



# CDR-790 Cellular Router

## Upgrade Process

**Application Software Version 1.58.1**

**Phone Module Hardware Version K2\_0\_7\_19A**



Call Direct

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# ***Table of Contents***

<b>CDR-790 CELLULAR ROUTER.....</b>	<b>1</b>
<b>UPGRADE PROCESS .....</b>	<b>1</b>
<b>APPLICATION SOFTWARE VERSION 1.58.1.....</b>	<b>1</b>
<b>PHONE MODULE HARDWARE VERSION K2_0_7_19A.....</b>	<b>1</b>
TABLE OF CONTENTS.....	2
DOCUMENT DESCRIPTION.....	3
<b><u>1.0 UPGRADE PROCESS.....</u></b>	<b><u>4</u></b>
Upgrade the Cellular Router Application Software.....	4
Upgrade the Phone Module Bootloader.....	8

## ***Document Description***

This document is intended to be used as a step-by-step guide for upgrading the Call Direct CDR-790seu cellular router from version 1.57.2 to the following version:-

Application Software Version:	1.58.1
Phone Module Firmware Version:	K2_0_7_19A

Note that if you presently have an Application Software Version other than V1.57.2 you will need contact Call Direct to obtain an upgrade pack at either:

Phone:	+61 (02) 9011-7526
Email:	<a href="mailto:support@call-direct.com.au">support@call-direct.com.au</a>

You will need the following files available to complete this upgrade procedure:

Application Software:	upgrade-1.57.2-1.58.1.cramfs (1,648KB)
Boot Loader:	MC8790_DLEX_K2.0.7.18.cwe (606KB)
Phone Application:	MC8790_K2.0.7.19.cwe (15,835KB)

## 1.0 Upgrade Process

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### ***Upgrade the Cellular Router Application Software***

1. **After upgrading the current settings on the unit will be lost**
2. Please **backup the current settings on the unit before the upgrade** to make a backup copy of the current settings go to the Application Load/Save then under the "Save a copy of current settings:" click Save, this will create a backup file of the current settings. To restore the previous settings select the "Restore saved settings:" select the backup file and click Restore.
3. Plug the network (CAT5) cable in to the Ethernet port, next plug in the power cable.
4. Log in to the web administration page by opening your web browser and typing in the URL <http://192.168.1.50/> with the following credentials:
  - a. Username: admin
  - b. Password: password
5. Verify that the present "Application Software Version" is 1.57.2 ①  
If "Application Software Version" is NOT 1.57.2 please contact Call Direct for an alternate upgrade pack to suit your software version.

**Status**

**LAN**

IP: 192.168.1.50 / 255.255.255.0

MAC Address: 00:11:DC:F2:06:00

**SYSTEM INFORMATION**

System Up time: 00:11:20

Router Version: Hardware: 1.04\_e Software: 1.57.2

Phone Module: Model: Hardware: not available Firmware: not available Temp:

Serial Number: 00:11:DC:F2:06:00

**PPP**

PPP Status: DISABLED

PPP IP Address: N/A / N/A

PPP P-I-P: N/A

IPsec:

**PPPOE**

PPPoE Status: DISABLED

6. Click on the "Application Load/Save" link in the menu bar ② .
7. Click the "Browse" button and select the application firmware file that is to be updated, which in this case is *upgrade-1.57.2-1.58.1.cramfs* and click "Open".
8. Now click on "Upload".

**UPLOAD NEW FIRMWARE:**

File:

**Note: The whole upgrade procedure can take 2~3 mins.**

9. Click OK to the below message:



10. Also click OK to the below message:



11. You will now see a progress bar as indicated in the images below, which you will have to wait to finish before you can continue:

Status

LAN  
DHCP  
NAT  
Routing  
SNMP  
Data Connection  
PPTP  
System Monitor  
Modem  
Band  
Security  
DDNS  
Log  
Application Load/Save  
Reboot

Application Load/Save

Phase:	Upload
Messages:	
Errors:	
Percent Complete:	93 %

Current Position:	1597 / 1648 KBytes
Elapsed time:	00:00:14
Est Time Left:	00:00:01
Est Speed:	112 KB/s.

SAVE A COPY OF CURRENT SETTINGS:

Save

RESTORE SAVED SETTINGS:

File	<input type="text"/>	Browse...	Restore
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UPLOAD NEW FIRMWARE:

File	<input type="text" value="sktop\790\upgrade-1.57.2-1.58.1.cramfs"/>	Browse...	Upload
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Note: The whole upgrade procedure can take 2~3 mins.

