

BSH-DRV-1 Firmware Upgrade Procedure

NOTE: The BSH-DRV-1 has two 20 pin sockets. The socket closest to the USB cable connection houses the MASTER 20X2 control chip. The socket closest to the yellow LED houses the SLAVE chip

When the card is in programming mode only one socket can be used for programming – this is the socket closest to USB cable connector (the Master socket). So make sure that the correct 20X2 chip is inserted in the programming socket. If you are reflashing the Master chip then both 20X2's can be left in situ. But if you want to reflash the Slave chip then you must remove the main Master chip from the programming socket and insert the Slave chip instead.

1. Download the PICAXE Programming Editor software from <http://www.picaxe.com/Software/Obsolete/PICAXE-Programming-Editor/> Install the software on your PC.
2. Run the software and go to Options-Serial Port and set the correct COM port for your USB/TTL download cable.
3. Go to File-Open and load the Master or Slave chip firmware bas file as required. Do not alter the contents of the file in any way.

NOTE if you are only checking the comms with the card by requesting the 20X2 PICAXE firmware version then you do not need to load a .bas program at this stage.

4. Close the BFF Shaker software if it is running. Remove the connections to your bass shakers from the card. Turn pot "PWM Volume" fully CCW (you may wish to make a note of your normal working setting before doing this).
5. Set JMP-1 on the BSH-DRV-1 to programming mode (pins 1 & 2 connected and pins 4 & 5 connected).
6. Make sure the correct 20X2 chip is in the programming socket (see above) and that its orientation is correct.
7. Power up the BSH-DRV-1.
8. Click Program in the Programming Editor. The software will download the new firmware to the 20X2 chip in the programming socket on the 64SPU-2. It will indicate progress and completion.

NOTE To check the comms WITHOUT updating the chip programming do not click Program; instead go to Options-Mode-Check Firmware Version. If contact with the card is made then the programming software will report the PICAXE firmware version of the

chip in the programming socket. If not it will report an error. See item 9 below for further steps to take if contact with the card is not made.

9. If the software indicates a connect problem and you are sure your COM port settings are correct then try a hard reset on the card. To do this remove power from the card, click Program again, then immediately re-apply power to the BSH-DRV-1. This will force the 20X2 chip to recognise the download data.
10. Once programming is complete remove power from the BSH-DRV-1. Close the Programming Editor, and restore JMP-1 to Normal mode (pins 2 & 3 connected). Return the 20X2 chips to their correct sockets if you have moved them. Restore potentiometer "USB Volume" to its normal working position. Reconnect your Bass Shakers.

The BSH-DRV-1 firmware has now been upgraded. You can use the card as before.