Cobalt Digital Inc.

2406 E. University Ave.
Urbana, IL 61802
Voice 217.344.1243 • Fax 217.344.1245
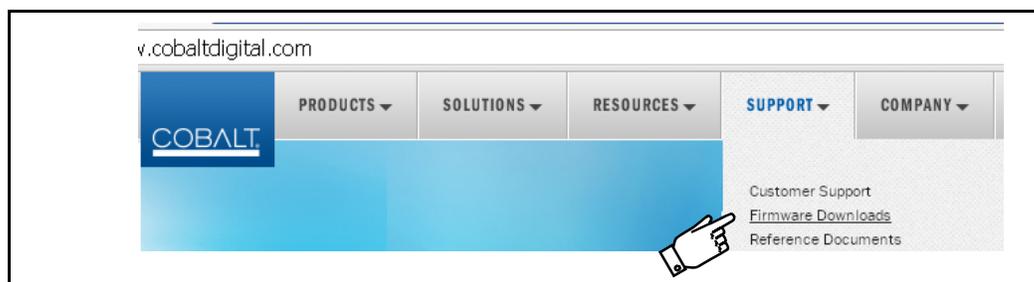www.cobaltdigital.com

Updating Cobalt® Cards Using Firmware Upload

Cobalt COMPASS® and FUSION3G® cards can be updated with the latest firmware in just minutes. Following the simple steps here helps ensure a smooth and trouble-free update.

Note: COMPASS® and FUSION3G® cards retain the previous firmware in card memory, thereby providing firmware redundancy that allows reverting to the previous firmware should any problems arise when new firmware is uploaded to the card.

Checking for and Obtaining Firmware from Cobalt's Web Site

1. Go to **www.cobaltdigital.com ➜ Support ➜ Firmware Downloads**

2. The **Latest Firmware Versions** page shows the latest versions for various Cobalt® cards. Check your card's version in its DashBoard™ **Card Info** pane.

3. Click on the **Firmware File** link for your card ("9006_rev_217_firmware.bin" in the example above). A dialog opens in which the file can be downloaded to a location browsed to on your computer.

After the firmware downloads to your computer, upload the firmware to your card as described in the remainder of this Guide.

Saving Your Presets

The Presets feature on your card allows you to save card user setups. While your card presets are normally preserved when a firmware update is performed, you should always save your presets on a computer **before** doing a firmware update.

Save (download) presets from your card to create a Presets file on your computer as follows:

1. In DashBoard™, open the card and select the **Presets** tab.

2. Adjacent to the **Download Presets** field, click **Save**.

3. In DashBoard™, the screen shown below now appears. Navigate to the location where you want to save the Presets file (in this example, "My Documents/Cobalt Presets"). Click **Save** and confirm. All of the current presets for the card are now saved on your computer.

## Updating Your Card's Firmware (DashBoard™ V3.0 or later)

Upload the update firmware you received from Cobalt® to a card as follows:

Note: Make certain the card is not carrying an on-air signal while performing this procedure. The card will automatically go off-line while the software uploads to the card.

