

Return Address

MACKENZIE LABORATORIES, INC.
1163 Nicole Court
Glendora, CA 91740 USA

OTHER MACKENZIE PRODUCT LINES

Storecasting & Message On Hold - Mackenzie's full line of digital Storecasting & Message-On-Hold systems, turn your public address system and telephone into a powerful marketing tool. The DYNAVOX series offers maintenance free digital playback with CD, tape, modem or satellite download. Several varieties are available with advanced features such as Music-Thru, individual message enable/disable, message sequencing and more.

Digital Message Repeaters - Mackenzie's line of Digital Message repeaters are the ideal audio announcement solutions for Public Address, Amusement, Entertainment, Museum and Exhibit applications. Self contained solid state systems offer unparalleled reliability. A variety of channel, connection, bandwidth and memory configurations are available.

Controls and Peripherals - Many applications require additional equipment to optimize the performance of Mackenzie products. This area focuses on items developed or sourced for their compatibility, ease of use and value. Included are, input/output controllers, speakers, amplifiers, motion sensors and pushbuttons among others.

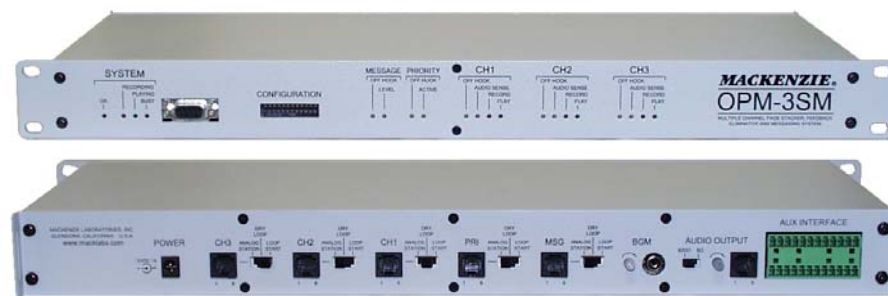
Transit - Mackenzie is making a difference in transit applications with innovative solutions for ADA compliance and Passenger Information Systems. These products address a variety of audio and text messaging requirements and support both in-vehicle and wayside installations.

MACKENZIE

OVERHEAD PAGE MANAGEMENT

OPM-3SM

Multiple Channel Page Stacker, Feedback
Eliminator and Messaging System



User's Manual

Version 1.2, Revised: 20,Feb 2008

Doc 99-20-067 - \$25.00

MACKENZIE LABORATORIES, INC.
1163 Nicole Court
Glendora, CA 91740 USA

Tel: (909) 394-9007 Fax: (909) 394-9411
Email: info@macklabs.com
Web: www.macklabs.com

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. A UL/CSA approved power pack is provided.
8. DO NOT staple or otherwise attach the power supply cord to building surface.
9. DO NOT use the product near or in wet or damp places, such as wet basements.
10. DO NOT use extension cords. Install within six feet of a grounded outlet receptacle.
11. DO NOT install during lightning storm.
12. Never touch un-insulated wires or terminals unless the unit is disconnected from both power and the rest of the phone system.
13. Use Caution when installing or modifying configuration switches or control lines.
14. 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.

Regulations:

FCC (Part 15) Radio Frequency Interference

The OPM-3SM generates and uses radio frequency energy and if not installed and used in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. Unit complies with the limits for Class A devices in accordance with the specifications in Subpart J of Part 15 of the FCC Rules. This testing is designed to provide reasonable protection against such interference. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the unit off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient the radio or TV receiving antenna.
- Relocate the unit with respect to the radio or TV receiver or vice-versa.
- Plug the unit into a different outlet so that it and the radio or TV receiver are on different branch circuits
- If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions.

Warranty & Registration Card for the OPM-3SM - Page Stacker & Feedback Eliminator

Date: _____ Serial No.: _____

Purchaser: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Fax: _____ Email: _____

Seller: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Fax: _____ Email: _____

Return warranty card via:

FAX: (909) 394-9411

MAIL: Address on reverse side

ONLINE: www.macklabs.com/registration.html

NOTES

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The following items should be found in the container of OPM-3SM:

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1.1 Features and Capabilities

BACKGROUND MUSIC: To keep everything in harmony, the OPM-3SM also includes a background music input. This allows playback of your favorite music source over the paging system. When a page or message is played, the background music will be muted and the announcement will be heard loud and clear.

