IVX® S-Class

Administrator's Manual

0450-0458
Rev. D

esi

We Make It Easy To Communicate

About ESI

ESI (Estech Systems, Inc.) is a privately held corporation based in Plano, Texas. Founded in 1987, ESI designs and builds innovative telecommunications products for businesses like yours. Because of their powerful combination of value and features, ESI products are consistently recognized by industry publications and leaders.

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Administrator programming: An introduction

You can program an IVX S-Class system from a 24 or 48-Key Digital Feature Phone in the system (while the system is operating). **Read the *S-Class User's Guide* first.** Programming features require a clear understanding of **user** interface and application.

Once you've accessed programming mode on a 24 or 48-Key Digital Feature Phone, the system will prompt for — and confirm — each keystroke action via voice commands and the display. You program both configuration data and recordings in the same manner.

> **Note:** This manual uses the term *Generation II* to refer to IVX S-Class systems introduced in 2004.

> **Important:** During programming, the 24-Key Feature Phone's two-line display shares the same content as the top two lines of the 48-Key Feature Phone's three-line display. As a result, to save space, the sample displays shown herein will show only two lines.
>
> References throughout this manual to separate **PROGRAM** and **HELP** keys are valid for only the 48-Key Digital Feature Phone. On the 24-Key Digital Feature Phone, the two keys are combined into one **PROG/HELP** key, which is to be used in place of the separate keys.

Administrator duties

The System Administrator can perform the following tasks.

- Administering station assignments.
- Managing station feature authorization.
- Maintaining the employee directory (if used).
- Re-recording system prompts.
- Administering manual change of day/night mode (if required).
- Training new employees on the system's operation

Telephone system features

- **ESI Feature Phones** — Compact and stylish, yet rugged, the 48-Key Digital Feature Phone and the 24-Key Digital Feature Phone each include a high-quality speakerphone, an informative multi-functional display, and a specially designed key layout with several dedicated keys to minimize or eliminate the need to memorize codes. An Expansion Console is available for the 48-Key Digital Feature Phone; and each 48-Key Feature Phone model includes an integrated headset jack.[1] ESI also offers the 12-Key Digital Feature Phone with similar design and basic functions. At least one 24- or 48-Key Digital Feature Phone must be purchased with each S-Class system.

- **Extensive help** — Easily accessible with one press of the **HELP** key, ESI's Verbal User's Guide[™] uses spoken and displayed help prompts to help everyone from the Installer through the Administrator down to the least experienced end user. You may also go to *www.esiusers.com* for online help.

- **Intelligent Caller ID** — Allows one-touch automatic message return.[2]

- **Live call recording** — Can record any conversation or personal memo along with moving or copying of any recording to another user's voice mailbox.[1]

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[1] If shipped on or after March 1, 2004.
[2] This and all other references to Caller ID service within this manual assume the end-user organization subscribes to Caller ID service from its telephone service provider.

- **Call waiting** — Includes helpful display, showing both calls' Caller ID information, and easy one-key toggling between calls.
- **Conference calling** — Includes two conference bridges, and a conference may contain up to four parties, so the IVX S-Class system can support two conferences of four parties each. Analog phones on the system also may initiate conferences.
- **Esi-Dex**™ **speed-dialing** — Calls any number using three separate lists (personal, station, and system); uses Caller ID information or direct keypad entries.[2]
- **Dedicated overhead paging interface** — Allows for external paging through overhead speakers or multi-zone paging units (amplification required)
- **911 alert** — Provides immediate line access if any station with line access dials **9 1 1** to report an emergency; sends a message via the serial port indicating the start date, time, station number and end-time of the 911; also sounds an audible warning at the operator station and displays, for example:
    911 CALL FROM
    X102 JOHN JAMES
- **Status indicator lamp** — Indicates three conditions of the 48- and 24-Key Digital Feature Phone: off-hook, ringing, and new voice mail message.

Voice mail features

- **Quick Groups**™ — Makes it easy to leave voice mail messages for several users.[2]
- **Quick Move**™ — Records a conversation into another user's mailbox.[2]
- **Virtual Mailbox Key**™ allows easy monitoring of a second mailbox.[2]
- **Different mailbox types**, including cascade, guest, and broadcast.[2]
- **IVX S-Class with Integrated Answering Machine** can record up to two simultaneous calls. Messages can be retrieved by any authorized 12, 24 or 48-Key Feature Phone or remotely from an off-premises location. The system can also be programmed to either call an off-premises number or commercial network to deliver messages.
- **Message-on-hold recordings** — Up to five recording: three prerecorded, one customized, and one live entry.
- **Message Recycle Bin** (undelete) — Remembers, and can restore, each mailbox's 10 most recently deleted messages. This feature is also available on the Integrated Answering Machine (mailbox 501).

