



G U A R D I A N T E L E C O M

Product and Services Guide

Talk/Back — Explosion Proof Stations & Amplifiers

Paging with Talk/Back capability allows users to maintain hands-free communication during critical operations. Guardian's Talk/Back systems meet this demand with standard plus explosion proof versions. Master to single slave or multiple slave configurations are available in our non-hazardous models.

From drilling operations right through to onboard ships and other specialized applications, Guardian Telecom Talk/Back systems can be tailored for specific functionality.

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CONNECTED. PROTECTED.

SECTION

18



Visit industrial sites around the world and you can find telephones and communication systems designed, manufactured, distributed and commissioned by Guardian Telecom. From certified and ruggedized telephone and paging endpoints, to loudspeakers & ringers, cable, accessories, acoustic booths and much more. Our product line is extensive and our knowledge in-depth.

Guardian manufactures and assembles at our modern, ISO certified, CSA, UL and ATEX approved facility located east of the Canadian Rockies in Calgary, Alberta, Canada.

Working closely with our customers has always been a cornerstone in our work ethic. It keeps us up to date on their evolving needs and requirements as they operate in a demanding and uncompromising industrial world.

Guardian Telecom has completed its initial VoIP telephone product launch. As the IP world continues to evolve and grow, we will continue to invest both time and resources in design and testing to meet the stringent requirements that clients demand.

The in-house channel-partner sales and technical teams are here to work directly with you or through our network of distributors and representatives, locally, nationally and globally. Take advantage of their practical experience and product knowledge to make informed decisions based on your communication needs, environmental factors, regulatory requirements, budget considerations, growth and scheduling.

From individual telephone units to complete systems, our focus on customers' distinct needs is also addressed by customizing products whenever practical. From features to colors, finishes to labels, graphics, parts, enclosures and more.

Guardian can help guide you through the product selection process no matter how complex it is. We invite you to contact us to discuss your needs and see if our products & services will be the right fit.



Toll free (North America) 1 800 363-8010 Tel 403 258-3100 Fax 403 253-4967 E-mail info@guardiantelecom.com

Guardian Telecom's Product and Services Guide Catalogue is a compilation of individual Category Sections. They include an in-depth selection of Product Data Sheets from our extensive product lines including Analog and VoIP Telephones, Page/Talk, Cable, Talk/Back, PA/GA equipment, Acoustic Booths, Loudspeakers & Ringers and Accessories at the date of publication.

Based on a policy of continuous improvement, Guardian is constantly evaluating and redesigning existing models, adding new features and introducing new products to the benefit of our customers. Additional information can be found on our website at www.guardiantelecom.com.

Talk/Back Explosion Proof Stations & Amplifiers



Explosion Proof Station – EXP-TBA

18-1

EXP-TBA provides easy to operate paging with the versatility of a hands free slave speaker. Total system flexibility in order to adapt to station location, with the use of either internal microphone & faceplate PTT switch or master speaker as microphone & remote PTT switch.

- 24V AC/DC, 120/230 VAC powered



Multi-Channel Amplifier Series – TBA

18-3

TBA Amplifiers provide easy to operate paging with the versatility of a hands free slave speaker. Only one amplifier is required for master/slave(s) communication.

Primary Slave Channel is available as either Hands Free or Push to Page.

- TBA20 2 Channel: Master / Slave
- TBA21 2 Channel: Master / Push-to-Talk Slave
- TBA30 3 Channel: Master / 2 Slaves
- TBA31 3 Channel: Master / 2 Slaves (Primary being Push-to-Talk)
- TBA40 4 Channel: Master / 3 Slaves
- TBA41 4 Channel: Master / 3 Slaves (Primary being Push-to-Talk)
- TBA50 5 Channel: Master / 4 Slaves

EXP-TBA

Explosion Proof Talk/Back Station



EXP-TBA

EXP-TBA Explosion Proof Talk/Back Stations provide communications in harsh, industrial environments and hazardous areas. They provide easy to operate paging with the versatility of a hands free slave speaker.