9. WARRANTY, SERVICE & RETURNS

The industrial grade housing and quality construction of the Mackenzie OPM-3SM virtually eliminates the need for service or maintenance. There are no user-serviceable components within the Mackenzie OPM-3SM. Refer all servicing to the factory.

9.1 Warranty Coverage:

The Mackenzie OPM-3SM 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

9.2 What we ask you to do:

To get warranty service for your OPM-3SM system, you must provide proof of the date of original purchase. In the event you need to ship your OPM-3SM system to the factory for service, call us for a return authorization number. When you ship your OPM-3SM 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 OPM-3SM system. When sending your OPM-3SM 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 OPM-3SM system, we will ship it to your return address at no cost to you within the USA. Repair or replacement of your OPM-3SM system at our factory is your exclusive remedy.

9.3 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.

1.2 General Specifications

AUDIO

Bandwidth	100Hz - 8kHz
Page Input	3, RJ12 connector, Station Port/Dry Loop/Loop Start
Priority Input	1, RJ12 connector, Station Port/Dry Loop/Loop Start
Messaging Input	1, RJ12 connector, Station Port/Dry Loop/Loop Start
Background Music Input	Line level input with level control
Page output	1, RJ12 connector, 8ohm power/600ohm line level(switch selectable), adjustable

PAGE STACKING

Message repeat	play one or two times, dip switch selectable
Delay between messages	1s, 3s, 5s, 10s dip selectable
Stack	up to 16 messages per input
DTMF	Store/forward(0,2,3 or 4 tones) dip selectable
Pre-Page Tone	dip selectable

POWER

Power Pack	12VDC @ 1 amp, UL and CSA
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MEMORY

Type	FLASH
Page Stacking	4 min per page input channel
Messaging	8 min

MESSAGE CONTROL

# of messages	99
Record Control	DTMF control from messaging input
Play Control	Triggered from DTMF on messaging input or start contacts (10)

PAGE CONTROL

Priority	Control contact is offered on the Priority Input RJ connector
Page Inputs	3, Page Input RJ connector. Each input answers (loop, audio sense, DTMF)

STATUS OUTPUTS

Playing Contact	Solid State Relay contacts 24VDC @ 100mA max
Record Contact	Offered on the Page Output RJ connector
	Offered on each Page Input RJ, as well as the Message Input RJ

PACKAGE

Chassis:	Rack mount(1U)
Material:	18 gauge cold rolled steel, painted with silkscreen

2. INSTALLATION & CONFIGURATION

This section provides complete instructions for mounting the OPM-3SM in a rack or on a table. It also illustrates all interface requirements to auxiliary equipment, including inputs and outputs. Configuration switch settings are provided.

2.1 Installation Steps

These are the general steps for installation:

1. Find a space in a rack or on a table. Mount the unit to the selected place with it's wiring at least 18" away from the power supply or other equipment that generate electrical noise. Secure unit using the supplied mounting screws.
2. Make sure there is a standard electrical outlet into which you can plug the power pack. This outlet should NOT be controlled by a wall switch.
3. Make cable connections from the OPM-3SM to the PBX or audio source and the Paging system,
4. Set DIP switches to the desired operation.
5. Connect the power supply. System OK Led should illuminate GREEN.
6. Test unit operation.

2.2 Hardware Description

FRONT



1. Power LED - Green
2. Recording LED - Red
3. Playing LED - Green
4. Busy LED - Yellow
5. Setup Switches, for selection of optional operational functions
6. Messaging Input Off Hook LED - Yellow
7. Messaging Input Level LED - Yellow
8. Priority Input Off Hook LED - Yellow
9. Priority Input Active LED - Yellow
10. Paging Channel 1 Off Hook LED - Yellow
11. Paging Channel 1 Audio Sense LED - Yellow
12. Paging Channel 1 Record LED - Red
13. Paging Channel 1 Play LED - Green
14. Paging Channel 2 Off Hook LED - Yellow
15. Paging Channel 2 Audio Sense LED - Yellow
16. Paging Channel 2 Record LED - Red
17. Paging Channel 2 Play LED - Green
18. Paging Channel 3 Off Hook LED - Yellow
19. Paging Channel 3 Audio Sense LED - Yellow
20. Paging Channel 3 Record LED - Red
21. Paging Channel 3 Play LED - Green

7. BACKGROUND MUSIC INPUT

The OPM-3SM allows for a background music source to be mixed with pages and pre-recorded messages. Background music is muted when pages or pre-recorded messages are played to the audio output. The BGM Level control allows you to optimize the level music sent to the audio output.

