



Release Notes

ArtistaUSB Firmware

Version 1.1

22.04.2010

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1 ArtistaUSB firmware release notes

1.1 ArtistaUSB firmware version- definition

V <Major Number>. <Minor Number>

Major Number means that general functional features were changed, removed or added. Hardware changes are possible. (*)

Minor Number means that no general function calls were changed but bug fixes were made or customized functions were added or adapted.

1.2 Note(*): There was an exception with ArtistaUSB MCU firmware V03.01! History:

- V01.xx: 1st firmware release. Was intended for ArtistaUSB-320 cards only.
There was no driver for this firmware revision.
- V02.xx: First firmware series intended for ArtistaUSB 320, 640 & 800 with driver support
- Touch screen data is since this release handled over a separate logical USB interface.
 - The display ID was increased from one byte to 128 bits to be able to handle GUIDs, which are needed for proper diver usage.
- V03.xx: Switching to a new USB microcontroller to suit new ROHS regulations. The firmware is now being able to handle ArtistaUSB-800-LVDS cards for the first time.
- Hardware version rev1.2 was implemented.
 - The new microcontroller has now more memory to increase the filter depth in the touch screen dejitter filter.
 - Firmware is incompatible with the old hardware revision
- V03.01: Hardware and firmware bug fix: Solves problems with start-up behaviour of some panels (this was observed using LG panels; it can also become an issue when using new panels in the future; currently all available kits are not affected by this problem, as far as we know.)
- A small hardware change was done and the firmware was fitted accordingly.
 - Compatible hardware versions
 - o ZU-02-110_A1
 - o ZU-02-111
 - o ZU-02-120_A1
 - o ZU-02-130_A1
 - o ZU-02-140
 - The firmware versions are incompatible to prior hardware versions. **Warning: On older hardware revisions it is possible to harm the hardware by using the new firmware version V03.01! Don't use it there!**



V04.00: Firmware supports first time the ArtistaUSB-II cards.

The firmware contains now new additional features.

- Compatible hardware versions
 - o ZU-02-110_A1
 - o ZU-02-111
 - o ZU-02-120_A1
 - o ZU-02-130_A1
 - o ZU-02-140
 - o ZU-02-170
- USB serial number
 - o By using the USB serial number, the preinstalled driver can now install an Artista device. This way, a once installed Artista card installs itself only one time, no matter on which USB port it is hooked up.
 - o By using the USB serial number, a new feature of the desktop driver V1.2.2 is now available. With the new feature "static assignment" will one Artista device be referenced to one Windows desktop and act as an individual monitor. Therefore, the Artista can now act like a standard graphics card in terms of hardware presence. The desktop area and content will now still be available for his device, even when it is unplugged and again replugged.
 - o This feature can still be turned of when producing customer based solutions.
Warning!: Only when ordered explicitly, (NRE costs!)
- Auto touch screen detection
 - o When a touch panel is being connected to an Artista card so it will be automatically detected during the next power-up phase. This way, the touch driver will be also installed when the touch is present.
 - o When no touch panel is connected to the specific Artista card, the driver will also notice this fact.
 - o Caution! The ArtistaUSB-320 will be produced without a touch controller in the future! So, the touch screen support of this device will always detect the touch as not present and therefore no touch driver will ever be installed for those devices.
 - o This feature can still be turned of when producing customer based solutions.
Warning!: only when ordered explicitly, (NRE costs!)

V04.01: Bug fix: touch screen was jittering in some situations.

- Compatible hardware versions
 - o ZU-02-110_A1
 - o ZU-02-111
 - o ZU-02-120_A1
 - o ZU-02-130_A1
 - o ZU-02-140
 - o ZU-02-170

V05.00: Bug fix: touch screen was jittering in some situations.

- Compatible hardware versions
 - o ZU-02-170 (ArtistaUSB-II)
- added new function calls
 - o 64 character client name
 - o 256 character description field
 - o 64 byte reserved user data memory
 - o get resolution information
 - o back buffer picture transmission with manual back buffer to front buffer change event
 - o get verbose firmware version information
- change in touch screen data handling to avoid theoretical race conditions and blocking touch data queue



V06.00:

-
- Compatible hardware versions
 - o ZU-02-170 (ArtistaUSB-II)
- added new function calls
 - o VX_CUSTOMER_DATA. 64 Byte memory for general purpose
 - o VX_CONFIGURATION_VERSION
- changed length of VX_CONFIGURATION_ID from 16Byte to 20Byte
- manual switch from back to front buffer only possible if a picture is transmitted

V06.01:

- Compatible hardware versions
 - o ZU-02-170 (ArtistaUSB-II)
- fixed a bug in touch screen handling

V06.02:

- Compatible hardware versions
 - o ZU-02-170 (ArtistaUSB-II)
- fixed a bug which could corrupt USER_DATA

V07.00: supports new HW revision

- Compatible hardware versions
 - o ZU-02-170_A1 (ArtistaUSB-II HW1.3)
- Changes in touch data handling. Better release pressure handling if host system couldn't handle touch data fast enough. Before V07.00 always the last queued touch position will be handled as touch release position. Now it is the last real position.

V07.01: avoids USB Back-voltage

- Compatible hardware versions
 - ZU-02-170_A1 (ArtistaUSB-II HW1.3).

V07.02: supports new HW revision

- Bugfix: fixed USB reconnection in some USB cable un-plug/re-plug situations
- Bug fix: minor fix of new touch handling introduced with V07.00



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