



LEM
by GENERALMUSIC

PERFORMANCE

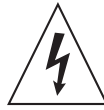
SERIES

LOUDSPEAKER SYSTEMS

MANUALE D'USO
OWNER'S MANUAL

Italiano
English

CODE: 277.387



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure, that may be of sufficient magnitude to constitute a risk of electric shock to persons.



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

IMPORTANT SAFETY INSTRUCTIONS

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK OR INJURY TO PERSONS

WARNING - When using electric products, basic precautions should always be followed, including the following:

1. Read all the SAFETY INSTRUCTIONS before using the product.
2. To reduce the risk of injury, close supervision is necessary when the product is used near children.
3. Do not use this product near water - for example, near a bathtub, washbowl, kitchen sink, in a wet basement or near a swimming pool or the like.
4. This product in combination with headphones or an amplifier, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
5. This product should be located so that its location or position does not interfere with its proper ventilation.
6. This product should be located away from heat sources such as radiators, heat registers or other products that produce heat.
7. The product should be connected to a power supply only of the type described on the operating instructions or as marked on the product.
8. This product may be equipped with a polarized line plug (one blade wider than the other). This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician to replace your obsolete outlet. Do not defeat the safety purpose of the plug.
9. The power-supply cord of the product should be unplugged from the outlet when left unused for a long period of time. When unplugging the power-supply cord, do not pull on the cord, but grasp it by the plug.
10. Care should be taken so that objects do not fall and liquid are not spilled into the enclosure through openings.
11. The product should be serviced by qualified service personnel when:
 - A. The power-supply cord or the plug has been damaged; or
 - B. Objects have fallen, or liquid has been spilled into the product; or
 - C. The product has been exposed to rain; or
 - D. The product does not appear to operate normally or exhibits a marked change in performance; or
 - E. The product has been dropped or the enclosure damaged.
12. Do not attempt to service the product beyond that described in the user-maintenance instructions. All other servicing should be referred to qualified service personnel.
13. **WARNING** - Do not place objects on the product's power cord or place it in a position where anyone could trip over, walk on or roll anything over it. Do not allow the product to rest on or to be installed over power cords of any type. Improper installations of this type create the possibility of fire hazard and/or personal injury.

SAVE THESE INSTRUCTIONS

1. Introduzione

Congratulazioni per l'acquisto dei diffusori **PERFORMANCE!**

Per un impiego corretto dei diffusori seguite le istruzioni riportate in questo manuale. Buon divertimento e buon lavoro.

2. Norme di Installazione e Uso

1. La protezione e la manutenzione.

Evitate di esporre collocare i diffusori in vicinanza di forti fonti di calore e di esporli direttamente alla luce solare, alla pioggia, all'umidità, alla polvere o ad intense vibrazioni. Lasciate l'apposita griglia di protezione sempre applicata al diffusore. In caso di avaria non aprite il diffusore, ma rivolgetevi al più vicino Centro di Assistenza GENERALMUSIC.

2. Prevenzione di possibili disturbi.

Collegando gli apparati del vostro impianto audio, ponete molta attenzione ai cosiddetti "loop di massa" che potrebbero causare ronzii: in caso di disturbi, provate ad agire sullo switch **EARTH LIFT/SHIELD** posto sul pannello controlli del diffusore.

3. Collegamenti

Prima di collegare il diffusore alla presa della corrente, accertatevi che la tensione di rete corrisponda a quella indicata sul retro dell'apparato (è accettata una tolleranza fino a $\pm 10\%$). Collegate il cavo di alimentazione al diffusore sempre prima di accenderlo e rimuovete il cavo sempre dopo aver spento il diffusore. Per evitare pericolosi picchi di segnale effettuate i collegamenti con altri apparati sempre a diffusore spento e accendete sempre prima il mixer e poi il diffusore.

4. I cavi di collegamento (fig. 4)

Per il collegamento di casse amplificate al mixer accertatevi di utilizzare sempre e solo cavi di segnale schermati costituiti da due fili più una calza che funge da schermo. L'utilizzo di cavi non schermati potrebbe determinare l'insorgere di fastidiosi ronzii e rumori di fondo. Per il collegamento di casse passive all'amplificatore di potenza accertatevi di utilizzare sempre e solo cavi di potenza costituiti solo da due fili di uguale sezione. L'utilizzo di cavi di segnale potrebbe determinare un'eccessiva dispersione di potenza. Verificate periodicamente che i cavi impiegati siano in buono stato, con le connessioni realizzate nel modo corretto e con tutti i contatti in perfetta efficienza, in modo da evitare inconvenienti come falsi contatti, rumori di massa, scariche, ecc.

