

Application Programming Interface (API)

Manual

Ver. A1

Application Programming Interface (API)

1.1 Accessing the API Package

The API now supports the full suite of DSC 1.4 Source Compliance Testing. Detailed information about the API can be found by downloading the **Application Programming Interface (API)** package listed under **Optional Packages** at https://quantumdata.com/downloads.html.

Official Release (updated October 17, 2021):	
Required Files:	
Advanced Test System Manager 6.40	The second second
Instrument Firmware: ATP-64 Release 6.40	Release Notes
Important: Please read the Release Notes.	
Optional Packages:	
HDMI Sink Compliance Test Package	
HDMI HDCP 2.2 Sink Compliance Package	
HDR Lab Test Images	
Application Programming Interface (API)	
HDMI Dolby Compressed Audio Files	
HDMI DSC Sink CT Test Images	
A/V Sync Files	
Video Protocol Suite Graphical User Interface	

Upon download and extracting the zipped files, ensure that you replace your current instance of the tlqd.py file containing the API classes/methods, found in the folder indicated below.

📜 « Downloads > atp-api-R6.40 > ATP_API >	lib 🗸 (ン シ Search lib	
Name	Date modified	Туре	Size
🗋 tlqd.py	12/14/2021 11:48 AM	PY File	302 KB

Upon download and extracting the zipped files, navigate to Index.html for a full reference and procedures for Installation and Programming using the Python API.

📜 « atp-api-R6.40 > ATP	_API > docs	~	Ü	,	h docs	
Name	Date modified	Туре			Size	
📕 html	12/14/2021 11:49 AM	File fo	older			
doxygen_sqlite3	12/14/2021 11:48 AM	Data Base File			374 KB	
index	12/14/2021 11:48 AM	Chron	ne HTN	IL Document		1 KB

1.2 Available API Programming

There are a number of APIs available to control testing without using the GUI. Refer to the table below for a listing and brief description of each API.

Navigator Sidebar				
ΑΡΙ	Description			
Instrument Control				
HDMI Source Control	The API allows a quantumdata instrument user to control the HDMI Source without the GUI			
HDMI Sink Control	The API allows a quantumdata instrument user to control the HDMI Sink without the GUI			
DisplayPort Source Control	The API allows a quantumdata instrument user to control the DisplayPort Source without the GUI.			
DisplayPort Sink Control	The API allows a quantumdata instrument user to control the DisplayPort Sink without the GUI.			
Device Testing	 The GUI was designed to step a user through each test. The API was designed to control every test and iteration so that the programmer decides which tests and iterations to run, in the order of their choosing. There is no need to provide a CDF file when using the API with FRL source tests. 			
HDMI Source Tests	The API allows a quantumdata instrument user to run HDMI Source tests without the GUI.			
FRL Source Tests	The API allows a quantumdata instrument user to run FRL Source Tests without the GUI.			
DSC Source Tests	The API allows a quantumdata instrument user to run DSC Source Tests without the GUI.			
eARC Source Tests	The API allows a quantumdata instrument user to run eARC Source tests without the GUI.			
eARC Sink Tests	The API allows a quantumdata instrument user to run eARC Sink tests without the GUI.			
HDMI Sink Tests	The API allows a quantumdata instrument user to run HDMI Sink tests without the GUI. There is not a requirement to provide a CDF file when using the API with HDMI sink tests, but it may be provided for convenience. Many test iterations allow the programmer to specify attributes, such as a VIC or bit-depth.			
FRL Sink Tests	The API allows a quantumdata instrument user to run FRL Sink tests without the GUI. There is not a requirement to provide a CDF file when using the API with FRL sink tests, but it may be provided for convenience. Many test iterations allow the programmer to specify attributes, such as a VIC or bit-depth.			
DSC Sink Tests	The API allows a quantumdata instrument user to run DSC Sink tests without the GUI. There is not a requirement to provide a CDF file when using the API with DSC sink tests, but it may be provided for convenience. Many test iterations allow the programmer to specify attributes, such as a VIC or bit-depth.			

1.3 Sample API Code

The API zip file that is downloadable from the Teledyne Lecroy website offers a number of python files with sample API code. Sample code is available for nearly every Control/Testing API supported.

Access the Sample API code by clicking the **Files** tab within the API index file accessed in Section 1.1.

eledyne LeCroy quantumdata instrument API					
Main Page	nywhereyoulook Namespaces	Classes	Files		
File List	-				

A list of download links containing the available sample python code files will be displayed under the File List tab, as shown below.

in Page Namespaces	Classes
e List	
le List	
17.017.1	
ere is a list of all files with brief	descriptions:
examples	
DpSinkControl.py	Sample code for controlling a DisplayPort Sink
DpSourceControl.py	Sample code for controlling a DisplayPort Source
DscSinkTests.py	Sample code for running DSC Sink tests
DscSourceTests.py	Sample code for running DSC Source tests
eArcSinkTests.py	Sample code for running eARC Sink tests
eArcSourceTests.py	Sample code for running eARC Source tests
FriSinkTests.py	Sample code for running FRL Sink tests
FriSourceTests.py	Sample code for running FRL Source tests
📄 HdmiSinkAudio.py	Sample code for using audio an HDMI Sink
HdmiSinkControl.py	Sample code for controlling an HDMI Sink
HdmiSinkTests.py	Sample code for running HDMI Sink tests
HdmiSourceAudio.py	Sample code for using audio on an HDMI Source
HdmiSourceControl.py	Sample code for controlling an HDMI Source
HdmiSourceTests.py	Sample code for running HDMI Source tests
IIb	
in tied ov	API library for a Teledyne LeCroy quantumdate instrument

Sample API Code Files			
Sample Code File	Description		
DpSinkControl.py	Sample code for controlling a DisplayPort Sink		
DpSourceControl.py	Sample code for controlling a DisplayPort Source		
DscSinkTests.py	Sample code for running DSC Sink tests		
DscSourceTests.py	Sample code for running DSC Source tests		
eArcSinkTests.py	Sample code for running eARC Sink tests		
eArcSourceTests.py	Sample code for running eArc Source tests		
FrlSinkTests.py	Sample code for running FRL Sink tests		
FrlSourceTests.py	Sample code for running FRL Source tests		
HdmiSinkAudio.py	Sample code for using audio on an HDMI Sink		
HdmiSinkControl.py	Sample code for controlling an HDMI Sink		
HdmiSinkTests.py	Sample code for running HDMI Sink tests		
HdmiSourceAudio.py	Sample code for using audio on an HDMI Source		
HdmiSourceControl.py	Sample code for controlling an HDMI Source		
HdmiSourceTests.py	Sample code for running HDMI Source tests		
tlqd.py	API Library for Teledyne Lecroy quantumdata instruments		

Refer to the following table for a description of the downloadable sample python code files.