

ISP 4500

Installation and Operating Instructions



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ISP 4500 Technical Specifications

Recording Time

4, 8, 16, 24, and 32 Minutes

Message Capability:

Zone 1 - MOH - 12 messages

Zone 2 - ISP - 21 messages

Zone 2 - Trigger/Timed - 12 messages

Memory Type:

NAND Flash Memory, non volatile (holds all programming in memory until user makes a change)

Frequency Response/Bandwidth:

Messages - 200 Hz to 8 KHz

Frequency Response/Bandwidth:

Music - Same as external music source

8 Ohm output (MOH):

8 Ohm and 5 Watt (RCA type connector)

600 Ohm output (MOH):

600 Ohm output for "line-in" connection to amplifier (RCA type connector)

"Line-Out" (ISP):

RCA type connector

Music Input:

"Line-Out" type connector from music source (RCA type connector)

Handset Input:

Carbon Handset



IMPORTANT

Before using the Premier ISP4500, please read these operating instructions carefully.

I. Introduction

The Premier ISP4500 unit is a high quality audio recorder and playback system. **The unit is able to simultaneously play independent message groups over the Music On Hold (MOH) and In Store Promotion (ISP) outputs.** A Music input allows an external music source to play in between messages and optionally, at decreased volume behind messages. Dual input music volume potentiometers allow the music level to be independently adjusted as compared to the message level, on each of the two outputs.

Up to 21 messages can be recorded for the ISP output. These messages can be played at intervals of between 2 seconds and an upward limit of 59 minutes and 59 seconds, in increments of one second. Additionally, **the ISP output can play up to 12 trigger messages that play on a specific day of the week and time of the day.** Up to **24 trigger times can be entered for the 12 trigger messages.** Each trigger time identifies the trigger message number to be played, and the days of the week and single time of day to play the message.

Up to 12 messages can be recorded for the MOH output. These messages can be continuously played by entering 0 seconds for the interval or they can be played at intervals of between 2 seconds and an upward limit of 59 minutes and 59 seconds, in increments of one second. (1 second is not a valid number.)

Messages can be recorded from tape or from a carbon telephone handset (sold separately). Tape messages can be recorded individually or in bulk. Messages may be any length, as long as the total memory time of the unit is not exceeded. Individual messages may be erased and re-recorded any number of times with no additional limitations on message length.

The **MOH output** is intended to connect directly to an 8 ohm speaker or to a 600 ohm or other input on a telephone system's music-on-hold port. The ISP output is intended to connect to a line-in connection on a PA system. A music source may be connected to the music input on the unit for background music.

Additional features include

- Background music playing behind a message can be independently turned on or off for each output.

- Individual messages can be turned on or off. (Off messages will be skipped during playback.)
- The internal speaker can be turned on or off.
- An “(All ISP Messages On/Off)” keypad allows the playing of ISP messages to be turned on and off.
- Messages can be erased independently or in bulk.
- Recording of new messages automatically erases old messages.
- Any single message can be listened to, over the internal speaker.

Connections

- 1) Connect a music source to Input on the unit.
- 2) Connect the On Hold 600 Ohm output to the music-on-hold port on the telephone system. If volume level is insufficient, change the connection to the On Hold 8 Ohm output.
- 3) Connect a telephone handset with carbon microphone to the Handset connector for local recording of individual messages.
- 4) Connect the ISP output to the line-in input on a PA system.
- 5) Connect the AC adapter to the unit’s Power input. (Power input requires 12 Vdc @ 800 mA, center terminal positive.) Connect the other end of the AC adapter to a 120 Vac outlet.

Volume Adjustment & Misc. Setup

The following steps should be used to adjust the volume for each of the audio outputs. Note: there is some interaction between the music volume and the output message volume.

- 1) Record one or more audio messages from audio tape or handset into the ISP and MOH areas. (See Recording from tape.)
- 2) Turn on Test Mode (See Test Mode), for continuous playing of messages, or change the message play interval to 2 seconds (See Message Interval) for both ISP and MOH. (Note that Test Mode turns off automatically after 90 seconds.)
- 3) Adjust On Hold Output Vol. and ISP Output Vol. for proper listening levels of messages.

