800 Hz peaking), and LOW (100 Hz shelving) bands.

Four or Six Buses (Stereo and Group)
In addition to the main stereo bus, the MG12/4FX feature a stereo group bus and outputs that can be used for convenient channel grouping. The MG16/6FX has an additional two group busses for a total of six buses. Stereo and group bus assign switches are located above each channel fader. You could, for example, mix your instrument sources to the stereo buss while creating separate groups for the main vocal and chorus channels … or any bus configuration you need for your application.

MASTER SECTION

Aux and Effect Sends & Stereo Aux Return
The MG16/6FX has one pre-fader AUX send and one pre/post switchable AUX send, plus an additional effect send. The MG12/4FX has one pre/post switchable AUX send as well as an effect send. Whichever model you choose you have plenty of flexibility for external signal processing and monitoring. A stereo auxiliary return is also provided.

A Comprehensive Selection Of Output Connectors
In addition to the main L and R XLR and phone-jack stereo outputs, these versatile mixers also offer phone-jack control room, pin-jack recording, and stereo phone-jack headphone outputs. You have plenty of outputs for a wide range of applications – monitoring, master recorder feed, etc. Phone-jack group outputs are also provided to allow independent output of the group bus mixes.

12-segment Meters for Accurate Visual Monitoring
Output level monitoring is made accurate and easy with high-visibility 12-segment level meters on the stereo and group buses as well as the 2TR inputs.

EASE OF USE

Top-quality Digital Effects Built In
Yamaha digital signal processing is widely respected as the finest in the industry. It may be small, but the MG12/4FX is packed with a surprising amount of signal-processing power. Renowned Yamaha multi-effect technology brings you a range of reverb, delay, chorus, flanger, phaser, distortion, and other effects built in a total of 16 types in all. In the MG16/6FX you get a complete effects system with a range of 16 superb reverb and delay effects built right in. Each effect program has a number of editable parameters as well as effect on/off switching and return level control. Additional convenience is provided by a footswitch jack to MG12/4FX which you can connect an optional footswitch for effect on/off switching .

Effect List

MG12/4FX

1. REVERB HALL 1
2. REVERB HALL 2
3. REVERB ROOM 1
4. REVERB ROOM 2
5. REVERB STAGE 1
6. REVERB STAGE 2
7. REVERB PLATE
8. DRUM AMBIENCE
9. KARAOKE ECHO
10. VOCAL ECHO
11. CHORUS 1
12. CHORUS 2
13. FLANGER
14. PHASER
15. AUTO WAH
16. DISTORTION

MG16/6FX

1. HALL 1
2. HALL 2
3. HALL 3
4. ROOM
5. PLATE 1
6. PLATE 2
7. PLATE 3
8. GATE REVERB
9. VOCAL ECHO 1
10. VOCAL ECHO 2
11. VOCAL ECHO 3
12. VOCAL ECHO 4
13. VOCAL REVERB 1
14. VOCAL REVERB 2
15. VOCAL REVERB 3
16. VOCAL REVERB 4

7-band Stereo GEQ (MG16/6FX)
There's also a 7-band stereo graphic equalizer for flexible overall response shaping control or feedback reduction. The EQ bands are centered at 125, 250, 500, 1k, 2k, 4k, and 8kHz, adjustable over a 12dB range.

Reliable 60-millimeter Faders & Illuminated Switches
Reliable, high-performance 60-millimeter faders provide smooth, noise-free level control. while original Yamaha illuminated ON (ST buss assign), PFL (Pre-Fader Listen), and phantom power switches provide easy visual confirmation of critical console settings.

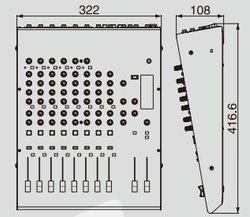
Compact, Portable Design
Compact and surprisingly light in weight, these mixers can easily be carried just about anywhere. You get top-quality mixing performance in the rehearsal studio, club, outdoors … wherever you need it.

Rack Mount Adaptors Included
Use your MG mixer on a desktop or mounted in a rack – the rack mount adaptors are provided.

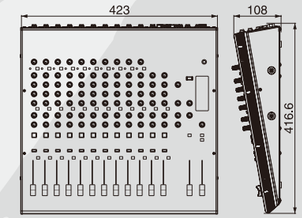
Easy Operation and High Reliability
All switches and controls used in these mixers have been chosen for smooth, reliable operation as well as easy visual confirmation.

DIMENSIONS

MG12/4FX



MG16/6FX

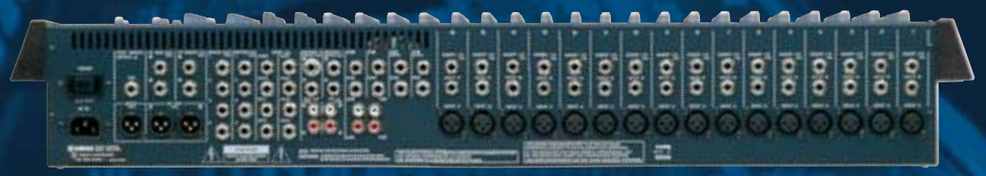


MG24/14*FX*
MIXING CONSOLE

MG32/14*FX*
MIXING CONSOLE

Panel Layout

MG24/14*FX*



MG32/14*FX*

Serious Capacity For Sound Reinforcement & Installations

If your application is live sound reinforcement you'll want all the channel capacity you can get — just in case. Vocal mics, instrument mics, stereo keyboards, direct-injection feeds, drum mics, and the rest can add up very quickly. With 24 and 32 input channels, respectively, the MG24/14FX and MG32/14FX are ready to handle all but the most ambitious sound-reinforcement setups. And with dual SPX digital effect systems on-board you won't need racks of outboard gear to get the sound you need. There's also a comprehensive range of group and auxiliary busses to make even complex mixes easy.

