

DCD

DCD

The DCD applications include Delivery Unit Volume Recording System - DUVRS (Office) and Route Inspection (Route). Data transfer in DOIS replaces the data transfer (upload and download of files) functions for both DSIS and the RES DCD Host System Menu.

DCD Setup

The current DCD can only accommodate either the mail volume or the route inspection application in memory at one time. The user chooses the desired application for software burn-in from the DCD menu:

In DOIS

1. Log onto DOIS.
2. Click Options on the DOIS menu bar.
3. Click Utilities.
4. Click DCD Software Burn-In.
5. Click Capture Mail Volumes.

Using the DCD

6. Perform Command Boot.
 - Press and hold A and D simultaneously.
 - Press and release the On/Off key.
 - Release all keys.(Screen should display Command Mode, Select Function, Self Test)
7. Press the up arrow twice.
(Screen should display Select Function, Program Loader)
8. Press Enter.
(Screen should display Warning: EEPROM will be erased. Continue?)
9. Press Enter.
(Screen should display Comm Parameters, Baud, 4 9600)
10. Press the up arrow twice.
(Screen should display Comm Parameters, Baud, 6 38400)
11. Press Enter.
(Screen should display Data Bits, 7)
12. Press Enter.
(Screen should display Parity, Odd)
13. Press Enter.
(Screen should display Flow Control, None)
14. Press the arrow once.
(Screen should display Flow Control, Xon/ Xoff)
15. Press Enter.
(Screen should display Comm Parameters, Start?)

16. Press Enter.

In DOIS

17. Click the DCD Ready button.
18. Press the Enter key on your keyboard.

Using the DCD

(Screen should display Program Loader, Receiving:)
This process should take 60 – 90 seconds.

(Screen should display Program Loader, Status 0000)

In DOIS

19. Click OK to DOIS message: DCD Burn-in process initiated.
(Inspect DCD for successful load – STATUS 0000)

DCD Loading Routes

After the software has been burned-in, routes must be downloaded into the DCD. This step should be completed the first time the DCD is used to collect mail volumes.

Using the DCD

1. Press the On/Off button to turn off the DCD.
2. Press and hold down <F1>, <F4> and <Enter> keys simultaneously.
3. Press and release the On/Off button.
4. Release the <F1>, <F4> AND <Enter> keys.
(Screen should display Lithium cells dead. Source = charger. Press a key...)
5. Press any key to the lithium cells message.
6. Set the Date and Time to the current date and time using the number keys and arrow keys.
7. Press <Clear>.
(Screen should display the DUVRS Collection v3.92 menu)

In DOIS

8. Click Options on the DOIS menu bar.
9. Click Utilities.
10. Click DCD Configuration – Mail Volume.

Using the DCD

11. Press <T> to initiate data transfer.

In DOIS

12. Click the Load Route Data button on the DCD Configuration – Mail Volume Window.
(message displays when the download is successfully completed)

Using the DCD

13. Press any key to continue.
14. Change the date and time, if incorrect.
15. Press <CLEAR>

DCD Mail Volume
Collection

The DCD can be used to track volume data during daily office processes. Volume information is uploaded to the DUC through the Capture Mail Volumes (DCD) window of DOIS when data collection is complete. DOIS only recognizes the routes in AMS that have been attached to the delivery unit. Phantom routes used in DSIS are no longer recognized.

DCD Recording Mail
Volumes

Using the DCD

1. Press the On/Off button.
2. Verify that the date is correct. If the date is correct press <Clear>. If the date is incorrect, input the correct date and press <Enter> and then press <Yes>.
3. Press <A> for add volume.
4. Use the ↓ button and select the type of mail.
5. Press Enter.
(The volume entry window for the last route is displayed).
6. Verify the ZIP Code is correct. The first two digits of the route number are the last two digits of the ZIP Code.
7. To enter mail volumes use the ↑ and ↓ buttons to move between routes. Control + O can be pressed to re-order the routes in numeric order. To move between mail types (Sequenced Letters, Sequenced Flats, Parcels, and DPS) use the ← and → buttons.
8. Before recording mail volumes for the next trip press <C> to clear all data.

Transferring Mail
Volumes from DCD
to DOIS

9. To do a search for a route number press F5 and then enter the three - digit route.

NOTE: Pressing the up arrow ↑ on the DCD will increment the routes. Pressing Ctrl + O (at the same time) will change the arrows so that the down arrow ↓ will increment the routes.