- 4) Adjust On Hold Tone and ISP Tone for proper tone adjustment.
- 5) Allow the test mode to time out, or change the message play interval to 10 minutes for both ISP and MOH.
- 6) Adjust In Store Promotion Input Vol. and On Hold Input Vol. for proper listening levels of music. (Do not readjust the output volume or the message volume will change.)
- 7) Playing of music at reduced volume, behind messages can be turned on or off by pressing “(Additional Setup)” and by using the “(Next)”, “(Accept)”, or “(Change)” keypads to turn ISP & MOH music on or off. (See Background Music On/Off)
- 8) Enter desired message play interval for ISP & MOH. Entering 0 interval time causes the messages to play continuously. Any other time from 2 seconds to 59 minutes and 59 seconds may be entered. (1 second is invalid.) (See Message Interval).

General Display Information

The Liquid Crystal Display provides information about the status of the unit, and it prompts the user through various command sequences.

During normal message play, the display shows message status for each of the three types of messages (ISP, MOH & TRI). Each of the three types of messages can be cycled through by pressing the “(Toggle Display Mode)” keypad. The three character display mode is shown in the lower right part of the display. Since only 12 messages can be displayed at one time, the **ISP screen displays messages 1 to 12 and the IS2 screen displays messages 13 to 21. The MOH and TRI display modes shows messages 1 to 12(respectively).**

Solidly displayed message numbers are “On” and will be played in their turn, starting with the lowest message number and proceeding in order to the highest. **Blinking message numbers are “Off”** and will not be played.

Messages can be turned “On” or “Off” by pressing the “(Single Message On/Off)” keypad and by selecting the desired menu choices.

General Keypad & Programming Information

All commands to the unit are entered via the membrane switch keypad. Simply push the desired command and follow the easy prompting on the display. **Most commands require that the “(Accept)” or “(Change)” keypad be pressed prior to execution.** Miscellaneous commands are structured under the “(Additional Setup)” keypad, and require use of the “(Previous)” and “(Next)” keypads. In most cases, pressing the “(Cancel)” key causes the current command sequence to abort.

Flash Memory Storage and Power Up Operation

All program information and recorded messages are stored in non volatile flash memory. Following power up of the unit, the lowest message number for each output is played first.

Memory Block Size for Storage of Messages

Recorded messages are stored in flash memory in increments called blocks, even though messages can be any length. Each block of memory is either one or two seconds long depending on the size of the flash memory. Messages will consume memory in full block increments.

II. Operating Instructions

Default Operation

The unit comes programmed with a **default ISP message interval of 10 minutes and an MOH interval of 10 seconds**. All memory is blank and ready to be recorded. Background music behind the messages is turned on. The internal speaker is on.

Toggle Display Mode

The units display will show the message status for any single category (ISP, MOH, TRI). To toggle through the different categories, press the **“(Toggle Display Mode)”** keypad. Since the ISP mode’s 21 messages can not fit on one screen, this category has been split into two displays. **When the display shows ISP, then the status of messages 1 through 12 are shown. When the display shows IS2, then the status of messages 13 through 21 are shown. The MOH and TRI modes each display messages 1 through 12(respectively)**. The order of displayed categories is ISP, IS2, MOH and finally TRI. Only messages that have been saved will show on the display. Messages that have been turned off will blink.

The Toggle Display Mode function is used as a category selector for other functions or commands. In other words, the command will only act on the current category that is displayed.

Recording from Tape – (Record one or more messages from tape)

All recording of tape messages is initiated by simply opening the tape door, inserting the tape and closing the door. This action automatically causes the display to show the tape record menu. Choose the type of recording desired (single or multiple message). Then choose the category (ISP, MOH, TRI). If single message is chosen, then you must also enter a two digit message number. (Enter 0 as the first character for message numbers less than 10.) Once the method of recording is chosen, the unit will erase all old messages in the chosen category for multiple message record or the single old message for single message record, rewind the tape and finally record the new messages.

