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GA MULTI-PRIORITY INDUSTRIAL AMPLIFIER RANGE

GA units are designed for heavy duty industrial paging and alarm systems where multiple priorities for time signals and alarm tones and radio reception are frequently required. These amplifiers are versatile and comprehensively specified to ensure complete integration with other Mustang equipment ranges, such as zone controls, volume controls, and slave amplifiers.

Input facilities are determined by a range of modules, which includes radio tuner modules which are for use in GTMA units only.

Construction is robust with aspects which ensure long term reliability and ease of maintenance. Each model is available for rack mounting or with free-standing case.



MAIN FEATURES

- 3 priority capability, ladder, equal access, or combination.
- Priority controlled DC current sinks, individual and overall, to operate zone relays/busy lamps, etc.
- Priority controlled page-only and full programme outputs at 100V
- 0dB input/output access points for system expansion, tape recording, etc.
- 50Watt, 100Watt, or 200Watt output options
- Simultaneous low impedance and 100V outputs
- Music/Auxiliary input (non-priority) is standard on all models and is overridden by any priority channel - accepts standard modules
- Optional tuner module capability with front panel switch selection of 4 VHF/FM and/or 1 MW/AM station
- Full range of plug-in modules to meet all system requirements.
- Plug-in driver circuit modules featuring advanced electronics for accuracy and reliability.
- Laced cableforms throughout
- Robust output devices plug-in to massive heatsink system.
- Convection cooled for supreme reliability
- Generous power and output transformers provide effortless performance.
- Stabilised mixer supply
- Internal treble, bass and master level adjustments to defeat tampering.
- Single 75 ohm antenna input for all tuner models
- Free-standing cased, or standard 2U/3U rack mounting versions
- Full electronic protection
- Robust locking DIN connectors
- 24V DC output to operate remote relays, lamps, or remote pre-amplifiers, etc.
- Optional spindle-locked controls in place of front gain control knobs.

200 Watt versions only:

- Delayed and silent switch on/off
- Protection of load and amplifier by automatic disconnect circuit during fault condition
- Output and temperature status LED's
- Output level indication by discrete LED ladder
- Over temperature auto shutdown and re-set.