3. Pannello connessioni (fig. 2)

1. Connettori XLR + JACK collegati in parallelo (LINK) per l'ingresso ed il rilancio del segnale.
2. Connettori STEREO XLR-F + JACK collegati in parallelo (LINK) per l'ingresso ed il rilancio del segnale (solo PFM15SA e PFM18SA).
3. Connettori STEREO XLR-M + JACK collegati in parallelo (LINK) per il collegamento dei satelliti (solo PFM15SA e PFM18SA).
4. Controllo per la selezione della frequenza di taglio del crossover interno da 80 a 320Hz (solo PFM15SA e PFM18SA).
5. LED SIGNAL/COMP (solo su PFM15SA e PFM18SA): segnala la presenza di segnale (VERDE) o l'intervento del compressore (ROSSO).
6. Controllo di livello del segnale inviato all'amplificatore interno.
7. Controllo di separazione della massa elettrica dalla massa del telaio.
8. Interruttore di accensione/spegnimento con LED di segnalazione.
9. Presa per il cavo di alimentazione.
10. Ingresso di potenza JACK 1/4".
11. Rilancio di potenza JACK 1/4" per il collegamento di due diffusori (solo nei modelli con impedenza a 8 ohms).
12. Uscita di potenza JACK 1/4" con taglio di crossover a 200Hz per il collegamento del satellite al sub-woofer (solo PFM15S e PFM18S).

4. Collegamenti PFM15SA e PFM18SA (fig. 3)

PFM15SA e PFM18SA possiedono due uscite bilanciate LEFT & RIGHT per il collegamento ai satelliti sia in configurazione MONO che in configurazione STEREO. Queste uscite inviano all'esterno il segnale filtrato dal CROSSOVER ATTIVO.

1. Configurazione STEREO

Collegate l'uscita RIGHT (destra) del mixer all'ingresso RIGHT del sub-woofer e l'uscita RIGHT del sub-woofer all'ingresso della cassa amplificata DESTRA. Collegate l'uscita LEFT (sinistra) del mixer all'ingresso LEFT del sub-woofer e l'uscita LEFT del sub-woofer all'ingresso della cassa amplificata SINISTRA.

2. Configurazione MONO

Collegate l'uscita DESTRA del mixer ad uno dei due ingressi (LEFT o RIGHT) del sub-woofer DESTRO e l'uscita corrispondente del sub-woofer all'ingresso della cassa amplificata di DESTRA. Collegate l'uscita SINISTRA del mixer ad uno dei due ingressi (LEFT o RIGHT) del sub-woofer SINISTRO e l'uscita corrispondente del sub-woofer all'ingresso della cassa amplificata di SINISTRA.

5. Specifiche tecniche

		PFM 10.2	PFM 12.2	PFM 15.2	PFM 15.3	PFM 15.3XL
SPECIFICHE del DIFFUSORE						
COMPONENTI	Alti	Tweeter a tromba al Niobium				Driver da 1" EWT™
	Medi					Midrange da 6"
	Bassi	Woofers da 10"	Woofers da 12"	Woofers da 15"	Woofers da 15"	2 x Woofers da 15"
POTENZA APPLICABILE (EIA RS-426A)	W continui	100	150	250	250	500
	W picco	200	300	500	500	1000
IMPEDEENZA	Ohms	8	8	4 / 8	4 / 8	4
CROSSOVER PASSIVO	Hz	5 kHz 6 dB/oct.	5 kHz 6 dB/oct.	4 kHz 6 dB/oct.	0.8 / 5 kHz 12 / 6 dB/oct.	400 @ 6dB/oct. 2600 @ 12-18dB/oct.
CONNESSIONI (versioni passive)		2 x JACK (input + link)				2 x SPEAKON (input + link)
CONSTRUZIONE		Truciolare ricoperto di moquette blu.				
DIMENSIONI	mm (LxAxP)	340x458x285	390x508x325	458x578x405	482x608x405	477x1052x430
PESO (passive / attive)	kg	9 / 12	11.5 / 15.5	16.5 / 21.5	19.5 / 24.5	27
SPECIFICHE dell'AMPLIFICATORE (versioni attive)						
POTENZA D'USCITA EIA (1kHz, max THD 1%)	W	100	150	250	250 + 80	
SENSIBILITA' di INGRESSO	dB (V)	0 (0.775V)				
IMPEDEENZA di INGRESSO	kohms	30 (bilanciato) - 15 (sbilanciato)				
CROSSOVER ATTIVO	Hz				2 kHz 18 dB/oct.	
DISTORSIONE	%	<0.02 (THD+Noise)				
CONTROLLI		Volume				
CONNESSIONI		2 x JACK (input + link)				
ALIMENTAZIONE		Vedi targhetta informativa sull'apparato.				
SPECIFICHE del SISTEMA						
SENSIBILITA' (SPL 1W/1m)	dB	96	97	98	98	99
MAX SPL continua	dB	113	116	119	121	123
MAX SPL di picco	dB	116	119	122	127	126
RISPOSTA in FREQUENZA	Hz (-10dB)	60 - 20k	55 - 20k	48 - 20k	45 - 20k	46 - 17K
DISPERSIONE (OxV)	°	90 x 60	90 x 60	90 x 60	90 x 60	60 x 40

