

IVX X-Class Installer worksheets

Function 1: System parameters

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

F11 — Initialization

F12 — Installer password
Range: 2–8 digits. Default: 789.

F13 — Administrator password
Range: 2–8 digits. Default: 456.

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.

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** _____

Tenant 3 **Name** _____

Tenant 4 **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

Loc.	Name	Number
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	Line group	Ring 1	Ring 3	Ring 5	Ring 9
<i>Slot #</i> _____	1								
<i>Card type:</i>	2								
	3								
	4								
	5								
	6								
<i>Slot #</i> _____	1								
<i>Card type:</i>	2								
	3								
	4								
	5								
	6								
<i>Slot #</i> _____	1								
<i>Card type:</i>	2								
	3								
	4								
	5								
	6								
<i>Slot #</i> _____	1								
<i>Card type:</i>	2								
	3								
	4								
	5								
	6								

Make copies of this sheet for additional lines.

F212: DLC 12 programming for T1

F2121: CO line programming

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

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

Programming of E&M DNIS/DID

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

IVX X-Class Installer worksheets

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	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 additional DLC 12 cards (T1).

* 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	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										

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

* Does not apply when DNIS/DID is enabled.

F2132: Line build-out

Default: 1.

DLC 12 (PRI) #1	
DLC 12 (PRI) #2	
DLC 12 (PRI) #3	

F2133: CSU emulation

Default:1.

DLC 12 (PRI) #1	
DLC 12 (PRI) #2	
DLC 12 (PRI) #3	

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):

Deny numbers (maximum, 100 entries):

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	

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.

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	

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	

F24 — Caller ID

Options: Enabled, disabled. Default: Disabled.

Local – 7:

Local – 10:

Function 3 : Extension programming

F31 — Extension definition and routing

For Digital Feature Phones

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

Make copies for additional extensions.

(Continued on wide-format pages)

For IP Feature Phones (local)

	Ext	Type	MAC	Name	Tenant	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_____						

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	CO	CF day	CF night
Slot #:				00304D_-----								
				00304D_-----								
Card Type: LNC/ RNC				00304D_-----								
				00304D_-----								
				00304D_-----								
				00304D_-----								
				00304D_-----								
				00304D_-----								
				00304D_-----								
				00304D_-----								
				00304D_-----								
				00304D_-----								

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







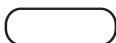
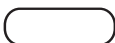
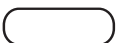
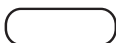
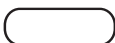
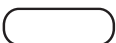






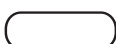
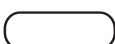
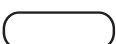
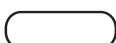
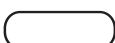
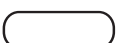
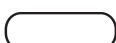
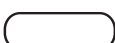
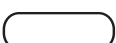
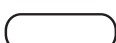
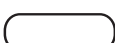
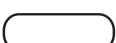
Dept. types: In Order, All, UCD, ACD, Pick-Up.

Dept. ext.	Name	Tenant	Type	CF day	CF night
280					
Ext. List:					
281					
Ext. List:					
282					
Ext. List:					
283					
Ext. List:					
284					
Ext. List:					
285					
Ext. List:					
286					
Ext. List:					
287					
Ext. List:					
288					
Ext. List:					
289					
Ext. List:					
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:					

F35 – Extension button mapping

See "Function 35: Extension button mapping" in *IVX X-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