The unit begins recording a message when it detects sound on the tape and it stops recording the present message when it detects 3 seconds of silence. The first message must begin within 30 seconds of the beginning of the tape. There must be at least 30 seconds of silence following the last message. **For multiple message recording, each message must be separated by 3 to 30 seconds of silence (optimal is 6 seconds).**

The recorded audio messages will be heard over the internal speaker if the internal speaker is On. During the record process a bar graph (VU meter) will indicate relative record volume of the various messages.

Recording Multiple Messages from Tape

- **Open tape door.** Insert tape. Close tape door.
display: “Multi Mes Recd” then “Press Acc/Change”
- **Press “(Accept)”**
display: “Record ISP Mes” then “Press Acc/Change”
- **Press “(Change)”**
display: “Record MOH Mes” then “Press Acc/Change”
- **Press “(Accept)”**
All MOH messages are erased and new MOH messages are recorded.

Recording a Single Message from Tape

- **Open tape door.** Insert tape. Close tape door.
display: “Multi Mes Recd” then “Press Acc/Change”
- **Press “(Change)”**
display: “Single Mes Recd” then “Press Acc/Change”

- **Press “(Accept)”**
display: “Record ISP Mes” then “Press Acc/Change”
- **Press “(Accept)”**
display: “Enter Mes #00” then “Press Acc/Cancel”
- **Press “(0, 7, Accept)”**
ISP message #07 is erased and re-recorded from tape.

Recording from Handset

Any single message can be recorded with a carbon microphone handset that is plugged into the Handset jack.

- **Press “(Record Handset)”** on the keypad to begin the record process. The record menu will appear on the screen.
- **You must choose the correct category “(ISP, MOH or TRI)”** for the message by pressing the Change keypad until the correct choice is displayed.
- **Press “(Accept)”** when the desired category is displayed.
- **Enter the desired message number for the recording.** All message numbers are entered as two digits. (To enter a single digit number, you must enter “0”, and then the number.)
- **Press “(Accept)”** The old message for that category and number is erased and the screen displays the current category and message number and prompts you to press “(Accept)”, then “(Start)” and finally “(Stop)”. (If you press “(cancel)” at this point, the old message is erased and the record is aborted.)
- **Press “(Accept)”** The display says “Recording” and shows the category and message number on the top line of the display. The bottom line becomes a bar graph or VU meter and indicates loudness of the audio during the record process.
- **Press the “(Start)”** - which is also the number 6 on the keypad. Talk into the handset in a normal talking voice. Your message is now being recorded. The VU meter shows the volume of the recording.
- **Press the “(Stop)”** - which is also the “(Internal Speaker On/Off)” keypad. The recording is stopped and is saved at the designated location.

Erasing Messages - Erase one or more messages from flash memory.

- **Press the “(Additional Setup)”** on the keypad, to erase one or more messages independently from the record process. A variety of menu choices will display themselves.
- **Press the “(Previous)” or “(Next)”** on the keypad until you see the display indicate “Erase Menu Off ” then “Next/Acc/Change”.
- **Press “(Change)”** to turn On the erase menu.
- **Press “(Accept)”** to enter the erase menu.
- **Press “(Change)”** to toggle through the “Single Mes Erase”, and “Multi Mes Erase” screens. Single erases only one message. Multi will erase all messages in selected mode
- **Press “(Accept)”** when the desired erase screen is displayed.

For Single Message Erase:

- **Press “(Change)”** to toggle through the different categories (ISP, MOH or TRI).
- **Press “(Accept)”** to choose the correct category for message erase.
- Enter the two digit message number to be erased.
- **Press “(Accept)”** to erase only that message number.

For Multiple Message Erase:

- **Press “(Change)”** to toggle through the different options (ALL, ISP, MOH or TRI).
- **Press “(Accept)”** to choose the correct category type of erase. Choosing “ALL” causes all ISP, MOH & TRI messages to be erased. Choosing any of the other categories results in only that category being erased.

Message Interval

Change the message interval for the playing of either ISP or MOH messages. A time of 0 seconds can be entered to continuously play messages. **A time of 2 seconds to 59 minutes and 59 seconds, in increments of 1 second can be entered.** The time is entered in min/sec as MM:SS. Music from the Input port will ramp down prior to the playing of a message and it will ramp back up at the end of the message.