INPUT SECTION

24 or 32 Input Channels
Choose either the 24-channel MG24/14FX or the 32-channel MG32/14FX according to your needs. All other features are the same. The MG24/14FX has 16 mono microphone/line channels while the MG32/14FX has 24. Both offer four stereo line channels in addition to the mono mic/line channels. Gain trim covers a wide -60dB ~ -16dB range for microphone input, and -34dB ~ +10dB for line input. Peak indicators are also provided for effect input gain setup.

A Variety of Input Connectors
Balanced XLR and phone-jack connectors are provided on all mono inputs (channels 1 ~ 16 on the MG24/14FX, and channels 1 ~ 24 on the MG32/14FX). Two of the stereo channels feature both pin-jack and phone jack connectors. A separate stereo 2TR input with pin-jack connectors is provided for independent input of signals from CD players or similar sources.

Low-noise, High-precision Mic Preamps
All 16 mic preamps in the MG24/14FX and all 24 mic preamps in the MG32/14FX are of exemplary quality. They offer low-noise, transparent amplification with the widest possible range of dynamic and condenser microphones, which adds up to cleaner, better-sounding mixes.

Switchable Phantom Power
All mic preamps feature switchable +48V phantom power for phantom-powered studio condenser microphones. Phantom power is switchable in 8-channel groups.

Insert I/O
All mono input channels feature insert I/O patch points so you can insert compressors, EQ, or other extra signal-processing gear into the channel signal path as required. Insert patch points are also provided on the stereo and group buses for effective output processing.

Versatile EQ for Effective Sound Shaping
Mono channels feature 3-band equalizers with HIGH (10 kHz), LOW (100 Hz), and MID (250 Hz ~ 5 kHz sweep) bands. High-pass filters are also provided on all microphone inputs. Stereo channels have 4-band equalizers with HIGH (10 kHz shelving), HI MID (3 kHz peaking), LOW MID (800 Hz peaking), and LOW (100 Hz shelving) bands.

MASTER SECTION

14 Buses In All For Flexible Signal Routing
In addition to lots of input channels, live sound reinforcement applications usually demand a number of additional mixes – usually in the form of group sub-mixes and aux sends for external signal processing and monitor mixes. In both the MG24/14FX and MG32/14FX you have a total of 14 mix buses: the main stereo program bus, four stereo group bus pairs for convenient channel grouping, six auxiliary busses (four configurable for pre- or post-fader operation and two set up as effect sends), and two internal effect busses that feed the dual high-performance built-in effect processors. You can use the bus select switches and controls on each channel to assign the channel signal to the stereo, group, internal effect, and AUX buses as required.

Six Aux Sends & Two Stereo Aux Returns
All input channels feature six AUX send controls. AUX sends 1 through 4 are pre/post switchable while AUX 5 and 6 are post-fader sends. Two effect sends are also provided. You choose you have plenty of flexibility for external signal processing and monitoring in live sound-reinforcement applications. Two stereo auxiliary returns are included, as well as return facilities for the internal effect stages.

A Comprehensive Selection Of Output Connectors
In addition to the main L and R XLR and phone-jack stereo outputs, these versatile mixers also offer L and R phone-jack sub-stereo, pin-jack recording, XLR mono, and stereo phone-jack headphone outputs. You have plenty of outputs for a wide range of applications – monitoring, master recorder feed, etc. Phone-jack group outputs are also provided to allow independent output of the group bus mixes.

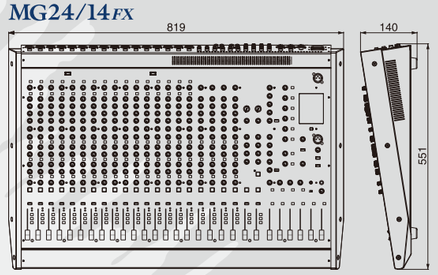
Balanced XLR Stereo and Mono Outputs
Professional connectivity is provided by reliable XLR-type balanced stereo and mono outputs.

Sweepable LPF for Mono Out
One of the many uses for a mono output is to drive a subwoofer system. The MG24/14FX and MG32/14FX make this easier than ever with a built-in 80 ~ 120 Hz sweepable low-pass filter on the mono outputs.

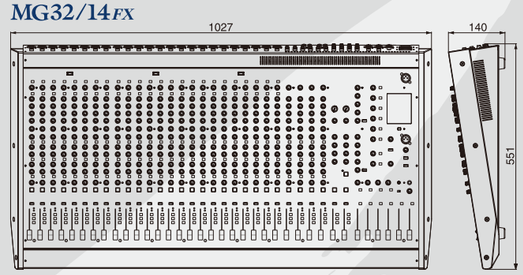
12-segment Meters for Accurate Visual Monitoring
Output level monitoring is made accurate and easy with four high-visibility 12-segment level meters that can be switched to display the stereo, group, 2TR input, PFL (Pre-fader Listen), and AFL (After-fader Listen) signal levels.

DIMENSIONS

MG24/14*FX*



MG32/14*FX*



EASE OF USE

Dual SPX Digital Effects
SPX DIGITAL MULTI EFFECT PROCESSOR

In the MG24/14FX and MG32/14FX you have not one, but two high-performance digital signal processing stages, fed by separate effect buses, so you can enhance your mix with two separate effects at the same time. And the effects are provided by the very latest Yamaha DSP technology – you know you're getting the best.
Each stage provides a selection of 16 professional-quality SPX digital effects, including reverb, delay, pitch change, chorus, phasing, vocal doubling, distortion, and more.
Parameter controls that can be adjusted to tailor the effects to your sonic requirement are also provided and Tap delay makes it easy to produce tempo-synchronized delays.