The EXP-TBA has total system flexibility in order to adapt to station location, with the use of either internal microphone & faceplate PTT switch or master speaker as microphone & remote PTT switch.

A post announcement tone can be programmed (internal) to indicate end of page from master station to the slave speaker. An optional switch can be wired at the slave speaker to activate a ring signal at the master station to request communication.

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ISO-9001:2008 Certification
Today's Quality Creates Our Future

FEATURES and BENEFITS

- Easy master/slave operation
- Only one station required for master/slave communication, reducing costs
- Internal microphone or option to use master speaker as microphone, providing flexibility
- Push-to-talk (PTT) switch on faceplate
- Option for remote hand/foot push-to-page switch
- Post announcement tone from master to slave option
- Slave operator ring tone to master station option
- Attenuation of master speaker when paging to prevent feedback
- External programming, eliminating need to declassify area when making changes
- 24V AC/DC, 120/230 VAC powered
- Water/dust tight NEMA 4X (IP66) explosion proof enclosure

CONTROLS

- Separate master and slave speaker volume controls on faceplate
- Internal master microphone, talk/back gain and speaker controls
- Internal ring tone volume control
- External programming method for easy switching of slave operations

APPLICATIONS

Guardian's EXP-TBA Talk/Back system provides reliable point-to-point communication in Class I & II, Division 1 hazardous areas such as on drilling rigs between drill floor and monkey board. The EXP-TBA can be used anywhere where hands free communication is required from slave operator end in hazardous areas.

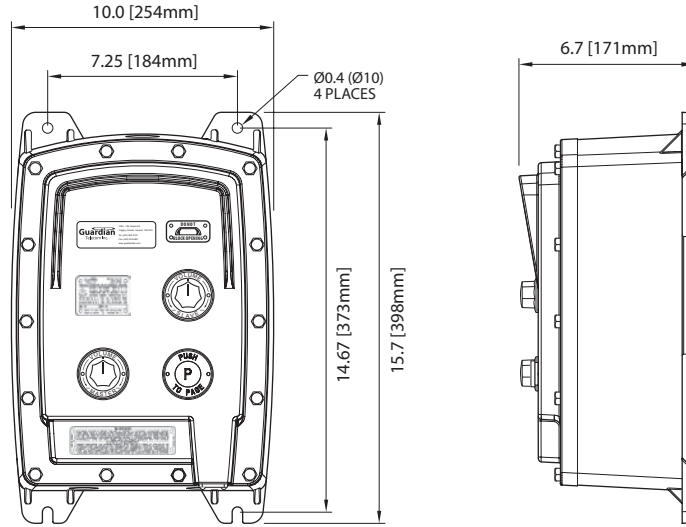
INSTALLATION and CONNECTABILITY

Guardian's EXP-TBA Talk/Back system gives you the flexibility to set up a system based on exactly what you need. Talk/Back components connect through common plugs and cable types for easy installation.

Recommended speaker:
SR40 (P7245) 70V 30 Watt
Explosion Proof Class I & II,
Division 1



OVERALL DIMENSIONS



EXP-TBA Explosion Proof Talk/Back Station

ENGINEERING SPECIFICATIONS

ELECTRICAL REQUIREMENTS

Input Voltage	20-29 VDC	20-26 VAC	90-140 VAC	200-260 VAC
Power Cycle	n/a	50/60 Hz	50/60 Hz	50/60 Hz
Fuse	1 Amp	1 Amp	0.5 Amp	0.25 Amp

SPEAKER AMPLIFIER

Page Output Voltage	70 Volt
Page Output Power	12 Watts RMS/Channel
Frequency Response	250 - 8000 Hz
Distortion	1.0% Maximum THD @ 1000 Hz
Master Station Talk/Back Attenuation (Internal Adjustable)	-20 dB to Mute

MECHANICAL SPECIFICATIONS

Body Construction	Copper Free Cast Aluminum
Finish	Powder Coated
Net Weight	30.0 lbs (13.6 kg)
Shipping Weight	38.0 lbs (17.3 kg)
Shipping Dimensions (L x W x D)	20.0" x 15.0" x 11.5" (508 x 381 x 293 mm)
Mounting	Vertical Wall
Connection Fittings	Conduit or Cable Gland