VIP capability

IVX S-Class Generation II systems are capable of using ESI's ***VIP*** (**V**isually **I**ntegrated **P**hone)™ — a tool that integrates *Microsoft*® *Outlook*® and the IVX® phone system to help users meet the challenges of today's fast-paced business environment. *VIP* lets a user do all of the following from his/her PC:

- **Call handling** — Handling incoming and outgoing calls, in conjunction with various system features.
- **Unified messaging** — Viewing voice and e-mail messages, live call recordings, and personal memos in one *Outlook* Inbox; prioritizing each message by importance; and selecting for playback voice mail messages, in any order.
- **Call Log** — Viewing and printing a history of call activity from his/her station.
- **Contact management** — Having his/her contacts in a central location, which includes *Outlook* Contacts, Station List, Company Speed Dial List, Missed Calls, and the *VIP* Quick Call list.
- **User programming** — Programming his/her station from his/her PC.

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[1] Not available on 12-Key Feature Phone.
[2] Not available on 12-Key Feature Phone.

Feature Phone overlays

Each ESI Feature Phone comes with one overlay for the programmable feature keys. To order additional overlays, visit the DESI™ Web site at *www.desi.com*. You can also download the free *Windows*®-based software, *DESI Lite*, which allows you to print on the overlays. For assistance with DESI products, please consult the DESI Web site.

> **Tip:**   Remember that ESI's *Esi-Admin* software, available from your ESI Reseller, also lets you print on the overlays as well as perform certain programming tasks.

Entering programming mode

You may program from **any** 24-Key or 48-Key Digital Feature Phone[1] in the system:

1. Press **PROGRAM**[2] at any digital station. The normal **station** programming menu prompts will begin to play.
2. Press **HOLD**. The "enter password" prompt will play.
3. Enter the **Administrator password** (default is **4 5 6**). Then, to confirm the password, either press **#** or wait two seconds. **You are now in programming mode.** The extension will be automatically placed in DND.
4. The system will play the **system** programming menu. Follow it to program as you wish.
5. When finished, hang up.

> **Note:**   The system will automatically exit programming mode after 10 minutes of inactivity.

> **Example:**   If your Administrator password is *864*, **enter** programming mode by pressing **PROGRAM HOLD 8 6 4 #**. (To **exit** programming mode, hang up.)

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[1] Although a 12-Key Feature Phone allows you to **enter** Administrator programming, we don't recommend that you use a 12-Key Feature Phone for programming because of its one-line display and small number of programmable feature keys.
[2] Or, if using the 24-Key Feature Phone, press **PROG/HELP**.

System programming overview

The following menus show the programming functions available on S-Class systems. For S-Class with four-port or two-port voice mail, see the first menu; for S-Class with Integrated Answering Machine, refer to the second menu.

Programming menu for S-Class with voice mail and auto attendant

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      141 Set time/date
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3 Extension programming
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Programming menu for S-Class with Integrated Answering Machine

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   13 Administrator password
   14 System clock
      141 Set time/date
      142 Automatic time setting
   17 System speed dial
3 Extension programming
   32 Extension feature authorization

5 Voice mail programming
   54 Answering Machine Member
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6 Recording
   63 MOH programming
      631 MOH source

Programming keys

During programming, the first line of the display will show the current **item** being programmed, and the second line will be the **entry** line. You can enter values as directed by the combination of the voice prompts and display. To enter multiple values, such as a list of extension numbers, separate each value by **#** (to exit the list, enter **# #**).

To...	Press ...	What this does
Enter	#	Confirms new or existing entry and advances to next programming step.
Back up (*i.e.*, reverse direction)	✱	Backs up to previous prompt without changing its value.
Delete	**HOLD**	Deletes data or recording.
Exit	[Hang up]	Exits programming mode and removes extension from DND.
Help	**HELP**	Provides more detailed instructions during programming.
Select/scroll	▼ *(left-side scroll key)*	• During entry of a value, backs up. • If a list is present (">" is displayed), scrolls to left.
	▲ *(right-side scroll key)*	• Selects from options presented. • If a list is present (">" is displayed), scrolls to right. • Inserts a space during entry of a name.

> **Note:** Either **<** or **>** in the display indicates that additional choices or values are available by pressing a corresponding scroll key (▼ or ▲).

Entering alphanumeric characters

You enter names for **extensions, departments, and branch IDs** by pressing the dial pad key that corresponds to the character to be entered. The key's possible entries will change each time the key is pressed, and the display will show this. When the desired character appears on the display, press **#** to confirm; the cursor will move to the next character position. You may move the cursor left (to correct an entry) by pressing the left scroll key (▼) or move right (to add a space) by pressing the right scroll key (▲).