The transfer of mail volume data can be performed after collecting mail volumes on the DCD. The mail volume data transfer can only be completed for the delivery unit the user is logged into. Follow the steps below to perform a mail volume data transfer:

Using the DCD

1. Plug-in the AC adapter and connect it to the DCD.
2. Ensure that the DCD is connected to the correct COM Port on the DUC by use of a 25 pin, male-female null modem serial cable.
3. From the DCD DUVRS Collection Menu, select <T> to begin transferring data between the DCD and DOIS.

In DOIS

4. Click the Transfer Volume Data button from the Mail Volume - DCD window on DOIS.

(DOIS displays a message box asking "Are you logged into the correct delivery unit for the Mail Volume data you are about to upload. Yes/No.")

Using the DCD

5. Click the <Yes> button.
(DOIS displays the message, "Mail Volumes have been successfully saved from the DCD." The DCD displays the date/time screen)
6. Press <Clear>.
(The Main Menu is now displayed again)

Clearing Volumes
from the DCD after
Transfer to DUC

Using the DCD

1. Press <Clear> to reach the Main Menu.
2. From the Main Menu press <C> to select (C)lear All data.
(“Are you sure you want to erase all volumes that are now in the DCD? Enter Yes/No:” is displayed on the DCD screen.)

3. Press the <Yes> key on the DCD.

NOTE: If you forget to clear mail volumes from the previous day, a Volume Data Error appears prompting you to clear the previous days data.

DCD PS Form 3999
Software Burn-in

The following steps describe the process of burning-in the route inspection (PS Form 3999) software to the DCD. This software must be burned in before route information is loaded.

In DOIS

1. Click Options on the DOIS menu bar.
2. Click Utilities.
3. Click DCD Software Burn-In.
4. Select Street Data Collection (PS Form 3999) from the DCD Software Burn-In options.

Using the DCD

5. Perform Command Boot.
 - Press and hold A and D simultaneously.
 - Press and release the On/Off key.
 - Release all keys.(Select should display Command Mode, Select Function, Self Test)
6. Press the up arrow twice.
(Screen should display Select Function, Program Loader)
7. Press Enter.
(Screen should display Warning: EEPROM will be erased. Continue?)
8. Press Enter.
(Screen should display Comm Parameters, Baud, 4 9600)
9. Press the up arrow twice.
(Screen should display Comm Parameters, Baud, 6 38400)
10. Press Enter.
(Screen should display Data Bits, 7)
11. Press Enter.
(Screen should display Parity, Odd)
12. Press Enter.
(Screen should display Flow Control, None)
13. Press the arrow once.
(Screen should display Flow Control, Xon/ Xoff)

14. Press Enter.
(Screen should display Comm Parameters, Start?)
15. Press Enter.

In DOIS

16. Click the DCD Ready button.
17. Press the Enter key on your keyboard.

Using the DCD

(Screen should display Program Loader, Receiving:)
This process should take 60 – 90 seconds.
(Screen should display Program Loader, Status 0000)

