

# IVX E-Class Installer worksheets

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## Function 1: System parameters

**Important:** Before programming, make sure you initialize the system!

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### F11 — Initialization

#### F12 — Installer password

Range: 2–8 digits. Default: 789.

#### F13 — Administrator password

Range: 2–8 digits. Default: 456.


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### F14 — Set time/date

*F141: Set time and date*

*F142: Automatic time settings*

*Synchronize with Caller ID*

Default: Enabled.

*Adjust for Daylight Savings Time*

Default: Enabled.


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### F15 — System timing parameters

*F151: Flash hook duration*

Range: 0.2–2.0 sec. Default: 1.5 sec.

*F152: Transfer forward timer*

Range: 1–9 rings. Default: 3.

*F153: Recall timers*

*F1531: Exclusive hold recall timer*

Range: 5–960. Default: 60.

*F1532: Hold recall timer*

Range: 5–960. Default: 60.

*F154: ACD exit timer*

Range: 0,5–600 (0 = no limit). Default: 180.

*F155: ACD wrap timer*

Range: 0,5–600 (0 = no limit). Default: 0.

*F156: Cell phone delay*

Range: 0–50 (0.0–5.0 sec). Default: 1.0.


## F16 — System feature parameters

**F161: Recording alert tone**

Default: Disabled.


**F162: Connect tone**

Default: Enabled.

**F163: Feature set activation**

**1. Group listen**

Default: Disabled.

**2. Privacy release**

Default: Disabled.

**3. Headset microphone gain adjust**

Range: 0–5. Default: 2.


**F164: Esi-Link location number/line-group access selection**

Defaults refer to when Esi-Link is installed.

Access number	(Check one)	
	Location prefix (Default: Off)	Line group number (Default: On)
71		
72		
73		
74		
75		
76		

**F165: Auto attendant parameters**

**1: Auto attendant inter-digit timer**

Range: 40–1000 (400 ms to 10 sec.). Default: 300 (3 sec.).

**2: Auto attendant no-response timer**

Range: 50–6000 (500 ms to 1 min.). Default: 300 (3 sec.).

**3: ACD beep**

Range: 0–1 (1 = disabled). Default: 1 (disabled).

**4: Fax energy level (CNG tone)**

Range: 1–32767. Default: 70.

**5: Name key digits**

Range: 1–3. Default: 3.


**F166: CO parameters**

**1: CO-to-CO conference gain**

Range: 100–32767. Default: 2048.

**2: ARS inter-digit timer**

Range: 40–1000 (400 ms to 10 sec.). Default: 300 (3 sec.).

**3: CO playback gain**

Range: 1–12. Default: 6.

**4: Trunk-to-trunk CO gain**

Range: 1–12. Default: 10.

**5: Delay before connection “beep-beep”**

Range: 10–100 (100 ms to 1 sec.). Default: 20 (200 ms).

**6: Caller ID gain**

Range: 1–32767. Default: 20000.

**7: PRI minimum digits for local number**

Options: 7, 10. Default: 10.


**F167: Voice mail parameters**

**1: Energy threshold**

Range: 0–65535. Default: 500.

**2: Recording silence value**

Range: 200–3000 (2–30 sec.). Default: 350 (3.5 sec.).

**3: Maximum message length (minutes)**

Range: 2–20. Default: 3.

**4: Page glare value**

Range: 0–15. Default: 2.

**5: Maximum messages in Message Recycle Bin**

Range: 2–40. Default: 10.

**6: Unified messaging playback timeout**

Range: 0–20 (sec.). Default: 4.


**F169: Feature set activation**

**Tenant service**

Default: Disabled.

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**Tenant 1      Name** \_\_\_\_\_

**Tenant 2      Name** \_\_\_\_\_

**F17 — System speed-dial**

(Use the worksheet on the following page.)

**F18 — Serial port baud rate**

**1: Output device**

Options: None, Serial, Ethernet.

**2: Serial baud rate**

Options: 300, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200.

Default: 38400.

**3: SMDR format**

Options: Standard or CSV. Default: Standard.


### F17 — System speed dial

<b>Loc.</b>	<b>Name</b>	<b>Number</b>
600		
601		
602		
603		
604		
605		
606		
607		
608		
609		
610		
611		
612		
613		
614		
615		
616		
617		
618		
619		
620		
621		
622		
623		
624		
625		

(Use a blank sheet for additional speed dial numbers 626–699.)