Effect List

Effect A	Effect B
1. REVERB HALL	1. REVERB HALL
2. REVERB ROOM	2. REVERB ROOM
3. REVERB PLATE	3. REVERB PLATE
4. REVERB VOCAL 1	4. REVERB VOCAL 1
5. REVERB VOCAL 2	5. REVERB VOCAL 2
6. VOCAL ECHO 1	6. VOCAL ECHO 1
7. VOCAL ECHO 2	7. VOCAL ECHO 2
8. DELAY 1	8. DELAY 1
9. DELAY 2	9. DELAY 2
10. MOD.DELAY	10. EARLY REF.
11. REVERB GATE	11. GATE REVERB
12. PITCH CHANGE	12. VOCAL DOUBLER
13. CHORUS	13. SYNPHONIC
14. PHASER	14. FLANGE
15. RADIO VOICE	15. DISTORTION
16. TREMOLO	16. TAP DELAY

Reliable 60-millimeter Faders & Illuminated Switches
Reliable, high-performance 60-millimeter faders provide smooth, noise-free level control. while original Yamaha illuminated ON (ST buss assign), PFL (Pre-Fader Listen), and phantom power switches provide easy visual confirmation of critical console settings.

Talkback Input
Communication capability is important for efficient setup as well as for keeping a show running smoothly. The MG24/14FX and MG32/14FX both feature a talkback system that allows the FOH engineer to communicate with the monitor engineer, performers, or other staff to keep the team operating at optimum efficiency.

Compact, Portable Design
Compact and surprisingly light in weight, these mixers can easily be carried just about anywhere. You get top-quality mixing performance in the rehearsal studio, club, outdoors … wherever you need it.

MG Series Specifications

MG10/2 INPUT CHARACTERISTICS

Connection	Gain Trim	Actual Load Impedance	For Use With Nominal	Input Level *1		Connector In Mixer
				Nominal	Max. before Clip	
CH IN MIC (1 – 2)	-60	3 kΩ	50 – 600 Ω Mics	-60 dBu (0.775 mV)	-40 dBu (7.75 mV)	XLR-3-31 type *2
	-16			-16 dBu (123 mV)	+4 dBu (1.23 V)	
CH IN LINE (1 – 2)	-34	10 kΩ	600 Ω Lines	-34 dBu (15.5 mV)	-14 dBu (155 mV)	Phone Jack (TRS) *3
	10			+10 dBu (2.45 V)	+30 dBu (24.5 V)	
ST CH MIC IN (CH 3 – 4, 5 – 6)	-60	3 kΩ	50 – 600 Ω Mics	-60 dBu (0.775 mV)	-40 dBu (7.75 mV)	XLR-3-31 type *2
	-16			-16 dBu (123 mV)	-10 dBu (245 mV)	
ST CH LINE IN (CH 3 – 4, 5 – 6)	-34	10 kΩ	600 Ω Lines	-34 dBu (15.5 mV)	-14 dBu (155 mV)	Phone Jack *4
	10			+10 dBu (2.45 V)	+30 dBu (24.5 V)	
ST CH INPUT (CH 7 – 8, 9 – 10)		10 kΩ	600 Ω Lines	-10 dBu (245 mV)	+10 dBu (2.45 V)	Phone Jack *4 RCA Pin Jack
CH INSERT IN (1 – 2)		10 kΩ	600 Ω Lines	0 dBu (0.775 V)	+20 dBu (7.75 V)	Phone Jack (TRS) *5
AUX RETURN [L, R]		10 kΩ	600 Ω Lines	+4 dBu (1.23 V)	+24 dBu (12.3 V)	Phone Jack *4
2TR IN [L, R]		10 kΩ	600 Ω Lines	-10 dBV (316 mV)	+10 dBV (3.16 V)	RCA Pin Jack

MG10/2 OUTPUT CHARACTERISTICS

Connection	Actual Source Impedance	For Use With Nominal	Output Level *1		Connector In Mixer
			Nominal	Max. before Clip	
ST OUT [L, R]	150 Ω	10 kΩ Lines	+4 dBu (1.23 V)	+20 dBu (7.75 V)	Phone Jack (TRS) *6
AUX SEND	150 Ω	10 kΩ Lines	+4 dBu (1.23 V)	+20 dBu (7.75 V)	Phone Jack (TRS) *6
CH INSERT OUT (1 – 2)	150 Ω	10 kΩ Lines	0 dBu (0.775 V)	+20 dBu (7.75 V)	Phone Jack (TRS) *5
2TR OUT [L, R]	600 Ω	10 kΩ Lines	-10 dBV (316 mV)	+10 dBV (3.16 V)	RCA Pin Jack
C-R OUT [L, R]	150 Ω	10 kΩ Lines	+4 dBu (1.23 V)	+20 dBu (7.75 V)	Phone Jack (TRS) *6
PHONES OUT	100 Ω	40 Ω Phones	3 mW	75 mW	Stereo Phones Jack

MG8/2FX INPUT CHARACTERISTICS

Connection	Gain Trim	Actual Load Impedance	For Use With Nominal	Input Level *1		Connector In Mixer
				Nominal	Max. before Clip	
CH IN MIC (1 – 2)	-60	3 kΩ	50 – 600 Ω Mics	-60 dBu (0.775 mV)	-40 dBu (7.75 mV)	XLR-3-31 type *2
	-16			-16 dBu (123 mV)	+4 dBu (1.23 V)	
CH IN LINE (1 – 2)	-34	10 kΩ	600 Ω Lines	-34 dBu (15.5 mV)	-14 dBu (155 mV)	Phone Jack (TRS) *3
	10			+10 dBu (2.45 V)	+30 dBu (24.5 V)	
ST CH MIC IN (CH 3 – 4, 5 – 6)	-60	3 kΩ	50 – 600 Ω Mics	-60 dBu (0.775 mV)	-40 dBu (7.75 mV)	XLR-3-31 type *2
	-16			-16 dBu (123 mV)	-10 dBu (245 mV)	
ST CH LINE IN (CH 3 – 4, 5 – 6)	-34	10 kΩ	600 Ω Lines	-34 dBu (15.5 mV)	-14 dBu (155 mV)	Phone Jack *4
	10			+10 dBu (2.45 V)	+30 dBu (24.5 V)	
ST CH INPUT (CH 7 – 8)		10 kΩ	600 Ω Lines	-10 dBu (245 mV)	+10 dBu (2.45 V)	Phone Jack *4 RCA Pin Jack
CH INSERT IN (1 – 2)		10 kΩ	600 Ω Lines	0 dBu (0.775 V)	+20 dBu (7.75 V)	Phone Jack (TRS) *5
AUX RETURN [L, R]		10 kΩ	600 Ω Lines	+4 dBu (1.23 V)	+24 dBu (12.3 V)	Phone Jack *4
2TR IN [L, R]		10 kΩ	600 Ω Lines	-10 dBV (316 mV)	+10 dBV (3.16 V)	RCA Pin Jack