		PFM 12.2MA	PFM 15.2MA	PFM 8MA	PFM 15S	PFM 18S
SPECIFICHE del DIFFUSORE						
COMPONENTI	Alti	Tweeter a tromba al Niobium			Widerange da 8"	
	Medi					
	Bassi	Woofers da 12"	Woofers da 15"		Woofers da 15"	Woofers da 18"
POTENZA APPLICABILE (EIA RS-426A)	W continui	150	250	100	350	350
	W picco	200	500	200	700	700
IMPEDEENZA	Ohms				4	4
CROSSOVER PASSIVO	Hz	5 kHz 6 dB/oct.	4000 @ 6 dB/oct.		230 Hz 12 / 6 dB/oct.	120 Hz 6 / 6 dB/oct.
CONNESSIONI (versioni passive)		3 x JACK (input + link + out)				
CONSTRUZIONE						
DIMENSIONI	mm (LxAxP)	390x508x325	450x572x400	305x395x275	478x508x478	630x540x550
PESO (passive / attive)	kg	15	21.5	11.5	19.5 / 24.5	28.5 / 35
SPECIFICHE dell'AMPLIFICATORE (versioni attive)						
POTENZA D'USCITA EIA (1kHz, max THD 1%)	W	150	250	100	350	350
SENSIBILITA' di INGRESSO	dB (V)	0 (0.775V)				
IMPEDEENZA di INGRESSO	kohms	30 (bilanciato) - 15 (sbilanciato)				
CROSSOVER ATTIVO	Hz				Da 80 a 320 @ 12dB/oct.	
DISTORSIONE	%	<0.02 (THD+Noise)				
CONTROLLI		Volume			Volume - Shield on/off XOVER frequency	
CONNESSIONI		2 x JACK (input + link)			JACK + XLR-F (in) JACK + XLR-M (out)	
ALIMENTAZIONE		Vedi targhetta informativa sull'apparato.				
SPECIFICHE del SISTEMA						
SENSIBILITA' (SPL 1W/1m)	dB	97	98	95	94	96
MAX SPL continua	dB	116	119	114	118	120
MAX SPL di picco	dB	119	122	117	121	123
RISPOSTA in FREQUENZA	Hz (-10dB)	55 - 20k	48 - 20k	65 - 20k	40 - 300	40-200
DISPERSIONE (OxV)	°	90 x 60	90 x 60	90 x 90		

1. Introduction

Congratulations for having chosen **PERFORMANCE** loudspeaker systems!

To make the best use of the PERFORMANCE systems, please read this manual thoroughly before operating the equipment.

2. Instructions for use and installation

1. Protection and maintenance.

To avoid jeopardizing correct operation, it is best not to position the enclosure for long periods in exposed places (damp, high temperature, etc.), in dusty environments or those subject to strong vibrations. On this subject, it's advisable to always leave the protective grille mounted on the enclosure. In the event of breakdown, do not open the enclosure, but contact the nearest GENERALMUSIC Service Centre.

2. Prevention of possible interference.

Avoid installing your equipment in the vicinity of radios, televisions, etc., since this could cause noisy disturbance. When connecting other equipment to your sound system, pay close attention to so-called earth-loops, which can cause hum: in the event of interference, try using the **EARTH LIFT/SHIELD** switch on the enclosure's control panel.

3. Connections.

Before connecting the enclosure to the mains supply, make certain that the current corresponds with that indicated on the rear of the unit (there is an allowance of $\pm 10\%$). Always connect the power cable to the enclosure before switching on the enclosure and always remove it after having switched off. Remember to always connect or disconnect other equipment with the enclosure off and to always switch on the mixer first, then the enclosure: in this manner, annoying and often dangerous peaks are avoided.

4. Connector cables (fig. 4).

When connecting amplified enclosures to the mixer, make certain to always use only screened signal cables made up of two wires plus a braid/screen: the use of unscreened cables could in fact probably cause annoying hum and noise. When connecting passive enclosures to the power amplifier, make certain to always use only power cables made up of just two wires with the same cross-section: the use of signal cables could cause an excessive loss of power. Check periodically that your cables are in good condition, correctly wired and with perfectly efficient contacts: in fact many problems and drawbacks (false contacts, ground hum, crackles, etc.) are caused by the use of unsuitable or damaged cables.