# Function 2: CO lines

## F21 — CO line programming

Options: Analog CO line (1), T1 CO line (2), PRI CO line (3).  
 Default answer ring assignment for CO lines: ID1

### F211: Analog CO line programming

Mode: \_\_\_\_\_ (day, night).

	Circuit	CO	Name	Tenant <sup>1</sup>	Line group	Ring 1	Ring 3	Ring 5	Ring 9
Slot # _____ Card type:	1								
	2								
	3								
	4								
	5								
	6								
Slot # _____ Card type:	1								
	2								
	3								
	4								
	5								
	6								
Slot # _____ Card type:	1								
	2								
	3								
	4								
	5								
	6								
Slot # _____ Card type:	1								
	2								
	3								
	4								
	5								
	6								

Make copies of this sheet for additional lines.

<sup>1</sup> IVX E-Class Generation II only.

**F212: DLC 12 programming for T1**

**F2121: CO line programming**

***Programming of loop start, ground start or E&M trunks***

<b>Outgoing signal type</b> Default: Wink start.	
<b>Incoming signal type</b> Default: Wink start.	
<b>Trunk mode</b> Default: 2-way traffic.	
<b>Dial tone transmit</b> Default: Off.	
<b>Ringback transmission</b> Default: Off.	

***Programming of E&M DNIS/DID***

<b>Outgoing signal type</b> Default: Wink start.	
<b>Incoming signal type</b> Default: Wink start.	
<b>Trunk mode</b> Default: 2-way traffic.	
<b>Dial tone transmit</b> Default: Off.	
<b>Ringback transmission</b> Default: Off.	

**IVX E-Class Installer worksheets**

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**Important:** Standard ring assignments are used for loop and ground-start trunks. E&M can be answered only by an ID branch, and E&M DID uses the translation table programmed in Function 224.

**Configuration mode (day, night):** \_\_\_\_\_.

**Frame format:** \_\_\_\_\_      **Carrier name:** \_\_\_\_\_

**Default: ESF/B8ZS.**                      **Number:** \_\_\_\_\_

Slot	Channel	CO port	Name	Tenant <sup>1</sup>	Protocol	Line group	Ring 1*	Ring 3*	Ring 5*	Ring 9*
	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									
	16									
	17									
	18									
	19									
	20									
	21									
	22									
	23									
	24									

Make a copy of this sheet for a second DLC 12 (T1).

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<sup>1</sup> IVX E-Class Generation II only.

\* Does not apply when using E&M DNIS/DID protocol.

**F2122: T1 frame format and line coding**  
Default: ESF/B8ZS.

<i>DLC 12 (T1) #1</i>	
<i>DLC 12 (T1) #2</i>	

**F2123: Line build-out**  
Default:1.

<i>DLC 12 (T1) #1</i>	
<i>DLC 12 (T1) #2</i>	

**F2124: CSU emulation**  
Default: Off.

<i>DLC 12 (T1) #1</i>	
<i>DLC 12 (T1) #2</i>	



**F213: DLC 12 (PRI) line programming**

**F2131: PRI CO line programming**

**Important:** CO answer ring assignments are used only when DID is disabled. With DID enabled, calls will be routed according to the pilot number or DID tables.

**Configuration mode (day, night):** \_\_\_\_\_.

**Switch protocol:** \_\_\_\_\_ **Carrier name:** \_\_\_\_\_

\_\_\_\_\_ **Number:** \_\_\_\_\_

**Framing:** ESF/B8ZS.

Slot	Chnl.	CO port	Dial tone transmit on/off	Ringback transmit on/off	Name	Tenant <sup>1</sup>	Line grp.	Ring 1*	Ring 3*	Ring 5*	Ring 9*
	1										
	2										
	3										
	4										
	5										
	6										
	7										
	8										
	9										
	10										
	11										
	12										
	13										
	14										
	15										
	16										
	17										
	18										
	19										
	20										
	21										
	22										
	23										

<sup>1</sup> IVX E-Class Generation II only.

\* Does not apply when DNIS/DID is enabled.

Make a copy of this sheet for a second DLC 12 (PRI).

**F2132: Line build-out**

Default: 1.