12. Once the application upload has finished, you will see the screen below with the  
Phase: Finished

Application Load/Save

Phase:	Finished
Messages:	<p>Checking Kernel parameters ... OK  MODE: cramfs  Checksum OK  R 1.57.2 =&gt; 1.58.1  Stopping processes  Deleting symlinks  Starting update  MEM=8112, DISK=4228, SIZE=826  Updating kernel  Checking kernel  Updating file system  Deleting old files  Installing new files  Upgrade was successful (finished=1)  Cleaning up  Installation has succeeded  Finished.  The system will shortly reboot itself.  This will take about 90 seconds. Do NOT power off during this time.  Reload by pressing the Status button until you see the status screen.  It may be necessary to restart the Web browser after the upgrade.</p>
Errors:	
Percent Complete:	100%

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Current Position:	1648 / 1648 KBytes
Elapsed time:	00:03:54
Est Time Left:	00:00:00
Est Speed:	7 KB/s.

13. You will need to wait approximately 1 minute for the router to restart (this is done automatically).

Do NOT power off the router.

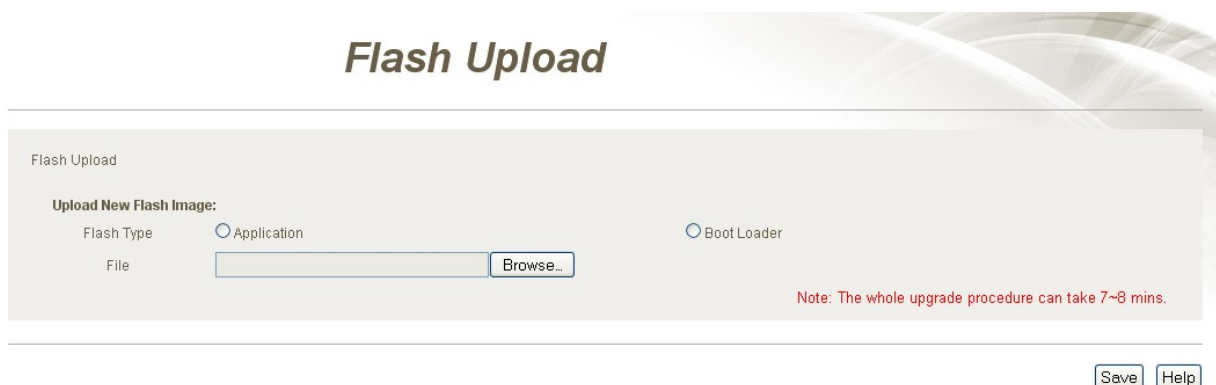
**Close your web browser** and log back into the web administration page by opening your web browser and typing in the URL <http://192.168.1.50/>

Router Version	Hardware: 1.04_e Software: 1.58.1
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**You have now completed the cellular router software upgrade and may proceed to upgrade the phone module firmware.**

### ***Upgrade the Phone Module Bootloader***

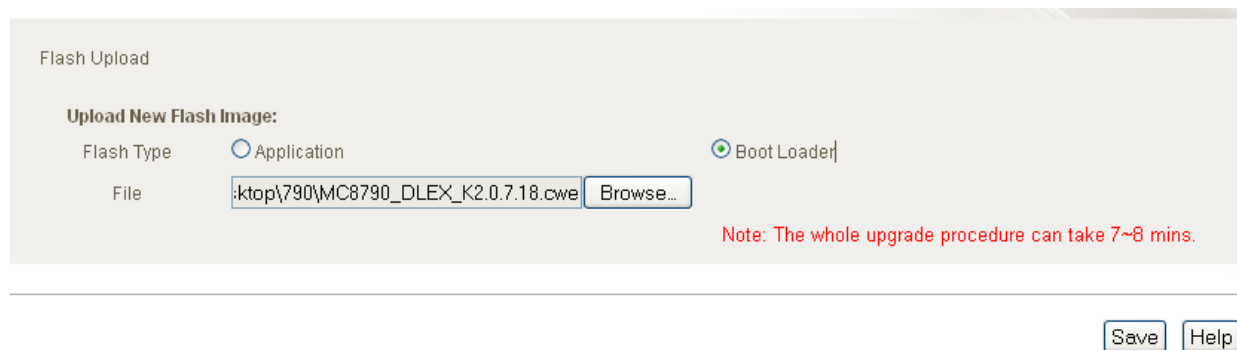
14. In your browsers URL bar, type the following address:  
<http://192.168.1.50/linkFiles/FlashUpload.html> and you should see the following page load:-