3. Connection panel (fig. 2)

1. XLR-F + JACK sockets connected in parallel for the signal input and linking.
2. XLR-F + JACK sockets connected in parallel for the signal input and linking (only PFM15SA and PFM18SA).
3. XLR-M + JACK sockets connected in parallel for the connection of the satellites (only PFM15SA and PFM18SA).
4. Control for selecting the crossover frequency from a 80Hz to 320Hz (only PFM15SA and PFM18SA).
5. SIGN/COMP LED (only PFM15SA and PFM18SA): show the presence of a signal with minimum level -26dB (green color) or the built-in compressor operating (red color).
6. Control of the signal level sent to the built-in amplifier.
7. Control for separating the electrical earth from that of the chassis.
8. ON/OFF switch with LED indicator.
9. Power supply socket.
10. JACK 1/4" power input.
11. 1/4" JACK power output for the linking of two loudspeaker systems in series (only in the 8-Ohm versions).
10. 1/4" JACK output power with 230 Hz CROSSOVER for the connection of the satellite to the sub-woofer (only PFM15S and PFM18S).

4. PFM15SA and PFM18SA connections (fig. 3)

PFM15SA and PFM18SA have two balanced LEFT & RIGHT outputs to enable the use of the system in STEREO or MONO. These outputs feed out the signal coming from the ACTIVE CROSSOVER.

1. STEREO configuration

Connect the mixer's RIGHT output to the sub-woofer's RIGHT input and the sub-woofer's RIGHT output to the RIGHT input of the RIGHT amplified enclosure. Connect the mixer's LEFT output to the sub-woofer's LEFT input and the sub-woofer's LEFT output to the LEFT input of the LEFT amplified enclosure.

2. MONO configuration

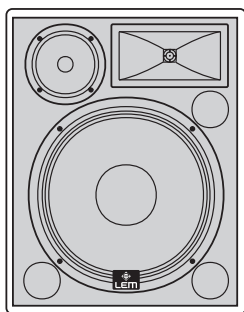
Connect the mixer's RIGHT output to one of the two inputs (LEFT or RIGHT) of the RIGHT-HAND sub-woofer and the corresponding sub-woofer output to the input of the RIGHT-HAND amplified enclosure. Connect the mixer's LEFT output to one of the two inputs (LEFT or RIGHT) of the LEFT-HAND sub-woofer and the corresponding sub-woofer output to the input of the LEFT-HAND amplified enclosure.

5. Technical specifications

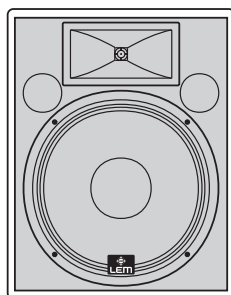
		PFM 10.2	PFM 12.2	PFM 15.2	PFM 15.3	PFM 15.3XL
LOUDSPEAKER SPECIFICATIONS						
COMPONENTS	High	Niobium horn tweeter				1" EWT™ driver
	Mid					6" midrange
	Low	10" woofer	12" woofer	15" woofer	15" woofer	2 x 15" Woofer
POWER HANDLING (EIA RS-426A)	W continuous	100	150	250	250	500
	W peak	200	300	500	500	1000
IMPEDANCE	Ohms	8	8	4 / 8	4 / 8	4
PASSIVE CROSSOVER	Hz	5 kHz	5 kHz	4 kHz	0.8/ 5 kHz	400 @ 6dB/oct
		6 dB/oct.	6 dB/oct.	6 dB/oct.	12 / 6 dB/oct.	2600 @ 12-18dB/oct.
CONNECTIONS (passive versions)		2 x JACK (input + link)				2 x SPEAKON (input + link)
CONSTRUCTION		Chipboard covered with blue carpet				
DIMENSIONS	mm (WxHxD)	340x458x285	390x508x325	458x578x405	482x608x405	477x1052x430
WEIGHT (passive / active)	kg	9 / 12	11.5 / 15.5	16.5 / 21.5	19.5 / 24.5	27
AMPLIFIER SPECIFICATIONS (active versions)						
EIA OUTPUT POWER (1kHz, max THD 1%)	W	100	150	250	250 + 80	
INPUT SENSITIVITY	dB (V)	0 (0.775V)				
INPUT IMPEDANCE	kohms	30 (balanced) - 15 (unbalanced)				
ACTIVE CROSSOVER	Hz				2 kHz	
					18 dB/oct.	
DISTORSION	%	<0.02 (THD+Noise)				
CONTROLS		Volume				
CONNECTIONS		2 x JACK (input + link)				
POWER SUPPLY		See label on the apparatus				
SYSTEM SPECIFICATIONS						
SENSITIVITY (SPL 1W/1m)	dB	96	97	98	98	99
MAX SPL continuous	dB	113	116	119	121	123
MAX SPL peak	dB	116	119	122	127	126
FREQUENCY RESPONSE	Hz (-10dB)	60 - 20k	55 - 20k	48 - 20k	45 - 20k	46 - 17K
DISPERSION (OxV)	°	90 x 60	90 x 60	90 x 60	90 x 60	60 x 40