- **Press “(Message Interval)”**
display: “ISP Interval” then “Press Acc/Change”
- **Press “(Change)”**
display: “MOH Interval” then “Press Acc/Change”
- **Press “(Accept)”**
display: “Interval 00:10” then “Press Acc/Change”
- **Press “(Change)”**
display: “Interval MM:SS” then “Press Acc/Cancel”
- **Press “(0, 0, 2, 0, Accept)”** - 20 seconds has been entered as the new MOH interval.

Listen to Message

A single message can be played over the internal speaker and over the associated output port. The internal speaker must be On for the message to play over the speaker. This action will interrupt the normal playing of messages and will play one message that has been chosen from the currently displayed message category.

- **Press “(Toggle Display Mode)”** until the desired category is shown in the
display: (ISP, IS2 MOH, TRI).
display: “Enter Mes #00” then “Press Acc/Cancel”
- **Press “(0, 5, Accept)”** - Message # 05 from the displayed category will play over the associated port and over the internal speaker (if the internal speaker is On).

Speaker On/Off

Turn the internal speaker on or off. In normal play mode, **the speaker plays whatever output is being played for the given category that is shown in the display.** ISP, IS2 and TRI display modes all cause the speaker to play whatever comes out of the ISP output port. The MOH display mode causes the speaker to play whatever comes out of the MOH port.

Single Message On/Off

View and change the status of each message. When a message is on, it will be played during its turn, in order from lowest to highest. When a message is off, it will be skipped during its turn, and the next “on” message will be played. An On message is displayed continuously. An Off message blinks on and off repeatedly at a slow rate.

- **Press “(Toggle Display Mode)”** until the desired category is shown in the
display: (ISP MOH, TRI).
- **Press “(Single Message On/Off)”**
display: “Enter Mes #00” then “Press Acc/Cancel”
- **Enter “(0, 3, Accept)”**
display: “On Mes # 03” then “Press Acc/Change”
- **Press “(Change)”**
display: “Off Mes # 03” then “Press Acc/Change”
- **Press “(Accept)”** - Message #03 of the chosen category is turned off.

All ISP Messages On/Off

Turn the playing of all ISP messages on or off. If off, input music will continue to play through the ISP port. TRI messages will continue to play.

- **Press “(All ISP Messages On/Off)”**
display: “ISP Messages On” then “Press Acc/Change”
- **Press “(Change)”**
display: “ISP Messages OFF” then “Press Acc/Change”
- **Press “(Accept)”** - The playing of ISP messages is disabled. (TRI messages will still play.)

Background Music On/Off

The playing of music at reduced volume behind the playing of messages can be independently turned on or off for both the ISP and the MOH output ports.

- **Press “(Additional Setup)”**
display: “ISP Music On” then “Next/Acc/Change”
- **Press “(Next)”**
display: “MOH Music On” then “Next/Acc/Change”
- **Press “(Change)”**
display: “MOH Music Off” then “Next/Acc/Change”
- **Press “(Accept)”** - Background music behind MOH messages is turned off.

Test Mode On/Off

This function changes both the ISP and MOH message intervals to 0, for 90 seconds. This function is only used during setup to temporarily adjust the ISP and MOH output message volumes.

- **Press “(Additional Setup)”**
display: “ISP Music On” then “Next/Acc/Change”
- **Press “(Next)”**
display: “MOH Music On” then “Next/Acc/Change”
- **Press “(Next)”**
display: “Test Mode Off” then “Next/Acc/Change”
- **Press “(Change)”**
display: “Test Mode On” then “Next/Acc/Change”
- **Press “(Accept)”** - to enter test mode for 90 seconds.

Master Reset

NOTE: Erases all messages and changes all settings to default.

- **Press “(Additional Setup)”**
display: “ISP Music On” then “Next/Acc/Change”
- **Press “(Next)”**
display: “MOH Music On” then “Next/Acc/Change”
- **Press “(Next)”**
display: “Test Mode Off” then “Next/Acc/Change”
- **Press “(Next)”**
display: “Master Reset OFF” then “Next/Acc/Change”
- **Press “(Change)”**
display: “Master Reset On” then “Next/Acc/Change”
- **Press “(Accept)”** - to initiate Master Reset.