The screenshot shows the 'Flash Upload' web interface. At the top, the title 'Flash Upload' is displayed in a large, bold, italicized font. Below the title, the section 'Flash Upload' is visible. Underneath, the heading 'Upload New Flash Image:' is present. There are two radio buttons for 'Flash Type': 'Application' (which is selected) and 'Boot Loader'. Below the 'Application' radio button, there is a text input field labeled 'File' and a 'Browse...' button. A red note at the bottom right of the form area states: 'Note: The whole upgrade procedure can take 7~8 mins.' At the bottom right of the page, there are two buttons: 'Save' and 'Help'.

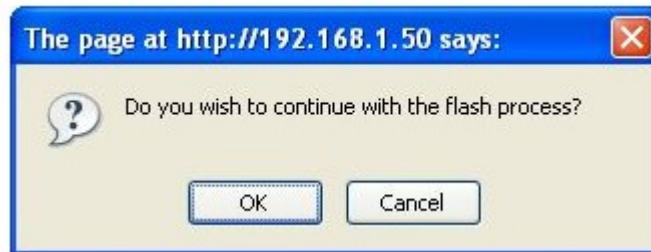
15. You must select the "Boot Loader" radio button first, then click on the "Browse" button and select the **Boot Loader** file (MC8790\_DLEX\_K2.0.7.18.cwe) and click "Open".

16. Now click "Save".



This screenshot shows the 'Flash Upload' interface after the 'Boot Loader' radio button has been selected. The 'Flash Type' section now shows 'Boot Loader' as the selected option. The 'File' input field now contains the text ':\ktop\790\MC8790\_DLEX\_K2.0.7.18.cwe'. The 'Browse...' button is still present. The red note 'Note: The whole upgrade procedure can take 7~8 mins.' remains at the bottom right of the form area. The 'Save' and 'Help' buttons are still at the bottom right of the page.

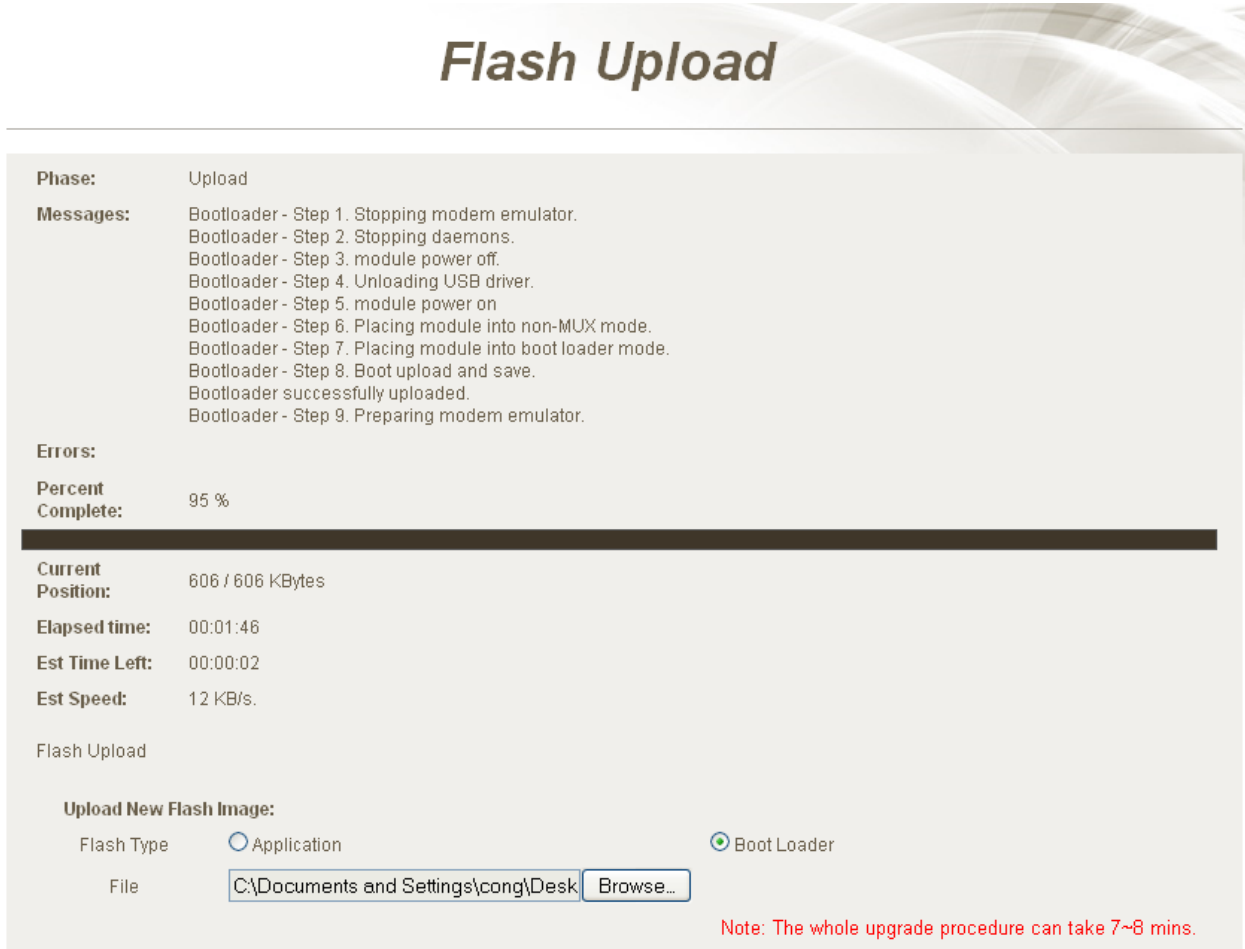
17. Click OK to the following:



