MACKENZIE®

DADS-PAS

PLATFORM ANNOUNCEMENT SYSTEM



User's Manual

Version 1.0 Revised 15, April 2015

Doc 99-20-091 - $25.00

General Safety Instructions

Always follow these basic safety precautions when using the system:

1. Read carefully and understand all instructions.
2. Follow all warnings and instructions marked on the product.
3. DO NOT block or cover ventilation slots and openings.
4. DO NOT place the product in a closed enclosure or cabinet unless proper ventilation is provided.
5. Never spill liquid on the product or drop objects into the ventilation slots and openings. Doing so may result in serious damage to the components.
6. Repair or service must be performed by a factory authorized repair facility.
7. DO NOT staple or otherwise attach the power supply cord to building surface.
8. DO NOT use the product near or in wet or damp places, such as wet basements.
9. DO NOT install during lightning storm.
10. Never touch un-insulated wires or terminals unless the unit is disconnected from both power and the rest of the phone system.
11. Use Caution when installing or modifying configuration switches or control lines.
12. The unit must be securely attached to a wall board, rack or table mounted.

CAUTION:	If any wiring from the system leaves the premises, you must use proper electrical protectors.

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Shipping Container Contents

The following items should be found in the container of DADS-PAS, Platform Announcement System:

- DADS-PAS System
- Installation and User Guide
- Ethernet Cable
- RCA-RCA Cable
- Rack Mounting Hardware

Hardware Configurations

- N/A

Optional Accessories:

- Public Address Amplifier

1 OVERVIEW

1.1 Features and Capabilities

The DADS-PAS system has been developed as the next generation Wayside Announcement System. The DADS-PAS system is designed to accept commands over the Ethernet connection. The command protocol can be tailored to the user requirements

The DADS-PAS offers up to 99 messages and hours of MP3 or WAV audio. MP3 supports up to 15 kHz bandwidth and 80 dB of dynamic range. All 99 messages are accessible from the Ethernet connection on the DADS-PAS.

The DADS-PAS retrieves stored audio data from non-volatile SD Card memory, eliminating the need for battery backup, and delivers superb sound quality.

The system integrates a monitor speaker and pushbutton interface allowing the user to test the system locally, verifying that the system and all messages are operating as expected.

2 GENERAL SPECIFICATIONS

Audio Coding:

Playback:	MPEG 1, Layer 3 (32-128kbps bitrate), or 16 bit WAV

Audio Quality:

Dynamic Range:	80dB, Typical
Signal to Noise:	80dB, Typical
Frequency Resp.:	50Hz to 15kHz
THD:	< 0.5% at 1kHz, Typical

Audio Input:

n/a

Audio Output:

Line Out:	600 ohm, transformer isolated, RCA
Line Out Level:	Adjustable potentiometer
Speaker:	Front panel mounted
Speaker Level:	Adjustable potentiometer

Audio Memory:

Type:	SD Card
Capacity:	2GB, or larger

Power Requirement:

Input Voltage:	12VDC
Current:	1 amp, maximum
Connection:	2 pin pluggable terminal

Manual Control Interface:

Pushbuttons:	Play All, Stop, Speaker
LED's/Display:	Play All, Stop, Speaker, Status

3 Installation and Configuration

This section provides complete instructions for mounting the DADS-PAS, Platform Paging System. It also illustrates all interface requirements to auxiliary equipment, including inputs and outputs.

1. Find an open 1U rack space in the 19” Rack Chassis
2. Mount the unit to the selected place with its wiring at least 18” away from power supply or other equipment that generates electrical noise.
3. Connect audio inputs and outputs.
4. Connect control inputs and outputs.
5. Connect and apply power.
6. Test unit operation.

3.1 Rear Panel Hardware Configuration



3.1.1 Power

2 position Euro connector
Pos 1 12 VDC at 1 amp
Pos 2 Ground

3.1.2 Ethernet

RJ45 Connector.
Use standard Ethernet cabling to interface the DADS-PAS to the on-site Ethernet network.

3.1.3 Audio Out

RCA Jack
Single ended, line level audio output. Center pin is positive, and outside ring is shield, or negative.

3.1.4 I/O Port

6 position Euro connector
Reserved for future usage

3.1.5 Audio Out Level

Potentiometer to adjust Audio Output level. Counterclockwise sets the level lower, clockwise sets it higher.

3.2 Front Panel Hardware Configuration



3.2.1 Lighted Play All Pushbutton

A momentary, lighted “Play All” pushbutton activates a sequence which plays all of the messages stored on the memory from message #1 through the last message on the SD Card, one time each, or until a “Stop” command is issued.

The LED on this pushbutton will light whenever a Play All sequence is active

3.2.2 Lighted Stop Pushbutton

A momentary, lighted “Stop” pushbutton triggers the “Stop” function, which ends the playback initiated from either a “Play All” activation or an ATS triggered message.

