

DK424 to DK424i Upgrade Procedure Using DKi Admin

This bulletin describes how to upgrade the DK424 to a DK424i system. It also lists the upgrade paths for various DK424 processors, provides system capacity and line considerations, along with reconfiguration examples and blank configuration worksheets.

Upgrade Considerations

Upgrade Paths – The following is a list of possible DK424 to DK424i upgrade paths:

- ♦ **RCTU A processors (R1~4.x)** >> B1, B2, B3, B5 processors
- ♦ **RCTU B processors (R1~4.x)** >> B2, B3, B5 processors
- ♦ **RCTUC/D processors (R1~4.x)** >> B3 & B5 processors
- ♦ **RCTU E/F processors (R3~4.x)** >> B5 processors

Note For a specific list of all processors, see Page 6 of this bulletin.

System Capacity Verification – Make sure the DK424i system you are upgrading to provides enough PCB slots, station ports, and CO lines to match the existing DK424 system (see tables below).

DK424i Maximum System Capacities with only Digital T1/PRI Line PCBs

B1CU	B2CAU/B2CBU	B3CAU/B3CBU	B5CAU/B5CBU
1 Cabinet	2 Cabinets	3 Cabinets	5 Cabinets
8 Universal slots	14 Universal slots	28 Universal slots	48 Universal slots
56 Stations Max.	112 Stations Max.	192 Stations Max.	336 Stations Max.
32 T1/PRI lines Max.	120 T1/PRI lines Max.	120 T1/PRI lines Max.	196 T1/PRI lines Max.
64 Stations & Digital lines	128 Stations & Digital lines	248 Stations & Digital lines	432 Stations & Digital lines

DK424i Maximum System Capacities with only Analog Line PCBs

B1CU	B2CAU/B2CBU	B3CAU/B3CBU	B5CAU/B5CBU
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1 Cabinet	2 Cabinets	3 Cabinets	5 Cabinets
8 Universal slots	14 Universal slots	28 Universal slots	48 Universal slots
56 Stations Max.	104 Stations Max.	192 Stations Max.	336 Stations Max.
32 CO lines Max.	120 CO lines Max.	120 CO lines Max.	200 CO lines Max.
64 Stations & Analog lines	112 Stations & Analog lines	248 Stations & Analog lines	376 Stations & Analog lines

Configuring DK424i Cabinets with DK424 PCBs

RCTU, R1~R3 Software with Tie and/or DID Lines

- ◆ When installing PCBs in the DK424i cabinets, all PCBs must be installed in the same order in relation to each other as they were in the DK424 cabinets. You may have to skip slots in the new cabinets to place RDTU PCBs into the allowed slots.
- ◆ Only install the PCBs that currently exist in the DK424 cabinets into the DK424i cabinets – do not add more line or station PCBs during the upgrade. The only exception to this rule is that you can add an RSIU, PIOU, PIOUS, RSSU.

RCTU, R1~R3 Software Without Tie/DID, or any R4.x Software With or Without Tie/DID Lines

- ◆ Only install the PCBs that currently exist in the DK424 cabinets into the DK424i cabinets – do not add more line or station PCBs during the upgrade. The only exception to this rule is that you can add an RSIU, PIOU, PIOUS, RSSU.
- ◆ When installing PCBs in the DK424i cabinets, all station PCBs and the RATU must be installed in the same order in relation to other station PCBs as they were in the DK424 cabinets.
- ◆ When installing PCBs in the DK424i cabinets, all CO line PCBs must be installed in the same order in relation to other CO line PCBs as they were in the DK424 cabinets.
- ◆ When moving station PCBs from DK424 to DK424i cabinets, you do not have to installed them in the same order in relation to CO line PCBs, and vice-versa .
- ◆ Do not skip slots except when necessary for RDTU, RPTU, and RWIU. Make sure these PCBs are installed in the correct cabinet slot per Worksheet 6 of the *Strata DK I&M Manual*, Chapter 6 – DK424i Configuration.
- ◆ PIOU, PIOUS, RSSU, etc., can be installed in any DK424i slot that does not conflict with RDTU, RPTU or RWIU vacant slots. These PCBs do not have to be installed in any order corresponding to where they were installed in DK424 cabinets. The RSIU must be installed in slot S101.

