

Grandioso K1X

Firmware update manual

Model covered

Grandioso K1X

Equipment used

Windows computer (with built-in USB 2.0 port)
Micro USB cable

- Cables designed only for charging cannot be used. Always use a micro USB cable that supports data transmission.

Supported operating systems

Windows 8 (32/64-bit)
Windows 8.1 (32/64-bit)
Windows 10 (32/64-bit)
(as of February, 2020)

1. Preparation

A micro USB cable is necessary to update the firmware. **Use a commercially-available micro USB cable.**

Download the DFU driver and updaters to any location on the computer from the following download link.

- Double-click the downloaded files to decompress them.

<https://www.esoteric.jp/en/product/k1x/download>

DFU driver

- Win_DFU_driver.exe

Updaters

- K1X_IFvxxx_updater.exe
- FPGA_updater_K1X_DIGITAL_Vxxx_DAC_Vxxx.exe
- MQA_vxxxxxx_updater.exe

IMPORTANT NOTICE

Different firmware update programs are made for every model. Execution of a firmware update program for a different model will make the Grandioso K1X unusable.

NOTE

The screens used in these instructions are from Windows 10.

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2. Install the DFU driver

After installing this on the computer once, installing it again will not be necessary. Proceed to "3. Update the I/F firmware".

1 Double-click Win_DFU_driver.exe.

2 When "Press any key to continue..." appears, press the Enter key.

Display example

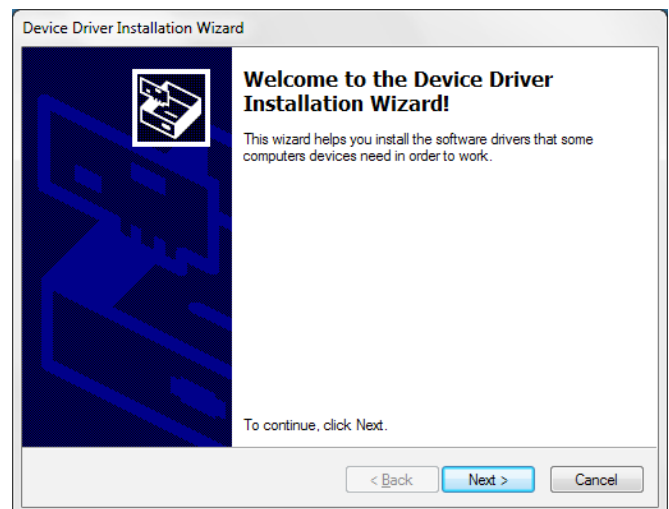
* DFU driver for "Windows10 32bit" will be installed.

Press any key to continue...

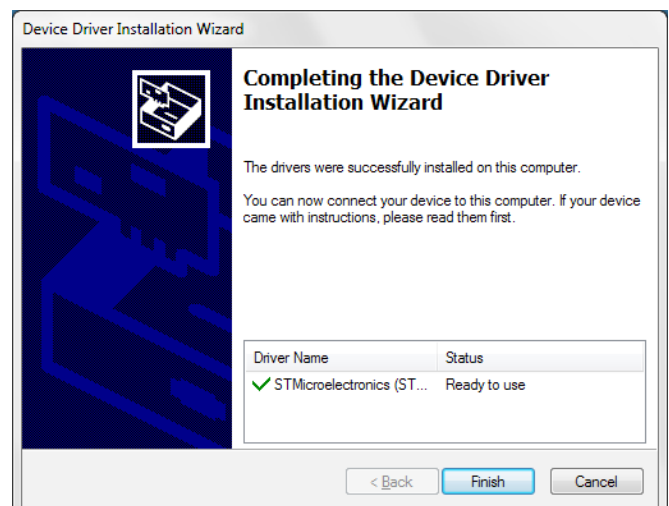
NOTE

If a "User Account Control" pop-up message appears during installation, click "Yes".