In DOIS

18. Click OK to DOIS message: DCD Burn-in process initiated.
Inspect DCD for successful load – STATUS 0000)

DCD Loading Routes

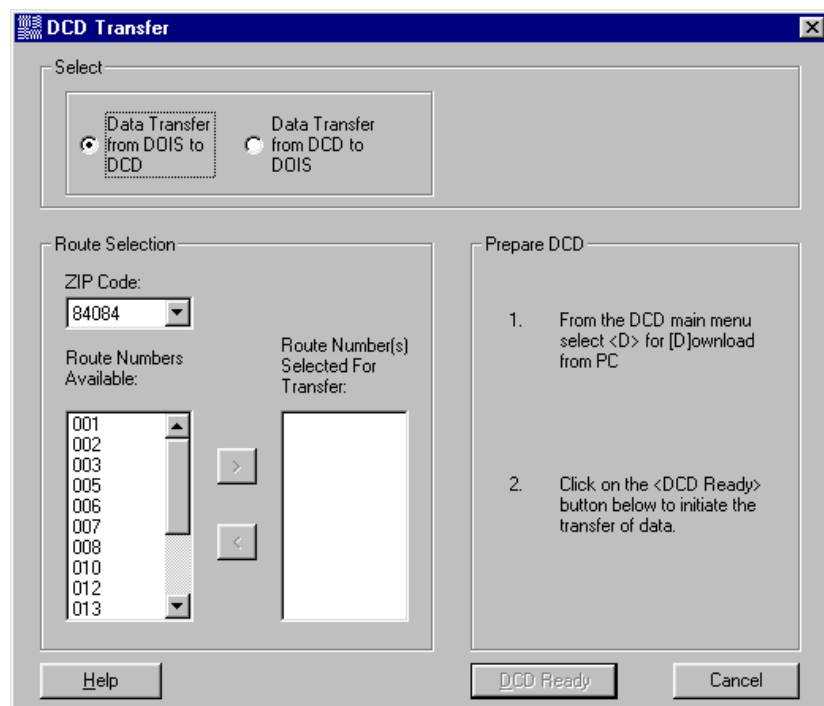
Using the DCD

1. Press the On/Off button to turn off the DCD.
(Screen display goes blank)
2. Press and hold down <F1>, <F4> and <ENTER> keys
simultaneously. (Screen display is blank. The DCD is off)
3. Press and release the On/Off button. (Screen display is blank.
The DCD is off)

DCD PS Form 3999
Data Transfer

Prior to conducting a route inspection the DCD must be loaded with PS Form 3999 data. This is completed from the Route and Unit Maintenance tab on the Supervisor Workbench or the Route and Inspection and Adjustment Workbench.

1. Click the DCD Transfer button on the Route and Unit Maintenance tab of the Supervisor Workbench or Route Inspection and Adjustment Workbench. The DCD Transfer window opens.
2. Select Data Transfer from DOIS to DCD.
3. Select the Route to Download from Route Numbers Available.
4. Follow the directions in the Prepare DCD Frame.
5. Click the DCD Ready button.

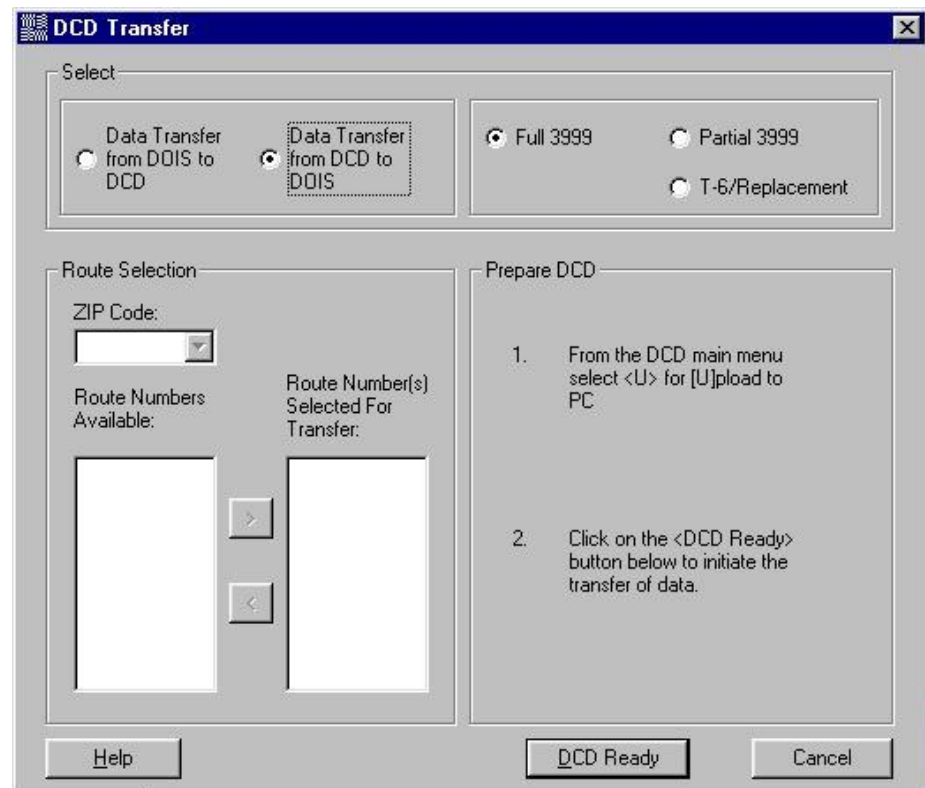


6. Click OK.
7. You will be notified that the transfer was successfully completed.

**Transfer of Data from
 the DCD to DOIS**

In DOIS

1. Click the DCD Transfer button on the Route and Unit Maintenance tab of the Supervisor Workbench or Route Inspection and Adjustment Workbench.
 (The DCD Transfer window opens.)



