

# Keynes Controls Ltd

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Ref : Firmware Upgrade - NDACS 6000 system

## Instructions

The following instructions describe the actions to be followed to complete an upgrade from NDACS system firmware 3209 -- 3221 to the latest firmware release date 11 Sept 2002 version 3553.

## Software required

Image3398.bin - small memory model

Image4226kc.bin - current firmware.

Flash memory loader software - flashloader.jar

Burning block 9

## IMPORTANT NOTE

If for any reason the flashloader software does not complete its operations DO NOT power off the instrument. Close the program window and repeat the operation.

## Testing the Communications

Before upgrading the NDACS 6000 test that communication to the instruments is operating correctly.

- 1) Ensure that the current instrument web pages can be seen
- 2) Ping the instrument.

```
ping 192.168.2.250
```

The instrument response should be similar to below

```
Reply from 192.168.2.250 bytes=32 time=2ms TTL=64
```

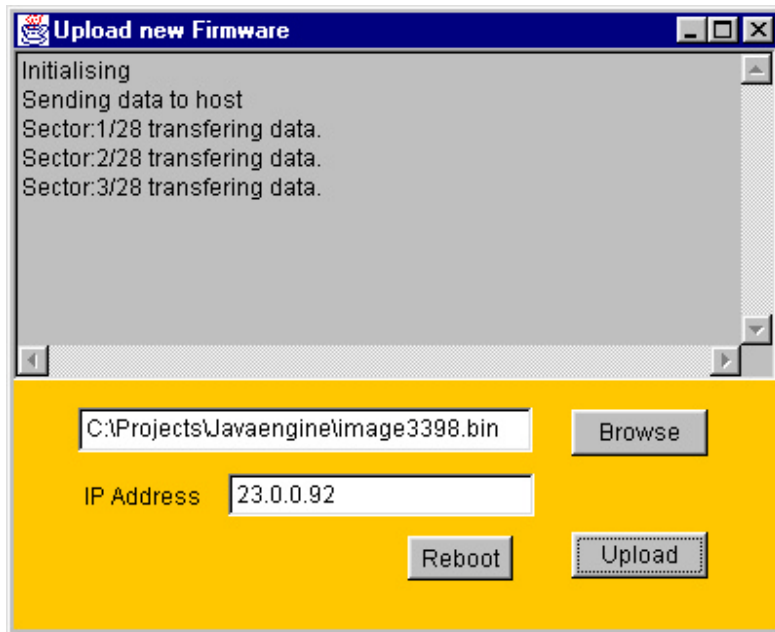
## Uploading new Firmware into the NDACS 6000

On the test system the files are stored in the directory

C:\projects\javaengine

There is no requirement to copy this directory structure but it is important that all the files are kept together

1) Activate the flashloader software and the Window shown below should appear



2) Enter IP address of the instrument to be upgraded into the box provided.

The example shows the software uploading new firmware into an instrument with IP address 23.0.0.92

3) Select the file to be uploaded.

Using the Browse button select the file **Image3398.bin** (small memory model)

4) Select the Upload button.

The file will now start loading into the instrument.

### Software Response - image3398.bin

Upon starting the upload process the flashloader software will show messages as displayed in the Window above.

They are:

Initialising  
Sending data to host  
Sector 1/28 transferring to host

While loading the file Image3398.bin the software will display

Sector 1/28 transferring to host ..... to Sector 28/28 transferring to host

Once the software has completed the transfer into the instrument the following software responses will be shown

Burning block1 .... Burning block 28  
Rebooting  
Finished

**The uploading of firmware 3398 has to be completed first before the final software is uploaded. The instrument web pages will not be shown while the unit is running with firmware 3988 - do not worry.**

## Uploading Firmware image4226kc.bin

The file image4226kc.bin is the firmware recently available on the web.

The uploading of the file is carried out exactly as shown for the file image3398.bin except will take a few minutes longer.

## Software Response - image4226kc.bin

The Flashloader software will display:

Initialising

Sending data to host

Sector 1/38 transferring to host

While loading the file Image3398.bin the software will display

Sector 1/38 transferring to host ..... to Sector 38/38 transferring to host

**Note. 38 blocks are written to the NDACS for image4226kc and not 28 as for image3398**

Once the software has completed the transfer into the instrument the following software responses will be shown

Burning block1 .... Burning block 38

Rebooting

Finished

## Completion Checks

Upon completing the software upgrade the instrument new web pages will appear. It is possible that some of the configuration parameters to become corrupt or not permanently set.

Using the Logger Setup --

Assign sample rates and enable logging operations

Power the unit on and off and retest.