18. Also click OK to the following:



19. Once the flash upload has completed, you will see the following message:



The image shows a 'Flash Upload' progress window. At the top, the title 'Flash Upload' is displayed in a large, bold, italicized font. Below the title, the window is divided into several sections. The 'Phase' section shows 'Upload'. The 'Messages' section lists nine steps of the bootloader process, from stopping the modem emulator to preparing the modem emulator. The 'Errors' section is empty. The 'Percent Complete' section shows '95 %'. Below this is a progress bar. The 'Current Position' section shows '606 / 606 KBytes'. The 'Elapsed time' section shows '00:01:46'. The 'Est Time Left' section shows '00:00:02'. The 'Est Speed' section shows '12 KB/s.'. Below these sections is the 'Flash Upload' label. At the bottom, there is an 'Upload New Flash Image:' section with two radio buttons: 'Application' (selected) and 'Boot Loader'. Below the radio buttons is a text box containing the file path 'C:\Documents and Settings\cong\Desktop' and a 'Browse...' button. A red note at the bottom right states: 'Note: The whole upgrade procedure can take 7~8 mins.'

**Flash Upload**

**Phase:** Upload

**Messages:**

- Bootloader - Step 1. Stopping modem emulator.
- Bootloader - Step 2. Stopping daemons.
- Bootloader - Step 3. module power off.
- Bootloader - Step 4. Unloading USB driver.
- Bootloader - Step 5. module power on
- Bootloader - Step 6. Placing module into non-MUX mode.
- Bootloader - Step 7. Placing module into boot loader mode.
- Bootloader - Step 8. Boot upload and save.
- Bootloader successfully uploaded.
- Bootloader - Step 9. Preparing modem emulator.

**Errors:**

**Percent Complete:** 95 %

**Current Position:** 606 / 606 KBytes

**Elapsed time:** 00:01:46

**Est Time Left:** 00:00:02

**Est Speed:** 12 KB/s.

Flash Upload

**Upload New Flash Image:**

Flash Type ☐ Application ☒ Boot Loader

File

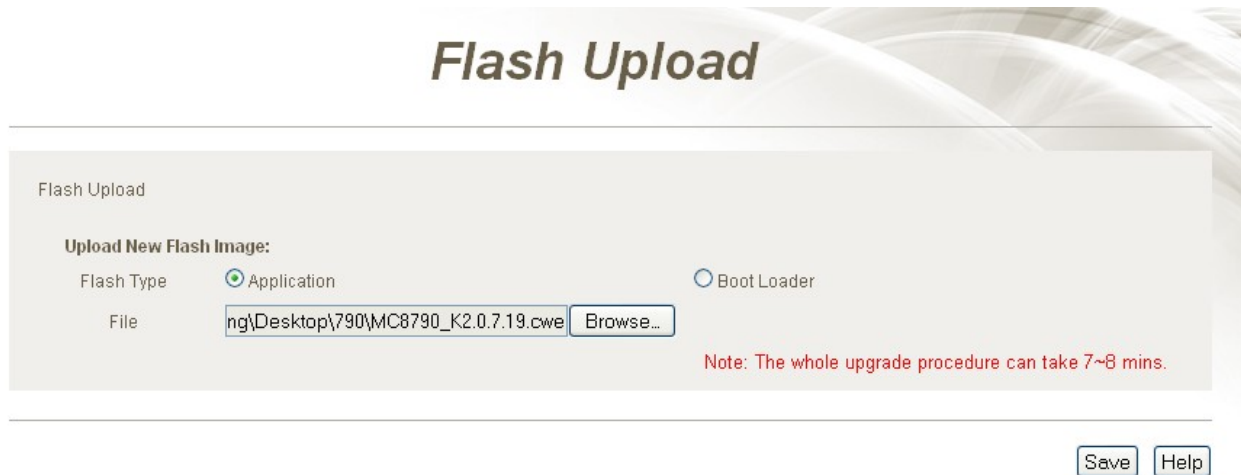
Note: The whole upgrade procedure can take 7~8 mins.

