ADAM DBX Upgrade

Single frame ADAM to multi-frame ADAM DBX or existing multi-frame SBX to DBX

dbx upgrade procedure.doc 7/28/00

Caution: Read entire procedure before attempting upgrade

Important: Be aware there can be a 2 minute period for each group of cards selected during the download process where the master controller will take each Audio I/O card off line and reprogram its firmware. Any disruption during this period (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 programmer. Since this could potentially result in a major disruption in communications, 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.

. 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.

UPGRADE PROCEDURE

Minimum requirements:

a) Master Controller cards must have Altera ver 4.1 or higher and RAM installed in U10-U13 & U15-U18. If Master Controllers have ver 8.x firmware, a M/C card swap is necessary to bring the Masters up to the level capable of a DBX upgrade.
b) DBX cards must have firmware ver 1.2.1 or higher and Altera ver 1.1 or higher.
c) AIO cards ver 10.0.3 (or higher).
d) UIO256 requires firmware ver 2.0 (checksum 78b5, wired in a multi-drop mode, dip switch S1-2 closed and RS485 data going to J2 of each UIO256 (or higher).
e) PAP940, 951, 952 requires firmware ver 7.3.x (or higher).
f) Trunking, requires firmware ver 7.4.0 and CStrunk ver 7.3.1 (or higher). Trunking should be upgraded first before the DBX's.
g) LCP102's require ver 1.1 (or higher).
h) ADAMedit ver 1.07.06 (or higher).

DBX Upgrade

1. Save current intercom setup file to disk (very important).
2. If trunking, disconnect from Trunk Master.
3. Download ver 10.0.2 or higher AIO firmware to all AIO cards half a frame at a time with older existing SBX controller cards still in frames. Confirm successful download with ADAMedit in Status/Software Versions/AIO Cards. (fig. 1)

- **If physically changing MC and DBX flash, continue with steps 4-16. If downloading, skip these steps and proceed to steps 17-28.**

4. Power down entire system.
5. Change existing back cards in the appropriate frame slots to DBX back cards. See frame layout drawings relating to DBX system size and install coax links per cable diagram.
6. Remove all slave frame Master Controller cards and back cards. These slots will remain blank and never used again. DO NOT use for spare card storage.
7. In **frame 1 only**, change Master and Standby Controller flash U2 & U4 to new DBX Peripheral Controller flash ver 10.2.x. These cards will be heretofore referred to as "Peripheral Controllers" (PC).

8. Put only one DBX card in frame 1, slot 9 (turn on DIP 7), and one PC card in frame 1, slot 19 (also needs dip 7 on).
9. Power up frame 1 ONLY and ensure ADAMedit goes on line. Resize to new final system size under Options/Intercom Configuration. Default is 3 frame redundant audio system. (fig. 2)
10. Check “use DBX cards” in Options/Intercom Configuration/Resources, if not already detected, always check “use test audio” and “use redundant audio” [only if appropriate for system being set up].(fig. 2) Also check Options page to be sure number of talk levels, remote trunk master (*not to be confused with local trunking*), and other options are set now, otherwise the system will first birthday again if you need to change them later. (fig 4)
11. If applicable, select “Apply” and the system will reconfigure itself and re-start.
12. After system has settled down, plug in the standby DBX into slot 8 of frame 1 and let it update. Next plug in the standby PC into slot 20 of frame 1, (remember both dips 7 need to be on) and let it update.
13. Insert all remaining DBX cards in each slave frame (dips 7 must be off) and power up all frames. This may take a little time - be patient. Verify I/O cards can be seen with proper versions in Status/Software Versions/AIO Cards. (fig. 1)
14. Check DBX Link Status. (fig 3)
15. Send saved intercom setup file from step 1 above if necessary.
16. Re-connect Trunk Master if appropriate.

