Downloading Hardware Upgrades

(reproduced from ADAMedit Help File ver 1.06.03)
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- **Master Controller Upgrade**
- **Audio I/O Card Upgrade**
- **Keypanel Upgrade**

Upgrading a Master Controller

Caution: *The following procedure will cause one or more brief disruptions in intercom communications. Also, save your intercom system configuration before proceeding. (Use Save on the File menu. Then later, if you need to restore the intercom configuration from disk, use Send File in the Online menu.)*

Upgrade, Part 1: All Intercom Systems

If using ADAMedit to download anything, Master Controller an AIO firmware must be ver 9.xx. Version 9.xx Masters will not talk to version 8.xx AIO's.

1. Connect to the intercom system, and make sure that **SERVER** mode is deactivated.

2. If you have not already done so, open the **Master Controller Status** screen.

Note: You can also perform this procedure from the **Master Controller Version Information** screen, but the procedure is written using the **Master Controller Status** screen, since that screen provides slightly more feedback during the update process. As an option, you can access both screens and then switch back and forth between them using the **Go Back** and **Go Forward** buttons.

3. Select the master controller that you want to update:

   - Zeus, ADAM CS, or Single-Frame ADAM: There is only one master controller, and it should already be selected. If not, click to select it.

   - Multi-frame ADAM Systems: Select **ONLY** the master controllers for all slave frames. These are numbered 002, 003 etc. **Do not** select the master controller for the master frame (001). To select the master controllers in all slave frames, click on the 002 master controller to select it. Then, hold down the Shift key on the computer keyboard and click on the last slave master controller in the list.

4. Make sure ADAMedit or ZEUSedit is the active window, and not the help file. (Click anywhere on the ADAMedit or ZEUSedit window to make it the active window.) Then, press **Ctrl+Shift+D** on the computer keyboard. This will open the **Firmware Download** dialog.

Note: If Ctrl+Shift+D does not work, firmware download may be disabled. To enable this feature, go to the Options menu and select **Preferences**. Then, click on the **Advanced** tab. In the Advanced settings, place a check next to **Allow firmware download**, then click **Apply**. Click **OK** to exit. You should now be able to use the firmware download feature. Repeat step 4, above.

5. Select the disk drive and folder where the firmware file is located, then select the file that you want to download.

Note: For a Zeus intercom system, the file name will be u2u3.hex. For an ADAM or ADAM CS intercom system, the file name will be combined.hex.

6. Click **OK**. The **Download Device Firmware** dialog will appear, and the download information will display in the upper-left corner.

7. Click **Begin Download**. First the file will load. Then it will download to the master, and the percentage will be reported.

Note: If there is any disruption in the communications link during the download, you will get an error message. In this case, repeat the download.

8. When the file has been 100% downloaded, the master controller will begin processing the update. Important: Any disruption at this point, such as a loss of power, removing or resetting cards (ADAM, ADAM CS) etc. will result in **master controller failure!** If this happens, you will either have to return the affected unit for replacement, or you will have to remove the EEPROM chip(s) from the affected unit and manually reprogram them with an EEPROM programming tool. Also, ADAM and ADAM CS users, do not proceed with the update of any more cards until you identify the problem.

- Zeus Intercom Systems: Allow 1 or 2 minutes for the update to complete. You may also see a message that the intercom connection has been lost. If this happens, wait about 15 to 30 seconds, then click **Retry** to restore the connection. You may have to do this once or twice. Note: You may also see a **Capabilities Conflict** message after the update. This happens because the new firmware adds new capabilities to the intercom system. Click **Yes** to update the capabilities. For more information about capabilities, see “Configuration Conflict Message” in Help file.

This completes the procedure to update the Zeus master controller. Skip the remaining steps. Note that the new firmware version should display in the **Master Controller Version Information** screen.

- ADAM CS or Single-Frame ADAM Systems: Allow 1 or 2 minutes for the update to complete. You may also see a message that the intercom connection has been lost. If this happens, wait about 15 to 30 seconds, then click **Retry** to restore the connection. You may have to do this once or twice. At some point, you will see the Slot indication change in the **Master Controller Status** screen. For example, if the Slot originally was **Right**, it will change to **Left**. This indicates that the standby master controller has taken over as the active master controller and is now ready to be updated. **Proceed to Update, Part 2, ADAM CS and Single-Frame ADAM Systems**.

- Multi-Frame ADAM Systems: Allow 1 or 2 minutes for the update to complete. During this time, the **Master Controller Status** screen will display **OK Old** for all slave master controllers. Finally, you may see a message that the intercom connection has been lost. If this happens, wait about 15 to 30 seconds, then click **Retry** to restore the connection. You may have to do this once or twice. At some point, the slave master controllers will indicate **OK Cur**. This indicates that the standby slave master controllers have taken over as the active master controllers and are now ready to be updated**. Proceed to Update, Part 2, Multi-Frame ADAM Systems**.

Upgrade, Part 2, ADAM-CS and Single-Frame ADAM Systems

The following steps basically repeat the steps that you just performed, except that this time, you will be updating the standby master controller(s), which is now operating as the active master controller.

