

KeyCode Open API

User Guide

Applicable Models

Model	Description	I/O Control Ports	Notes
KD-CX800	Controller	3	1 IR, 2 IR/RS-232
KD-IP822ENC/DEC	AV over IP Encoder/Decoder	2	1 IR, 1 IR/RS-232
KD-IP922ENC/DEC	AV over IP Encoder/Decoder	3	1 IR, 2 IR/RS-232
KD-IP1022ENC/DEC	AV over IP Encoder/Decoder	3	1 IR, 2 IR/RS-232

Description

If a Unit's port is configured for use in Open API mode, the device will listen on a dedicated TCP port for that I/O port. The user application/control system can then make a TCP connection to that port and send data to that I/O port.

IP Port number assignments for I/O ports are flexible, and are assigned using KDMS Pro. It is recommended that TCP Port assignments always be no lower than 1024.

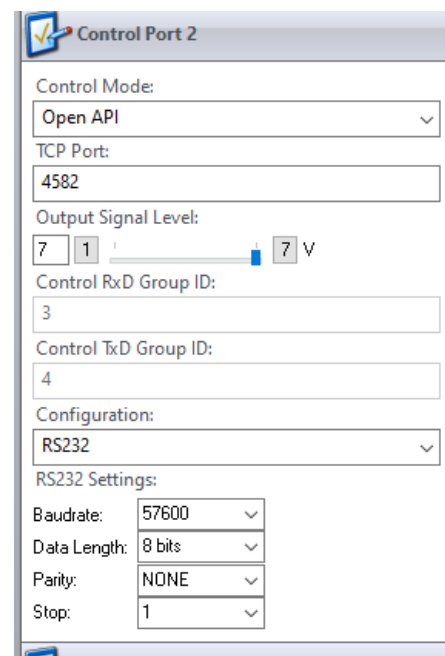
All I/O port traffic is limited to only one TCP connection at a time.

Only 1 port may be set to RS-232 per unit.

Setup

1. Use [KDMS Pro](#) software to ensure unit's I/O Control ports are set to Open API control mode, with IR or RS232 configuration.
 - a. For RS-232, ensure the Baudrate is set according to the device you are controlling. See example image.
2. Send desired command string to the unit's Main IP address
 - a. For I/O Control Port 1 (RS-232 not supported), use IP Port 4581*
 - b. For I/O Control Port 2, use IP Port 4582*
 - c. For I/O Control Port 3, use IP Port 4583*

*Unless port has assignment has been updated.



Controlling RS-232 Devices

Send any RS-232 string to the encoder/decoder/controller over IP on port 4582/4583. Port 1 does not support RS-232 control. Only 1 port may be set to RS-232 per unit.

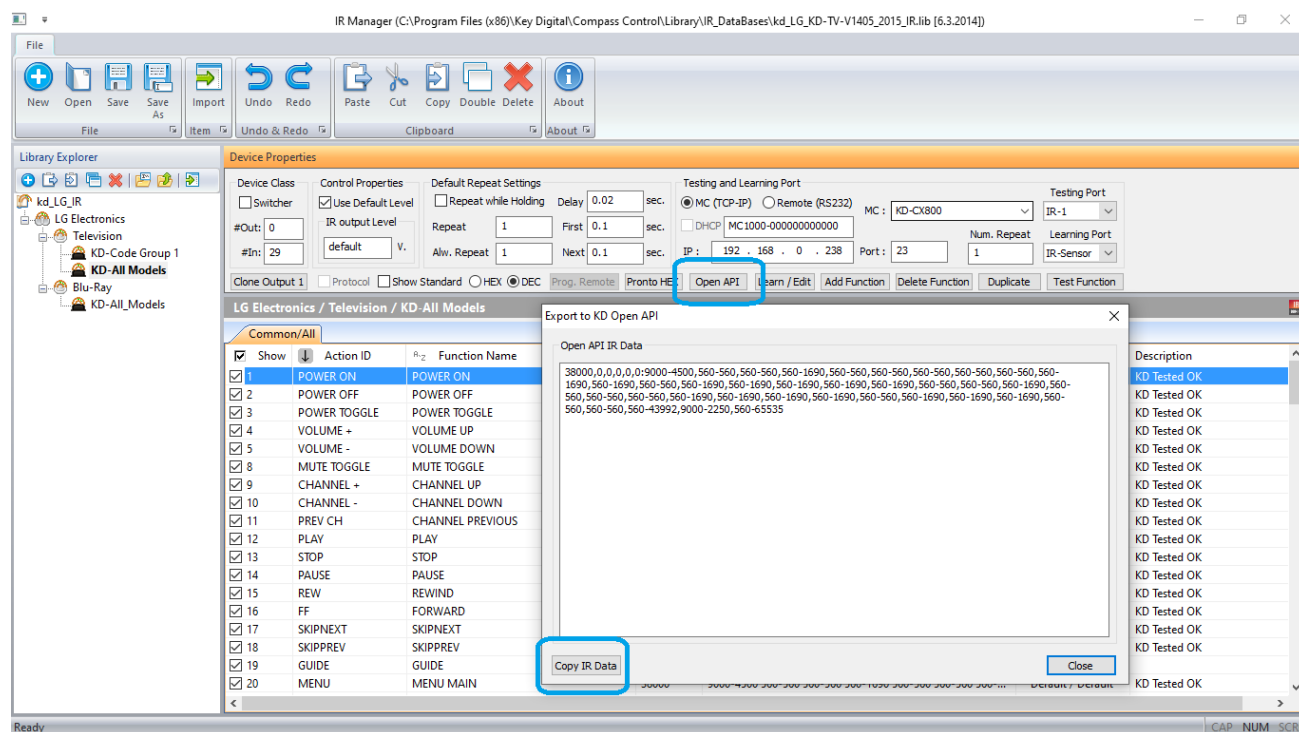
Specify ASCII, HEX, or Binary string format in the user application/control system as the encoder/decoder/controller is transparent and does not apply any formatting.