Reconfiguration Example: The following tables show two examples of how to load DK424i cabinet slots from the same DK424, RCTU E/F R4, system.

Existing DK424 Cabinets		
Slot	PCB	T/L No.
R11	RCTUE	
RCTU	RCTUF	
S11	RSIU	
S12	PDKU	T1
S13	RSTU	T2
S14	PEKU	T3
S15	RDTU	L1
S16	VACANT	L1
S21	RCOU	L2
S22	PEKU	T4
S23	RPTU	L3
S24	VACANT	L3
S25	PDKU	T5
S26	PDKU	T6
S27	RCOU	L4
S28	RCOU	L5
S31	REMU	L6
S32	PDKU	T7
S33	RSTU	T8
S34	PEKU	T9
S35	PDKU	T10
S36	RDSU	T11
S37	PDKU	T12
S38	PDKU	T13
S41	RDTU	L7
S42	VACANT	L7
S43	PDKU	T14
S44	RDDU	L8
S45	PESU	T15
S46	PDKU	T16
S47	RSTU	T17
S48	RCOU	L9
S51	PDKU	T18
S52		
S53		

Example 1, DK424i Cabinets		
Slot	PCB	T/L No.
B101	B5CAU	
B102	B5CBU	
S101	RSIU	
S102	PDKU	T1
S103	RDTU	L1
S104	VACANT	L1
S105	RCOU	L2
S106	RSTU	T2
S107	RPTU	L3
S108	VACANT	L3
S201	PEKU	T3
S202	PEKU	T4
S203	RCOU	L4
S204	RCOU	L5
S205	REMU	L6
S206	PDKU	T5
S207	PDKU	T6
S208	PDKU	T7
S209	RSTU	T8
S210	PEKU	T9
S301	RDTU	L7
S302	VACANT	
S303	PDKU	T10
S304	RDSU	T11
S305	PDKU	T12
S306	PDKU	T13
S307	PDKU	T14
S308	PESU	T15
S309	PDKU	T16
S310	RDDU	L8
S401	RCOU	L9
S402	RSTU	T17
S403	PDKU	T18
S404		
S405		

Example 2, DK424i Cabinets		
Slot	PCB	T/L No.
B101	B5CAU	
B102	B5CBU	
S101	RSIU	
S102	PDKU	T1
S103	RSTU	T2
S104	PEKU	T3
S105	RDTU	L1
S106	VACANT	L1
S107	RCOU	L2
S108	PEKU	T4
S201	PDKU	T5
S202	PDKU	T6
S203	RPTU	L3
S204	VACANT	L3
S205	RCOU	L4
S206	PDKU	T7
S207	RCOU	L5
S208	RSTU	T8
S209	PEK	T9
S210	PDKU	T10
S301	RDSU	T11
S302	REMU	L6
S303	RDTU	L7
S304	VACANT	L7
S305	PDKU	T12
S306	PDKU	T13
S307	PDKU	T14
S308	RDDU	L8
S309	RESU	T15
S310	RCOU	L9
S401	PDKU	T16
S402	RSTU	T17
S403	PDKU	T18
S404		
S405		

T=Telephone type PCB

L=CO Line type PCB

DKi Admin Upgrade Procedure (DK424 to DK424i)

1. When upgrading from a DK424 (RCTU) to DK424i (BxCU), use DKi Admin to download the complete RCTU database (F2 then F3 from Backup/Restore Data).

Note After the download, use the DKi Admin “Transfer DK Data” function to transfer this data to a floppy in case you need to restore the data back to the RCTU processor.

2. Before proceeding with DKi Admin, complete either the On-site Upgrade or Off-site Upgrade:

On-site Upgrade	<ol style="list-style-type: none"> 1. Install the new BxCU processor and all other PCBs from the DK424 cabinets into the DK424i cabinets and then initialize the BxCU from the programming telephone (follow the PCB configuration rules shown on the previous page). 2. After initialization, use the programming telephone to check/enter Program 03 PCB codes for each cabinet slot.
Off-site Upgrade	<ol style="list-style-type: none"> 1. Install the programming telephone and TTY port PCB into a DK424i base cabinet. Install the new BxC processor into the DK424i base cabinet and initialize it from the programming telephone. 2. After initialization, use the programming telephone to enter Program 03 PCB codes for each cabinet slot (follow the PCB configuration rules shown on the previous page).