Key	Options
0	0, - (hyphen), _ (underline)
1	Q, Z, 1, "_" (space)
2	A, B, C, 2
3	D, E, F, 3
4	G, H, I, 4
5	J, K, L, 5
6	M, N, O, 6

Key	Options
7	P, R, S, 7
8	T, U, V, 8
9	W, X,Y, 9
▼ (left scroll key)	Backs up and erases
▲ (right scroll key)	Adds a space
#	[Enter]
# #	Ends the name

Example: To enter a *B*, press **2** twice (the possible options to scroll through are **A, B, C** and **2**). When **B** is displayed, press **#** to confirm; the cursor will move to the next character to be entered. To complete the name, press **# #**.

System fixed numbering plan

Numbers		Function
Generation II	**Generation I**	
0	0	Operator
1–16	1–16	CO lines
100–131	100–123	Digital extensions
132–139	124–129	Analog extensions
199	199	Overhead paging port
290–299		Department numbers
300–309		Guest/info mailboxes
500		Broadcast mailbox
520–529		Cascade mailboxes
560–580		Feature codes
590–594		MOH recordings
600–699		System speed-dial

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Function 1: System parameters

Function 13: Administrator password

This will display the existing password and prompt for entry of a new password. The password can be 2–8 digits long, followed by **#**. The default Administrator password is **4 5 6**.

> **Note:** Be sure to write down the new password, and store it in a safe place.

Accessing user station programming

Should a user forget his password or if an employee leaves the organization, this feature allows the Installer or Administrator to enter a user's station programming and operate within it as if he were the user. From the user's station, enter the **Administrator** password when the system prompts for the **user** password.

> **Example:** From station 105, entering **4 5 6 #** instead of the user password (**1 0 5 #**) will enter the station's user programming. (Default Administrator password shown for this example).

Function 14: System clock

Function 141: Set time/date

1. Enter a new time in a **twelve**-hour format.

> **Example:** Enter **1 2 3 3** for *12:33*, or **3 1 5** for *3:15* (note that you need **no** leading zero for the time).

2. Select AM or PM by pressing a scroll key (either ▼ or ▲).

3. Enter a new date in an **eight-digit** format, **including** leading zeroes.

> **Example:** Enter **0 7 0 4 2 0 0 3** for July 4, 2003 (note that leading zeroes **are** required here, unlike in Step 1).

4. Press **#** to finish the entry.

> **Note:**   A built-in battery maintains the correct time and date, even in the event of a power loss.

Function 142: Automatic time setting

1. Synchronize with CID

This function, when enabled, synchronizes the real-time clock with Caller ID (CID) messaging: call processing compares the time of a CID message to the system real-time clock and, if the difference is more than two minutes, resets the real-time clock to match the time (hours and minutes) of the CID message. The system will analyze each such message (or — if it receives more than four calls with CID information within a one-minute period — as is needed). Select *ENABLE* or *DISABLE* by pressing a scroll key (either ▼ or ▲). Choosing *ENABLE* will allow the CID data to update the time and date.
Default: Enabled.

2. Adjust for Daylight Savings Time

This function, when enabled, causes the real-time clock to adjust itself automatically for Daylight Savings Time (DST). Select *AUTO* or *DISABLE* for DST by pressing a scroll key (either ▼ or ▲). Choosing *DISABLE* is best for those areas that don't observe DST.
Default: Disabled.

Function 17: System speed-dial

Up to 100 system speed-dial names and associated numbers can be stored, in location numbers 600–699, for access by any station. A user can initiate a system speed-dial by dialing the speed-dial location number or by accessing the name through the Esi-Dex feature. In Function 32, access to system speed-dial can be denied to individual stations (see page C.1).

> **Note:**   System speed-dialing overrides toll restrictions (Function 32, page C.1).

1. Enter the 3-digit location number to program,

2. Enter a **ten-character** name (see "Entering alphanumeric characters," page A.5).

3. Enter the number to be dialed (including the line group 9, 8, or 7). Press the left scroll key (▼) to delete any character or digit entered in error. Here's an example:

1.	2.	3.
Speed Dial #	**Name**	**Number**
601	AUTO RENTL	915552221212

The number dialed in Step 3 can be up to 30 digits long **including** the following special codes:

Code	What it produces
#	# DTMF tone
✳	✳ DTMF tone
F	Flash hook
P	2-second pause

To insert a special code, press the right scroll key (▲) to select the desired special code: **# , ✳ , F** or **P**.

Press **#** to confirm the inserted character and continue. Press **# #** to complete the entry.

Use the down arrow key (▼) to backspace.