2. Select Data Transfer from DCD to DOIS.
3. Select the Street Analysis Type.
4. Follow the directions in the Prepare DCD Frame.
5. Click the DCD Ready button.
6. Click OK.
7. You will be notified that the transfer was successfully completed.

**DCD
 Troubleshooting**

The following points provide procedures to execute when problems are encountered when using the DCD.

DCD Timeouts

After a 60-second period of inactivity the screen on the DCD goes

blank. This conserves energy and helps protect data. To resume usage press the On/Off key or press Enter if not collecting data. The screen reappears as it did before going blank. No data is lost.

Verify DCD
Hardware

- A null modem cable should connect the serial port of the DCD to a COM port on the DUC.
- A 25-pin male/9-pin female adapter should connect the Null Modem Cable with the DUC and the DCD with the Null Modem Cable.
- Be sure to securely fasten the Null Modem Cable to the DCD.

Check DCD Settings

1. Check COM Port setting in DOIS:
 - While on the Supervisor Workbench, select Options from the menu bar.
 - In Options, select Utilities.
 - In Utilities, select Interface Configuration.
 - The Interface Configuration window appears and the DCD tab is selected.
 - The DCD tab should read "DCD COM Port: COM1." Rarely does this setting need to be changed.
2. Check the port settings on the PC. Follow the steps below that correspond to the version of Windows used on the DUC.

Follow the steps below when checking the port settings on a **Windows 95** DUC.

- Click the Start button in the lower left corner of your screen.
- Select Settings.
- Select Control Panel.
- Select System.
- Click the Device Manager Tab.
- Click Ports.
- Double click Communication Ports.
- Click the Resources Tab.
- The field labeled Settings Based on: Should read Basic configuration 0000. This is the setting that assigns the Communication Port to COM1.
- If this setting needs to be changed, you must restart the computer in order for the change to be recognized.

Follow the steps below when checking the port settings on a **Windows 2000** DUC.

	<ul style="list-style-type: none">- Click the Start button in the lower left corner of your screen.- Select Settings.- Select Control Panel.- Select System.- Select the Hardware Tab.- Click Device Manager.- Click Ports.- Double click Communication Ports.- Click the Resources Tab.- The field labeled "Settings Based on" should read Basic configuration 0000. This is the setting that assigns the Communication Port to COM1.
DCD Lighting	<p>The DCD is equipped with a backlighting function that is useful for entering data in poorly lit areas. To activate the light:</p> <ol style="list-style-type: none">1. Press the <FUNC> key.2. Press the <L> key. <p>The light will automatically go out after 15 seconds of inactivity. To reactivate the light or turn it off manually, prior to the 15 seconds, repeat the steps above.</p>
Verify Power Source	<p>Data transfers should always be executed with the AC Power Adapter plugged in. DCD data transfer requires a great deal of power that DCD batteries are incapable of supplying. If the lithium cells are going bad, data transfers are unsuccessful. Remove the cells and try again.</p>
Reboot the DCD	<p>Soft Boot</p> <p>When the DCD freezes, a soft boot unlocks it and no data is lost. To complete a soft boot:</p> <ul style="list-style-type: none">• Turn the DCD off;• Simultaneously press the <Shift> and <L> keys;• Press and release the on/off key (while still holding down <Shift> and <L>);• Release <Shift> and <L> keys. <p>Hard Boot</p> <p>A hard boot clears out any volumes that have been previously entered. To complete a hard boot:</p> <ul style="list-style-type: none">• Press <F1>, <F4>, and <Enter> on the DCD, ALL at the same time, and HOLD the three keys down;• Press the On/Off key and release;

- Release the <F1>, <F4>, and <Enter> keys.

This should restore DOIS to the Main Menu of the software loaded on the DCD (for example, Mail Volumes = DUVRS Collection Menu).

Rebooting Before Burn-In (Command Boot)

Before burning-in new software, the DCD must be rebooted. To reboot the DCD:

- Press the <A> and <D> buttons simultaneously and hold down;
- Press the <On/Off> key and release.

DCD Freezes – Soft Boot

The DCD may freeze such that the On/Off switch does not turn the DCD turn the screen off, therefore not allowing the DCD to be rebooted. If this happens:

- Press and hold the On/Off switch for approximately 30 seconds, the DCD will turn off.

Handling Specific Error Messages

The following lists the possible error messages on the DCD and provides tips on fixing problems:

“Check the DCD Download Directory Path in the windows Registry.”