3 When the Device Driver Installation Wizard appears, click "Next".



4 Click "Finish".

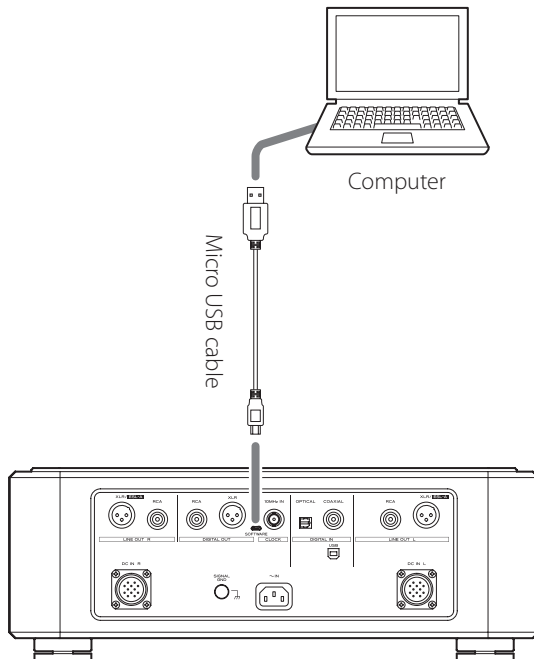


3. Update the I/F firmware

- Do this after installing the DFU driver (page 1).

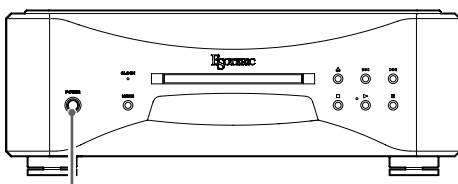
1 Turn the unit off.

2 Use a micro USB cable to connect the computer to the USB Micro-B SOFTWARE maintenance port on the back of the unit.



- Refer to the unit's operation manual for the location of the SOFTWARE maintenance port.
- Cables designed only for charging cannot be used. Always use a micro USB cable that supports data transmission.
- The USB driver will be installed on the computer automatically. Wait until it is complete. When first connected, loading the driver takes some time.

3 Press the POWER button on the unit to turn it on.



POWER



The CLOCK indicator on the unit blinks. Nothing will appear on the unit's OEL display.

4 Double-click K1X_IFvxxx_updater.exe.

* I/F firmware updater
K1X_IFvxxx.dfu

1. Shut down the target unit.
2. Connect the micro USB cable from PC to target.
3. Push power SW of target.
Then CLOCK LED will be flashing.

Press any key to continue...

5 Confirm that "K1X_IFvxxx.dfu" is shown on the screen, and press the Enter key.

Do not turn the unit power off or disconnect the micro USB cable while updating. Doing so could make the unit not operate properly.

NOTE

The following screen will appear if the unit is not recognized by the computer. Click the x at the top right of the window to close it.

0 Device(s) found. Plug your DFU Device !

```
Target 00: Error Code: Unknown error 0x12340005.
Target: 00
Error Code: Unknown error 0x12340005.
TransferSize: 0
DFU State: (Unknown 0x74)
DFU Status: STATUS_OK
Request: (unknown 0x2A59AD94).
CurrentNBlock: 0xF9743F6A
CurrentLength: 0x76C4EF
Percent: 0
```

If the screen shown above appears, check the following items and repeat step 4.

- The DFU driver is installed (page 1).
- The unit is put in firmware update mode. (The unit is turned on by pressing the POWER button.)
- The computer is connected to the USB Micro-B SOFTWARE maintenance port on the back of the unit using a micro USB cable.

ATTENTION

- Cables designed only for charging cannot be used for firmware updates. Always use a micro USB cable that supports data transmission.
- Connecting to a different USB port on the computer might allow it to recognize the unit.
- To cancel updating when the above screen appears, disconnect the power cord of the unit from the outlet once.

6 When " * Writing is completed." appears, press the Enter key to close the window.

1 Device(s) found:
 Device [1]: STM Device in DFU Mode, having [4] alternate targets
 Target 00: Upgrading - Download Phase (100)...Duration: 00:00:14
 Upgrade successful !

* Writing is completed.

* Please unplug the micro USB cable.

Press any key to continue...

7 Disconnect the micro USB cable from the SOFTWARE maintenance port on the back of the unit.

This turns the unit off.

4. Update the audio program

- Do this after installing the DFU driver (page 1).
- Before starting this procedure, confirm that a micro USB cable is not connected to the SOFTWARE maintenance port on the back of the unit.

1 Press the POWER button on the unit to turn it on.

2 Press and hold the MODE button for two or more seconds to open the Settings 1 screen.

3 Press and hold the MODE button for two or more seconds again to open the Settings 2 screen.

4 Press the MODE button repeatedly to show "AUD_UPDATE".

5 Press the play (▶) button to show "AUD_WRITE" on the unit's display.

6 Use a micro USB cable to connect the computer to the USB Micro-B SOFTWARE maintenance port on the back of the unit.

ATTENTION

- Cables designed only for charging cannot be used for firmware updates. Always use a micro USB cable that supports data transmission.