MG8/2FX OUTPUT CHARACTERISTICS

Connection	Actual Source Impedance	For Use With Nominal	Output Level *1		Connector In Mixer
			Nominal	Max. before Clip	
ST OUT [L, R]	150 Ω	10 kΩ Lines	+4 dBu (1.23 V)	+20 dBu (7.75 V)	Phone Jack (TRS) *6
EFFECT SEND	150 Ω	10 kΩ Lines	+4 dBu (1.23 V)	+20 dBu (7.75 V)	Phone Jack (TRS) *6
CH INSERT OUT (1 – 2)	150 Ω	10 kΩ Lines	0 dBu (0.775 V)	+20 dBu (7.75 V)	Phone Jack (TRS) *5
2TR OUT [L, R]	600 Ω	10 kΩ Lines	-10 dBV (316 mV)	+10 dBV (3.16 V)	RCA Pin Jack
C-R OUT [L, R]	150 Ω	10 kΩ Lines	+4 dBu (1.23 V)	+20 dBu (7.75 V)	Phone Jack (TRS) *6
PHONES OUT	100 Ω	40 Ω Phones	3 mW	75 mW	Stereo Phones Jack

MG12/4, MG16/4 INPUT CHARACTERISTICS

Connection	Gain Trim	Actual Load Impedance	For Use With Nominal	Input Level *1		Connector In Mixer
				Nominal	Max. before Clip	
CH IN MIC *7	-60	3 kΩ	50 – 600 Ω Mics	-60 dBu (0.775 mV)	-40 dBu (7.75 mV)	XLR-3-31 type *2
	-16			-16 dBu (123 mV)	+4 dBu (1.23 V)	
CH IN LINE *7	-34	10 kΩ	600 Ω Lines	-34 dBu (15.5 mV)	-14 dBu (155 mV)	Phone Jack (TRS) *3
	10			+10 dBu (2.45 V)	+30 dBu (24.5 V)	
ST CH MIC IN *8	-60	3 kΩ	50 – 600 Ω Mics	-60 dBu (0.775 mV)	-40 dBu (7.75 mV)	XLR-3-31 type *2
	-16			-16 dBu (123 mV)	-10 dBu (245 mV)	
ST CH LINE IN *8	-34	10 kΩ	600 Ω Lines	-34 dBu (15.5 mV)	-14 dBu (155 mV)	Phone Jack *4
	10			+10 dBu (2.45 V)	+30 dBu (24.5 V)	
ST CH INPUT *9		10 kΩ	600 Ω Lines	-10 dBu (245 mV)	+10 dBu (2.45 V)	Phone Jack *4 RCA Pin Jack
CH INSERT IN *7		10 kΩ	600 Ω Lines	0 dBu (0.775 V)	+20 dBu (7.75 V)	Phone Jack (TRS) *5
AUX RETURN [L, R]		10 kΩ	600 Ω Lines	+4 dBu (1.23 V)	+24 dBu (12.3 V)	Phone Jack *3
2TR IN [L, R]		10 kΩ	600 Ω Lines	-10 dBV (316 mV)	+10 dBV (3.16 V)	RCA Pin Jack

MG12/4, MG16/4 OUTPUT CHARACTERISTICS

Connection	Actual Source Impedance	For Use With Nominal	Output Level *1		Connector In Mixer
			Nominal	Max. before Clip	
ST OUT [L, R]	150 Ω	600 Ω Lines	+4 dBu (1.23 V)	+24 dBu (12.3 V)	XLR-3-32 type *2 Phone Jack (TRS) *13
GROUP OUT (1 – 2)	150 Ω	10 kΩ Lines	+4 dBu (1.23 V)	+20 dBu (7.75 V)	Phone Jack (TRS) *6
CH INSERT OUT *7	150 Ω	10 kΩ Lines	0 dBu (0.775 V)	+20 dBu (7.75 V)	Phone Jack (TRS) *5
REC OUT [L, R]	600 Ω	10 kΩ Lines	-10 dBV (245 mV)	+10 dBV (2.45 V)	RCA Pin Jack
C-R OUT [L, R]	150 Ω	10 kΩ Lines	+4 dBu (1.23 V)	+20 dBu (7.75 V)	Phone Jack (TRS) *6
PHONES OUT	100 Ω	40 Ω Phones	3 mW	75 mW	Stereo Phones Jack

*1 In these specifications, when dB represents a specific voltage, 0 dB is referenced to 0.775 Vrms.
*2 XLR type connectors are balanced.
*3 CH INPUT Phone Jacks (TRS) are balanced. [T: HOT, R: COLD, S: GND]
*4 Phone Jacks are unbalanced.
*5 INSERT Phone Jacks (TRS) are unbalanced. [T: OUT, R: IN, S: GND]
*6 Phone Jacks (TRS) are impedance balanced. [T: HOT, R: COLD, S: GND]
*7 MG12/4: CH1 – CH4, MG16/4: CH1 – CH8, MG16/6FX: CH9 (L)/10 (R), CH11 (L)/12 (R), MG24/14FX: CH1 – 16, MG32/14FX: CH1 – 24
*8 MG12/4: CH5 (L)/6 (R), CH7 (L)/8 (R), MG16/4: CH9 (L)/10 (R), CH11 (L)/12 (R), MG16/6FX: CH13 (L)/14 (R), CH15 (L)/16 (R), MG24/14FX: CH17 (L)/18 (R), CH19 (L)/20 (R), MG32/14FX: CH25 (L)/26 (R), CH27 (L)/28 (R)
*9 MG12/4: CH9 (L)/10 (R), CH11 (L)/12 (R), MG16/4: CH13 (L)/14 (R), CH15 (L)/16 (R), MG24/14FX: CH21 (L)/22 (R), CH23 (L)/24 (R), MG32/14FX: CH29 (L)/30 (R), CH31 (L)/32 (R)
*10 CH INPUT XLR type connectors and Phone Jacks (TRS) are balanced. [T: HOT, R: COLD, S: GND]
*11 TB IN XLR type connector is unbalanced.
*12 MG24/14FX: CH1 – 16, MG32/14FX: CH1 – 24
*13 Phone Jacks (TRS) are balanced. [T:HOT, R:COLD, S:GND]