Once the number is saved you can use the scroll keys to move back and forth to view the number. To edit the number, you must delete it and enter the correct number.

> **Example:**   To create a system speed-dial number that dials *9*, then *972-555-5644*, then pauses for four seconds and finally dials *#104*, enter:
>
> **9 9 7 2 5 5 5 5 6 4 4** (then scroll to) **P #** (then scroll to) **P #** (then scroll to) **# # 1 0 4 #**

Deleting a speed-dial number

To delete an entire speed-dial number and name, delete the location number (**6 X X**) by pressing **HOLD** or the left scroll key (▼) during Step 1 in the speed-dialing procedure described above.

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Function 3: Extension programming

This section provides programming for extensions and department groups.

Important:	Where any **gray shading** (■) appears in an example, it represents values either **unavailable** to the function or **unused** in the particular example.

Function 32: Extension feature authorization

The Installer or Administrator can allow or deny many extension features on an extension-by-extension basis. A User, however, can only program and use allowed features (by using a combination of voice and display prompts) from his/her phone. Here is an example of a completed programming worksheet. This assumes a Generation II system (for Generation I, change the last extension below to 124). The programming sequence is:

1. Ext.	2. Name	3. Live recording[1]	4. Toll allow	5. Sys. spd.-dial	6. Ext. fwdg.	7. Ext. fwdg. to toll #	8. Trk-to-trk
XXX	Default	Y	Y	Y	N	N	N
100	Jane	Y	Y	Y	N	N	N
101	Roger	Y	Y	Y	N	N	N
102	Sally	N	Y	Y	N	N	N
132	Bill		Y	Y	N	N	N

The programming steps are:

1. **Extension number** — Enter the extension number to program.
2. **Extension name** — Name the extension (if not previously named in Function 31 by the Installer).

For each of the following features, press a scroll key (▼ or ▲) to select *YES* or *NO*.

3. **Live recording feature** — If enabled, will allow the user to record conversations.
4. **Toll restriction** — "YES" allows the user to place toll calls. If you select "NO," the user can make only either non-toll calls or calls to numbers listed in the allow exception table.
5. **System speed-dial** — "YES" allows the user to access and place system speed-dial calls.
6. **External forwarding** — Allows the station user to enable the off-premises "reach-me" feature. The off-premises reach-me feature allows a caller that has been forwarded to voice mailbox to be transferred to an outside number. See the *IVX S-Class User's Guide* for more information about the Off-Premises reach-me feature.
   Default: Disabled.
7. **External forwarding** — This feature is used in conjunction with external forwarding. When enabled, this feature lets the user program a long-distance number for external call forwarding.

Note:	After the system dials the external forwarding number, a prompt will be played saying, *"You are receiving a forwarded call. Press any key to accept."* This prompt will play continuously for 30 seconds. If the forwarded call is answered and the called party dials a digit, the forwarded call will be connected to the called party. If no digit is dialed, the caller is automatically forwarded to voice mail. While the two lines (trunks) are connected, the system constantly monitors the lines for open loop conditions (hang-up). If an open loop is detected on either line, the call is disconnected. The system also monitors for voice activity on the connected lines. If voice is no longer detected, the call is disconnected. Finally, if both lines are connected for more than 60 minutes[2], the call will be disconnected.

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[1] Not available on 12-Key Feature Phone.
[2] The default timer can be made longer or shorter.

8. **Trunk-to-trunk transfer** — When enabled, this lets the station user initiate a **trunk-to-trunk transfer.** The user, while connected to a CO line, can press **TRANSFER**, dial an off-site number and then complete the trunk-to-trunk transfer by simply hanging up. Both outside parties are then connected.

   Default: Disabled.

Important:	USE OF FEATURES, SUCH AS TRUNK-TO-TRUNK TRANSFER, THAT REQUIRE TRUNK-TO-TRUNK CONNECTIONS WILL INCREASE THE RISK OF TOLL FRAUD. IN NO EVENT SHALL ESI (ESTECH SYSTEMS, INC.) BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES WHATSOEVER INCLUDING, BUT NOT LIMITED TO, FRAUDULENT TOLL CHARGES, LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTIONS OR ANY OTHER COSTS OR DAMAGES RELATED THERETO ARISING FROM THE USE OF THESE FEATURES.

Function 5: Voice mail programming

To simplify initial installation, all programmed extensions will automatically have the generic personal greeting, *"You have reached the mailbox for extension* [xxx].*"* The mailbox user should replace this with a personalized greeting. Each mailbox must have a greeting recorded for IVX S-Class to consider the mailbox active.

Function 53: Guest/info mailboxes

> **Note:**   Not available on IVX S-Class with Integrated Answering Machine.