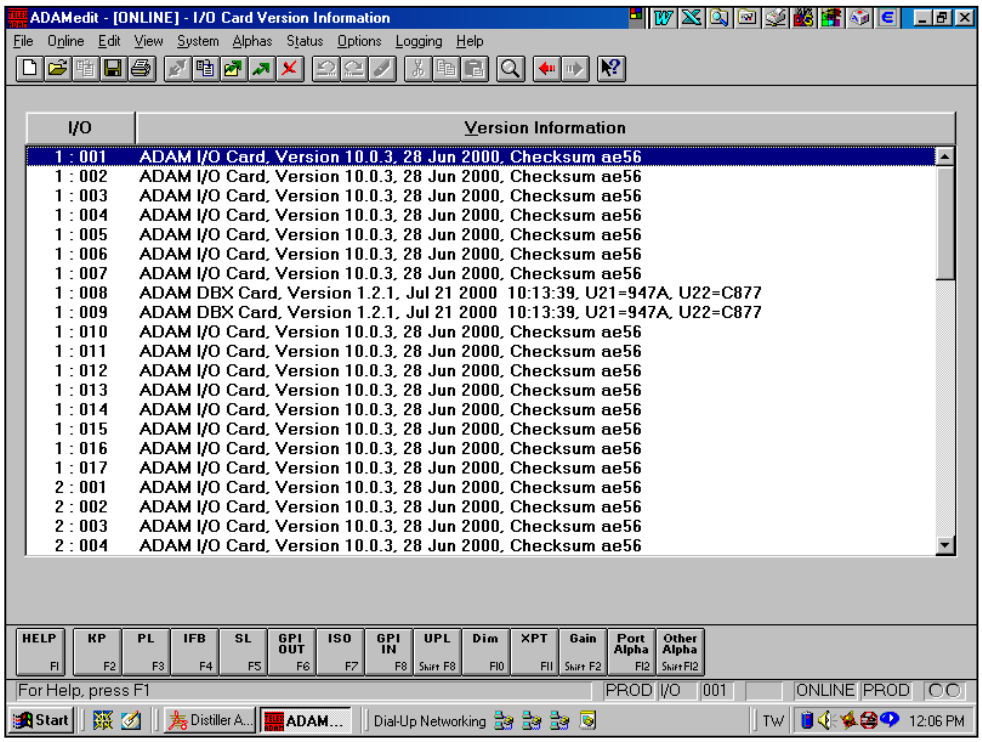
If Downloading PC’s and DBX Cards

(If steps 1-16 above have been performed, ignore this section)