MG12/4FX INPUT CHARACTERISTICS

Connection	Gain Trim	Actual Load Impedance	For Use With Nominal	Input Level *1		Connector In Mixer
				Nominal	Max. before Clip	
CH IN MIC (CH1 – 4)	-60	3 kΩ	50 – 600 Ω Mics	-60 dBu (0.775 mV)	-40 dBu (7.75 mV)	XLR-3-31 type *2
	-16			-16 dBu (123 mV)	+4 dBu (1.23 V)	
CH IN LINE (CH1 – 4)	-34	10 kΩ	600 Ω Lines	-34 dBu (15.5 mV)	-14 dBu (155 mV)	Phone Jack (TRS) *3
	10			+10 dBu (2.45 V)	+30 dBu (24.5 V)	
ST CH MIC IN (CH 5 – 6, 7 – 8)	-60	3 kΩ	50 – 600 Ω Mics	-60 dBu (0.775 mV)	-40 dBu (7.75 mV)	XLR-3-31 type *2
	-16			-16 dBu (123 mV)	-10 dBu (245 mV)	
ST CH LINE IN (CH 5 – 6, 7 – 8)	-34	10 kΩ	600 Ω Lines	-34 dBu (15.5 mV)	-14 dBu (155 mV)	Phone Jack *4
	10			+10 dBu (2.45 V)	+30 dBu (24.5 V)	
ST CH INPUT (CH 9 – 10, 11 – 12)		10 kΩ	600 Ω Lines	-10 dBu (245 mV)	+10 dBu (2.45 V)	Phone Jack *4 RCA Pin Jack
CH INSERT IN (1 – 8)		10 kΩ	600 Ω Lines	0 dBu (0.775 V)	+20 dBu (7.75 V)	Phone Jack (TRS) *5
RETURN [L, R]		10 kΩ	600 Ω Lines	+4 dBu (1.23 V)	+24 dBu (12.3 V)	Phone Jack *4
2TR IN [L, R]		10 kΩ	600 Ω Lines	-10 dBV (316 mV)	+10 dBV (3.16 V)	RCA Pin Jack

MG12/4FX OUTPUT CHARACTERISTICS

Connection	Actual Source Impedance	For Use With Nominal	Output Level *1		Connector In Mixer
			Nominal	Max. before Clip	
ST OUT [L, R]	150 Ω	600 Ω Lines	+4 dBu (1.23 V)	+24 dBu (12.3 V)	XLR-3-32 type *2 Phone Jack (TRS) *4
GROUP OUT (1, 2) AUX SEND (1, 2) EFFECT SEND	150 Ω	10 kΩ Lines	+4 dBu (1.23 V)	+20 dBu (7.75 V)	Phone Jack (TRS) *13
CH INSERT OUT (CH1 – 4)	150 Ω	10 kΩ Lines	0 dBu (0.775 V)	+20 dBu (7.75 V)	Phone Jack (TRS) *5
REC OUT [L, R]	600 Ω	10 kΩ Lines	-10 dBV (316 mV)	+10 dBV (3.16 V)	RCA Pin Jack
C-R OUT [L, R]	150 Ω	10 kΩ Lines	+4 dBu (1.23 V)	+20 dBu (7.75 V)	Phone Jack (TRS) *6
PHONES OUT	100 Ω	40 Ω Phones	3 mW	75 mW	Stereo Phones Jack

MG16/6FX INPUT CHARACTERISTICS

Connection	Gain Trim	Actual Load Impedance	For Use With Nominal	Input Level *1		Connector In Mixer
				Nominal	Max. before Clip	
CH IN MIC (CH1 – 8)	-60	3 kΩ	50 – 600 Ω Mics	-60 dBu (0.775 mV)	-40 dBu (7.75 mV)	XLR-3-31 type *2
	-16			-16 dBu (123 mV)	+4 dBu (1.23 V)	
CH IN LINE (CH1 – 8)	-34	10 kΩ	600 Ω Lines	-34 dBu (15.5 mV)	-14 dBu (155 mV)	Phone Jack (TRS) *6
	10			+10 dBu (2.45 V)	+30 dBu (24.5 V)	
ST CH MIC IN *7	-60	3 kΩ	50 – 600 Ω Mics	-60 dBu (0.775 mV)	-40 dBu (7.75 mV)	XLR-3-31 type *2
	-16			-16 dBu (123 mV)	-10 dBu (245 mV)	
ST CH LINE IN *7	-34	10 kΩ	600 Ω Lines	-34 dBu (15.5 mV)	-14 dBu (155 mV)	Phone Jack *4
	10			+10 dBu (2.45 V)	+30 dBu (24.5 V)	
ST CH INPUT *8		10 kΩ	600 Ω Lines	-10 dBu (245 mV)	+10 dBu (2.45 V)	Phone Jack *4 RCA Pin Jack
CH INSERT IN (1 – 8)		10 kΩ	600 Ω Lines	0 dBu (0.775 V)	+20 dBu (7.75 V)	Phone Jack (TRS) *5
AUX RETURN [L, R]		10 kΩ	600 Ω Lines	+4 dBu (1.23 V)	+24 dBu (12.3 V)	Phone Jack *4
2TR IN [L, R]		10 kΩ	600 Ω Lines	-10 dBV (316 mV)	+10 dBV (3.16 V)	RCA Pin Jack