Important! *Make sure all PCBs are installed and/or programmed correctly with Program 03 in the DK424i before uploading data to the DK424i processor.*

3. Connect the DKi Admin PC to the TTY port in the DK424i base cabinet and then set up the TTY port/communications parameters using the programming telephone.
4. Go to the Select Customer menu and select the RCTU data that was downloaded in Step 1 above. (The data you want to upload to the new DK424i processor).
5. Go to the Backup/Restore menu and type the DK Code 0000.
6. When you see the “DK System Program File screen” press F5 and follow the Processor Conversion prompts to upgrade and send data to the DK424i processor.
7. Step 6 prompts you to send the RCTU data to the BxCU processor and then pull it back. Once the data is pulled back, go back to the “Select Customer” menu and reselect the customer database; then check the cabinet diagram.

Important! *After the upgrade is complete, you must use DKi Admin to re-set Program 12-9 (recommended value is 04 sec.) and all slot related programs (Prg. 19, *42-1~2, and *60).*

Upgrade Configuration Worksheet (copy additional sheets as necessary)**DK424 Cabinets**

Cab 1 Slots	PCB	T/L	Cab 4 Slots	PCB	T/L
R11			S51		
RCTU			S52		
S11			S53		
S12			S54		
S13			S55		
S14			S56		
S15			S57		
S16			S58		
Cab 2 Slots	PCB	T/L	Cab 6 Slots	PCB	T/L
S21			S61		
S22			S62		
S23			S63		
S24			S64		
S25			S65		
S26			S66		
S27			S67		
S28			S68		
Cab 3 Slots	PCB	T/L	Cab 7 Slots	PCB	T/L
S21			S71		
S22			S72		
S23			S73		
S24			S74		
S25			S75		
S26			S76		
S27			S77		
S28			S78		
Cab 4 Slots	PCB	T/L			
S41					
S42					
S43					
S44					
S45					
S46					
S47					
S48					

DK424i Cabinets

Cab 1 Slots	PCB	T/L	Cab 4 Slots	PCB	T/L
B101			S401*		
B102			S402		
S101			S403*		
S102			S404		
S103*			S405*		
S104			S406		
S105*			S407		
S106			S408		
S107*			S409		
Cab 2 Slots	PCB	T/L	Cab 5 Slots	PCB	T/L
S201*			S501*		
S202			S502		
S203*			S503*		
S204			S504		
S205*			S505*		
S206			S506		
S207			S507		
S208			S508		
S209			S509		
S210			S510		
Cab 3 Slots	PCB	T/L			
S301*					
S302					
S303*					
S304					
S305*					
S306					
S307					
S308					
S309					
S310					

Notes:

T=Telephone type PCB

L=CO line type PCB

*= Allowed T1/PRI slots

The Base cabinet allows Spkr OCA and DIU data with PDKU in all slots; expansion cabinets provide these features in slots S_01~S_06 only.

Last available slot: B1C=S108, B2C=206, B3C=310, and B5C=510.

Strata DK Processor Upgrade Paths

DK14 (contains DK Release 3.1 software)

- ◆ **Upgrade DK14 to:** DK16e or DK40 or DK40i or RCTUA3 or RCTUBA3/RCTUBB3 or RCTUC3/D3 or RCTUC3/D4 or RCTUE3/F3 or RCTUE3/F4 or B1CU or B2CAU/B2CBU or B3CAU/B3CBU or B5CAU/B5CBU.

DK16e (contains DK Release 3.1 software)

- ◆ **Upgrade DK16e to:** DK40 or DK40i or RCTUA3 or RCTUBA3/RCTUBB3 or RCTUC3/D3 or RCTUC3/D4 or RCTUE3/F3 or RCTUE3/F4 or B1CU or B2CAU/B2CBU or B3CAU/B3CBU or B5CAU/B5CBU.

