

Teledyne LeCroy quantumdata 780, 780A, 780AH, 780B, 780BH, 780C, 780D Firmware Release 18.07  
July 27, 2018  
Release Notes

## Overview

This document provides information on Release 18.07 of the firmware for the above listed 780 series products. For further information, please refer to the Quick Start Guide and the User Guide for the specific 780 model, available on our website at [www.quantumdata.com](http://www.quantumdata.com)

New functionality includes addition of RGB Ramp patterns, EDID colorimetry data blocks for 300 Mcsc HDMI receivers, and a new Display Calibration test pattern with related API commands.

## Installation Instructions

### 780, 780A, 780AH, 780B, 780BH

1. Go to the downloads page <http://www.quantumdata.com/downloads.html>
2. Select the 780 Series Tab.
3. Select and download the official release for your specific 780 model.
4. Extract the files from the download zip.
5. Format an SD card using an SD Card format tool such as that available at <https://www.sdcard.org/downloads>
6. Copy all files to the SD card's root directory and insert the card into the 780 series device.
7. Power on the unit.
8. Go to the Help menu and perform Application Flash Update.
9. When complete, power cycle the device.
10. Go to the Help menu and perform FPGA Flash Update.
11. When complete, power down the 780 series device.
12. Remove the SD Card and then power on.
13. Go into the Help menu and verify versions for your 780 model using table 1 below.

### 780C

1. Go to the downloads page <http://www.quantumdata.com/downloads.html>
2. Select the 780 Series Tab.
3. Select and download the official release for the 780C.
4. Extract the files from the download zip.
5. Format an SD card using an SD Card format tool such as that available at <https://www.sdcard.org/downloads>
6. Copy all files to the SD card's root directory and insert the card into the 780C.
7. Power on the unit.
8. Go to the Help menu and perform Application Flash Update.
9. When complete, power cycle the 780C.
10. Go to the Help menu and perform FPGA Flash Update.
11. When complete, power cycle the 780C.

12. Go to the Help menu and perform HDBaseT Tx Flash Update. When it tells you to power cycle, you may perform the HDBaseT Rx Flash Update. When it tells you to power cycle, power down the 780C.
13. Remove the SD Card and then power on.
14. Go into the Help menu and verify versions using table 1 below.

**780D**

1. Go to the downloads page <http://www.quantumdata.com/downloads.html>
2. Select the 780 Series Tab.
3. Select and download the official release for 780D.
4. Extract the files from the download zip.
5. Format an SD card using an SD Card format tool such as that available at <https://www.sdcard.org/downloads>
6. Copy all files to the SD card’s root directory and insert the card into the 780D.
7. Power on the unit.
8. Go to the Help menu and perform Application Flash Update.
9. When complete, power cycle the 780D.
10. Go to the Help menu and perform FPGA Flash Update.
11. When complete, power cycle the 780D.
12. Go to Help Menu and perform Program Other Chips (Press View)
13. Perform the 4 updates on this screen.
14. Power down the 780D.
15. Remove the SD Card and then power on.
16. Go to the Help menu and verify the versions using table 1 below.

	780	780A	780AH	780B	780BH	780C	780D
<b>Firmware Release</b>	18.07.2411	18.07.2411	18.07.2411	18.07.2411	18.07.2411	18.07.2432	18.07.2432
<b>Gateware Rx</b>							18052401
<b>Gateware Tx</b>							17082301
<b>Gateware</b>	13011802	16011201	16011201	16011201	16011201		
<b>HDMI2 Tx</b>							1.00.09 D0
<b>HDMI2 Rx</b>							1.99.17 D0
<b>HDBaseT Tx</b>						13140210	13140210
<b>HDBaseT Rx</b>						13140200	13140200

Table 1. Versions

**Added the following features:**

- 1038. Added HDR/colorimetry data blocks to EDID of 300MHz RX (HDBaseT RX, and 780A/AH/B/BH/C RX)
- 1047. Added CVR3830H format, VESA CVT reduced blanking, 3840x2160 30 Hz. Available from command prompt. Available on with models and modes capable of at least 300 MHz pixel clock.
- 2322. Added “HDCP 100” command to simulate GUI HDCP button press.
- 2360. Added Calibration pattern and related API commands. See separate document for information.
- 2379. Added CPGG? command query to determine whether HDCP is enabled on Tx.
- 2383. Added RGB Ramp test patterns on 780D (RampR, RampG, RampB, RampC, RampM, RampY)
- 2385. Added Multibr3 test pattern with sine wave for Standard Definition analog output.

2426. Added Long Reach mode to HDBaseT TX selections  
Added "VICxxx" format aliases for FMTL command (where xxx can be any CTA-861-G VIC code)

### **The following enhancements, bug fixes, and changes were made:**

1689. Improved EDID decode to better fit LCD screen.  
2125. Added Page Up and Page Down buttons to ACA menu.  
2275. Prevents bitmap image loading upon boot. Changes to built-in Color Bar instead.  
2309. Fixed some VESA CVT and DMT formats that had incorrect sync polarities.  
2348. Fixed HDMI 3D VSIF transmission.  
2392. Added Hexadecimal representation of EDID product ID and serial number fields to EDID Report.  
2395. Clears text in Cable Test menu upon entering menu.  
2400. Auto-updates HDBaseT error statistics in the RX Interface Selection menu when HDBT is selected.  
2411. For HDBaseT 4K 47/48/50/59/60 Hz formats, auto-switches to YCbCr 4:2:0 upon selection.  
2431. Improvements to Cable Test GUI.  
2434. Improves command line loading of formats near maximum frequency, when deep color was previously selected.  
Fixed Rx status bar updates in certain situations.  
Fixed 64 kHz LPCM audio channel status value.  
Fixed labeling of HDMI Forum VSDBs in EDID parsing.

### **Support**

For support on the Quantum Data 780 family of products or other Teledyne LeCroy PSG products, please send an email to [psgsupport@teledynelecroy.com](mailto:psgsupport@teledynelecroy.com)  
Please include your full contact information and a detailed description of the problem, including product model number, serial number, version information from Help screen, etc.