<b>DLC 12 (PRI) #1</b>	
<b>DLC 12 (PRI) #2</b>	

**F2133: CSU emulation**

Default: 1.

<b>DLC 12 (PRI) #1</b>	
<b>DLC 12 (PRI) #2</b>	

**F2134: Switch protocol**

Options:

- Nortel — DMS 100
- ATT/Lucent — 5ESS
- National/NI2 — Default
- Siemens — EWSD

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**Note:** Most switches can emulate the various protocols. Be sure to make your selection based on the protocol being used rather than the switch manufacturer. NI2 is the only protocol that supports name-and-number CID.

**F2135: DID enable/disable**

Default: Disabled.

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**F22 — Access codes/toll restriction**

**F221: Centrex/ PBX access codes**

**Line group 9**

Default: 0.

**Line group 8**

Default: 0.

**Line group 71**

Default: 0.

**Line group 72**

Default: 0.

**Line group 73**

Default: 0.

**Line group 74**

Default: 0.

**Line group 75**

Default: 0.

**Line group 76**

Default: 0.


**F222: Toll restriction exception tables**

**Allow** numbers (maximum, 100 entries):

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**Deny** numbers (maximum, 100 entries):

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**F223 — Automatic route selection (ARS)**

**Enabled/disabled**

Default: Disabled.

If enabled:

Fixed <

ARS table	Line groups	OCC	Numbers
1	9		7 or 10 digits, information
2	8		1+, 0+, 01+, 011+, or 101XXXX
3			
4			
5			
6			
7			
8			
9			
10			



**F225 — Pilot number table**

Entry no.	Number	Name	Max chs.	Day				Night			
				Ring 1*	Ring 3*	Ring 5*	Ring 9*	Ring 1*	Ring 3*	Ring 5*	Ring 9*
1											
2											
3											
4											
5											

**F23 — CO line parameters**

**F231: Line receive volume**

Range: 0–12. Default: 10.

**F232: Line disconnect**

Range: 1-255. Default: 6.

**F233: T1 line receive volume**

Range: -28 dB to 6 dB. Default: -6 db.


Slot #:	Circuit	Volume
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	

Slot #:	Circuit	Volume
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	
	24	

\* Applies only when DNIS/DID is enabled.

**F234: PRI line receive volume**

Range: -28 dB to 6 dB. Default: -6 db.

	Circuit	Volume
Slot #:	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	

	Circuit	Volume
Slot #:	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
	11	
	12	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	
	21	
	22	
	23	

## F24 — Caller ID

Options: Enabled, disabled. Default: Disabled.

Local – 7:

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Local – 10:

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# Function 3 : Extension programming

## F31 — Extension definition and routing

*For Digital Feature Phones*

		Ext.	Type	Name	Tenant <sup>1</sup>	CO line groups	CF day	CF night	Pg zone	Ext.
		0		Operator						
<b>Slot #:</b>	1									
	2									
<b>Card type:</b>	3									
	4									
	5									
	6									
	7									
	8									
	9									
	10									
	11									
	12									
<b>Slot #:</b>	1									
	2									
<b>Card type:</b>	3									
	4									
	5									
	6									
	7									
	8									
	9									
	10									
	11									
	12									

Make copies for additional extensions.

*(Continued on wide-format pages)*

<sup>1</sup> IVX E-Class Generation II only.



**For IP Feature Phones (local)**

	Ext	Type	MAC	Name	Tenant <sup>1</sup>	CO	CF day	CF night	Pg zone
Slot #:	1		00304D_____						
	2		00304D_____						
Card Type: LNC	3		00304D_____						
	4		00304D_____						
	5		00304D_____						
	6		00304D_____						
	7		00304D_____						
	8		00304D_____						
	9		00304D_____						
	10		00304D_____						
	11		00304D_____						
	12		00304D_____						

<sup>1</sup> IVX E-Class Generation II only.

## Extension programming for ONLY Remote IP Feature Phones

(See also Function 31, page 16 of these worksheets.)

	Ext	Type	IP address	MAC	Gateway IP	UDP port	Remote-access IP address	Name	Tenant <sup>1</sup>	CO	CF day	CF night
Slot #:				00304D_____								
				00304D_____								
Card Type: LNC/ RNC				00304D_____								
				00304D_____								
				00304D_____								
				00304D_____								
				00304D_____								
				00304D_____								
				00304D_____								
				00304D_____								
				00304D_____								
				00304D_____								

<sup>1</sup> IVX E-Class Generation II only.