		PFM 12.2MA	PFM 15.2MA	PFM 8MA	PFM 15S	PFM 18S
LOUDSPEAKER SPECIFICATIONS						
COMPONENTS	High	Niobium horn tweeter				
	Mid					8" widerange
	Low	12" woofer	15" Woofer		15" woofer	18" woofer
POWER HANDLING (EIA RS-426A)	W continuous	150	250	100	350	350
	W peak	200	500	200	700	700
IMPEDANCE	Ohms				8	8
PASSIVE CROSSOVER	Hz	5 kHz	4000		230 Hz	120 Hz
		6 dB/oct.	6 dB/oct.		12 / 6 dB/oct.	6 / 6 dB/oct.
CONNECTIONS (passive versions)						3 x JACK (input + link + out)
CONSTRUCTION						
DIMENSIONS	mm (WxHxD)	390x508x325	450x572x400	305x395x275	478x508x478	630x540x550
WEIGHT (passive / active)	kg	15	21,5	11.5	19.5 / 24.5	28.5 / 35
AMPLIFIER SPECIFICATIONS (active versions)						
EIA OUTPUT POWER (1kHz, max THD 1%)	W	150	250	100	350	350
INPUT SENSITIVITY	dB (V)	0 (0.775V)				
INPUT IMPEDANCE	kohms	30 (balanced) - 15 (unbalanced)				
ACTIVE CROSSOVER	Hz				From 80 to 320	
DISTORSION	%	<0.02 (THD+Noise)				
CONTROLS		Volume			Volume - Shield on/of XOVER frequency	
CONNECTIONS		2 x JACK (input + link)			JACK + XLR-F (in) JACK + XLR-M (out)	
POWER SUPPLY		See label on the apparatus				
SYSTEM SPECIFICATIONS						
SENSITIVITY (SPL 1W/1m)	dB	97	98	95	94	96
MAX SPL continuous	dB	116	119	114	118	120
MAX SPL peak	dB	119	122	117	121	123
FREQUENCY RESPONSE	Hz (-10dB)	55 - 20k	48 - 20k	65 - 20k	40 - 300	40-200
DISPERSION (OxV)	°	90 x 60	90 x 60	90 x 90		

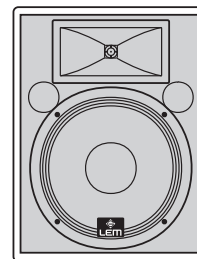
FIG. 1 - MODELS



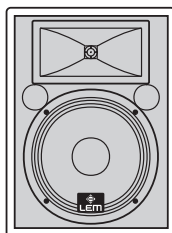
**PFM 15.3A
PFM 15.3**



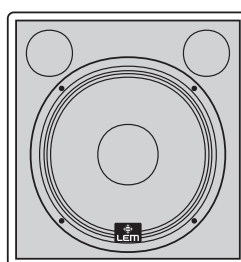
**PFM 15.2A
PFM 15.2**



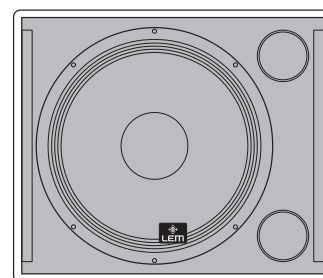
**PFM 12.2A
PFM 12.2**



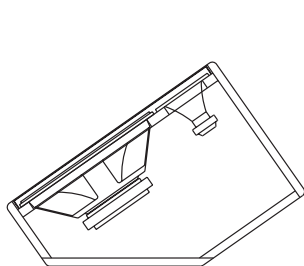
**PFM 10.2A
PFM 10.2**



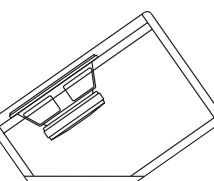
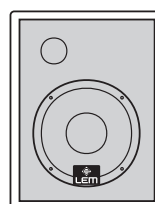
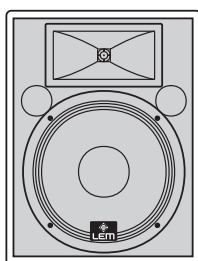
**PFM 15SA
PFM 15S**