This error can be the result of an incorrect installation or setup of DOIS. Reinstall DOIS and verify the DCD COM port.

"COM Port is already open."

If this error is encountered, close DOIS and any MS-DOS windows. Restart DOIS and retry the transfer.

"Unable to open COM Port."

This error is due to other applications using the handle of the COM port. Close any other applications currently running on the DUC. If the problems persist or there are no other applications running shutdown and restart the DUC.

"Unable to close COM Port."

This error can occur DOIS cannot close the COM port. This is a very rare error and can be hardware or operating system related.

"Route Data Transfer or Volume Data Transfer was not successful."

This error message appears if the file transfer to or from the DCD

did not complete successfully. The file transfer started correctly but the communication between the DUC and the DCD was broken by an external event. Another possible cause is a time out of DOIS waiting to receive data from the DCD.

To troubleshoot:

- Check the DCD connections;
- Take the lithium cells out and try again.

“There was an unrecoverable error during transfer.”

To troubleshoot:

- Restart DOIS;
- Check the DCD connection to the local machine;
- Retry the DCD transfer;
- If problem still occurs contact the USPS Help Desk.

“There was an unrecoverable Com Port error during transfer.”

To troubleshoot:

- Restart DOIS;
- Check the DCD connection to the DUC;
- Retry the DCD transfer;
- If problem still occurs contact the USPS Help Desk.

"An invalid application was selected for DCD Burn-In."

This error is rare. To troubleshoot, close the Burn-In window, reopen and retry.

Burn-In percentage count fails, and a fail error is displayed on the DCD screen.

This error is due to the built in functionality of the DCD for self-checking the lithium cells. If the cells are bad or not fully recharged, the burn-in fails.

Computer freezes after receiving error message “Volume Data Transfer was not successful.”

To troubleshoot:

- Restart the DUC.

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DCD Job Aid

Use the information below for additional DCD tips. Cut the two strips and attach to the sides of each DCD.

<p>1-STREET MAIN MENU 1. ZIP+4</p>
<p>2-TRAVEL/RELAY 1-To route; 2-Within; 3-From route; 4-Relay time</p>
<p>3-ACCOUNTABLE</p>
<p>4-LOAD/UNLOAD @office</p>
<p>5-PARCEL POST delivery time</p>
<p>6-BREAK 1-Break; 2-Lunch; 3-Personal needs, for example(comfort stop)</p>
<p>7-COLLECTION TIME</p>
<p>8-MISCELLANEOUS 1-Customer Service 2-Backtrack 3-Animal interference 4-Gas vehicle 5-Relay waiting 6-Wait transportation 7-Misc other (explain) 8-Temp detail 9-Misc. mgmt. Time A-Accident "O"-(Oh) Other 10-Deadheading</p>
<p>9-SPECIAL HOT KEYS A-Add new address S-Search for address B-Back to address (after a search) K-Modify incorrect function (time OK) R-Review entries F3-Park Points A-To add (type) F4-Enter clock rings F5-Vehicle miles CLEAR-End sub-func or return to street menu E-Exit (end street, go to main menu)</p>
<p>10 -INSIDE ZIP+4 SCREEN K-Change delivery mode E-Change delivery type Edit current address Possible delivery changes (multiple deliveries only) R-Return to menu</p>
<p>11-OFFICE HOT KEYS CLEAR: End line item V: Volume entry R: Review input data F3-Create park points F4-Clock rings</p>

<p>12-DCD FUNCTIONS V-View downloaded files, lithiums and check from opening screen. W-Walk through CLASS data from opening screen</p>
<p>13-WARM REBOOT Turn off DCD, press SHIFT+L; press and release ON/OFF key (All data will remain.)</p>
<p>14 -BACK LIGHTING Func + L (toggle on and off)</p>
<p>15-SCREEN CONTRAST Func + Bksp (light)</p>
<p>16-FINISHED WITH ROUTE? Be sure to press F4 to enter clock rings before you Answer "Yes".</p>
<p>17-BATTERY MAINT Keep 2 extra 9v alkalines with you for backup. Pull out small lithiums when storing DCD. Note: Small lithiums must be OK before starting inspection. These will maintain when 9v batteries are changed.</p>
<p>18-BATTERY CHECK Turn DCD off; hold down A+D; Press and release the On/Off key. 1) Press ENTER for self test 2) Press ENTER for config screen 1 3) Check lithium and 9v; if either is bad, replace 4) Press CLEAR 5) Do WARM REBOOT</p>