DK40 (contains DK Release 3.1 software)

- ◆ **Upgrade DK40 to:** DK40i or RCTUA3 or RCTUBA3/RCTUBB3 or RCTUC3/D3 or RCTUC3/D4 or RCTUE3/F3 or RCTUE3/F4 or B1CU or B2CAU/B2CBU or B3CAU/B3CBU or B5CAU/B5CBU.

DK40i (contains DK424 Release 4.3 software)

- ◆ **Upgrade DK40i to:** RCTUA4 or RCTUBA3/RCTUBB4 or RCTUC3/D4 or RCTUE3/F4 or B1CU or B2CAU/B2CBU or B3CAU/B3CBU or B5CAU/B5CBU.

DK280, RCTU R1/R2 (contains DK Release 1.0 or Release 2.0 software)

- ◆ **Upgrade RCTUA1 to:** RCTUB2 or RCTUBA3/RCTUBB3 or RCTUBA3/RCTUBB4 or RCTUC1/D2 or RCTUC3/D3 or RCTUC3/D4 or RCTUE3/F3 or RCTUE3/F4 or B1CU or B2CAU/B2CBU or B3CAU/B3CBU or B5CAU/B5CBU.
- ◆ **Upgrade RCTUB2 to:** RCTUBA3/RCTUBB3 or RCTUBA3/RCTUBB4 or RCTUC1/D2 or RCTUC3/D3 or RCTUC3/D4 or RCTUE3/F3 or RCTUE3/F4 or B2CAU/B2CBU or B3CAU/B3CBU or B5CAU/B5CBU.
- ◆ **Upgrade RCTUC1/D2 to:** RCTUC3/D3 or RCTUC3/D4 or RCTUE3/F3 or RCTUE3/F4 or B3CAU/B3CBU or B5CAU/B5CBU.

DK424, RCTU R3.x (contains DK Release 3.0 or Release 3.2 software)

- ◆ **Upgrade RCTUA3 to:** RCTUBA3/RCTUBB3 or RCTUC3/D3 or RCTUC3/D4 or RCTUE3/F3 or RCTUE3/F4 or B1CU or B2CAU/B2CBU or B3CAU/B3CBU or B5CAU/B5CBU.
- ◆ **Upgrade RCTUBA3/RCTUBB3 to:** RCTUC3/D3 or RCTUC3/D4 or RCTUE3/F3 or RCTUE3/F4 or B2CAU/B2CBU or B3CAU/B3CBU or B5CAU/B5CBU.
- ◆ **Upgrade RCTUC3/D3 to:** RCTUC3/D4 or RCTUE3/F3 or RCTUE3/F4 or B3CAU/B3CBU or B5CAU/B5CBU.
- ◆ **Upgrade RCTUE3/F3 to:** RCTUE3/F4 or B5CAU/B5CBU.

DK424, RCTU R4.x (contains DK Release 4.0, Release 4.15 or Release 4.3 software)

- ♦ **Upgrade RCTUA4 to:** RCTUBA3/RCTUBB4 or RCTUC3/D4 or RCTUE3/F4 or B1CU or B2CAU/B2CBU or B3CAU/B3CBU or B5CAU/B5CBU.
- ♦ **Upgrade RCTUBA3/RCTUBB4 to:** RCTUC3/D4 or RCTUE3/F4 or B2CAU/B2CBU or B3CAU/B3CBU or B5CAU/B5CBU.
- ♦ **Upgrade RCTUC3/D4 to:** RCTUE3/F4 or B3CAU/B3CBU or B5CAU/B5CBU.
- ♦ **Upgrade RCTUE3/F4 to:** B5CAU/B5CBU.

DK424i, BxC (contains DK Release 4.3 software)

- ♦ **Upgrade B1CU to:** B2CAU/B2CBU or B3CAU/B3CBU or B5CAU/B5CBU.
- ♦ **Upgrade B2CAU/B2CBU to:** B3CAU/B3CBU or B5CAU/B5CBU.
- ♦ **Upgrade B3CAU/B3CBU to:** B5CAU/B5CBU.