ENVIRONMENTAL

Weather Resistant	CSA Enclosure Type 4X (IP66)
Temperature	-40° to +140° F (-40° to +60°C)
Humidity	0 - 95% RH Non-Condensing

CSA COMPLIANCE (Canada and United States)

Class 4818 02	— Signal Appliances — Audible — For Hazardous Locations
Class 4818 82	— Signal Appliances — Audible - For Hazardous Locations
	Certified to US Standards
Class I, Division 1, Groups B, C and D; Class II, Division I, Groups E, F and G	
Canada:	Class I Zone 1 Ex d IIB+H2 T5
United States:	Class I Zone 1 AEx d IIB+H2 T5; Class II Zone 21

ORDERING INFORMATION

Warranty: One year parts and labor

Order No. Description

P5986 EXP-TBA Explosion Proof Talk/Back Station /120 VAC

Also available in other voltages including 240 VAC, 24 VAC and 24 VDC. For details contact a Guardian Telecom representative.

Distributed by:

TBA Series Multi-Channel Talk/Back Amplifiers



TBA-31

Guardian's TBA Talk/Back Amplifiers are designed for safe, reliable and cost-effective communication. They provide easy to operate paging with the versatility of hands-free slave speakers.

Utilizing explosion proof slave speakers, Talk/Back units are very useful in hazardous areas where hands-free communication is required, and Talk/Back systems are ideal in applications such as land based or off-shore drill rigs for communication between the doghouse, drill floor, monkey board, etc.

Talk/Back Amplifiers are available in 2, 3, 4 or 5 channel versions. The TBA has total system flexibility in order to adapt to the master location with the use of either external microphone or master speaker as microphone. A post-announcement tone can be programmed (internal) to indicate end of page from master station to the slave speakers. Primary slave channel is available as either Hands Free or Push to Page.

Communication from subsequent slave channels back to master operates on a first-come-first-served basis. An optional switch can be wired at the slave speakers to activate a ring signal at the master station to request communication.

FEATURES and BENEFITS

- Easy master/slave(s) operation
- Corrosion resistant for any industrial application
- Only one amplifier required for master/slave(s) communication
- 2, 3, 4 or 5 channel versions available
- Primary slave can be hands free (TBA20/30/40/50) or push-to-talk (TBA21/31/41)
- External microphone or option to use master speaker as microphone
- Hand or foot switch (not included) used with master to activate paging
- Post announcement tone from master to slave option
- 120/230VAC or 24VDC powered
- Attenuation of master speaker when paging to prevent feedback

CONTROLS

- Separate master and slave(s) speaker volume control on chassis
- Master microphone, talk/back gain and speaker attenuation controls (internal)
- Optional ring tone volume control (internal)

APPLICATIONS

Guardian's TBA Talk/Back systems provide reliable point-to-point and point-to-multipoint communication in areas such as on drilling rigs between drill cabin/drill floor and monkey board, plus moon pool, mud tanks, etc. Also used extensively on ships and off-shore platforms where hands-free communication is required from slave-operator end.

INSTALLATION and CONNECTABILITY

Guardian's modular approach to system design gives you the flexibility to set up a system based on exactly what you need. Talk/Back components connect through common plugs and cable types for easy installation.