1. In DashBoard™, open the card receiving the update firmware.

2. Click on the **Upload** button at the bottom of the DashBoard™ screen.

3. The screen shown below now appears. Click **Browse** and navigate to where you saved the file (in this example, "My Documents\Cobalt Updates"). Select the desired update file (in this example, "9061_rev_2955_firmware") and click **Open**.
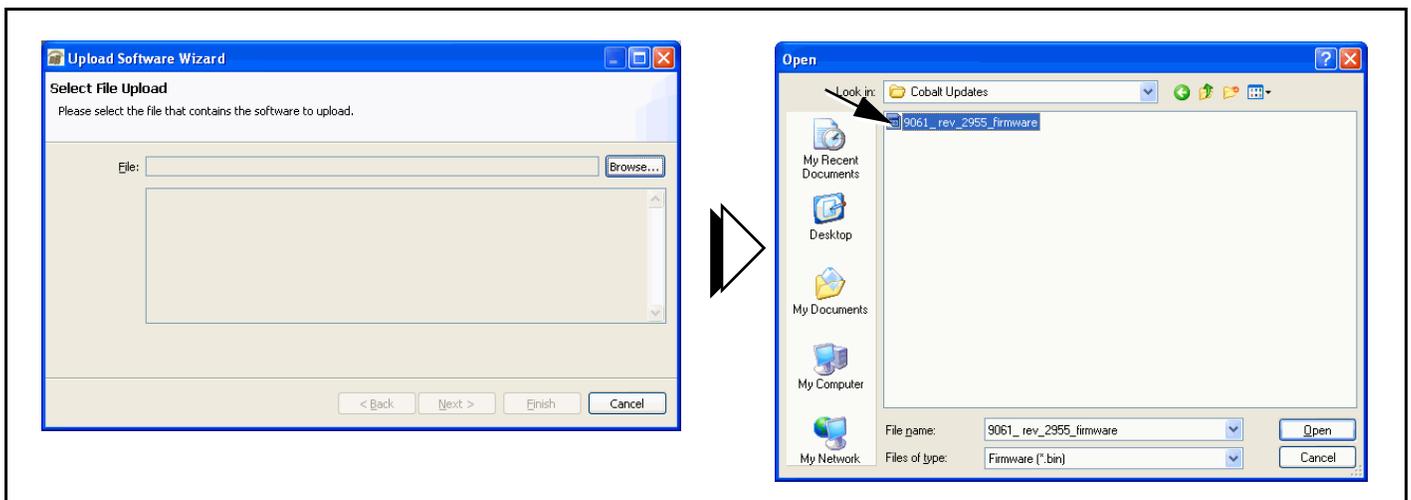
4. As shown below, the update file and its description is now displayed (left) (**disregard any product "not found" messages**). Click **Next**. The target card (in this example, "Slot 6: CDI-9061 RCVR 1B") is now selected to receive the upload.

   Other same-type cards will also be shown (in this example, "Slot 1: CDI-9061 RCVR 1A"). **If other same-type cards are also to receive this upload, put a check mark by these cards.**

5. Click **Finish**. When the upload is complete, click **OK**. The Upload function now closes and the card(s) automatically reboots. The card is now ready for use with the new firmware.

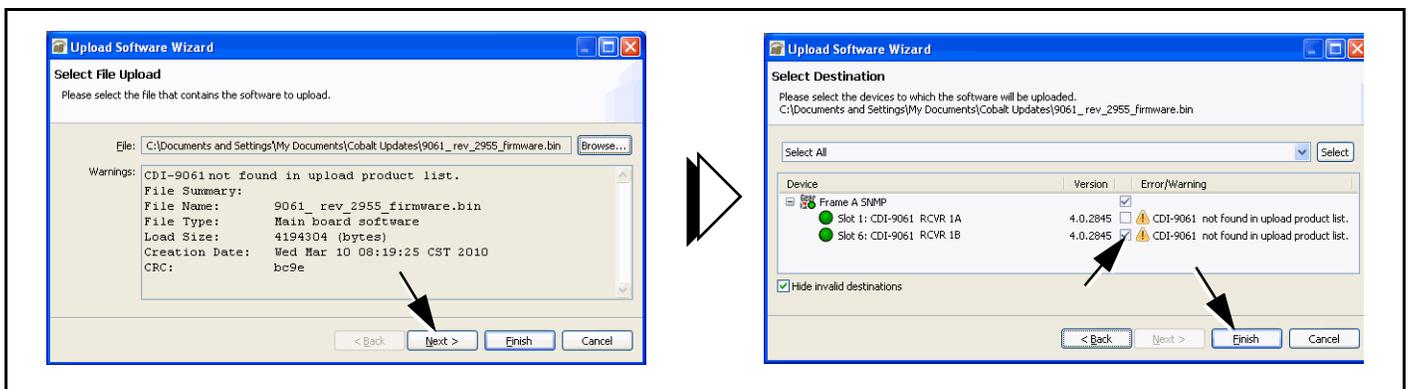## Updating Your Card's Firmware (DashBoard™ V2.0)

Upload the update firmware you received from Cobalt® to a card as follows:

Note: Make certain the card is not carrying an on-air signal while performing this procedure. The card will automatically go off-line while the software uploads to the card.