MG16/6FX OUTPUT CHARACTERISTICS

Connection	Actual Source Impedance	For Use With Nominal	Output Level *1		Connector In Mixer
			Nominal	Max. before Clip	
ST OUT [L, R]	150 Ω	600 Ω Lines	+4 dBu (1.23 V)	+24 dBu (12.3 V)	XLR-3-32 type *2 Phone Jack (TRS) *13
GROUP OUT (1 – 4) AUX SEND (1, 2) EFFECT SEND	150 Ω	10 kΩ Lines	+4 dBu (1.23 V)	+20 dBu (7.75 V)	Phone Jack (TRS) *6
CH INSERT OUT (CH1 – 8)	150 Ω	10 kΩ Lines	0 dBu (0.775 V)	+20 dBu (7.75 V)	Phone Jack (TRS) *5
REC OUT [L, R]	600 Ω	10 kΩ Lines	-10 dBV (316 mV)	+10 dBV (3.16 V)	RCA Pin Jack
C-R OUT [L, R]	150 Ω	10 kΩ Lines	+4 dBu (1.23 V)	+20 dBu (7.75 V)	Phone Jack (TRS) *6
PHONES OUT	100 Ω	40 Ω Phones	3 mW	75 mW	Stereo Phones Jack

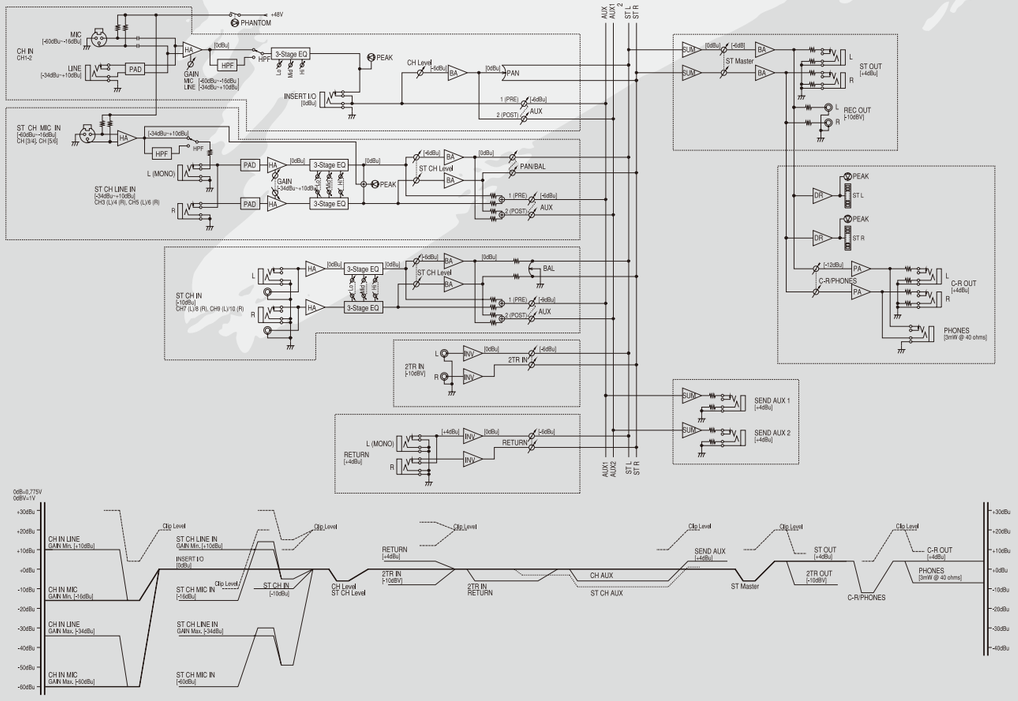
MG24/14FX, MG32/14FX INPUT CHARACTERISTICS

Connection	PAD	Gain Trim	Actual Load Impedance	For Use With Nominal	Input Level *1		Connector In Mixer
					Nominal	Max. before Clip	
CH INPUT [A, B] *7	0	-60	3 kΩ	50 – 600 Ω Mics 600 Ω Lines	-60 dBu (0.775 mV)	-40 dBu (7.75 mV)	A: XLR-3-31 type *10 B: Phone Jack (TRS) *10
	26				-34 dBu (15.5 mV)	-14 dBu (155 mV)	
	0	-16			-16 dBu (123 mV)	+4 dBu (1.23 V)	
	26				+10 dBu (2.45 V)	+30 dBu (24.5 V)	
ST CH INPUT *8 *9		-34	10 kΩ	600 Ω Lines	-34 dBu (15.5 mV)	-14 dBu (155 mV)	Phone Jack *8 *9 *7 RCA Pin Jack *9
		10			+10 dBu (2.45 V)	+30 dBu (24.5 V)	
CH INSERT IN *7			10 kΩ	600 Ω Lines	0 dBu (0.775 V)	+20 dBu (7.75 V)	Phone Jack (TRS) *5
GROUP INSERT IN (1 – 4)			10 kΩ	600 Ω Lines	0 dBu (0.775 V)	+20 dBu (7.75 V)	
SUB IN (1, 2) [L, R]			10 kΩ	600 Ω Lines	+4 dBu (1.23 V)	+24 dBu (12.3 V)	Phone Jack *4
TB IN			10 kΩ	50 – 600 Ω Mics	-50 dBu (2.45 mV)	-30 dBu (24.5 mV)	XLR-3-31 type *11
2TR IN [L, R]			10 kΩ	600 Ω Lines	-10 dBV (316 mV)	+10 dBV (3.16 V)	RCA Pin Jack

