

Talk Back Intercom System

Model TBA

Installation & Operation



P005482 Rev. C 041124 3/8/2007 8:40 AM

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Package Contents

- (1) TBA Talk Back Intercom Console
- (1) Primary Loudspeaker
 - Additional Loudspeakers (optional – up to three)
- (1) Installation & Operation Manual

Overview

TBA Talk Back Intercom System

The model TBA is an intercom system designed for use in situations where frequent communications between two or more stations are required. The system is particularly well suited to drilling rig operations. The system utilizes remote loudspeakers in dual roles, to broadcast messages from the central console and to act as a microphone to pick up and transmit messages back to the central console.

In drilling rig applications the system normally consists of a main console and one speaker at the monkey board set up as a talk back microphone, it will convert into a speaker when being called by the main console station or another location. Up to three additional channels may be added and these are normally set up as speaker channels. When the PTT switch associated with any of these speakers is pressed the system will convert that channel into a talk path, the other speakers will still be set as speakers to receive the message. The PTT switches of these additional speakers that are used to get access to the system transmission path are in a first-come first-served priority level.

The console set consisting of a goose neck microphone and a hand switch or pedal switch has the highest priority in sending messages. When the pedal switch is engaged in the push-to-talk mode the system attenuates the local speaker to prevent acoustical feedback and all the speakers in the system are placed in the speaker mode to receive the page message.

Jumper JP1 on the PCB board is a switch to provide the injection of a post announcement tone. Once the post announcement tone is enabled, a tone will be heard on the paged speakers when the paging station releases its PTT hand or pedal switch. When the post announcement tone is heard it confirms to the listener that the system is in the receive mode.

Installing the TBA

WARNING

The main console is not approved for use in hazardous areas. The speakers used with the system may or may not be approved, check the labels on the speakers for ratings.

- Follow all local codes and requirements when installing the TBA Intercom System.
- Use shielded cable for talk back speakers.
- Set the PCB mounted Potentiometers to the desired level.

- To pre-adjust system levels, remove the six screws from the top cover and remove the cover.
- If a post announcement tone is required enable the function by setting jumper JP1 on the PCB board to the appropriate position.
- Adjust the control pots to the desired levels:
 - Console speaker attenuation.
 - Console microphone input.
 - Talk back speaker input volume.
 - Ring tone volume.
- Replace the top cover.
- Using the controls on the front of the console adjust:
 - Console speaker volume.
 - Talk back speaker volume.
 - Other speakers volume (if fitted - TBA30/40/50)

See: Overview

See: Figure 1 – Control Potentiometers

Controls

Adjusting Pots:

PCB Mounted:

- R31: Console speaker attenuation control pot.
- R8 : Console microphone input volume control.
- R25: Talk back speaker (when used as a microphone) input volume control.
- R16: Ring tone volume control.

Panel Mounted:

- 1) Console speaker volume control.
- 2) Talk back speaker volume control.
- 3) Optional #1 speaker volume control (TBA30).
- 4) Optional #2 speaker volume control (TBA40).
- 5) Optional #3 speaker volume control (TBA50).

Post announcement tone jumper:

JP1; ON position: Post announcement enabled.
JP1; OFF position: Post announcement disabled.