1. Again, select the master controller if it is not already selected. Then, press **Ctrl+Shift+D**.

2. Again, select the disk drive and folder where the firmware file is located, then select the file that you want to download (combined.hex).

3. Click **OK**.

4. Click **Begin Download**. If there is an error during the download, repeat only the Part 2 update.

5. Allow 1 or 2 minutes for the update to complete. You will eventually see a message that the intercom connection has been lost. If this happens, wait about 15 to 30 seconds, then click **Retry** to restore the connection. You may have to do this once or twice.

6. You will also see a **Capabilities Conflict** message after the update. This happens because the new firmware has now added new capabilities to both master controllers. Click **Yes** to update the capabilities. Note: For more information about capabilities, see “Configuration Conflict Message” in Help file.

7. After you have cleared all messages, you will see the Slot indication change in the **Master Controller Status** screen. For example, if the **Slot** originally was **Left**, it will change to **Right**. This indicates that the standby master controller has taken over. Note that this is the master controller that you first updated, so both master controllers are now updated.

This completes the procedure to update an ADAM CS or single-frame ADAM intercom system. Skip the remaining steps. Note that the new firmware version should display in the **Master Controller Version Information** screen.

Note: Depending on the differences between the old and new firmware, your intercom system may perform a "first birthday reset".

- For an ADAM CS Intercom System, this means that the intercom configuration settings in your master controller will be reset to the default size for an ADAM CS Intercom System.

- In a single-frame ADAM Intercom System (ADAM-136) this means that the intercom configuration settings in your master controllers will be reset to the default size for an ADAM-136 Intercom System. If you previously customized your intercom configuration settings, you will have to redefine these in the master controller. To check the master controller intercom configuration, make sure that you are ONLINE, then **access intercom configuration** *setup*. Then, if the resource configuration is not correct for your intercom system size, perform the procedure **Changing the master controller configuration settings**.

Upgrade, Part 3, Multi-Frame ADAM Systems (standby controllers)

In this part, you update the standby master controllers in the slave frames (these have now switched over and become the active master controllers).

1. Again, re-select the same master controllers that you selected in part 1. Then, press **Ctrl+Shift+D**.

2. Again, select the disk drive and folder where the firmware file is located, then re-select the firmware file (combined.hex).

3. Click **OK**.

4. Click **Begin Download**. If there is an error during the download, repeat only the Part 2 update.

Allow 1 or 2 minutes for the update to complete. During this time, the **Master Controller Status** screen will display **OK Old** for all slave master controllers. Finally, you may see a message that the intercom connection has been lost. If this happens, wait about 15 to 30 seconds, then click Retry to restore the connection. You may have to do this once or twice.

You may also see a **Capabilities Conflict** message after the update. Click **Yes** to update the capabilities settings. For more information about the capabilities conflict, see “Configuration Conflict Message” in Help file.

The slave master controllers should now indicate **OK Cur**. All slave master controller cards have now been updated. **Proceed to Update, Part 3, Multi-Frame ADAM Systems**.

Upgrade, Part 3, Multi-Frame ADAM Systems (master controller, main frame)

In this final part, you update the master controller in the master frame.

1. Select **only** master controller 001.
2. Again, press **Ctrl+Shift+D** on the computer keyboard to reopen the **Firmware Download** dialog.
3. Again, select the disk drive and folder where the firmware file is located, then re-select the firmware file (combined.hex).
4. Click **OK**.
5. Click **Begin Download**. If there is an error during the download, repeat only the Part 3 update.
6. Allow 1 or 2 minutes for the update to complete. Finally, you may see a message that the intercom connection has been lost. If this happens, wait about 15 to 30 seconds, then click **Retry** to restore the connection. You may have to do this once or twice. When the connection is restored, you will notice that the Slot has changed (from Right to Left or vice-versa). You are now ready to update the last master controller card.
7. Select **only** master controller 001.
8. Again, press **Ctrl+Shift+D** on the computer keyboard to reopen the **Firmware Download** dialog.
9. Again, select the disk drive and folder where the firmware file is located, then re-select the firmware file (combined.hex).
10. Click **OK**.
11. Click **Begin Download**. If there is an error during the download, repeat only from step 7.
12. Allow 1 or 2 minutes for the update to complete. Finally, you may see a message that the intercom connection has been lost. If this happens, wait about 15 to 30 seconds, then click **Retry** to restore the connection. You may have to do this once or twice. When the connection is restored, you will notice that the Slot has again changed (from Right to Left or vice-versa).
13. You may also see a **Capabilities Conflict** message after the update. Click **Yes** to update the capabilities settings. For more information about the capabilities conflict, see “Configuration Conflict Message” in Help file.
14. The slave master controllers should now indicate **OK Cur**. All slave master controller cards have now been updated.