### F32 – Extension feature authorization

Card type	Ext.	Name	Call wait	DND	AA block	Rec.	Ser. ob.	Toll allow	Sys. spd. dl.	Auto Page	Ext. fwd.	Fwd. toll	Trunk-trunk	Unif'd msg.
	Default		Y	Y*	N	Y*	N*	Y	Y	Y	Y	N	Y	N
1														
	Ser. ob. list:													
2														
	Ser. ob. list:													
3														
	Ser. ob. list:													
4														
	Ser. ob. list:													
5														
	Ser. ob. list:													
6														
	Ser. ob. list:													
7														
	Ser. ob. list:													
8														
	Ser. ob. list:													
9														
	Ser. ob. list:													
10														
	Ser. ob. list:													
11														
	Ser. ob. list:													
12														
	Ser. ob. list:													

\* Does not apply to analog extensions.

Make copies of this sheet for additional extensions.

### F33 – Department programming

Dept. types: In Order, All, UCD, ACD, Pick-Up.

Dept. ext.	Name	Tenant <sup>1</sup>	Type	CF day	CF night
290					
Ext. List:					
291					
Ext. List:					
292					
Ext. List:					
293					
Ext. List:					
294					
Ext. List:					
295					
Ext. List:					
296					
Ext. List:					
297					
Ext. List:					
298					
Ext. List:					
299					
Ext. List:					

<sup>1</sup> IVX E-Class Generation II only.

## F35 – Extension button mapping

See “Function 35: Extension button mapping” in *IVX E-Class Installation Manual* for button default based on the system configuration.













### ***For 48-Key Feature Phone or 60-Key Expansion Console***

○	○	○
○	○	○
○	○	○
○	○	○
○	○	○
○	○	○
○	○	○
○	○	○
○	○	○
○	○	○
○	○	○

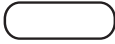
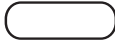
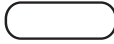



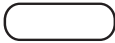
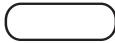
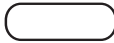
(Continued)