1. In DashBoard™, open the card receiving the update firmware.

2. Click on the **Upload** button at the bottom of the DashBoard™ screen.

3. The screen shown below now appears. Navigate to where you saved the file (in this example, "Cobalt Updates") and select the desired update file (in this example, "9061_rev_2955_firmware.bin").
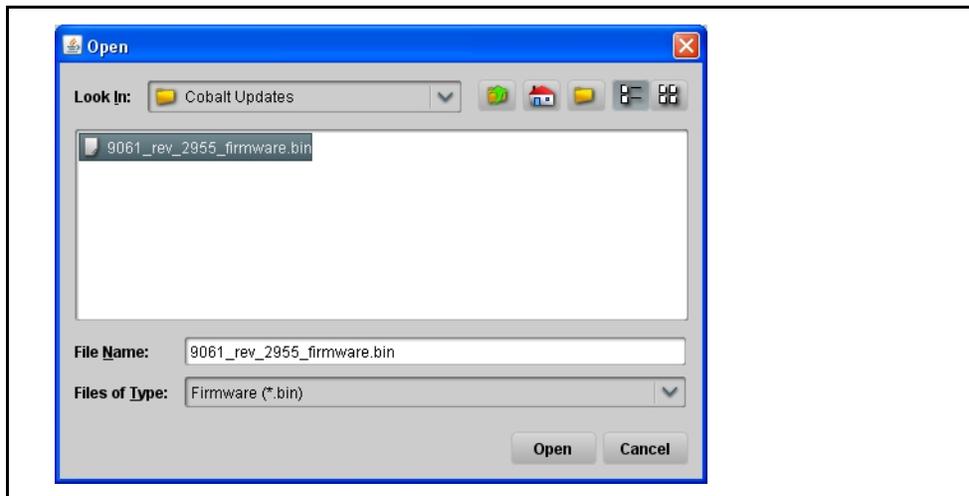
4. Click on the **Open** button and confirm the upload.

5. Wait while the file is sent to the card (as shown below).
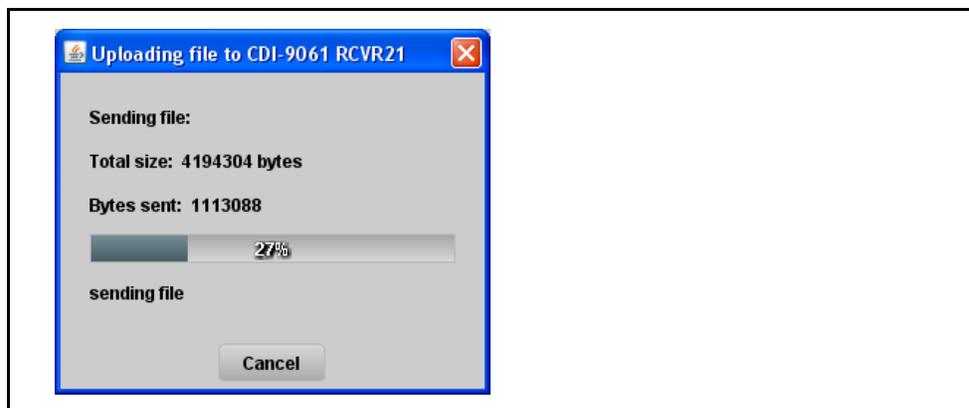
6. When the upload is complete, the Upload function closes and the card automatically reboots, and now displays the uploaded Software Version Number in its Card Info pane. The card is now ready for use with the new firmware.

What To Do If Your Card Locks Up With a Firmware Update (Compass® cards)

In the unlikely event that your card locks up in the boot state after receiving updated firmware, perform the following steps **in the order listed** as necessary until normal operation is restored.

❏ **Power-Cycle The Card** – Unseat the card from the frame slot connection, wait a few seconds, and then re-insert the card. If (following about 30 seconds) the card does not complete booting, proceed to the next step.