Downloading Upgrades

Important! Depending on the differences between the old and new firmware, your intercom system may perform a "**first birthday reset**". This means that your multi-frame intercom system will be resized to the default intercom configuration for a single-frame (ADAM-136) Intercom System. You must restore the default intercom configuration to the proper setting for your intercom system. Or, if you have been using custom resource settings, you will have to redefine these in the master controllers. To check the intercom configuration, access **resource configuration setup**. Then, if the resources are not correct for your intercom system size, perform the procedure **Changing the master controller configuration settings**.

Upgrade, Part 4, Audio I/O Cards

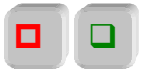
Note: This procedure applies only to ADAM CS and ADAM Intercom Systems. There are no I/O cards in a Zeus Intercom System.

Caution: The following procedure will cause one or more brief disruptions in intercom communications.

1. Connect to the intercom system, and make sure that **SERVER** mode is deactivated.

2. If you have not already done so, open the **Audio I/O Card Status** screen.

Note: You can also perform this procedure from **the Audio I/O Card Version Information** screen, but the procedure is written using the **Audio I/O Card Status** screen, since that screen provides slightly more feedback during the update process. As an option, you can access both screens and then switch back and forth between them using the **Go Back** and **Go Forward** buttons.



3. Select one or more of the **Audio I/O** cards. These are numbered 001, 002 etc.

Important: Be aware that there is a 20-30 second period during the download process where the master controller will take each Audio I/O card off line and reprogram its firmware. Any disruption at this point (loss of power, card removal, manually resetting cards) will result in I/O card failure! If this happens, you will either have to return the affected cards for replacement, or you will have to remove the EEPROM chips from the affected cards and manually reprogram them with an EEPROM programming tool. Since this could potentially result in a major disruption, we recommend that you only update a limited number of I/O cards at a time, and updating should be performed during non-critical periods of intercom usage.

4. Make sure **ADAMedit** is the active window, and not the help file. (Click anywhere on the ADAMedit window to make it the active window.) Then, press **Ctrl+Shift+D** on the computer keyboard. This will open the **Firmware Download** dialog.

Note: If **Ctrl+Shift+D** does not work, firmware download may be disabled. To enable this feature, go to the **Options** menu and select **Preferences**. Then, click on the Advanced tab. In the **Advanced** settings, place a check next to **Allow firmware download**, then click Apply. Click **OK** to exit. You should now be able to use the firmware download feature. Repeat step 4, above.

5. Select the disk drive and folder where the firmware file is located, then select the file that you want to download.

Note: For an ADAM CS Intercom System, the file name is Aio_cs.hex; for ADAM, the file name is Aio_std.hex.

6. Click **OK**. The **Download Device Firmware** dialog will appear, and the download information will display in the upper-left corner.

Click **Begin Download**. First the file will load. Then it will download to the master, and the percentage will be reported.

Note: If there is any disruption in the communications link during the download, you will get an error message. In this case, repeat the download.

7. When the file has been 100% downloaded, the master controller will begin updating the I/O cards. During this time, the Status column may display **OK Old** next to individual I/O cards, or it may display nothing. Also, intercom ports will go offline.

Important: Any disruption at this point (loss of power, card removal, manually resetting cards) will result in I/O card failure as previously described!

8. When the update is completed, the intercom ports will come back on line, and one-by-one, the status for I/O cards will change to **OK Cur**. The complete update procedure may take 3-5 minutes. You can verify the new firmware version in the **Audio I/O Card Version** Information screen.

Upgrade, Part 5, KP-12 or DKP Keypanels

Caution: Do not remove power or disconnect the keypanel during this procedure. If you do, the flash EPROM in the keypanel will have to be replaced.

Note: We recommend that you only download 4 or 5 keypanels at a time, and each should be on a different I/O Card.

Open the **Keypanel Version** Information screen or the **Port Status** screen.

1. Select the keypanel (or keypanels) that you want to update. To select several keypanels at random, click on the first keypanel, then hold down the Ctrl key on the computer keyboard while clicking on additional keypanels. To select a range of keypanels, click on the first keypanel, then hold down the Shift key and click on the last keypanel in the range.

2. With the keypanels now selected, press **Shift+Ctrl+D** on the computer keyboard. This will open the **Firmware Download** dialog.

3. Select the folder where the firmware file is located, then select the file that you want to download.

4. Click **OK**. The **Download Device Firmware** dialog will appear, and the download information will display in the upper-left corner.

5. Click **Begin Download**. First the file will load. Then it will download to the master controller in the intercom system, and the percentage will be reported. When the file has been 100% downloaded, the master controller will begin sending the information to the keypanel.

   The keypanel will display **DOWNLOAD** in the **Incoming Messages** window, and all keypanel activity will be locked out while the flash is being re-written. It will take 4-5 minutes at this point for the keypanel to update.

   If you are viewing the **Port Status** screen, the Status column will display **OK** until just before the update is completed. Then **Bad** will display for a few moments and **OK** will return. The update is now completed. If you are viewing the **Keypanel Version Information** screen, the new keypanel version will appear when the update is completed.

6. Repeat the above steps to update more keypanels.