

2308 Upload/Download Package

Operating instructions.

The 2308 Upload/Download package (P/N 922600000000) allows any user to transfer the memory contents of a 2308 or 2208 controller to and from a standard PC. Please note that the current software version only supports controllers with a 611 scene memory. The upload/download feature requires software version 2.0 or higher to be installed in the controller.

Requirements

- PC with at least a 80286 processor.
- 1 free slot for PC-card.
- Color monitor preferable.

Package Contents

- PC-card. (P/N 845108000000)
- Serial Cable with 2 links. (P/N 309131000000)
- Diskette with PC-software. (P/N 377191000000)

Installing the PC-card

CAUTION

Some of the components on the PC card and in your computer are subject to damage from static electricity. Whenever possible, handle the card by the metal bracket attached to the back of the card, and avoid touching components and the connector pins at the bottom of the card. To prevent damage from static discharge, touch the computer's metal chassis before handling the card.

When installing the PC-card you may choose any empty slot in your computer. Use any ISA (8 bit) connector, an EISA (16 bit) connector or either of these types in conjunction with a VL-Bus connector or PCI connector.

Before installing the card IRQ and IO addresses must be set on the card itself. You may want to note down the settings on a piece of paper for later reference.

Setting the I/O Address



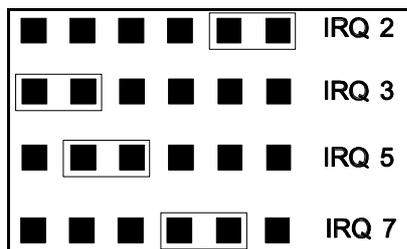
Possible I/O Address settings (PL04)

There are a limited number of IO addresses available on the card and since only one device can use each I/O address setting you must ensure that no other devices such as SMPTE interfaces, transmitter boards or CD-ROM interfaces uses the same I/O address.

Set the I/O Address by means of the two jumpers located on the PL04 connector on the PCB.

For the technically minded note that the card uses all 16 I/O addresses from the offset.

Setting the IRQ



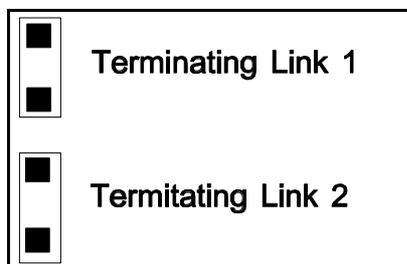
Possible IRQ settings (PL05)

As with the I/O address there are a limited number of IRQ settings on the card and it can not share this IRQ with other devices.

Also note that the PC normally uses IRQ3 in connection with the serial ports COM2 and COM4, so if you plan to use serial devices connected to these any of these ports - avoid using IRQ 3.

The IRQ is set with one jumper on connector PL05.

Terminating the Link

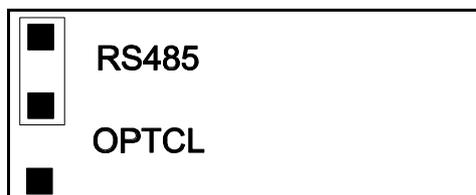


Link Termination (PL06)

By removing the jumpers on PL06 it is possible to let either of the two output links remain unterminated on the PCB.

Under normal operation you should take care that the links remain terminated on the PCB by setting the two jumpers as shown below.

Setting the Hardware Transmitter



Setting the Transmitter (PL07)

The card is equipped with an option of an optical signal buffer used in connection with MIDI and other transmission protocols. However when the card is used as an upload/download card it should be set for standard RS485 as shown.

Connecting the PC and Controller

To connect the PC to the 2308 controller use the supplied cable. For the controller end use the XLR labelled link 1/3. When operating the system make sure that the serial link to fixtures is disconnected or that all fixtures are switched off. Note that it is possible to upload programs to several controllers at once by daisy-chaining the controllers using normal 3 pin XLR cables.

Installing the software

The only software needed is the DOS program 2308UD.EXE contained on the diskette. This program may be used straight from diskette or copied to and used from harddisk.

The first time the program is used it will prompt for the cards IRQ and IO settings. Press keyboard buttons 1-4 to select the settings.

The program contains 3 options -

- Hardware setup.
- Download memory from controller.
- Upload memory to controller.

1 Hardware setup

This entry allows re-setting of IRQ and IO selections.

2 Download Data Memory from Controller

This function is used to transfer the memory contents from the controller to the PC. Switch on the controller and hold the joystick up until [UP00] is displayed - the controller will now start transferring the data to the PC, displaying its progress in the display. As soon as the transferal has started the PC screen will change to show the progress of the data transferal. When the controller has reached the end of the data transferal it will display [----] in the display. Switch off the controller and then back on, to operate it normally. When the upload has finished, a small box appears on the PC screen prompting for a name for the file containing the memory dump. After entering the name press Enter on the PC keyboard - the file will then be saved to the current directory for later retrieval.

If the PC screen doesn't change to display the download progress, check cable connections and IRQ and IO settings.

3 Upload Data Memory to Controller.

This entry is used to transfer a memory file previously downloaded to a controller. Note that the complete memory is transferred to the controller overwriting anything previously saved.

Select the file you wish to upload by using the pc keyboard cursor up and down keys and Enter for selecting the file. Switch on the controller and hold down the joystick until [do00] is displayed. Press Enter on the PC keyboard. The PC screen now changes to display the progress of the data transferal. Likewise the controller will also display the progress on its display. The upload has finished when the controller displays [----] and the PC screen reverts back to the menu. Switch off the controller then back on before operating it normally.

If the PC screen or controller display doesn't change to display the download progress, check cable connections and IRQ and IO settings.

Error Messages

Three new error messages concerning up and download have been implemented in the 2308 software:

- ErrA : Wrong memory size. The controller has a different memory size from the file you are trying to upload.
- ErrB : Sync Error. Received data is out of synchronization, download aborted. The data already transferred is most likely corrupt. Check connections and try again.
- ErrC : Memory protect error. You cannot download to a controller that is write protected.

Likewise the PC displays an error message if the data synchronization is corrupted during download.