Include carriage return or line feed characters if required by the device you are controlling.

Collecting Strings for IR Devices

To collect the Open API string for controlling IR Devices:

1. Open Key Digital [IR Database Manager](#) v2.0.6 or later.
2. File -> Open to find the Brand of device you need to control.
3. Choose the Device from the Library Explorer list at left of screen.
4. Choose the command you wish to copy the Open API string for
5. Press the Open API button, and Copy IR Data to your clipboard so you may paste it into your User Application/Control System.
6. Add a carriage return at the end of the string sent from User Application/Control system for the KD Open API unit to execute the command.



547,547-547,547-1693,547-547,547-1693,547-1693,547-1693,547-547,547-1693,547-1693,547-
547,547-1693,547-547,547-547,547-547,547-65535

HDMI 2

38380,0,0,0,0:4507-4507,547-1693,547-1693,547-1693,547-547,547-547,547-547,547-547,547-
547,547-1693,547-1693,547-1693,547-547,547-547,547-547,547-547,547-547,547-
1693,547-1693,547-1693,547-1693,547-1693,547-547,547-1693,547-1693,547-547,547-
547,547-547,547-547,547-1693,547-547,547-65535

Sony TV (Bravia)

Power On

40244,0,0,0,0:2385-596,596-596,1192-596,1192-596,1192-596,596-596,1192-596,596-596,1192-596,596-596,596-596,596-596,596-64000,2385-596,596-596,1192-596,1192-596,1192-596,596-596,1192-596,596-596,1192-596,596-596,596-596,596-596,596-65535

Power Off

40244,0,0,0,0:2385-596,1192-596,1192-596,1192-596,1192-596,596-596,1192-596,596-596,1192-596,596-596,1192-596,596-596,596-596,596-596,596-64000,2385-596,1192-596,1192-596,1192-596,1192-596,596-596,1192-596,596-596,1192-596,596-596,596-596,596-596,596-65535

Volume +

40244,0,0,0,0:2385-596,596-596,1192-596,596-596,596-596,1192-596,596-596,596-596,1192-596,596-596,596-596,596-596,596-64000,2385-596,596-596,1192-596,596-596,596-596,1192-596,596-596,596-596,1192-596,596-596,596-596,596-596,596-65535

Volume -

40244,0,0,0,0:2385-596,1192-596,1192-596,596-596,596-596,1192-596,596-596,596-596,1192-596,596-596,596-596,1192-596,596-596,596-596,596-64000,2385-596,1192-596,1192-596,596-596,596-596,1192-596,596-596,596-596,1192-596,596-596,596-596,596-65535

Mute Toggle

40244,0,0,0,0:2385-596,596-596,596-596,1192-596,596-596,1192-596,596-596,596-596,1192-596,596-596,596-596,1192-596,596-596,596-596,596-64000,2385-596,596-596,596-596,1192-596,596-596,1192-596,596-596,596-596,1192-596,596-596,596-65535