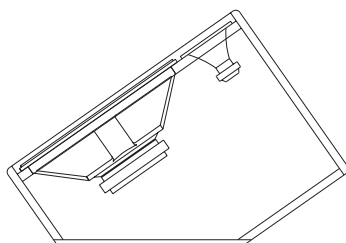
**PFM 18SA
PFM 18S**



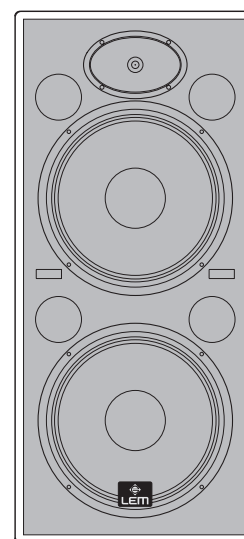
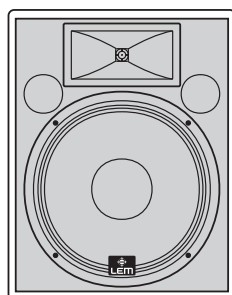
PFM 12.2MA



PFM 8MA



PFM 15.2MA



PFM 15.3XL

FIG. 2 - CONNECTION PANELS

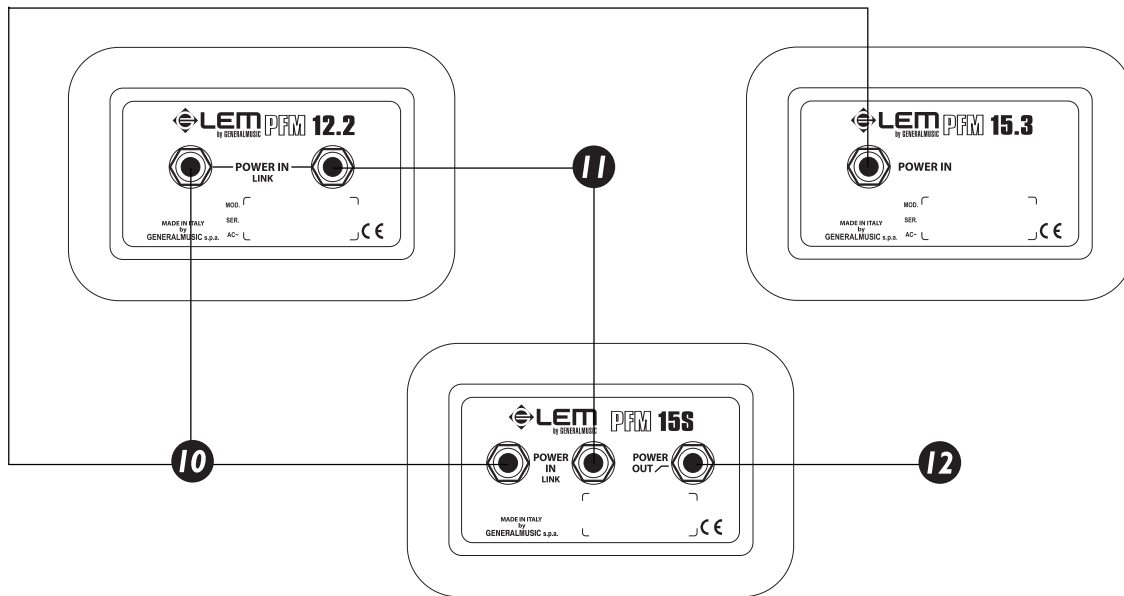
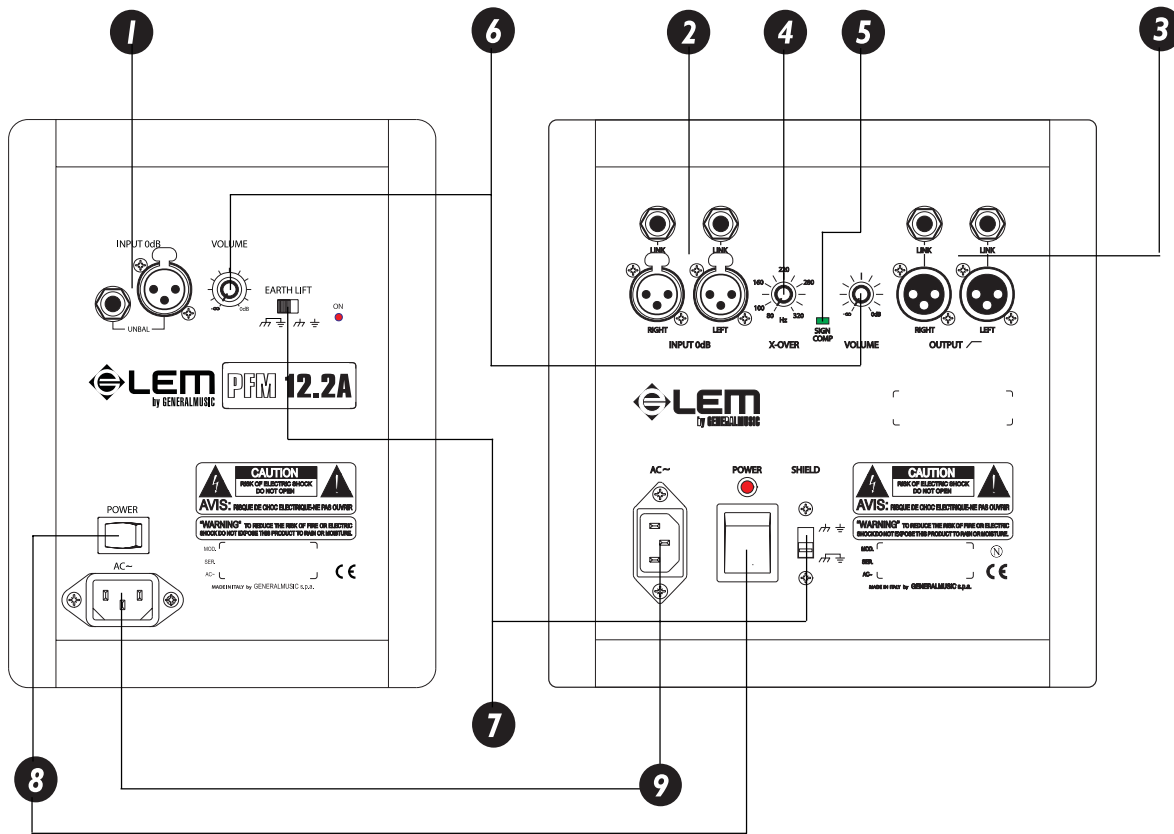