## F35 – Extension button mapping (continued)

*For 24-Key Feature Phone*

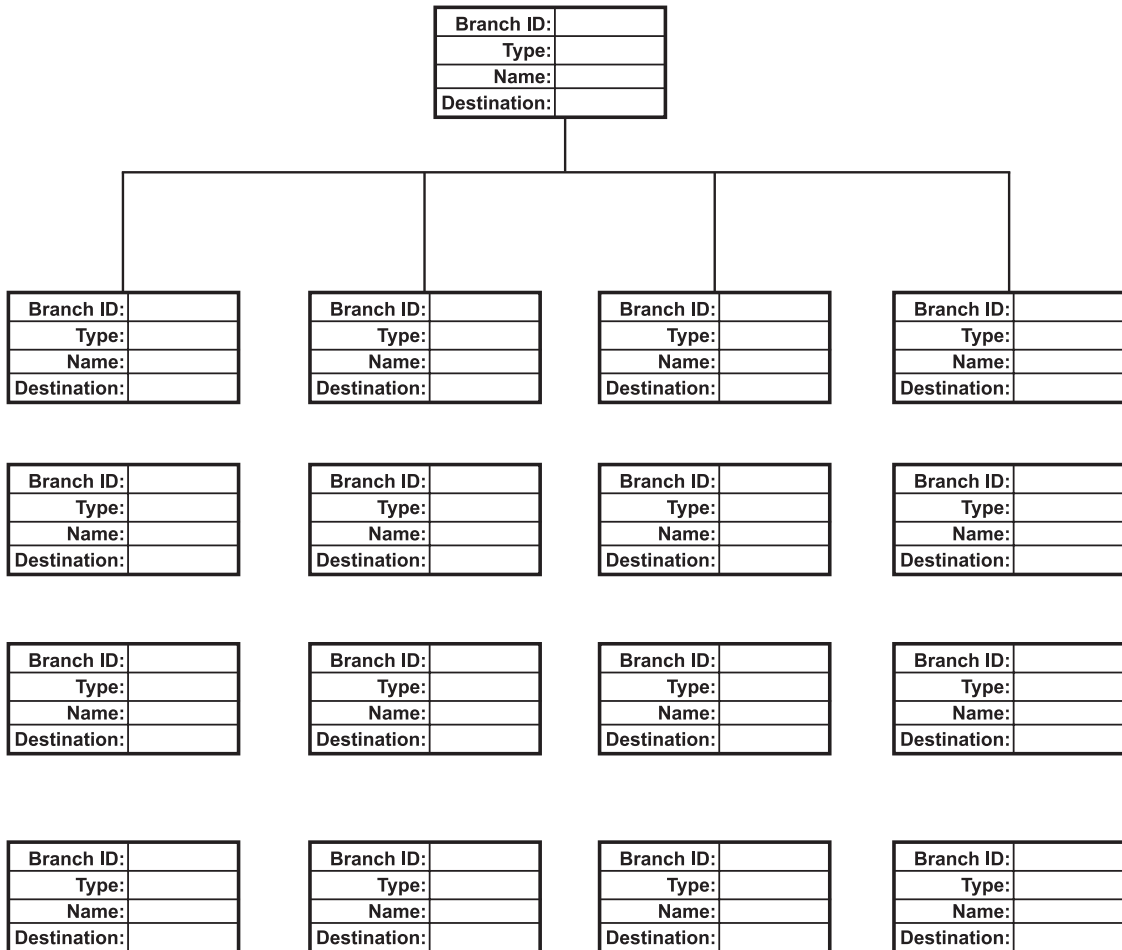
*For 12-Key Feature Phone*

# Function 4 : Auto attendant programming

## F41 – Auto attendant branch programming

Day   
 Night



Copy this page; you'll need one for day mode and one for night mode.

**F42 — Announce extension number**

Options: Enabled, disabled. Default: Enabled

**F43 — Automatic day/night tables**

**Important:** Program using **24-hour** format.

Tenant:<sup>1</sup> \_\_\_\_\_

	MON		TUE		WED		THU		FRI		SAT		SUN	
	Start time	Mode	Start time	Mode	Start time	Mode	Start time	Mode	Start time	Mode	Start time	Mode	Start time	Mode
1														
2														
3														
4														
5														
6														

<sup>1</sup> IVX E-Class Generation II only. If shared-office tenanting is enabled, make a copy of this page for additional tenants.



## Function 5: Voice mail programming

### F51 — Maximum message and record length

**Message length.** Range 1–30 min. Default: 3

**Record length.** Range 1–120 min. Default: 10


### F52 — Message purge control

Range: 0–365 days (0 = no purge). Default: No purging.

New messages	
Old messages	
Group messages	
Recordings messages	
Deleted messages	

### F53 — Guest / info mailboxes

*Use form on following page to record entries.*







## F55 — Message notification

### F551: Station delivery options

Mailbox		Number	Delay	Attempts	Interval	Quiet on	Quiet off
Range	Phone	Up to 24 digits	0–500	0–99	10–1,440	None	None
Range	Pager	Up to 24 digits	0–500	0–99	10–1,440		
Default	Phone	None	0	3	30	None	None
Default	Pager	None	0	3	30		
1	Phone						
	Pager						
2	Phone						
	Pager						
3	Phone						
	Pager						
4	Phone						
	Pager						
5	Phone						
	Pager						
6	Phone						
	Pager						
7	Phone						
	Pager						
8	Phone						
	Pager						
9	Phone						
	Pager						
10	Phone						
	Pager						
11	Phone						
	Pager						
12	Phone						
	Pager						

Make copies for additional mailboxes

### F552: Delivery/paging parameters

**CO line access**

Range: 9, 8, 71–76. Default: 9.

**Maximum lines**

Range: 1–19. Default: 1.

**Pager dialing pause**

Range: 0–20. Default: 6.


### F56 — Cascade paging mailboxes

Attempts — Range: 0–99. Default: 0.

Paging interval — Range: 0 (page only once)–1,440. Default: 0.

Mailbox	Option 1			Option 2		
	1st number	Attempts	2nd number	Attempts	3rd number	Paging interval
520						
521						
522						
523						
524						
525						
526						
527						
528						
529						

### F57 — Q & A mailboxes

Mailbox	Name	CFWD Day	CFWD Night
Default	MB Number	ID9999	ID9999
490			
491			
492			
493			
494			
495			
496			
497			
498			
499			

### F58 — Message move and delete

Options: Enabled, disabled. Default: Disabled.