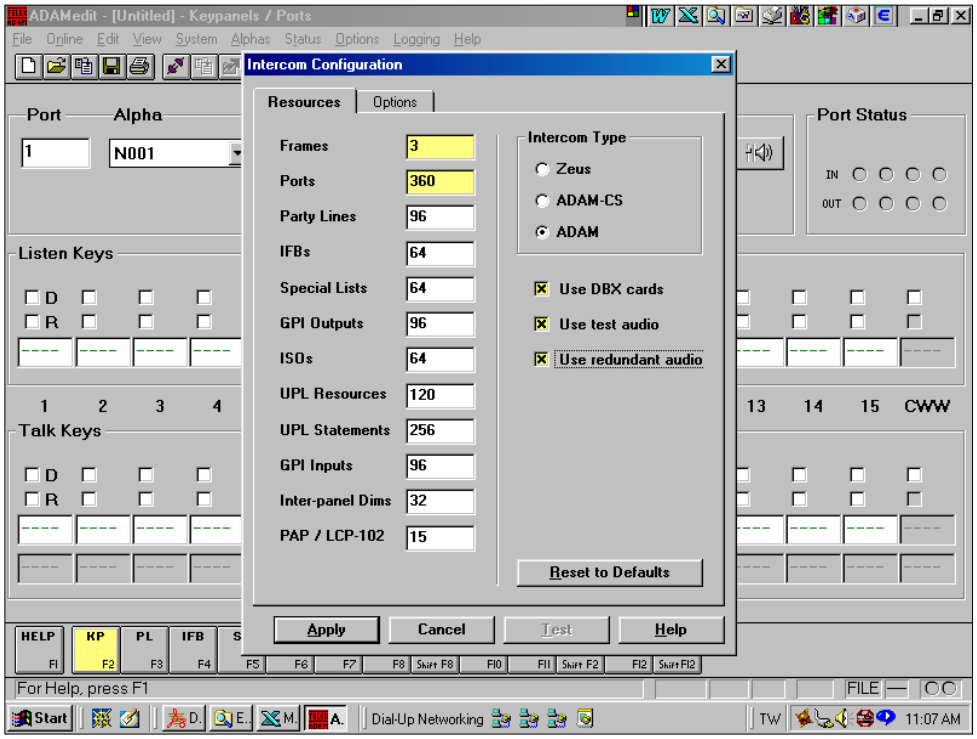
17. Pull MC #1 (slot 19), ensure ADAMedit is on line, and download MC #2 (slot 20). Pull MC #2 (slot 20) and put back MC #1 (slot 19), ensure ADAMedit is on line, and download it.
18. After downloading both MC’s (now PC’s), leave only PC #1 in slot 19.
19. Power down system and install DBX back cards in the appropriate card slots in frame 1.
20. Install a DBX card in slot 9 of frame 1 and power up. Download this card and when completed, remove it and install another in the same slot 9 and download it.
21. Resize to new final system size under Options/Intercom Configuration. Default is 3 frame redundant audio system. (fig. 2)
22. Check “use DBX cards” in Options/Intercom Configuration/Resources, if not already detected, always check “use test audio” and “use redundant audio” [only if appropriate for system being set up].(fig. 2) Also check Options page to be sure number of talk levels, remote trunk master (*not to be confused with local trunking*), and other options are set now, otherwise the system will first birthday again if you need to change them later. (fig. 4)
23. If applicable, select “Apply” and the system will reconfigure itself and re-start.
24. When the resize is done, you can install the first downloaded DBX into slot 8 and plug in the second PC into slot 20 as well.
25. Install DBX back cards and DBX controller cards in all slave frames, power up these frames and download all slave DBX’s. Verify I/O cards can be seen with proper versions in Status/Software Versions/AIO Cards. (fig. 1)
26. Check DBX Link Status. (fig 3)
27. Re-send saved setup file from step 1 if required.
28. Re-connect Trunk Master if appropriate.

Special Note: *In 2 & 3 frame non-redundant systems, the last 4 ports in each frame will be unusable due to test audio. This will affect overall system layout breakout cabling.*