**You have now completed the phone module boot loader upgrade and may proceed to upgrade the phone module firmware.**

**At this stage you will NOT be able to establish a cellular connection until you complete the next step.**

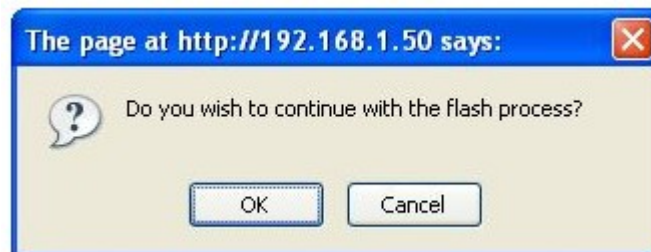
### ***Upgrade the Phone Module Application***

- 20. Please power cycle the cellular router (i.e. unplug power to the router, plug it back in again and wait for the router to reboot).**
21. In your browsers URL bar, type the following address:  
<http://192.168.1.50/linkFiles/FlashUpload.html> and select "Application", then "Browse" and select the Phone Application file (MC8790\_K2.0.7.19.cwe) and click "Open".
22. Now click "Save".



The image shows a web browser window displaying the 'Flash Upload' page. The page has a title 'Flash Upload' and a subtitle 'Flash Upload'. Under the heading 'Upload New Flash Image:', there are two radio buttons: 'Application' (selected) and 'Boot Loader'. Below the radio buttons, there is a text input field for the file path, which contains 'ng\Desktop\790\MC8790\_K2.0.7.19.cwe', and a 'Browse...' button. A red note at the bottom right of the form area states: 'Note: The whole upgrade procedure can take 7~8 mins.' At the bottom right of the page, there are two buttons: 'Save' and 'Help'.

23. Click OK to the following:



24. Also click OK to the following:



25. This stage of the upgrade can take anywhere from 3 to 5 minutes. You will see a progress bar being displayed as the upgrade progresses. Once the phone application firmware has successfully uploaded, the following screen will appear:

## Flash Upload

<b>Phase:</b>	Finished
<b>Messages:</b>	Application - Step 1. Stopping modem emulator. Application - Step 2. Stopping daemons. Application - Step 3. module power off. Application - Step 4. Unloading USB driver. Application - Step 5. module power on Application - Step 6. Placing module into non-MUX mode. Application - Step 7. Placing module into boot loader mode. Application - Step 8. Boot upload and save. Application successfully uploaded. Application - Step 9. Preparing modem emulator. Your unit should now return to normal operations.
<b>Errors:</b>	
<b>Percent Complete:</b>	100%

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<b>Current Position:</b>	15835 / 15835 KBytes
<b>Elapsed time:</b>	00:05:03
<b>Est Time Left:</b>	00:00:01
<b>Est Speed:</b>	53 KB/s.

Flash Upload

**Upload New Flash Image:**

Flash Type	<input checked="" type="radio"/> Application	<input type="radio"/> Boot Loader
File	<input type="text" value="ng\Desktop\790\MC8790_K2.0.7.19.cwe"/> <input type="button" value="Browse..."/>	

Note: The whole upgrade procedure can take 7~8 mins.

26. You should now be able to type in the following URL in the address bar to check the relevant software versions. <http://192.168.1.50/>

The Application Software Version & Phone Module Firmware Version should be reflected as below:

SYSTEM INFORMATION	
System Up time	00:16:17
Router Version	Hardware: 1.04_e Software: 1.58.1
Phone Module	Model: MC8790 Hardware: 1.0 Firmware: K2_0_7_19A
Temperature	30 °C

**You have now completed the Phone Module upgrade process and finished upgrading the router.**