FIG. 3 - PFM 15SA & PFM 18SA CONNECTION EXAMPLES

**STEREO
CONFIGURATION**

**MONO
CONFIGURATION**

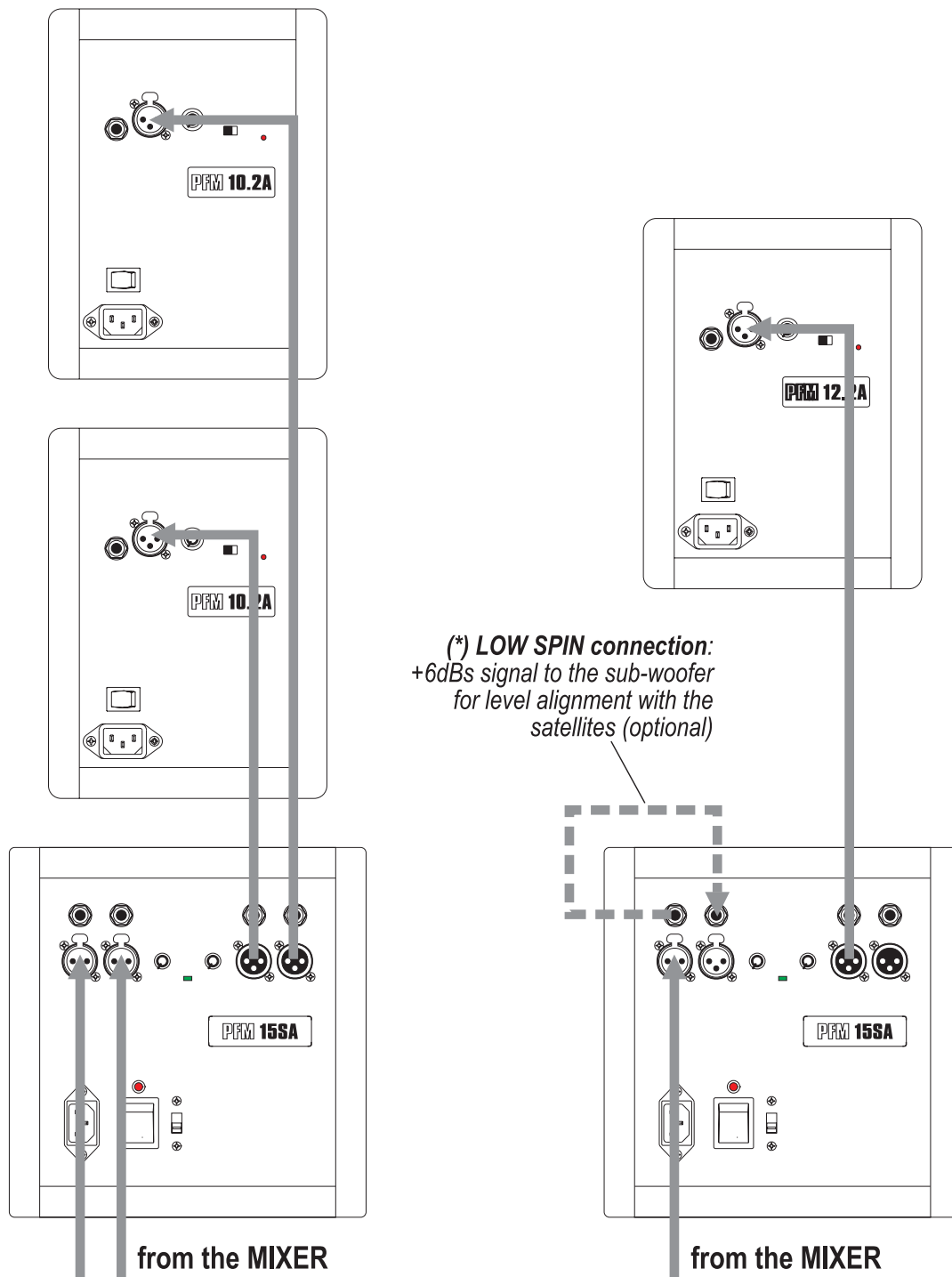
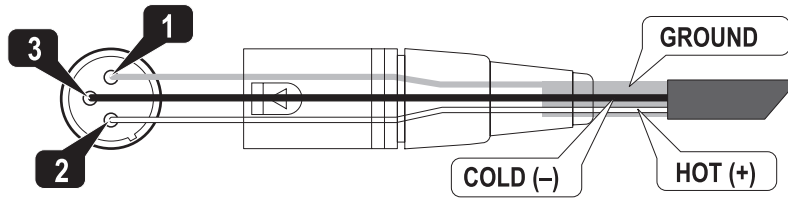
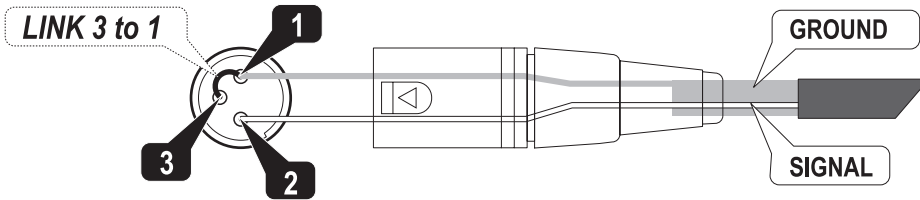