Mailboxes numbered 300–309 can be programmed as either a guest or info mailbox. Enter the mailbox number and select *Guest* or *Info* by pressing a scroll (▼ or ▲) key.

Guest mailboxes

Guest mailboxes are designed to be used by personnel, such as in outside sales or manufacturing, who do not have an extension assigned to them. A guest mailbox requires no programming other than the assigning of a name.

> **Note:**   A guest mailbox can be handled like a regular extension (*i.e.,* listed in the directory, assigned a station key, etc.), and is password-protected by default.

If a programmable feature key is programmed as a virtual mailbox key with a guest mailbox number, the key's LED will blink, to indicate that new messages exist.[1] To retrieve messages from a station, press **VOICE MAIL** ✶ and then either press the DSS key or enter the mailbox number.

To record a greeting, press **PROGRAM** ✶ and the mailbox number; then press **#** to confirm, and follow the prompts. The default password is the mailbox number.

To retrieve messages from the outside, press ✶ and the mailbox number **during the Main Greeting.**

Default: 300–309 as guest.

Info mailboxes

Info mailboxes can be used to give callers information on a variety of different subjects by "publishing" these mailbox numbers. Info Mailboxes are identical to Guest Mailboxes except that the caller will not be given a record tone after the personal greeting (the information to be played). Instead, the caller will be forwarded as programmed in this function (default is the caller will be disconnected after the information is played). The maximum length of the record time is 14 minutes.

Guest/info mailboxes are created or deleted here, but are turned "on" only when a personal greeting (the information to be played) has been recorded. Deleting the personal greetings will turn "off" the mailbox.

To record a greeting, press **PROGRAM** ✶ and the mailbox number; then press **#** to confirm, and follow the prompts. The default password is the mailbox number.

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[1]   Otherwise, the key is a DSS key that allows for single-key transfer of a call with no message indication.

Below is an example of a completed Programming Worksheet, showing the sequence of programming:

1.	2.	3.	4.	5.
MB	**Name**	**Type**	**CF day**	**CF night**
300	Dana	Guest		
302	Literature	Info	X/MB/ID	X/MB/ID

Each programming step is defined as follows:

1. **Mailbox number** — Enter a mailbox number, 300–309.
2. **Name** — The mailbox name is used for the display, reports, and as a programming aid. The name length can be no longer than 10 characters (see "Entering alphanumeric characters," page A.5). **Default:** The Mailbox number.
3. **Type** — Select a mailbox type: Guest or Info. **Default:** Guest.
4. **and 5. Call forward** *(info mailbox only)* — An info mailbox can be set to call forward after the personal greeting has played to an extension, department, a mailbox or a branch ID for day mode and differently for night mode. **Default:** ID9999 (automatic disconnect).

Function 54: Broadcast mailbox

> **Note:** For S-Class systems with voice mail and auto attendant. Not available on IVX S-Class with Integrated Answering Machine.

Mailbox 500, the **broadcast mailbox,** is a special mailbox that can be used to leave messages for all of the system's station users — extensions 100–131[1] who have recorded a personal greeting. The broadcast mailbox's user list cannot be edited. Guest mailboxes are not included in the broadcast group. Refer to the *IVX S-Class User's Guide* for more information.

Answering Machine members — MB501

> **Note:** Applicable only to IVX S-Class with Integrated Answering Machine

The Integrated Answering Machine can record up to two simultaneous calls. When a message is left, the message indicator on the 24- or 48-Key Feature Phone will light. Messages can be retrieved by any authorized 24- or 48-Key Feature Phone or remotely from an off-premises location. Only one user can access the mailbox at a time. The system can also be programmed to either call an off-premises number to deliver messages.

The first member in the Master List is allowed to program the Integrated Answering Machine via the **PROGRAM** key. This station is designated as the **Master Station**. All other users will only be able to play and delete messages. Only a 24- or 48-Key Digital Feature Phone can be installed on an extension designated as the Master Station. However, a 12-, 24-, or 48-Key Digital Feature Phone can be installed on an extension in the master list.
Default: Extension 100.

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[1] On IVX S-Class Generation II; *100–123* on IVX S-Class Generation I.

Function 55: Message notification

On a mailbox-by-mailbox basis for user or guest mailboxes, the system can be programmed to call an off-premises number or another extension to deliver messages or dial to an external commercial paging network to activate a user's pager. IVX S-Class will call or page when the first new message has been left in a mailbox and will repeat (at the interval of minutes programmed in this function) until the new message(s) have been deleted, saved or moved.

The user can program either a phone *or* pager number.

The Installer and Administrator can set, on an individual-station basis:

- The number to be called
- A delay period
- The number of attempts (maximum of 99)
- The interval between attempts
- A "quiet period" to suspend phone delivery — *e.g.*, late at night (the quiet period is an on-and-off time that applies to all days of the week)

> **Note:**   Only pager *or* phone notification can be programmed, not both.