HDMI 1

40244,0,0,0,0:2385-596,596-596,1192-596,596-596,1192-596,1192-596,596-596,1192-596,596-596,1192-596,596-596,1192-596,596-596,1192-596,1192-596,1192-596,596-596,1192-596,596-596,1192-596,596-596,1192-596,596-596,1192-596,1192-596,596-596,596-64000,2385-596,596-596,1192-596,596-596,1192-596,1192-596,596-596,1192-596,596-596,1192-596,596-596,1192-596,596-596,1192-596,1192-596,596-596,596-65535

HDMI 2

40244,0,0,0,0:2385-596,1192-596,1192-596,596-596,1192-596,1192-596,596-596,1192-596,596-596,1192-596,596-596,1192-596,596-596,1192-596,1192-596,1192-596,596-596,1192-596,596-596,1192-596,596-596,1192-596,596-596,1192-596,1192-596,596-596,596-64000,2385-596,1192-596,1192-596,596-596,1192-596,1192-596,596-596,1192-596,596-596,1192-596,596-596,1192-596,1192-596,596-596,1192-596,1192-596,596-596,596-65535

AppleTV (4th Gen)

Play/Pause Toggle

38384,0,0,0,0:9050-4522,521-604,521-1708,521-1708,521-1708,521-604,521-1708,521-1708,521-1708,521-604,521-1708,521-1708,521-1708,521-604,522-602,521-604,521-604,521-1708,521-604,521-1708,521-1708,521-1709,520-1708,521-604,521-1708,521-603,521-1708,521-604,521-604,521-1708,521-1708,521-1708,521-1709,520-1724,521-34043,9016-4523,521-604,521-1708,521-1708,521-1708,521-604,522-1707,521-1708,521-1708,521-1708,521-1708,522-1707,521-604,521-604,521-604,521-1708,521-604,521-604,521-1708,521-604,521-604,521-604,521-604,523-602,521-1708,521-604,521-604,521-1708,521-1708,521-1708,521-1710,519-1724,521-65535

Stop

38028,0,0,0,0:9019-4496,552-1682,552-552,578-1656,578-552,578-552,552-1682,552-1682,552-1682,552-1682,552-1682,552-552,578-552,578-552,578-552,552-1682,552-1682,552-552,578-552,552-1682,552-1682,552-552,578-552,578-1656,578-552,552-552,578-552,578-552,552-552,578-552,578-43493,8993-2235,552-65535

Menu

37683,0,0,0,0:9049-4564,557-557,557-1724,557-1724,557-1724,557-557,557-1724,557-1724,557-1724,557-1724,557-1724,557-1724,557-557,557-557,557-557,557-557,557-557,557-557,557-1724,557-1724,557-1724,557-557,557-557,557-557,557-557,557-557,557-557,557-557,557-1724,557-1724,557-557,557-557,557-557,557-557,557-40017,9049-2255,557-65535

Left

37683,0,0,0,0:9049-4564,557-557,557-1724,557-1724,557-1724,557-557,557-1724,557-1724,557-1724,557-1724,557-1724,557-1724,557-557,557-557,557-557,557-557,557-557,557-557,557-1724,557-1724,557-557,557-557,557-557,557-557,557-557,557-557,557-1724,557-1724,557-557,557-557,557-557,557-557,557-40017,9049-2255,557-65535

Right

37683,0,0,0,0:9049-4564,557-557,557-1724,557-1724,557-1724,557-557,557-1724,557-1724,557-1724,557-1724,557-1724,557-557,557-557,557-557,557-557,557-557,557-557,557-557,557-1724,557-557,557-1724,557-557,557-557,557-557,557-557,557-557,557-1724,557-1724,557-557,557-557,557-557,557-40017,9049-2282,557-65535

Up

37683,0,0,0,0:9049-4564,557-557,557-1724,557-1724,557-1724,557-557,557-1724,557-1724,557-1724,557-1724,557-1724,557-557,557-557,557-557,557-557,557-557,557-557,557-557,557-1724,557-557,557-1724,557-557,557-557,557-557,557-557,557-557,557-1724,557-1724,557-557,557-557,557-557,557-40017,9049-2255,557-65535

Down

37683,0,0,0,0:9049-4564,557-557,557-1724,557-1724,557-1724,557-557,557-1724,557-1724,557-1724,557-1724,557-1724,557-557,557-557,557-557,557-557,557-557,557-557,557-557,557-1724,557-557,557-1724,557-557,557-557,557-557,557-557,557-557,557-1724,557-1724,557-557,557-557,557-557,557-40017,9049-2255,557-65535