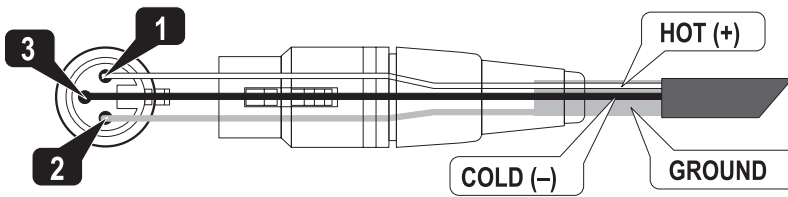
FIG. 4 - CONNECTION CABLES



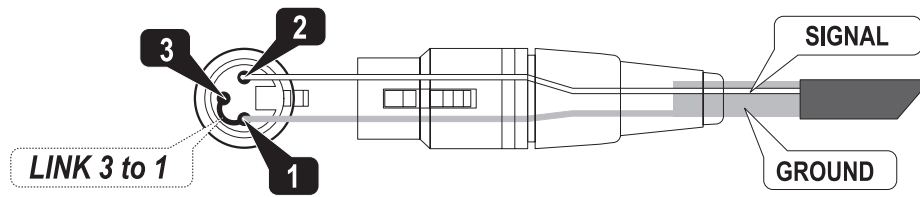
Balanced M-XLR



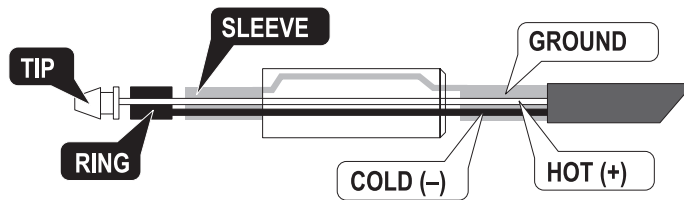
Unbalanced M-XLR



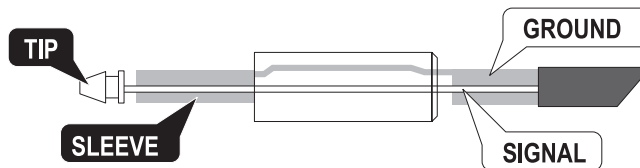
Balanced F-XLR



Unbalanced F-XLR



**Balanced
1/4" JACK**



**Unbalanced
1/4" JACK**

FEDERAL COMMUNICATIONS COMMISSION

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operations of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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