Function 551: Station delivery options

Programming of the station options, as shown below, can be performed by the Installer or Administrator. In addition, the user can change his phone number and pager number (but not phone or pager delay time). The phone number's maximum length is 24 digits.

	1. Number	2. Delay	3. Attempts	4. Interval	5. Quiet on	6. Quiet off
1. Phone	9725556789	30	6	60	10:30PM	7:15AM
2. Pager	9725551234	0	10	30		

To program, enter the station/extension number and choose **1** for phone number or **2** for pager number. Then, follow the prompts to set the parameters below.

    1.   Phone/pager number — The number to be dialed (**without** the CO line group [*9, 8* or *7*]).

    2.   Delay — How many minutes the system is to wait before dialing the phone or pager number. This allows the user to pick up a message if he is in the office.
       Range: 0–500. **Default:** 0.

    3.   Attempts — How many times the system will call/page.
       Range: 0–99. (0 turns off delivery.) **Default:** 3.

    4.   Interval — How many minutes should elapse between attempts.
       Range: 1–1440. **Default:** 30.

    5.   Quiet period on — When the quiet period should begin.
       Default: (None.)

    6.   Quiet period off — When the quiet period should end.
       Default: (None.)

> **Note:**   For the **Quiet period on** or **Quiet period off** parameters, a value in **either** of *0:00* is invalid and will cause notification not to work.

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> **Note:** To insert a special code, press the right scroll key (▲) to select the desired special code: **#**, **✶**, **F** or **P** (see below). Press **#** to confirm the inserted character and continue.
> Press **# #** to complete the entry.
> Use the down arrow key (▼) to backspace.
> Once the number is saved you can use the scroll keys to move back and forth to view the number. To edit the number, you must delete it and enter the correct number.
>
> | Code | What it produces |
> |------|------------------|
> | # | # DTMF tone |
> | ✶ | ✶ DTMF tone |
> | F | Flash hook |
> | P | Two-second pause |

Function 552: Delivery/paging parameters

The sequence of programming is as follows:

1. **CO line access** — Enter the CO line group (*9, 8* or *7*) that is to be accessed for delivery. **Default:** 9.

2. **Pager dialing pause** — When paging, IVX S-Class will send the mailbox number to be shown in the pager's display. To allow time for the paging service to answer, enter the pause, in seconds, to occur between when IVX S-Class dials the pager number and when it then dials the mailbox number.
   Range: 0–20. **Default:** 6.

Function 56: Cascade paging mailboxes

> **Note:** Not available on IVX S-Class with Integrated Answering Machine.

In addition to individual mailbox paging, IVX S-Class can support up to 10 cascade paging mailboxes (520–529). These can be assigned to anyone who requires escalating levels of paging beyond the single level available in all user mailboxes. In this function, you program the paging numbers and number of times each is to be paged before the next paging number is added; additionally, the mailbox owner can program these settings. To record a greeting, press **PROGRAM ✶** and the mailbox number; then press **#** to confirm, and follow the prompts. The default password is the mailbox number.

Cascade mailbox options

The user can program up to three paging numbers, of up to 24 digits each, to be paged whenever the mailbox takes a new or urgent message. The system will page the first paging number (for the number of times listed), then add the second paging number (for the number of times listed), then add the third paging number and will continue to page all three pagers until the message has been retrieved.

1.	2.	3.	4.	5.	6.
MB	1st Number	Attempts	2nd Number	Attempts	3rd Number
520	9725553232	2	9725554254	3	9725555452

To program this, enter:

1. **The mailbox number** — **Range:** 520–529. [Then press **1** to enter number programming, and proceed to Step 2.]

2. **First pager number** — The number to be dialed (**without** the CO line Group *[9, 8 or 7]*).

(Continued)

3. **Attempts** — How many times the system will page (up to 20) before adding the second pager number. **Range:** 0–99. (0 turns off delivery.)

4. **Second pager number** — The number to be dialed (**without** the CO line Group *[9, 8 or 7]*).

5. **Attempts** — How many times the system will page (up to 20) before adding the third pager number. **Range:** 0–99. (*0* turns off delivery.)

6. **Third pager number** — The number to be dialed (**without** the CO line Group *[9, 8 or 7]*).

Note: To insert a special code, press the right scroll key (▲) to select the desired special code: **#** , **✳** , **F** or **P** (see below). Press **#** to confirm the inserted character and continue.
Press **# #** to complete the entry.
Use the down arrow key (▼) to backspace.
Once the number is saved you can use the scroll keys to move back and forth to view the number. To edit the number, you must delete it and enter the correct number.