8. AUDIO OUTPUT

The audio output of the OPM-3SM is the audio interface for your zone controller, amplifier or public address system. All audio from the paging channels, priority input, messaging system and BGM input is routed to this output. The OPM-3SM manages stored pages on a first in, first out basis. This means that pages will be played in the order they were successfully completed and or triggered, independent of the particular input. Only the priority input has the ability to interrupt the playback queue. In the case of a priority page, the system will pause the playback queue during the priority page, then continue when the page is complete.

4. QUEUE

The OPM-3SM incorporates a playback queue to manage the order that messages play. This queue will manage up to 128 pages. Pages are put into the queue on a first in, first out basis. The queue is compatible with pages from any of the three page channels and/or the messaging input. The priority input offers live, or direct, access to the output of the system. A priority page will pause the playback queue. When the priority session completes, the queue will continue from where it left off.

5. PRIORITY

The OPM-3SM offers a Priority input to gain immediate access to the public address system. Activation of priority halts the playback of recorded pages. When the priority page is completed, the OPM-3SM will resume playback from the beginning of the message that was interrupted. Priority Activation methods include Analog Station, Dry Loop and Loop Start. A valid connection via any of these methods provides direct access to the system. Status of the Record Activation switches is not relevant.

6. MESSAGING, PRE-RECORDED

The OPM-3SM offers a pre-recorded messaging system for quick and easy access to standard or frequently used pages. This system allows messages to be recorded and permanently stored in FLASH memory. Playback is provided via DTMF command or contact closure. The messaging portion of the OPM-3SM can store up to 99 messages in 8 minutes of memory.

DTMF Commands

Code	Name	Description
#	End	Use this function to stop recording or exit a command
*0	Stop	Stop playing all triggered messages
*3xx	Delete	Delete message at location xx
*5xx -or- xx	Play	Play message at location xx to the audio output
*6xx	Review	Listen to a message through the handset. Audio is NOT routed to the audio output
*7xx	Record	Record message into location xx. Recordings may only be made to empty message locations. To update a previously recorded message, make sure to delete it first.

Connect to the messaging system with the desired mode, analog station, dry loop or loop start. The Message Off Hook LED (yellow) indicates that you are connected to the system in Loop Start or Analog Station mode.

A steady tone indicates a correctly executed and accepted command. A fast busy signal indicates an incorrectly executed command.

BACK



- 22. Power Input
- 23. Paging Channel 3 Audio/Control Connector
- 24. Paging Channel 3 Mode Switch
- 23. Paging Channel 2 Audio/Control Connector
- 24. Paging Channel 2 Mode Switch
- 23. Paging Channel 1 Audio/Control Connector
- 24. Paging Channel 1 Mode Switch
- 25. Priority Audio/Control Connector
- 26. Priority Mode Switch
- 25. Messaging Audio/Control Connector
- 26. Messaging Mode Switch
- 27. Background Music Input Level Adjust
- 28. Background Music Input
- 29. Output Mode Switch
- 30. Output Level Adjust
- 31. Output Audio/Control Connector
- 32. Messaging Playback Auxiliary Interface
- 33. Paging Control and Status Auxiliary Interface

2.2.1 Status LED Indicators

System OK LED – Solid Green, indicates unit is ON.

Recording LED - Red, indicates that a recording is being made to the messaging system.

Playing LED - Green, indicates system is playing a page.

Busy LED - Yellow, indicates the system is busy recording, playing, delaying a message or making a priority announcement.

Messaging Input Off Hook LED - Red, indicates the messaging system is being accessed.

Messaging Input Level LED - Yellow, indicates audio signal is present.

Priority Input Off Hook LED - Red, indicates the priority channel is being accessed.

Priority Input Active LED - Yellow, indicates the priority channel is active.

The following are valid for Paging Channels 1 - 3

Off Hook LED - Red, indicates the paging channel is active with Loop Current flowing.

Audio Sense LED - Yellow, indicates audio signal is present.

Record LED - Red, indicates paging channel is recording

Play LED - Green, indicates the paging channel is playing

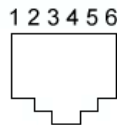
2.2.2 Power Input

Unit requires 12 VDC @ 1amp, connect power pack supplied. Chassis is connected to negative side of power supply.