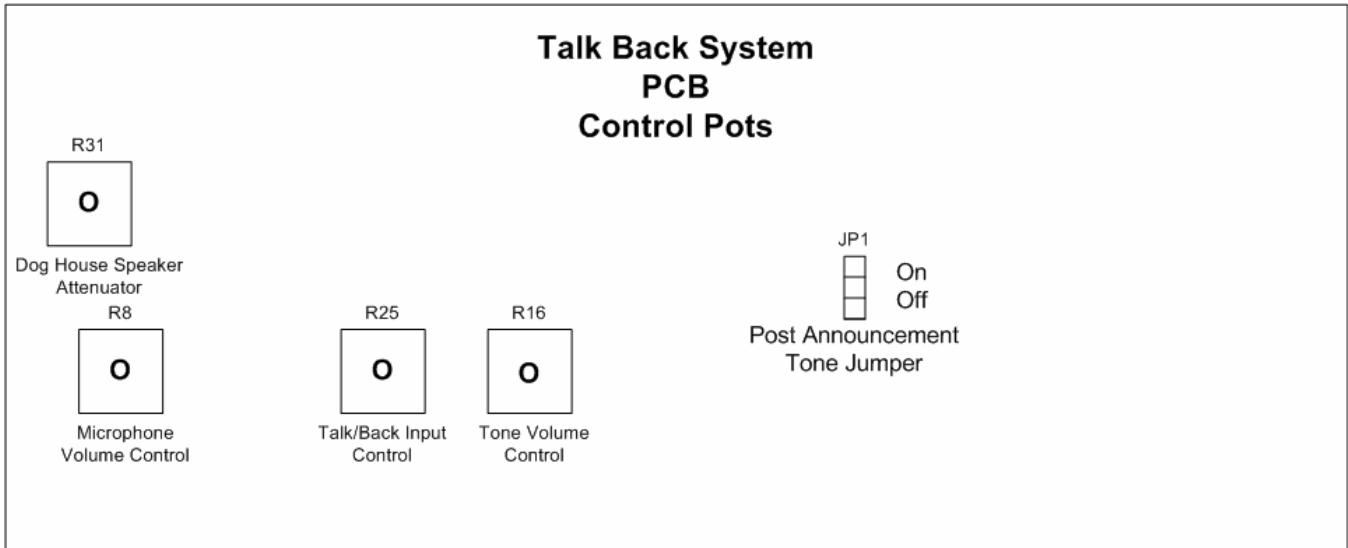


Figure 1 – Control Potentiometers

Engineering Specifications	
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<i>ELECTRICAL</i>	
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POWER REQUIREMENT	120V/240VAC, 50/60 Hz; 24VDC
POWER SUPPLY FUSE	250V, 0.25A, SLOW BLOW, 2AG
AUDIO OUTPUT FUSES	250V, 0.75A, SLOW BLOW, 2AG

<i>AUDIO AND CONTROL INPUTS</i>	
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CONSOLE MICROPHONE INPUT AND CONTROL	AUDIO: 600 OHMS, 750 mV RMS MAXIMUM PTT SWITCH: DRY CONTACT DPDT SWITCH
PRIMARY SPEAKER WHEN USED AS A TALK BACK MICROPHONE	AUDIO: 600 OHMS, 1 VRMS MAXIMUM
ADDITIONAL SPEAKERS WHEN USED AS TALK BACK MICROPHONES	AUDIO: 600 OHMS, 1 VRMS MAXIMUM PTT SWITCH: DRY CONTACT SPST SWITCH

<i>AUDIO OUTPUTS</i>	
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CONSOLE CHANNEL	70V LINE, 10 W
PRIMARY SPEAKER CHANNEL	70V LINE, 10W
CHANNELS 1,2 & 3 (TBA30/40/50)	70V LINE, 10W

Warranty

Guardian Telecom warrants your product to be free of defects in material and workmanship for a period of one year. Guardian Telecom will repair or replace any defective unit that is under warranty free of charge.

This warranty is null and void if any non-authorized modifications have been made to this product, or if it has been subjected to misuse, neglect, or accident. This warranty covers bench repairs only; such repairs must be made at Guardian Telecom or an authorized service depot. Guardian Telecom is not responsible for costs incurred for on-site service calls, freight, or brokerage.

Guardian products have been quality tested and are in full working order when shipped from the factory. Shipping damage should be claimed on the carrier.

A return authorization must be obtained prior to warranty claims or repairs.

Disclaimer

The products covered by this manual are designed for use in Industrial Environments and/or Hazardous Locations. Due to the range of possible applications the manufacturer will not be responsible for damages or losses of any kind suffered as a result of the use of this product, including consequential damages.

Warning

High voltages may be present in this product. Ensure that power is removed before installing, performing maintenance or repairs.

Service Telephone Number

1-800-363-8010 (North America)

Guardian Telecom provides a customer service telephone number which is toll-free within North America. If you need assistance when installing or operating this product, please call the toll-free telephone number between regular business hours (8:00AM-5:00PM), Mountain Standard Time. If you are calling outside of regular business hours, please leave a detailed message, and a member of Guardian Telecom's Service Department will return your call as soon as possible. If your product requires service, Guardian personnel will supply you with an RMA (return materials authorization) number over the telephone or through our web site product return page. This number must be included with your return address and the name of the person to contact.

**Guardian Telecom Inc.
7552 - 10th Street N.E.
Calgary, Alberta, Canada T2E 8W1
Toll-free 1-800-363-8010 in North America
Ph. (403) 258-3100
Fax. (403) 253-4967
www.guardiantelecom.com**

Feedback

Guardian Telecom continually strives to make reliable, durable, and easy to use products. If you, as an installer or user of our equipment, have any suggestions for improvements to this or any of our products or documents, including this manual, we would appreciate hearing from you.



**Guardian Telecom Inc.
7552 - 10th Street N.E.
Calgary, Alberta, Canada T2E 8W1
Toll-free 1-800-363-8010
Ph. (403) 258-3100
Fax. (403) 253-4967
www.guardiantelecom.com
E-mail: sales@guardiantelecom.com**

Industrial Communications Worldwide