Code	What it produces
#	# DTMF tone
✳	✳ DTMF tone
F	Flash hook
P	Two-second pause

Cascade paging parameters

The cascade paging mailboxes will use the same CO line group and pager-dialing pause as programmed in Function 552 (see page D.4).

Paging interval

To program the paging interval parameter for a cascade paging mailbox:

1. Enter the mailbox number *(520–529)*.

2. Press **2** to set parameters for the mailbox.

3. Enter the number of minutes for the interval between attempts.
   Range: 1–1440. **Default:** 0

Note: Once you change this setting from *0*, you cannot reset it to *0*.

This page included for pagination purposes only.

Function 6: Recording

Function 61: Re-record main greeting

The main greeting prompts are re-recorded here.

Recording a prompt

1. Practice the prompt by recording and re-recording (start and stop by pressing **1**).

2. When satisfied with its quality, press **#** to confirm.

- **Day main greeting** — Plays to callers if the auto attendant is programmed to answer in day mode. Press **1** to re-record.
  Default: *"Thank you for calling. Please dial the extension number of the party you wish to reach or dial 0 for the operator."*

- **Night main greeting** — Plays to callers when the system is in night mode. Press **2** to re-record.
  Default: No recording.

> **Note:** See also "Holiday main greeting" under "System prompts," *below*.

System prompts

- **Busy (530)** — Plays to the outside caller if an extension is busy.
  Default: *"That extension is busy."*

- **No answer (531)** — Plays to the caller if an extension does not answer.
  Default: *"That extension does not answer."*

- **Hold (532)** — Plays to the caller who makes a menu selection or enters an extension number.
  Default: *"One moment, please."*

- **Q/Z (534)** — Plays to a caller who has selected an alphabetic directory; instructs the caller to press **1** for the letters *Q* or *Z* since these two letters do not appear on the phone keypad; plays at the end of the first directory prompt (but only if a name in the directory starts with a *Q* or *Z).*
  Default: *"For the letters Q or Z, use key number 1."*

- **No names matched (535)** — Played to the caller if, in a directory branch, the first letter he/she selected does not have any names associated with it, or if he/she has listened to all of the names played and has not made a selection. After playing the prompt, the IVX system forwards the call to the extension, branch or mailbox as programmed in call forward no response.
  Default: *"No names matched; one moment please."*

- **End of message (537)** — Plays after a caller leaving a message presses **1** to stop recording; the prompt then tells the caller his/her options.
  Default: *"To continue this recording, press 1; to return to the main menu, press 8; or, if finished, press ✶ and hang up."*

- **Holiday main greeting (540)** — Plays to callers when the system has been manually placed in holiday mode.
  Default: *"Thank you for calling. Our office is closed in observance of the holiday. You may dial your party's extension, at any time, or please call back during regular business hours."*

> **Note:** While in holiday mode, the IVX system follows night mode programming for call routing.

> **Note:** Deleting a system prompt by pressing **HOLD** (instead of **#**) restores to the default recording.

Function 62: Record directory names

This function is accessible only if a directory branch has been created as part of auto attendant programming. Enter the extension number and record the name (and, if this is a by-alpha branch, enter the name key.)

Default: Last name.

Important:	Print the worksheet provided on your ESI CD for preparing directories and making future changes. As names change, the Administrator can enter this function and change any field via the Administrator password.

1. Ext.	2. Recorded name	3. Key
102	George Straite	4
113	Janet Smith	5

Note:	To record the prompt "Enter the first letter of the person's last name" you you must enter Function 61 and then enter the ID number of the directory branch.

Each programming step is defined as follows:

1. Extension number — Enter the extension number for the directory name.

2. Record name — Press **1** to begin recording and press **1** again when finished.

Function 63: Message-on-hold (MOH) programming

MOH can be:

- A live feed from an external music source connected to the **MOH** connector located on the side of the cabinet.
- One of three default, generic MOHs pre-recorded by the factory.
- A custom MOH loaded into the system by using a cassette recorder plugged into the **MOH** connector.

Function 631: MOH source

This selects the source that will be played to callers on hold.

Code	Source
590	Live external source*
591	Pre-recorded music
592	Pre-recorded with *"please continue to hold"*
593	Pre-recorded with *"dial 0 or extension from hold"*
594	Customer-recorded message on hold

* Dialing off-hold doesn't work.

Default: 592 (generic message-on-hold).

Function 632: MOH recording

1. Connect the message/music source to the MOH port on the side of the cabinet.

   > **Note:** The connector is monophonic-only — if you use a stereo source, you must either set it to output mono, if possible, **or** use a stereo-to-mono conversion cable (or adapter).