2.2.3 Paging Audio/Control, Channels 1 - 3

Input, RJ12 style connector, 6 position.

1. Abort, stops recording when connected to Ground(Pin 5).
2. Record input, connect to Ground(Pin 5) to activate.
3. Audio, ring/return.
4. Audio, tip/signal.
5. Ground, (power return).
6. Not used.



2.2.4 Paging Mode Switch, Channels 1 - 3

Analog Station - LEFT Position. Impedance 900 ohm, voltage for ring trip 75 - 105V(20 - 60Hz).

Dry Loop - Center Position. Configures audio input for 600ohm, line level(-10dB nominal).

Loop Start - RIGHT Position. Configures priority audio input for 900ohm and supplies 24VDC talk battery. Compatible with loop start trunk ports.

3.1 Page Recording

Upon receiving a valid recording signal, the OPM-3SM will start recording at the beginning of the memory until the page is complete. While this page is playing, if a new page is requested it will be recorded. Multiple pages will be recorded in series until the playing message has completed its play routine.

Multiple channels may be recording incoming pages at the same time. Playback order of pages is based on when the recording process is complete. For example, if a long message is being recorded on channel 1, and during that process a short message is recorded and completed on channel 2, the playback order will be the message on channel 2 then the message on channel 1.

3.2 Record Activation Methods

There are several methods to initiate automatic record mode on the OPM-3SM. The activation mode will be selected by the Setup Switches upon power up. It cannot be changed during normal operation.

Loop Start - Setup Switches 1=OFF, 2=OFF

The OPM-3SM will source the talk battery(24VDC) to the ring and tip, sense the loop current when phone goes off hook and start the recording process for the duration of the page. Valid for Analog Station and Loop Start modes.

Audio Sense - Setup Switches 1=OFF, 2=ON

For record activation without a separate switch closure or loop current. The OPM-3SM will start recording when the audio sensor goes active and will stop when the audio sensor is inactive for three seconds. Valid for Analog Station, Loop Start and Dry Loop modes.

DTMF Activation - Setup Switches 1=ON, 2=OFF

For record activation without a separate switch closure and perhaps noisy audio lines. The OPM-3SM will start recording when it "sees" a valid DTMF tone and will stop when the audio sensor is inactive for three seconds. Valid for Analog Station and Loop Start modes. The DTMF tone used to activate the recording will be stripped and not output when the message is played.

Manual Recording - Available in all modes - Typically associated with Dry Loop mode, this method enables the OPM-3SM to begin recording with a switch closure between pins 2 and 5 of the RJ12 connector of a particular channel.

3.3 Playback

The OPM-3SM can be configured to automatically playback pages after their record process has completed. This mode is configured by setting Setup Switch 8 to OFF.

The OPM-3SM may be configured for manual or switch closure playback(Setup Switch 8=ON) when you want full control of when pages will playback. Playback is triggered via a momentary closure(100ms) between pins 1 and 5 of the Paging Control and Status Auxiliary Interface.

6	Not Used	Not Used
7	Busy Common	Common for the busy relay
8	Busy Relay	Activates when system is recording or playing a message.
9	Playing Common	Common for the Playing Relay.
10	Playing Relay	Activates when system is playing.
11	Recording Common	Common for the Recording Relay.
12	Recording Relay	Activates when the system is recording.

3. PAGE STACKING, FEEDBACK ELIMINATION OPERATION

There OPM-3SM offers 3 channels of page stacking, intended for busy paging systems with multiple inputs. Each channel performs the following functions:

1. It eliminates feedback by recording the incoming page(s), then playing them back.
2. It is able to repeat each page allowing for better intelligibility in a noisy environment.
3. It is capable of stacking up to 16 incoming pages per channel by recording incoming pages while Playing back previously recorded ones on a first-in first-out basis.

Constraints:

- Each page is allowed a maximum of 1 minute recording time. Pages exceeding this will be aborted and a busy back tone is generated.
- Recordings that reach the end of memory are considered incomplete. These pages are aborted and a busy back tone is generated. If the memory is filled and a new recording command is offered, the OPM-3SM will not go into record mode and a busy back tone will be output to tell the user that the system not available.
- The recorded message must be a minimum of one second in length. Any message shorter than this will be aborted.
- The OPM-3SM aborts pages that are comprised of 3 or more seconds of silence. The page is deleted and a busy back tone is generated.