The LED on this pushbutton will light whenever the system is not playing a message.

3.2.3 Lighted Speaker Pushbutton

A maintained, lighted “Speaker” pushbutton enables the monitor speaker mounted to the front panel of the unit. When the switch is active the monitor speaker is active so whenever a message is playing, it will be heard through the monitor speaker. When this pushbutton is not depressed, the monitor speaker will be disabled.

The LED on this pushbutton will light when the switch is in the active position.

3.2.4 Volume

Potentiometer to adjust the Monitor Speaker level. Counterclockwise sets the level lower, clockwise sets it higher.

3.2.5 USB Port

Any future changes to the audio announcements can be loaded onto the system via USB memory key. The procedure to perform the required function will be provided by Mackenzie as it becomes necessary.

3.2.6 SD Card Slot

Should it become necessary to replace the SD Card in the unit, a slot on the front panel is provided behind a cover plate allowing the user to remove and replace the SD Card.

3.2.7 Status LED

A Status Indication LED is provided on the front panel of the unit. This LED will blink at a 2Hz rate when the system is powered up and active.

4 OPERATION

4.1 Network Interface

Mackenzie will program the networking configuration (e.g.: IP Address, Gateway, Subnet mask, etc.) into each unit, as specified by documentation provided by the customer, prior to shipping. The IP Address of the unit will be written on the rear of the system for ease of recognition by the end user.

4.2 Audio Playback

Audio playback is triggered through the PAS interface. Because the ATS actively manages the Public Address System, no message queuing or audio handshaking is necessary in the DADS-PAS. In the event a message is currently playing, and another “Play” command is received, the currently playing message will be aborted (stopped immediately) and the newly activated message will be played. Refer to the “ATS to PAS” document for specifics related to Play and Stop commands.

Messages are stored as .MP3 files in the DAVE directory of the SD Card in the system. No Sentences or Playlists are supported by this device. Message #1 corresponds to the file 1.MP3 on the SD Card.

The audio output of the DADS-PAS system is provided through a standard unbalanced audio connection. The audio output level is adjustable via user accessible potentiometer on the rear panel of the system. The output level is adjustable from mute (fully counterclockwise) to +2dB of gain (fully clockwise).

5 WARRANTY, SERVICE & RETURNS

The industrial grade housing and quality construction of the Mackenzie DADS-PAS virtually eliminates the need for service or maintenance. There are no user-serviceable components within the Mackenzie DADS-PAS. Refer all servicing to the factory.

5.1 Warranty Coverage:

The Mackenzie DADS-PAS is tested and checked before shipment and is guaranteed against defective material or workmanship for a period of one (1) year from the date of purchase. Should trouble ever develop, contact the Factory directly by telephone or in writing. If it is determined that the equipment requires Factory service, return it to the Factory. If our inspection shows that the trouble was caused by defective material or workmanship, we will repair or replace the equipment without charge and return prepaid. Repairs made necessary by abuse, improper use, unauthorized service or maintenance, and/or improper installation, as well as out of warranty repairs, will be charged at our regular repair prices in effect at the time. The obligation under this warranty shall be limited to the replacement, repair or refund of any such defective device within the warranty period, at Mackenzie's discretion.

This warranty is in lieu of and excludes all other warranties, expressed or implied, and in no event shall MACKENZIE be responsible for damage to other equipment or property, for any anticipated profits, consequential damages, loss of item, or other operation or use of this product, and MACKENZIE'S maximum liability shall not ever be greater than the price paid for the equipment. This warranty gives you specific legal rights. Your rights may vary from state to state. Inquiries regarding use, repair and service should be made to:

MACKENZIE LABORATORIES, INC.
1163 Nicole Court, Glendora, CA 91740 USA
Telephone: (909) 394-9007 / FAX No: (909) 394-9411

5.2 What we ask you to do:

To get warranty service for your DADS-PAS system, you must provide proof of the date of original purchase. In the event you need to ship your DADS-PAS system to the factory for service, call us for a return authorization number. When you ship your DADS-PAS system, you must prepay all shipping cost. We suggest that you retain your original packing material in the event that you need to ship your DADS-PAS system. When sending your DADS-PAS system to the factory, include your name, address, phone number, proof of date of purchase, and a description of the operating problem. After repairing or replacing your DADS-PAS system, we will ship it to your return address at no cost to you within the USA. Repair or replacement of your DADS-PAS system at our factory is your exclusive remedy.

5.3 What this warranty does not cover:

This warranty does not cover defects resulting from accidents, damage while in transit to factory, alterations, unauthorized repairs, failure to follow instructions, misuse, fire, flood and acts of God.

NOTES