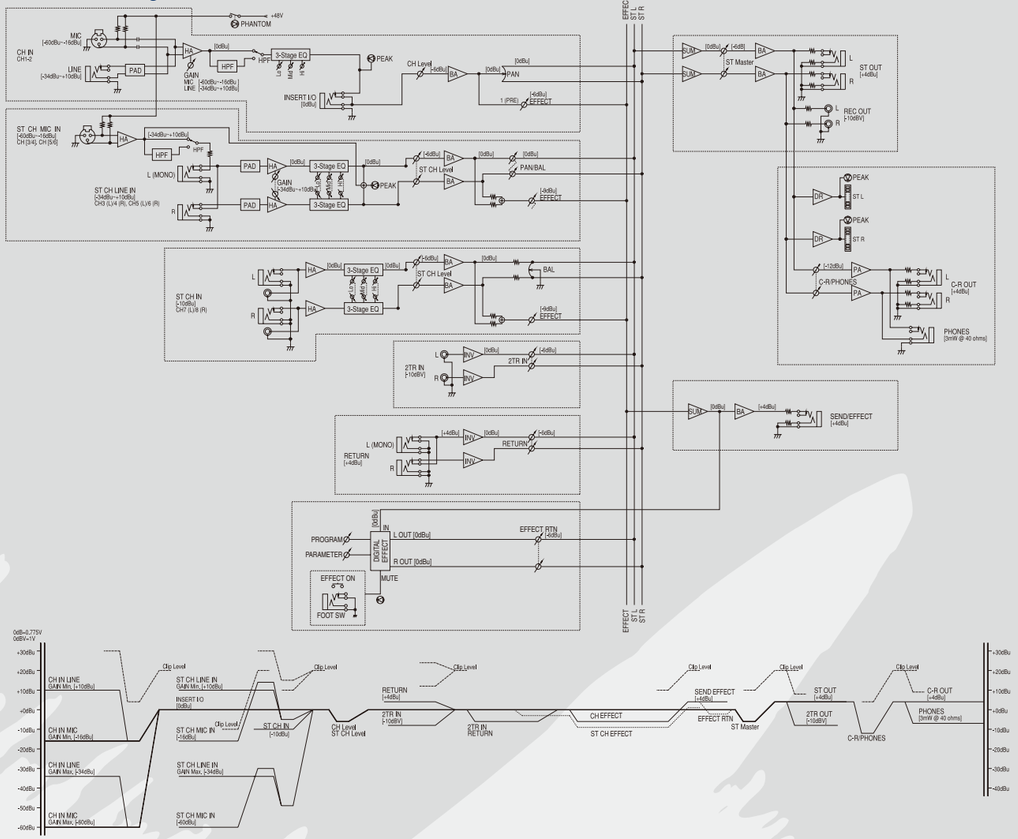
MG24/14FX, MG32/14FX OUTPUT CHARACTERISTICS

Connection	Actual Source Impedance	For Use With Nominal	Output Level *1		Connector In Mixer
			Nominal	Max. before Clip	
ST OUT [L, R] MONO OUT	150 Ω	600 Ω Lines	+4 dBu (1.23 V)	+24 dBu (12.3 V)	XLR-3-32 type *2
GROUP OUT (1 – 4) AUX OUT (1 – 6)	150 Ω	600 Ω Lines	+4 dBu (1.23 V)	+20 dBu (7.75 V)	Phone Jack (TRS) *6
ST SUB OUT [L, R] EFFECT OUT (1, 2)	150 Ω	10 kΩ Lines	+4 dBu (1.23 V)	+20 dBu (7.75 V)	Phone Jack (TRS) *6
CH INSERT OUT *12 GROUP INSERT OUT (1 – 4) ST INSERT OUT [L, R]	150 Ω	10 kΩ Lines	0 dBu (0.775 V)	+20 dBu (7.75 V)	Phone Jack (TRS) *5
REC OUT [L, R]	600 Ω	10 kΩ Lines	-10 dBV (316 mV)	+10 dBV (3.16 V)	RCA Pin Jack
PHONES OUT	100 Ω	40 Ω Phones	3 mW	75 mW	Stereo Phone Jack