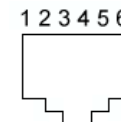
Other important features include the ability to Record/Regenerate, or Block DTMF tones for use in zone controller applications.

The OPM-3SM is designed to run in both Automatic and Manual modes. For paging applications the Automatic mode is the most widely used. This mode requires minimum installation time since it is the factory's default setup. RJ12 connectors are used for Audio inputs and outputs. Where logical, certain control signals are also provided on the individual RJ12 connectors associated with each input.

2.2.5 Priority Audio/Control Connector

Input RJ12 style connector, 6 position

1. Not used.
2. PRIORITY input, connect to Ground (Pin 5) to activate.
3. PRIORITY Audio, ring/return.
4. PRIORITY Audio, tip/signal.
5. Ground. (power return).
6. Not used.



2.2.6 Priority Mode Switch

Analog Station - LEFT Position. Impedance 900ohm, voltage for ring trip 75 - 105V(20 - 60Hz).

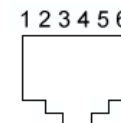
Dry Loop - Center Position. Configures audio input for 600ohm, line level(-10dB nominal).

Loop Start - RIGHT Position. Configures priority audio input for 900ohm and supplies 24VDC talk battery. Compatible with loop start trunk ports.

2.2.7 Messaging Audio/Control Connector

Input, RJ12 style connector, 6 position.

1. Not used.
2. Not used.
3. Audio, ring/return.
4. Audio, tip/signal.
5. Not used.
6. Not used.



2.2.8 Messaging Mode Switch

Analog Station - LEFT Position. Impedance 900ohm, voltage for ring trip 75 - 105V(20 - 60Hz).

Dry Loop - Center Position. Configures audio input for 600ohm, line level(-10dB nominal).

Loop Start - RIGHT Position. Configures priority audio input for 900ohm and supplies 24VDC talk battery. Compatible with loop start trunk ports.

2.2.9 Background Music Input Volume

Controls the background music input volume level delivered to the audio output.

2.2.10 Background Music Input Connector

RCA, 1Vrms, tip is audio signal and sleeve is audio return.

2.2.11 Output Mode Switch

This will select the type of audio drive available at the Output Audio/Control Connector. LEFT for line level (+4dB/600ohm), and RIGHT for power level (500mW/8ohm).

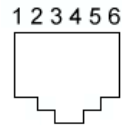
2.2.12 Output Volume

Controls the audio output volume level delivered to the paging system. It is shipped with 1:1 gain factory set.

2.2.13 Output Audio/Control Connector

Output, RJ12 style connector, 6 position.

1. Not used.
2. Playing Relay, Normally Open.
3. Audio Return.
4. Audio Signal.
5. Playing Relay, Common.
6. Not used.



Delay Between Plays

To make the page sequence more intelligible, a pause can be inserted between each message in the playback sequence as well as between any repeats of each message.

11	12	*1 second
		3 seconds
		5 seconds
		10 seconds

2.2.15 Messaging Playback Auxiliary Interface

Top row of 12 inputs on the Auxiliary Interface. This interface allows playback of pre-recorded messages through a momentary closure (100ms). Each closure between a Play input and Ground will play the corresponding message one time. Multiple closures on a single input or several inputs will queue the messages and the system will play them in the order received.

12 position Euro-style, two piece, pluggable type.



Pin	Name	Description
1	Ground	Common
2	Play 1	Plays message 1 when connected to ground
3	Play 2	Plays message 2 when connected to ground
4	Play 3	Plays message 3 when connected to ground
5	Play 4	Plays message 4 when connected to ground
6	Play 5	Plays message 5 when connected to ground
7	Play 6	Plays message 6 when connected to ground
8	Play 7	Plays message 7 when connected to ground
9	Play 8	Plays message 8 when connected to ground
10	Play 9	Plays message 9 when connected to ground
11	Play 10	Plays message 10 when connected to ground
12	Not Used	Not Used

2.2.16 Paging Control and Status Auxiliary Interface

Bottom row of 12 inputs on the Auxiliary Interface. Allows manual access to many of the common inputs and status outputs of the system.

12 position Euro-style, two piece, pluggable type.



Pin	Name	Description
1	Ground	Common
2	Not Used	Not Used
3	Priority	Initiates priority page when connected to ground.
4	Stop	Stops any currently playing message when connected to ground.
5	Play	Plays next message in queue when connected to ground.