Keypad Test

This is an additional test mode entered from the “(Additional Setup)” menu and is typically used during the manufacturing process only.

Display Trigger Times

Press this function to edit trigger times.

The messages on the TRI list will only play on the ISP output port when a timer event triggers. The 4500 can hold up to 24 timer events.

Each timer event saves information in memory about the TRI Message to be played, the days of the week that it plays and the time it should start.

- **Message** **01-12 (Trigger message #)**
- **DAY** **Sun.-Sat.**
- **TIME_HH** **00-23 Hours(Military time).**
- **TIME_MM** **00-59 Minutes**

Action	Display
• Press “(Display Trigger Times)”	To View Triggers - Press Next/Prev (for 2 seconds) - Or Change/Clear (for 2 seconds)
• Press “(Next)” to see the first trigger display	T01 Mes12 11:55 Su M Tu W Th F S The above display shows trigger (timer) #01 which will play message # 12 at 11:55 am every Monday through Friday. Saturday and Sunday are off and will blink.
• Press “(Next)” to see the next timer or “(Previous)”	T02 Mes00 00:00 Su M Tu W Th F S
• Press “(Change)”	Mes # 00 Press Acc/Change
• Press “(Change)”	Enter Mes # 00 Press Acc/Cancel
• Enter “(0, 2)”	Enter Mes # 02 Press Acc/ Cancel

Action	Display
• Press “(Accept)”	Trig Time 00:00 Press Acc/Change
• Press “(Change)”	Trig Time HH:MM Press Acc/ Cancel
• Enter “(1, 8, 0, 0)”	Trig Time 18:00 Press Acc/ Cancel
• Press “(Accept)”	Sunday Off Next/Acc/Change
• Press “(Next)”	Monday Off Next/Acc/Change
• Press “(Change)”	Monday On Press Acc/Change
• Press “(Next)”	Tuesday Off Next/Acc/Change
• Press “(Change)”	Tuesday On Press Acc/Change
• Press “(Accept)”	T02 MES02 18:00 Su M Tu W Th F S

NEW TIMED MESSAGE

- Press **“(Next)”** and go to message T03 T03 MES03 08:00
Su M Tu W Th F S
- Press **“(Clear Timer)”** (the “0” keypad) Clear Timer 03
Press Acc/Change
- Press **“(Accept)”** T03 MES00 00:00
Su M Tu W Th F S
(Mes & Time zeroes, Days all turn on)
- Press **“(Accept)”** and we are back to original idle display.

Clock

Sets the time and day of the week into the internal clock. The clock is used to determine when to play trigger messages.

- Press **“(Clock)”**
display: “Time 10:28” then “Press Acc/Change”
- Press **“(Change)”**
display: “Enter Time HH:MM” then “Press Acc/Cancel”
- Press **“(1, 3, 4, 7, Accept)”** - 13:47 military time is entered into the clock
display: “Day “F” then “Press Acc/Change”
- Press **“(Change)”**
display: “Enter Day “F” then “Prev/Next/Acc”
- Press **“(Previous)”**
display: “Enter Day “Th” then “Prev/Next/Acc”
- Press **“(Accept)”** - Thursday is entered into the clock as the current day of the week.

Dealer Service

For the name of your local dealer or for technical assistance from Premier Technologies, contact:

Premier Technologies, Inc. One Premier Drive, PO Box 159, Long Lake, MN 55356
PHONE: 952.475.2317, FAX: 952.475.3579, www.premtech.com

FCC Information:

Note: This equipment has been tested and found to comply with the limits for Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against interference when the equipment is operated in a commercial environment.

The user is cautioned that changes or modifications not expressly approved by Premier Technologies, Inc. could void the user’s authority to operate the equipment.

Warranty

Upon receipt, the manufacturer will repair or replace, at its option, for a period of three years from the date of purchase, any system that proves defective in materials or workmanship. The manufacturer is not liable for indirect, incidental, or consequential damages in connection with the use of this product. This limited warranty does not include labor for installation or removal of unit. This warranty is null and void if the label containing the serial number is removed.