ADAMedit Screen Views

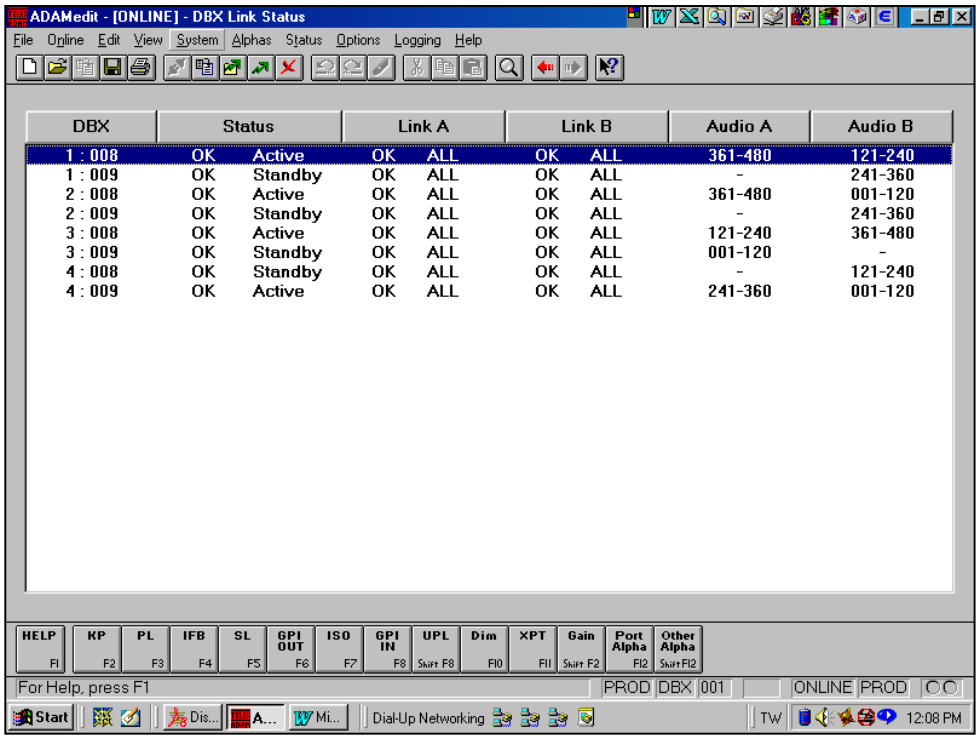


Verify software versions (steps 2, 23) Figure 1

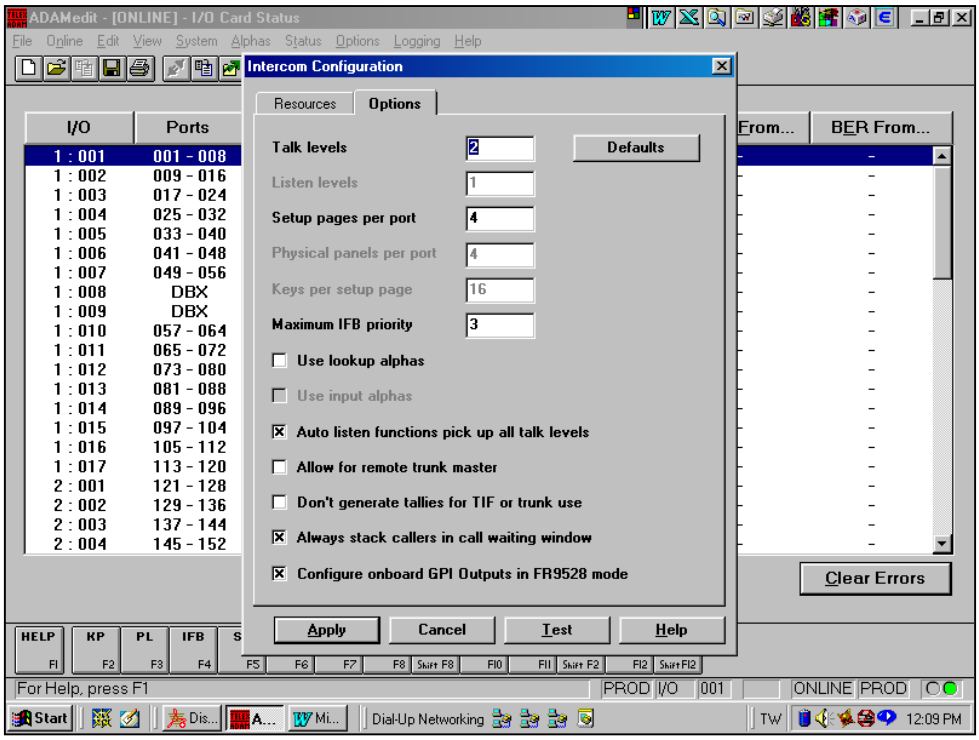


Set up frame size and DBX options (steps 8, 9, 19, 20) Figure 2

ADAMedit Screen Views



Check DBX Link Status (steps 13, 24) Figure 3



Set up Options page (steps 9, 20) Figure 4