## Function 6: Recordings

### F61 — Re-recordable prompts

Prompt	Type	Default	Re-recorded
530	Busy prompt	<input type="checkbox"/>	<input type="checkbox"/>
531	No answer	<input type="checkbox"/>	<input type="checkbox"/>
532	Hold	<input type="checkbox"/>	<input type="checkbox"/>
534	Q/Z	<input type="checkbox"/>	<input type="checkbox"/>
535	No names matched	<input type="checkbox"/>	<input type="checkbox"/>
537	End of recording	<input type="checkbox"/>	<input type="checkbox"/>
538	ACD queue	<input type="checkbox"/>	<input type="checkbox"/>
539	ACD hold	<input type="checkbox"/>	<input type="checkbox"/>
540	Holiday main greeting	<input type="checkbox"/>	<input type="checkbox"/>

### F62 — Record directory names

(Use the worksheet on the following page.)

**Prompt for first name/last name**

Options: "Select by first name" (default); "Select by last name."

### F63 — Message-on hold-programming

**F631: MOH source<sup>1</sup>**

Range: 590–598. Default: 592

**F632: MOH recording**

(See *Installation Manual* for instructions.)

**F633: MOH volume**

Range: 1–12. Default: 6

<sup>11</sup> If tenant service is enabled (IVX E-Class Generation II only), only Tenant 1's MOH source can be selected. See *IVX E-Class Installation Manual* for instructions.





# Function 8 — IP PBX programming

## Function 82 — Local programming

### F821: Program local IP PBX

<b>IP PBX private IP address</b> Default: 192.168.428.1	____ . ____ . ____ . ____
<b>MAC address</b>	00304D_____
<b>PBX gateway IP</b>	____ . ____ . ____ . ____
<b>Remote-access IP</b>	____ . ____ . ____ . ____
<b>Base UDP port</b> Default: 59.	__000

### F822: Starting local IP phone address

Default: 192.168.248.2.

____ . ____ . ____ . ____
---------------------------

### F823: Number of remote channels

Range: 1–12.

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### F824: Network Services Processor (NSP)

<b>NSP private IP address</b> Range: 1.0.0.1 – 254.254.254.254.	____ . ____ . ____ . ____
<b>NSP subnet mask</b> Range: 0.0.0.0 – 255.255.255.252.	____ . ____ . ____ . ____
<b>NSP gateway</b> Range: 1.0.0.1 – 254.254.254.254.	____ . ____ . ____ . ____
<b>NSP public IP address</b> Range: 1.0.0.1 – 254.254.254.254.	____ . ____ . ____ . ____
<b>Unified messaging e-mail server<sup>1</sup></b> Range: 1.0.0.1 – 254.254.254.254.	____ . ____ . ____ . ____
<b>Unified messaging e-mail address<sup>1</sup></b>	@

<sup>1</sup> This will appear only if VIP unified messaging has been installed on the system.

## Function 83 — Esi-Link programming

**F831: Local location number**

7__
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**F832: Esi-Link location**

<b>Location number</b>	7__
<b>Location name</b>	_____
<b>Abbreviation</b>	___
<b>PBX private IP</b>	___ . ___ . ___ . ___
<b>MAC address</b>	00304D_____
<b>Remote-access IP</b>	___ . ___ . ___ . ___
<b>Base UDP port</b>	__001

**F833: Deleting an Esi-Link location**

(See *Installation Manual* for instructions.)

Make copies of this page for multiple Esi-Link locations.

**Function 834: Programming the Esi-Link publish list**

	<b>Extension, mailbox, or group mailbox</b>
<b>1</b>	
<b>2</b>	
<b>3</b>	
<b>4</b>	
<b>5</b>	
<b>6</b>	
<b>7</b>	
<b>8</b>	
<b>9</b>	
<b>10</b>	
<b>11</b>	
<b>12</b>	
<b>13</b>	
<b>14</b>	
<b>15</b>	
<b>16</b>	
<b>17</b>	
<b>18</b>	
<b>19</b>	
<b>20</b>	
<b>21</b>	
<b>22</b>	
<b>23</b>	
<b>24</b>	
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<b>26</b>	
<b>27</b>	
<b>28</b>	
<b>29</b>	
<b>30</b>	