DTMF Tone Stripping Method

This setting determines how and where the DTMF tones coming from audio input, during a recording, are processed. Tones can be stripped only at the beginning of the message or at the middle of the message. If the tones recorded page are stripped in the middle of the message all recorded information preceding those tones will be deleted, resetting the message start.

- 4 ☐ *Strip only tones at the start of a recorded page.
☐ Strip any tones in message and restart recording message.

DTMF Allotment

Most paging systems require a limited number of tones to be recorded because of zone controlling equipment. If the selected number of tones is exceeded the OPM-3SM will abort that particular recording.

- 5 ☐ 6 ☐ *Unlimited number of DTMF tones
☐ ☐ 4 tones
☐ ☐ 3 tones
☐ ☐ 2 tones

Abort

This would allow a caller to abort a page being recorded by pressing the “#” button two times within one second. The recording will immediately be aborted and the busy back tone sent to the input. A single “#” sign during the recording will not have any effect.

- 7 ☐ *Enable
☐ Disable

Play Mode

Allows for automatic playback of page after recording.

- 8 ☐ *Auto Play
☐ Manual

Pre-page Tone

A pre-recorded tone can be output prior to message playback. This is used to alert listeners that a message is about to be played. This tone will be output before each message in the playback queue but not before the repeated plays.

- 9 ☐ *Disable
☐ Enable

Number of Plays

The number of times which each message plays during the playback sequence. If multiple messages were recorded into the queue, each message will play this number.

- 10 ☐ * Play once
☐ Play twice

2.2.14 Setup Switches

12 position DIP Switch: UP position is OFF, DOWN position is ON. * indicates factory Default Setting. Settings are scanned on power up. Power must be cycled for changes to take effect.



Record Activation Method

The method with which the user will enter the record mode.

- 1 ☐ 2 ☐ *Off Hook(Loop Current) - The system will source "talk battery" onto the ring and tip lines. The system will sense loop current flow to start the recording process for the duration of the loop current flow.
☐ ☐ Audio Sensor - The system will start recording when the audio sensor goes active and will stop when the audio sensor is inactive for 3 seconds.
☐ ☐ DTMF - The system will start recording when it detects a valid DTMF tone and will stop when the audio sensor is inactive for 3 seconds.
☐ ☐ Not in use

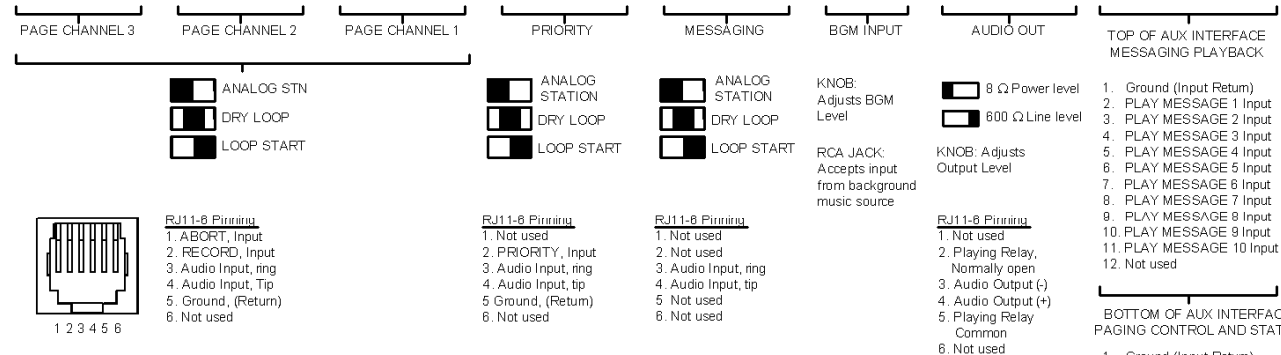
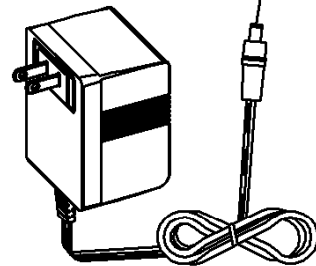
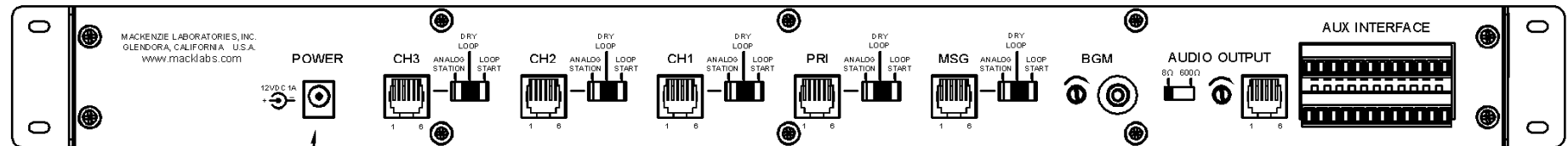
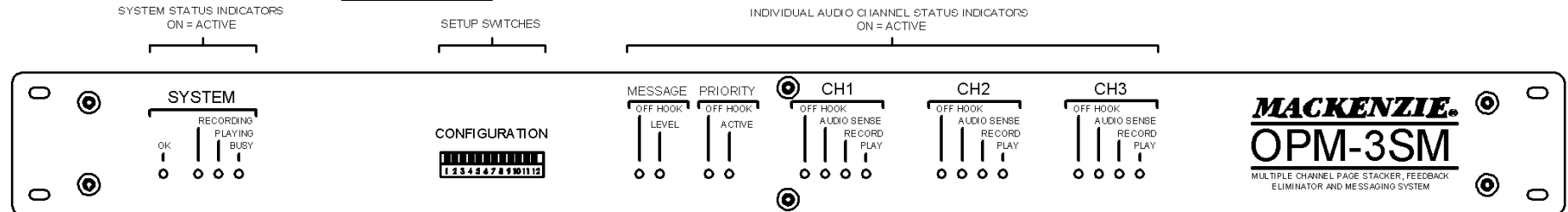
NOTE: Priority Input activation(see Priority Audio/Control Connector or Paging Control and Status Auxiliary Interface) is always available regardless of switch settings. A maintained contact closure on either of these inputs will start the recording process for the duration of the closure.