❏ **Erase The Presets** – Erase the presets stored in the card as described below, then allow the card to boot. If (following about 30 seconds) the card does not complete booting, proceed to the next step.

NOTE: Your card's Presets will be erased following this procedure. You may be able to re-apply them after performing this procedure as described in **Uploading Your Presets** on the next page.

If your card is still locked after this procedure, or if uploading the presets causes the card to again lock up, perform **Revert To Your Card's Previous Firmware Version** described below.
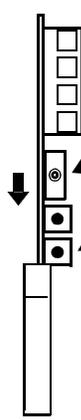
① Place the card in its frame slot but do not fully insert into slot yet.

② Hold the Menu Selection toggle switch in the **UP** position.

③ Hold the Enter Submenu pushbutton **IN**.

④ While holding the switches as described above, insert the card fully into slot.

⑤ When the yellow **USER** LEDs light, release the switch and Enter buttons. The presets are now being erased. Display shows WIPE when presets are erased.
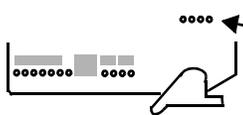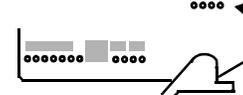
USER LEDs

❏ **Revert To Your Card's Previous Firmware Version** – If the previous steps do not restore proper operation, you can revert the card to its previous firmware. When your card receives updated firmware, it always retains the previous firmware in a spare memory location on the card. Revert to the previous firmware as described below.

NOTE: After reverting to the card's previous firmware, you can re-apply presets as described in **Uploading Your Presets** on the next page.

① Place the card in its frame slot but do not fully insert into slot yet.

② Hold the Menu Selection toggle switch in the **DOWN** position.

③ Hold **both** the Exit **and** Enter Submenu pushbuttons **IN**.

④ While holding **all** switches as described above, insert the card fully into slot.

⑤ When the **USER** LEDs light, release the switch and all buttons. The card is now booting with the previous firmware. (Full reboot takes about 30 seconds.)

USER LEDs

❏ **Contact Cobalt Digital Inc. Customer Support** – If your card still does not properly operate after the above, please contact our Customer Support personnel for any assistance at **support@cobaltdigital.com** or by calling (217) 344-1243.

What To Do If Your Card Locks Up (Fusion3G® cards)

In very rare cases of the card locking up during a firmware upgrade (such as power interruption during a card firmware upgrade), the card can be set to boot from its non-volatile file ("safe image") held in card ROM.

When the safe image is loaded, the card is now rebooted/unlocked and can receive a target firmware upgrade .bin file (which, if not stored on your computer can be downloaded from **Support>Firmware Download** link at www.cobaltdigital.com).

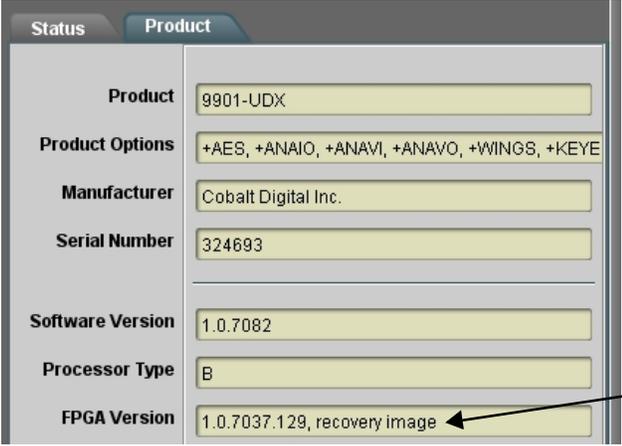Perform the following steps **in the order listed** as necessary until normal operation is restored.

NOTE: Your card's Presets may be erased following this procedure. You may be able to re-apply them after performing this procedure as described in **Uploading Your Presets** on the next page.
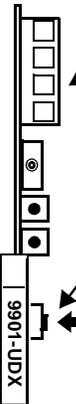
4-character display

① Place the card in its frame slot but do not fully insert into slot yet.

② Hold the lower button in and slide the card into a powered slot.

③ With card fully in slot, continue holding the button for about 3 seconds then release it.