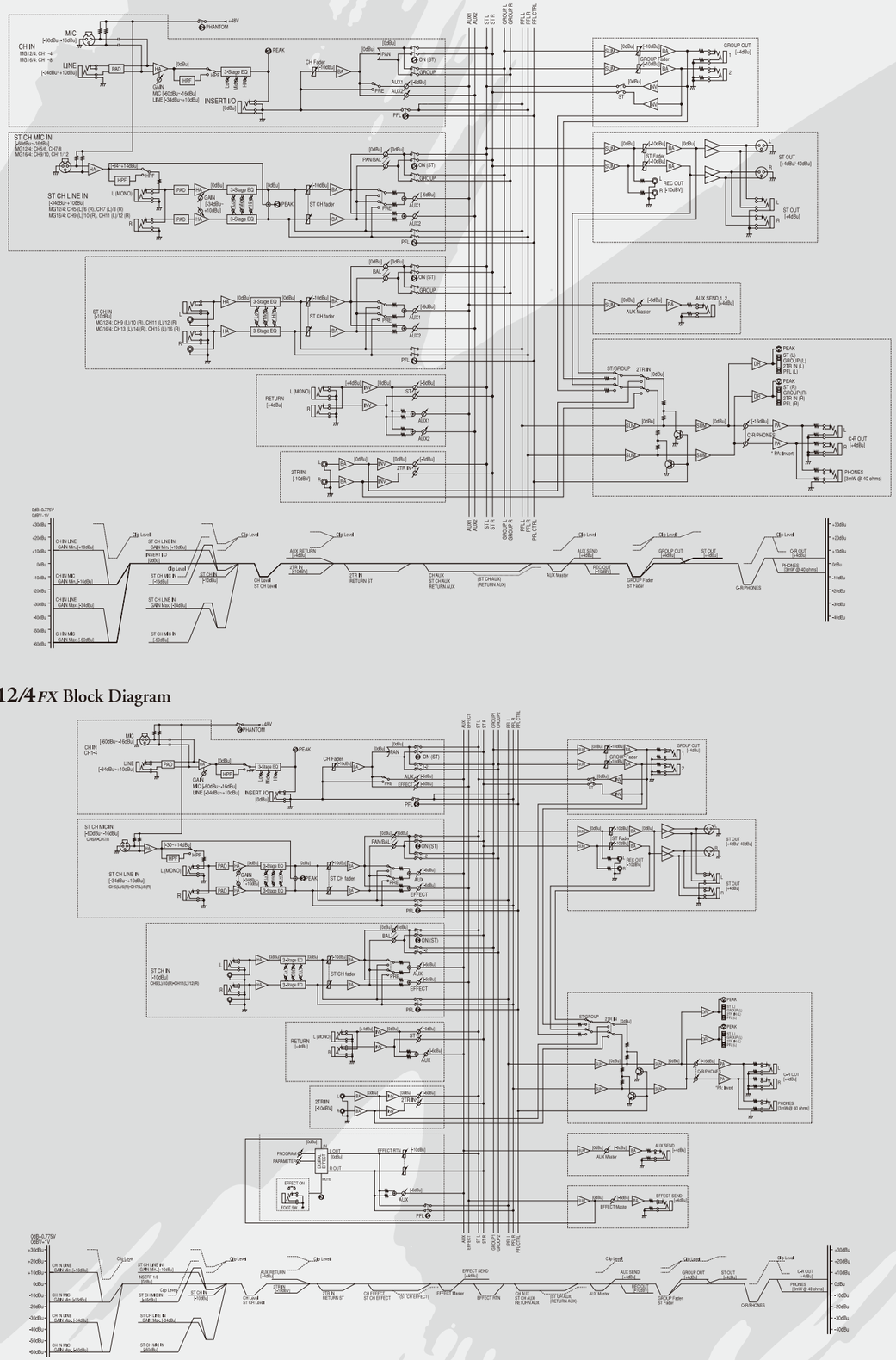
MG10/2 Block Diagram



MG8/2FX Block Diagram

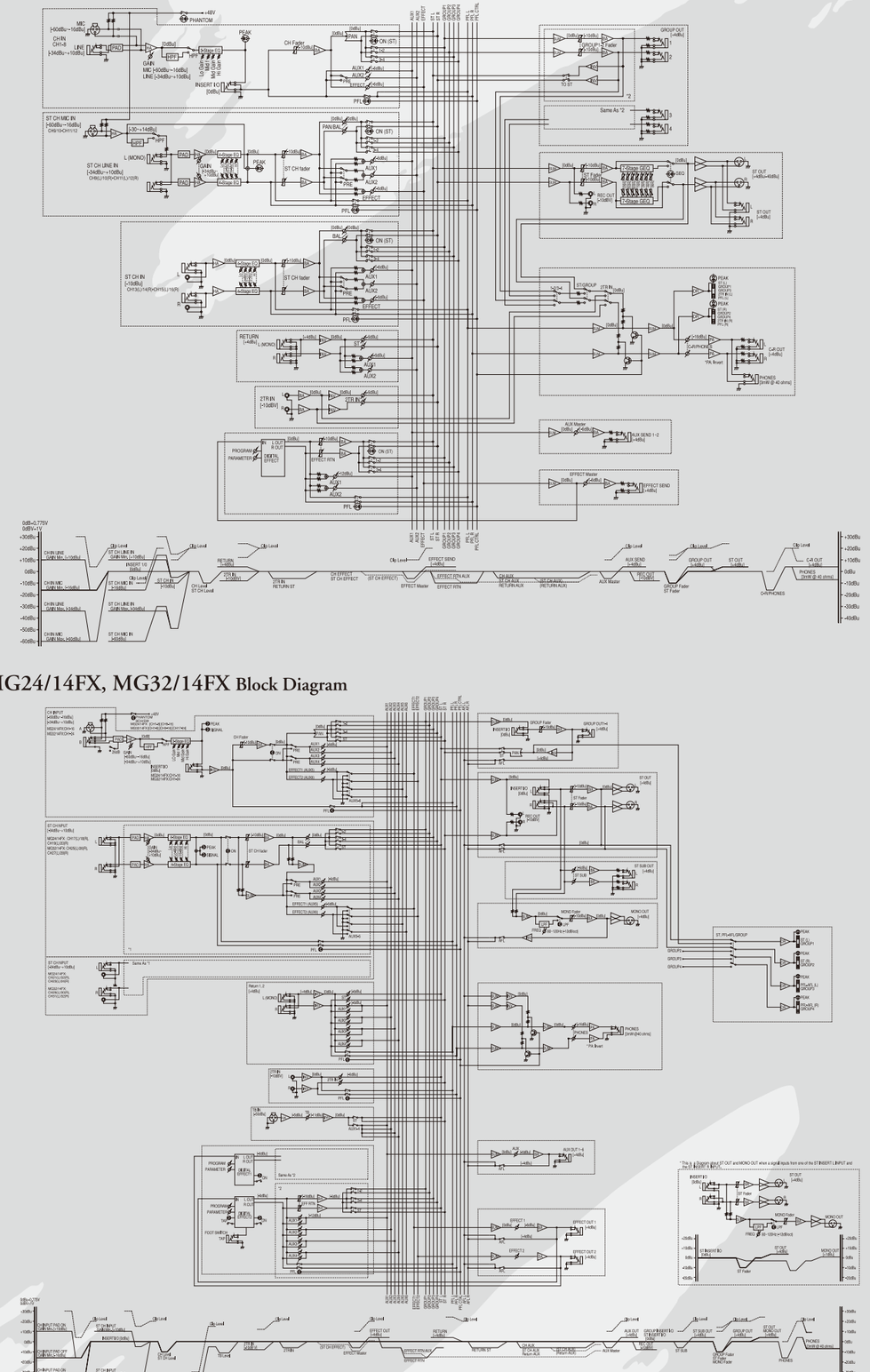


MG12/4, MG16/4 Block Diagram



MG12/4*FX* Block Diagram

MG16/6FX Block Diagram



MG24/14FX, MG32/14FX Block Diagram