DTMF Tone Stripping

DTMF tones recorded at the beginning of an audio message are typically used for zone control purposes. A repeated page should not have the zone control tones on the front end of the second page because the zone controller is already routed, therefore these tones will be stripped on the repeat of a page. DTMF tones at the beginning of the page would be handled in this fashion. Any DTMF tones recorded in the middle of the message would be recorded and played back in the typical manner.

- 3 ☐ *Active
☐ Not Active

		OFF	ON	* = Default Setting
1	2	RECORD Activation		
<input type="checkbox"/>	<input type="checkbox"/>	* Off Hook (loop current)		
<input type="checkbox"/>	<input type="checkbox"/>	Audio Sensor		
<input type="checkbox"/>	<input type="checkbox"/>	DTMF		
<input type="checkbox"/>	<input type="checkbox"/>	Not in Use		
3		DTMF Tone Stripping		
<input type="checkbox"/>		* Active		
<input type="checkbox"/>		Not - active		
4		DTMF Stripping Method		
<input type="checkbox"/>		* Strip only tones at start of a recorded page.		
<input type="checkbox"/>		Strip any tones in messages, and restart recording message.		
5	6	DTMF Allotment		
<input type="checkbox"/>	<input type="checkbox"/>	* Unlimited		
<input type="checkbox"/>	<input type="checkbox"/>	4 tones		
<input type="checkbox"/>	<input type="checkbox"/>	3 tones		
<input type="checkbox"/>	<input type="checkbox"/>	2 tones		
7		*#* Abort Enable		
<input type="checkbox"/>		* Active		
<input type="checkbox"/>		Inhibit		
8		Play Mode		
<input type="checkbox"/>		* Automatic		
<input type="checkbox"/>		Manual		
9		Pre-Page Tone		
<input type="checkbox"/>		* Not Active		
<input type="checkbox"/>		Active		
10		Number of Plays		
<input type="checkbox"/>		* Play message one time		
<input type="checkbox"/>		Play message two times		
11	12	Delays Between Plays		
<input type="checkbox"/>	<input type="checkbox"/>	* 1 second (Minimum)		
<input type="checkbox"/>	<input type="checkbox"/>	3 seconds		
<input type="checkbox"/>	<input type="checkbox"/>	5 seconds		
<input type="checkbox"/>	<input type="checkbox"/>	10 seconds		



OPM-3SM Quikiey
V1.1 24 OCT 2006
MACKENZIE LABORATORIES INC.
1163 Nicole Court, Glendora, California 91740 USA
TEL: (909) 394-9007, FAX: (909) 394-9411
www.macklabs.com