GA MULTI-PRIORITY INDUSTRIAL AMPLIFIER RANGE

TECHNICAL SPECIFICATION

DATA SHEET DS50-01

	GM.3 GTM.3	GMA.703 GTMA.703 A.70	GMA.1403 GTMA.1403 A.140	GMA.2803 GTMA.2803 A.280
Formats	GM.3 Multipriority mixerr only GTM.3 Multipriority mixer with accommodation for tuner module GMA..... Multipriority mixer amplifier GTMA.....Multipriority mixer amplifier with accommodation for tuner module A..... Slave amplifier only. No input module facilities			
Power output. Continuous sine wave rated ¹	-	50W RMS	100W RMS	200W RMS
Input modules facilities ²	Accommodation for up to 3 modules to be used in priority chain, 1 module for use in Aux/music module location, and 1 dedicated VHF tuner module. For selection see the list below.			
Input sensitivity and signal to noise ratio ²	Dependent upon input module(s) fitted - see other data sheet			
Tuner facilities	[GTM, GTMA units only] Requires VFM.3 module fitted in dedicated module position. Four internal pre-sets are used to tune the required stations. User may then select these by front panel switch. The switch has an extra position to accept programme from input module No.4 if			
Mixer output ² or mixer facility level	0.775V @ 600 ohms pre master level control; 0.775V @ 10k ohms post-master level control (power amplifier input).			
Tone controls ²	±13dB @ 100Hz; ±17dB @ 10kHz ref 1kHz. Set internally			
Priority control ²	Inputs 1-2-3 may be assigned ladder or equal access (lock-out) priority, collectively over input 4 (Aux/music). Priority triggering requires 2mA closing pair contact or equivalent sink to 0V.			
Page-only output ²	-	Standard 100V programme output for the duration of any priority being activated. Combined Page-only 100V output plus normal 100V output must not exceed the amplifier rating.		
Output matching ¹	-	4-8-16 ohms, 100V balanced, floating with centre tap and 100V balanced floating for page-only output	4 ohms and 100V balanced floating with centre tap and 100V balanced floating for page-only output	
Power Frequency response ¹	-	-3dB @ 20Hz, -0.5dB @ 20kHz 8 ohms ref. 1kHz; -3dB @ 20Hz and 20kHz 100V output ref 1kHz	-3dB @ 20Hz; -0.1dB @ 20kHz; 4 ohms ref 1kHz; -3dB @ 20Hz and 20kHz 100V output ref 1kHz	
S/N ratio ¹	-	92dB	100dB	
Total harmonic distortion. ¹	-	Typically 0.3% 8 ohm output	Typically 0.05% 4 ohm output	
100V line regulation ¹	-	2dB no load/maximum load	0.9dB no load/max load	
Auxiliary DC supply output ²	24V nominal. Maximum load 1A. Fused			
Priority sink outputs ²	Absolute maximum 500mA per sink @ 40V. Unfused			
Input connectors	Locking DIN 5 pin 180° (not supplied). Mustang part No. 5-180			
Mains connector	3-pin 6A IEC (supplied)			
Power output ¹ and sink connections	4BA (M3.5) barrier terminals to suit wire ends, spades or rings			
Mains voltage	220/240V AC 50/60Hz; 115V option is available - please contact the factory			
Fuses (power amplifier)	-	2A(T) mains	3.15A(T) mains. 6.3A(F) DC	
Switch-on time lag ¹	-	N/A	2.5 seconds	
LED output ladder ¹	-	N/A	3dB steps to -27dB	
Weight excluding modules	5Kg net	11kg net	11.5kg net	15kg net
Dimensions (19" style) excl. connectors	483 x 88 x 328mm (2U fitting). Allow 40mm FMS for handles			483 x 132 x 328mm (3U fitting). Allow 40mm FMS for handles
Dimensions (free-standing style) excl. connectors	441 x 95 x 328mm. Allow 40mm FMS for handles			441 x 139 x 328mm. Allow 40mm FMS for handles
Shipping	Allow 1.5Kg extra to the above. Vol: .04cu.M			Allow 1.5Kg extra to the above. Vol: .057cu.M

¹ - not applicable to GM or GTM mixers. ² - not applicable to A.70, A.140 or A.280 slave amplifiers.

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MODULE RANGE

MODULE	FUNCTION	MODULE	FUNCTION
M.60	Multi-purpose transformer balanced microphone & line, with phantom DC supply	TG.2	Tone generator - 1kHz tone pips and continuous tone
M.60TB	Multi-purpose transformer balanced mic/line, phantom DC. Treble & bass adjustment	TG.3	Tone generator - 1kHz gongs
L.50	Multi-purpose transformer high level balanced line	TG.5	Tone generator - Warble alarm and Dee-Dah alarm
M.6	Microphone 30-200 ohms, transformer balanced, with phantom supply	XAM.2	Tuner, AM, fixed single station
QM.6	Microphone 30-200 ohms, transformer balanced, three-tone chime, phantom supply	VFM.3	Tuner, VHF. for use with GTMA and GTM units.
G.4	Phono-turntable pick-up with RIAA ceramic/magnetic equalisation		
T.5	Line input, wide range sensitivity, unbalanced general purpose		
L.5	Line input, transformer balanced, medium to high level input		

QUALITY ASSURANCE

Guided by a policy of non-obsolescence, every part for the GA range of amplification is carefully manufactured direct from raw materials to ensure total control of all aspects of quality and delivery. Every sub-assembly and finished amplifier is exhaustively and individually tested.

All procedures meet our internal Quality Assurance standards, which in turn are maintained to ISO.9002.

CONTACT

We will be pleased to receive enquiries regarding application of the GA range, either by phone, fax, or email.

In the interests of continuous development, specifications are subject to change without notice.

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Electromagnetic compatibility (EMC) directive 89/336/EEC and amendment directive 92/31/EEC
 This equipment has been designed and manufactured to the highest standards. If connected and operated as set out in this manual, there should be no Electromagnetic Compatibility problems. If any aspect of operation gives rise to concern, then please contact the manufacturer for advice.