2. Enter **594**.
3. Press **1** to begin recording. To aid you in queuing, the source will be played through the phone's speaker.

   > **Note:** The recorded material should not have a "beginning" or "end" — so that playback can loop continuously.

4. Press **1** when finished. The recording will play back so you can review it.
5. Press **#** to accept the recording.

Function 633: MOH volume

If a custom MOH is recorded, the output volume can be adjusted in this function.
Range: 1 (faint)–12 (loudest). **Default:** 6.

> **Notes:** If an external audio source such as a radio is used for MOH, adjust the volume at the source.
> To turn live MOH volume completely off, turn off volume at the source.

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SMDR

SMDR (station message detail reporting) call records are output in real time via an ESI phone system's **Maintenance/SMDR** serial port. Connect a standard serial printer or call accounting system to the serial port. SMDR data will be stored temporarily if a laptop is connected for programming (five minutes after you exit programming mode, the buffered SMDR will resume output to the serial port).

The output from the serial port is: 8 data bits, 1 stop bit, and no parity, 1200 baud.

SMDR may be output in one of two formats, selected in system programming: **tabular** or **CSV**. The tabular format is the default.

Tabular SMDR format

The tabular IVX SMDR output format, which is compatible with the standard Panasonic® DBS® format, is as shown below:

```
          1         2         3         4         5         6         7
1234567890123456789012345678901234567890123456789012345678901234567890123456
T MM/DD HH:MM:SS HH:MM:SS NNN XXXXXXXXXXXXXXXXXXXXXXXXXXXX              LL
```

The columns are:

• **Call type** — Outbound ("O"), inbound ("I") or transferred ("T") at column 1.
• **Date** ("MM/DD") — Begins at column 3.
• **Start time** ("HH:MM:SS") — Begins at column 9.
• **Duration** ("HH:MM:SS") — Begins at column 18.
• **Extension number** ("NNN") — Begins at column 27.
• **Digits dialed** (right-justified)/**Caller ID** (left-justified) — Begins at column 31 (28 characters).
• **CO line number** ("LL") — Begins at column 77.

Each record is terminated with a line feed and carriage return character.

CSV SMDR format

The **comma-separated value (CSV)** format is compatible with *Microsoft® Excel®* and other spreadsheet applications. A CSV record will be output for each completed call, and will be represented as follows (word-wrapped):

Format:
```
"T","MMDDYYYY","HHMMSS","HHMMSS","NNN","XXXXXXXXXX. . .XXX","CCCCCCCCCC. . .CCC","LL"
```

Example A:
```
"I","07042002","000852","000059","101","9724229700","ESTECH SYS INC. ","54"
```

Example B:
```
"O","10312003","221502","020512","190","12125551212","","11"
```

(Continued)

The fields are:

- **Call type** ("T") — Outbound ("O"), inbound ("I") or transferred ("T").
- **Start date** ("MMDDYYYY") — Six characters, zero-filled.
- **Start time** ("HHMMSS") — Six characters, zero-filled; 24 hour clock.
- **Duration** ("HHMMSS") — Six characters, zero-filled.
- **Extension number** ("NNN") — Three characters, space-filled, right-justified.
- **Digits dialed/Caller ID** ("XXXXXXXX . . . XXX") — Up to 28 characters, null-filled.
- **Caller ID name** ("CCCCCCCCC . . . CCC") — Up to 24 characters, null-filled.
- **Line number** ("LL") — Two characters, null-filled, right-justified.

Each field is delimited with double quote marks and separated with a single comma. Null fields are still included as place holders (see Example B, p. F.1). Each record is terminated with a line feed and carriage return character.

Reporting conventions and rules

- Inbound and outbound call records are generated only for calls between a station and a CO line.
- The duration of each call record represents the period of time that that station controlled its portion of a call. A record is generated each time a station does any of the following:
  - Disconnects.
  - Places a call on hold.
  - Transfers a call.

  A single CO call could be included in multiple records if it is transferred from station to station.

- Periods when calls are placed on hold or attempts at supervised transfers are unsuccessful are included in the station's record.
- Periods when calls are on hold, in the auto attendant, leaving/retrieving voice mail or in an ACD queue are not included in call records.
- A new record begins when a station answers a call or a hold recall.
- Records will be generated independently for all stations in a conference. If more than one CO line is involved in a conference, each call record generated by that conference will be associated with only the last line disconnected.
- Dialed digits don't include the line group or location number.
- Outbound calls begin a call record 10 seconds after the call has cleared toll restriction.

PC interface

Use an RS-232C cable to connect a PC's serial port to the IVX system's **Maintenance/SMDR** port.

When connected to the IVX system, the PC resets the baud rate for faster communications. Once the PC/IVX connection is made, the Installer can update system software.

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