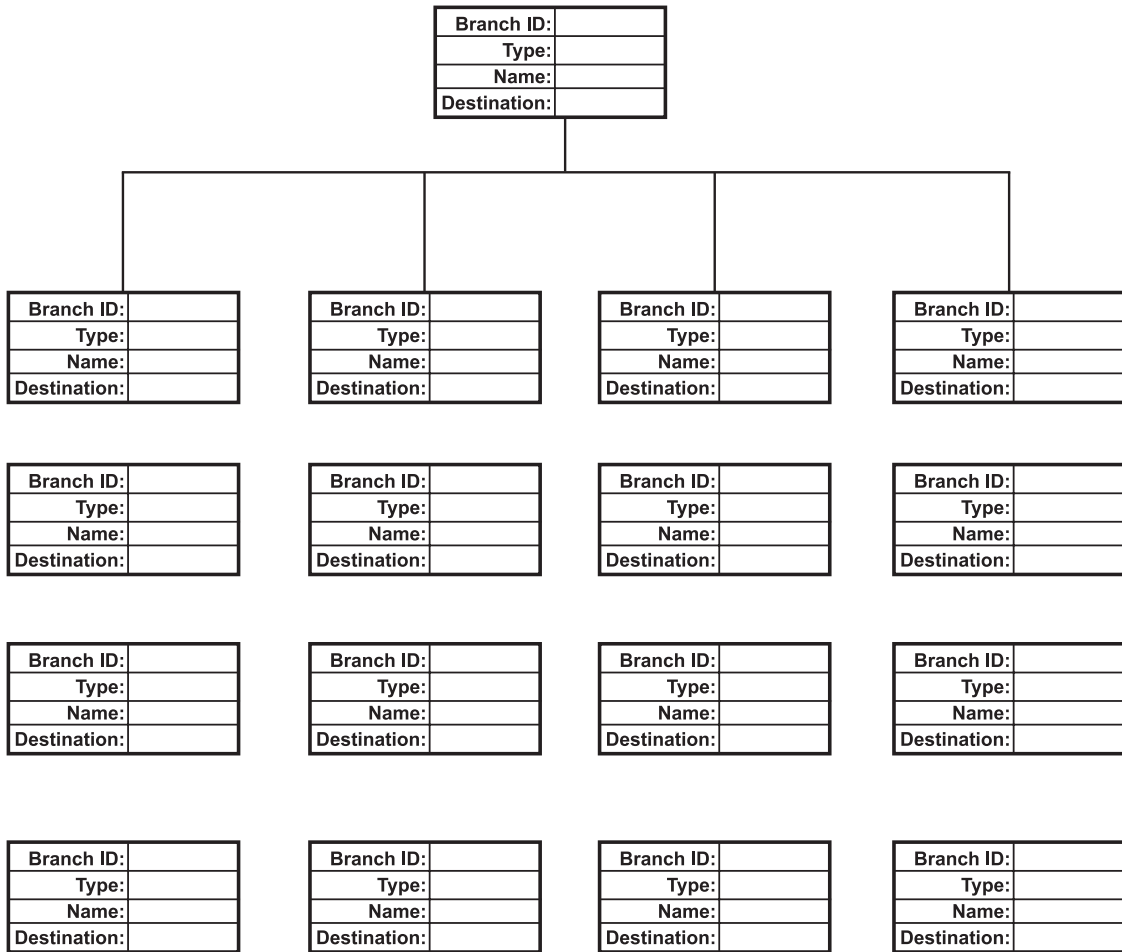
For 12-Key Feature Phone

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: _____

	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														

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.

F54 — Group mailboxes (continued)

	509	510	511	512	513	514	515	516
Members								

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 source¹

Range: 590–598. Default: 592

F632: MOH recording

(See *Installation Manual* for instructions.)

F633: MOH volume

Range: 1–12. Default: 6

¹ If tenant service is enabled, only Tenant 1's MOH source can be selected. See *IVX X-Class Installation Manual* for instructions.

Function 8 — IP PBX programming

Function 82 — Local programming

F821: Program local IP PBX

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

F822: Starting local IP phone address

Default: 192.168.248.2.

____ . ____ . ____ . ____

F823: Number of remote channels

Range: 1–12.

--

F824: Network Services Processor (NSP)

NSP private IP address Range: 1.0.0.1 – 254.254.254.254.	____ . ____ . ____ . ____
NSP subnet mask Range: 0.0.0.0 – 255.255.255.252.	____ . ____ . ____ . ____
NSP gateway Range: 1.0.0.1 – 254.254.254.254.	____ . ____ . ____ . ____
NSP public IP address Range: 1.0.0.1 – 254.254.254.254.	____ . ____ . ____ . ____
Unified messaging e-mail server¹ Range: 1.0.0.1 – 254.254.254.254.	____ . ____ . ____ . ____
Unified messaging e-mail address¹	@

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

Function 83 — Esi-Link programming

F831: Local location number

7__

F832: Esi-Link location

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

	Extension, mailbox, or group mailbox
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
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30	