7 Double-click updater_K1X_DIGITAL_Vxxx_DAC_Vxxx.exe.

* FPGA upgrade program

K1X_DIGITAL_V003_DAC_V003.dfu

1. Turn on the target and select MENU-[AUD UPDATE

* Don't connect the micro USB cable from PC to target yet!!

2. Push "PLAY" or ">" key. Then "AUD_WRITE" message is displayed.

3. Connect the micro USB cable from PC to target.
 (The DFU driver must be installed on the PC.)

Press any key to continue...

8 Confirm that “K1X_DIGITAL_Vxxx_DAC_Vxxx.dfu” is shown on the screen, and press the Enter key.

Do not turn the unit power off or disconnect the micro USB cable while updating. Doing so could make the unit not operate properly.

NOTE

The following screen will appear if the unit is not recognized by the computer. Click the x at the top right of the window to close it.

```
step1: Upgrading Digital FPGA

0 Device(s) found. Plug your DFU Device !

Target 00: Error Code: Unknown error 0x12340005.
Target: 00
Error Code: Unknown error 0x12340005.
TransferSize: 0
DFU State: (Unknown 0x75)
DFU Status: STATUS_OK
Request: (unknown 0xACEC7D69).
CurrentNBlock: 0x6976892C
CurrentLength: 0x76EA3C
Percent: 0
```

If the screen shown above appears, check the following items and repeat step 5.

- The DFU driver is installed (page 1).
- “AUD WRITE” appears on the unit’s display.
- The computer is connected to the USB Micro-B SOFTWARE maintenance port on the back of the unit using a micro USB cable.

ATTENTION

- Cables designed only for charging cannot be used for firmware updates. Always use a micro USB cable that supports data transmission.
- Connecting to a different USB port on the computer might allow it to recognize the unit.

9 When “* Writing is completed.” appears, press the Enter key to close the window.

```
step1: Upgrading Digital FPGA

1 Device(s) found:
Device [1]: STM Device in DFU Mode, having [3] alternate targets
Target 00: Upgrading - Download Phase (100)...Duration: 00:00:06
Upgrade successful !

step2: Upgrading DAC Lch FPGA

1 Device(s) found :
Device [1]: STM Device in DFU Mode, having [3] alternate targets
Target 01: Upgrading - Download Phase (100)...Duration: 00:00:08
Upgrade successful !

step3: Upgrading DAC Rch FPGA

1 Device(s) found :
Device [1]: STM Device in DFU Mode, having [3] alternate targets
Target 01: Upgrading - Download Phase (100)...Duration: 00:00:08
Upgrade successful !

* Writing is completed.

* Please unplug the micro USB cable.

Press any key to continue...
```

10 Disconnect the micro USB cable from the SOFTWARE maintenance port on the back of the unit.

This restart the unit.

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5. Update the MQA decoder firmware

- Do this after updating the firmware of the unit.
- Before starting this procedure, confirm that a micro USB cable is not connected to the SOFTWARE maintenance port on the back of the unit.

1 Turn the unit off.

2 Press the POWER button on the unit to turn it on.

3 Press and hold the MODE button for two or more seconds to open the Settings 1 screen.

4 Press and hold the MODE button for two or more seconds again to open the Settings 2 screen.

5 Press the MODE button repeatedly to show "MQA_UPDATE".

6 Press the play (▶) button to show "MQA_WRITE" on the unit's display.

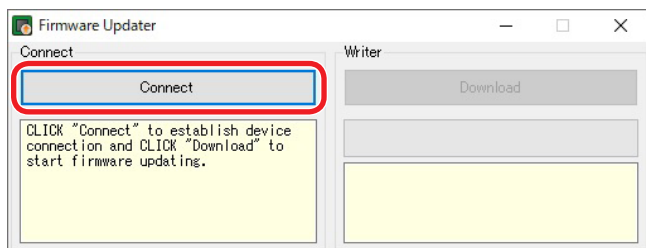
7 Use a micro USB cable to connect the computer to the USB Micro-B SOFTWARE maintenance port on the back of the unit.

ATTENTION

- Cables designed only for charging cannot be used for firmware updates. Always use a micro USB cable that supports data transmission.

8 Double-click MQA_vxxxxxx_updater.exe.

9 Click "Connect".



10 Click the "Download" button to start the update.



11 When "Succeeded" appears, press the POWER button on the unit to turn it off. Then, disconnect the micro USB cable from the unit's SOFTWARE maintenance port.