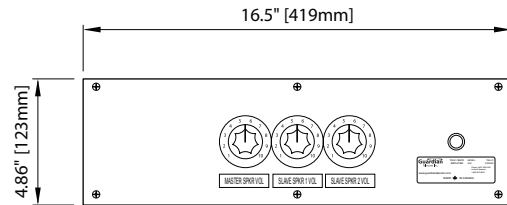
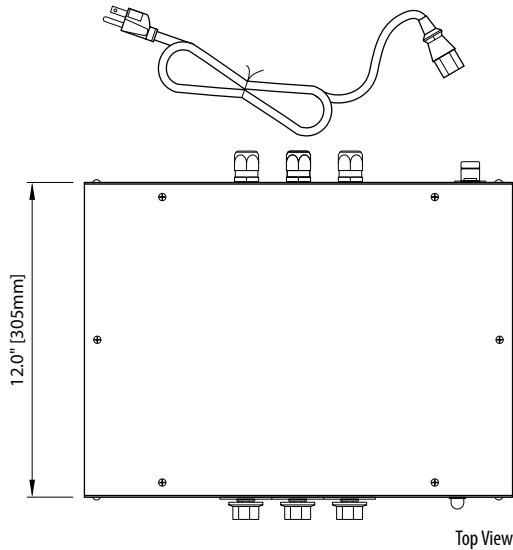
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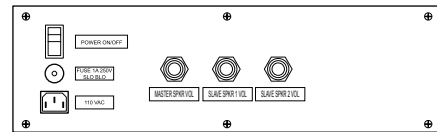
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OVERALL DIMENSIONS

TBA-31 is shown — Overall Dimension are the same for all TBA Multi-Channel Amplifiers



Front View



Back View

TBA Multi-Channel Talk/Back Amplifiers

ENGINEERING SPECIFICATIONS

ELECTRICAL PERFORMANCE

Power Supply Input Voltage 120/230VAC; 24VDC
Fuse 24V - 1 Amp, 120 VAC- 0.5 Amp, 230VAC - 0.25 Amp

PERFORMANCE

Audio Level

Page Output Voltage 70 Volt
Page Output Power (Master and Slave(s)) 12 Watts RMS/Channel
Frequency Response 250 - 8000 Hz
Distortion 1.0% Maximum THD @ 1000 Hz
Master Station Talk/Back Attenuation (internal adjustable) -20 dB to Mute
(External) Master Microphone 600 Ohms, 750 mV RMS
Master Switch Dry Contact SPST

MECHANICAL SPECIFICATIONS

Body Construction 16 Gauge Steel
Net Weight 20 lbs (9.1 kg)
Shipping Weight 22.0 lbs (10.0 kg)
Shipping Dimensions (L x W x D) 20.0" x 15.0" x 11.5" (508 x 381 x 293 mm)
Standard Mounting Horizontal or Vertical
Connection Fittings Cable Gland

ENVIRONMENTAL

Temperature -22° to +122°F (-30° to +50°C)
Humidity 0 - 95% RH Non-Condensing

ORDERING INFORMATION

Warranty: One year parts and labor

Order No.	Description
P8600	TBA20 2 Channel: Master / Slave
P8605	TBA21 2 Channel: Master / PTT Slave
P8601	TBA30 3 Channel: Master / 2 Slaves
P8606	TBA31 3 Channel: Master / 2 Slaves (Primary being PTT)
P8602	TBA40 4 Channel: Master / 3 Slaves
P8607	TBA41 4 Channel: Master / 3 Slaves (Primary being PTT)
P8603	TBA50 5 Channel: Master / 4 Slaves

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About Guardian Telecom

- Building on a Legacy of Design and Service
- Communications: Easy, Reliable and Safe
- More Choices, Selections and Services
- Standard Features
- Options & Accessories
- Product and Project Consultation
- Commissioning Services
- Sound Studies
- Training
- Maintenance, Cleaning, Trouble Shooting & Refurbishment
- Custom Design
- Page/Talk, Telephone, PA/GA and Talk/Back Systems
- Standards and Classifications

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ATEX-IEC



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Hazardous Area



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Outdoor Industrial



5

Indoor Industrial



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Emergency/Help Point



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Correctional



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Hazardous Area VoIP



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Outdoor Industrial VoIP



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Indoor Industrial VoIP



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Emergency/Help Point VoIP



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¹ Page/Party® is a registered trademark of GAI-Tronics Inc. Use does not imply endorsement.

Page/Talk

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Page/Party® Module Replacements¹



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Guardian represents DNH, E2S, Federal Signal, MEDC and TOA, and has access to an extensive range of other world class leading manufacturers. Visit www.guardiantelecom.com for additional information on Explosion Proof, Hazardous Area, ATEX-IEC and General Area Loudspeakers & Ringers.

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