④ When the card-edge 4-character display shows BOOT , the card is now rebooted and ready to receive its firmware .bin operating file.

9901-UDX

⑤ Open the card in DashBoard and observe its **Product** tab. Note the recovery image now shown in the **FPGA Version** field. This indicates that the card is ready to receive its operating firmware .bin file

⑥ Upload the desired card firmware .bin file as described in Checking for and Obtaining Firmware from Cobalt's Web Site (p. 1) and Updating Your Card's Firmware (DashBoard™ V3.0 or later) (p. 3).

Status	Product

| Product	9901-UDX
Product Options	+AES, +ANAIO, +ANAVI, +ANAVO, +WINGS, +KEYE
Manufacturer	Cobalt Digital Inc.
Serial Number	324693
Software Version	1.0.7082
Processor Type	B
FPGA Version	1.0.7037.129, recovery image

Uploading Your Presets (DashBoard™ V3.0 or later)

<table>
<tr><td>

This Page is for DashBoard™ version
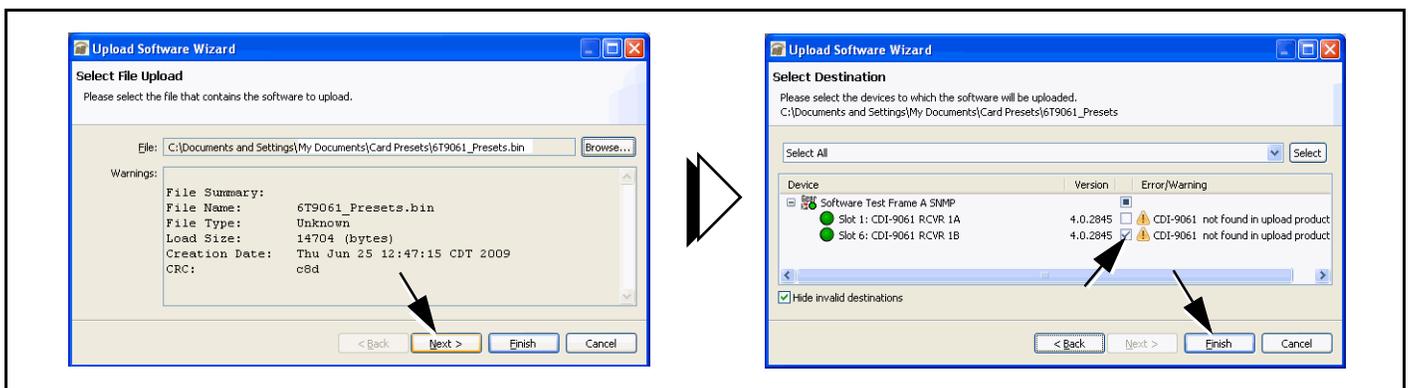
3.0
or later

Go to Page 7 for earlier DashBoard™ versions

</td><td>

Note: The procedure below is required **only** if you had to erase your presets in the course of fixing a locked-up card. In normal operation, card presets are preserved when a firmware update is performed.

1. In DashBoard™, open the card and select the **Presets** tab.

2. Click on the **Upload** button at the bottom of the DashBoard™ screen.

3. The screen shown below now appears. Click **Browse** and navigate to where you saved the file (in this example, "My Documents\Card Presets"), select the desired presets file (in this example, "6T9061_Presets") and click **Open**.

</td></tr>
</table>
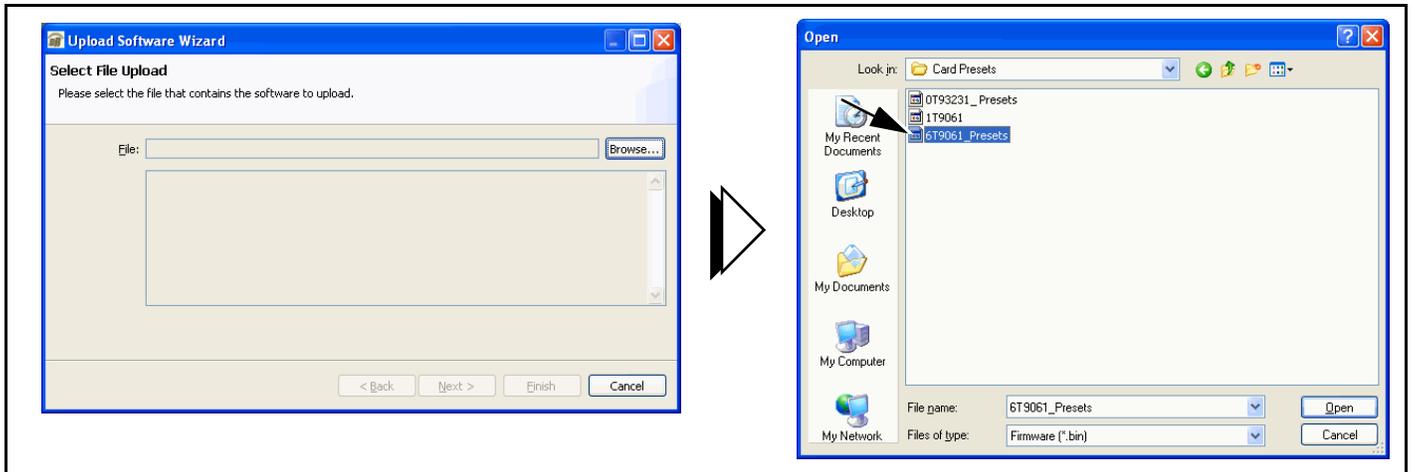
4. As shown below, the file and its description is now displayed (left) (**disregard any product "not found" messages**). Click **Next**. The target card (in this example, "Slot 6: CDI-9061 RCVR 1B") is now selected to receive the upload.

   Other same-type cards will also be shown (in this example, "Slot 1: CDI-9061 RCVR 1A"). For the purposes here, other same-type cards would not also be receiving a presets download; **leave the other same-type cards unchecked**.

5. Click **Finish**. When the upload is complete, click **OK**. The Upload function now closes and the card automatically reboots. Your saved presets are now in the card and can be re-applied as desired.

Uploading Your Presets (DashBoard™ V2.0)

Note: The procedure below is required **only** if you had to erase your presets in the course of fixing a locked-up card. In normal operation, card presets are preserved when a firmware update is performed.

1. In DashBoard™, open the card and select the **Presets** tab.

2. Click **Upload**. The screen shown below appears. Navigate to where you saved the Presets file (in this example "Cobalt Presets"). Select the desired file (in this example, "CDI-9061 Presets.bin") and click **Open**.
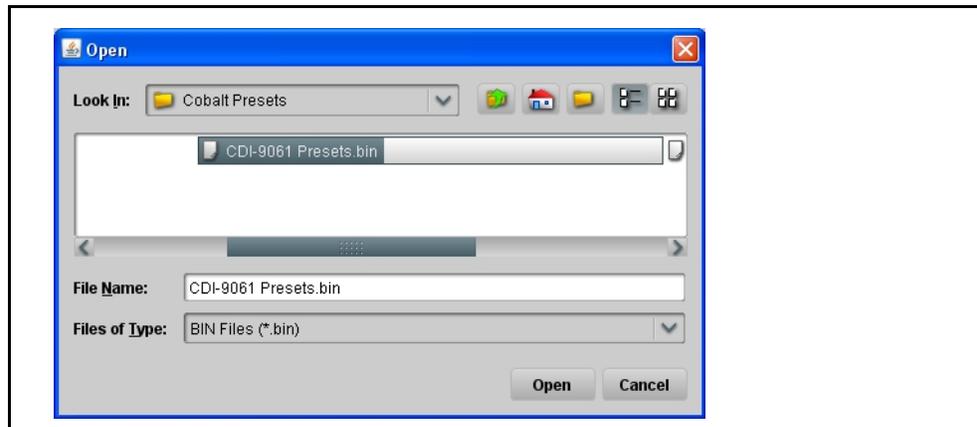
3. The screen shown below appears on DashBoard™. Click on **Continue** to proceed with the upload. When the upload is complete, the card reboots. Your saved presets are now in the card and can be re-applied as desired.