SLM WebXi overview April 22, 2022

A short overview of the Open Interface for the B&K2245 and HBK225 sound level meters, and where to continue from there.

Prerequisites

To communicate with the SLM, the following is needed:

- A B&K2245 or a HBK2255 sound level meter (the SLM)
- The SLM must be reachable via the network from the client. In this context, the client is the device from which you communicate with the SLM (could be a Windows PC) and the SLM is the server, providing the services needed to perform sound measurements.
- The SLM must have the "BZ-7400 Open Interface" license installed **and enabled**, otherwise access to the SLM functionality will be blocked (check: Menu>System Settings>Advanced settings, on the SLM). See also 'SLM WebXi License install.pdf' for more information about software license.
- Programming skills and understanding of software development is required
- Basic knowledge about TCP/IP networking, and how to establish connection between devices running TCP/IP is needed.

SLM network support

The SLM is a network device (like a PC or a mobile phone) complying with rules of Ethernet, Wi-Fi, TCP/IP, routing, broadcasting, DHCP, etc.

The SLM has two types of interfaces: Wireless (Wi-Fi) and cabled (Ethernet). See also: Menu>System settings>Network settings. The cabled interface is supplied through the USB-C socket at the bottom of the SLM.

For discovery purpose, the SLM supports zero-configuration networking based on mDNS.

WebXi

Communication with the SLM is through the B&K WebXi protocol. The SLM receive requests and send responses through HTTP. The SLM exposes its resources (parameters and features) using JSON data structure. The SLM accepts simple GET, PUT, POST and DELETE commands. Moreover, the SLM also features supports streams for binary and fast WebXi data streaming.

Before you begin

Before you begin, it is a good idea to familiarize yourself with the SLM; the basic operations of the SLM itself and also how to operate the SLM from one of the apps (e.g. the Noise Partner app). See reference below for how to install apps onto iPhone/iPad and Windows PC:

https://www.bksv.com/Service/Support/downloads/2245-Downloads/BK-2245-Software-downloads

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GitHub

Please find programming examples and additional documentation in GitHub: https://github.com/hbk-world/Open-Interface-for-Sound-Level-Meter.

Consider the first six documents being your getting started guide:

- 1. SLM WebXi overview.pdf (this document)
- 2. SLM WebXi license install.pdf
- 3. SLM WebXi connectivity.pdf
- 4. SLM network interfaces.pdf
- 5. SLM WebXi using Postman.pdf
- 6. SLM WebXi Python quick start.pdf

B&K 2245 and HBK 2255 product references

Find more product information as listed below.

Product pages:

- https://bksv.com/2245
- https://bksv.com/2255

User guides and help files:

https://www.bksv.com/Service/Support/downloads/2245-Downloads/BK-2245-Manuals-and-help-files

How-to videos:

- English: https://www.youtube.com/playlist?list=PLJiMDKQQaTpDcJe_gSD5UjfTs_8_ryAat
- German: https://www.youtube.com/playlist?list=PLJiMDKQQaTpBrFGlBJ-0ulQz8yL9fthWy
- French: https://www.youtube.com/playlist?list=PLJiMDKQQaTpAmYJeVQ2Bd45ORog27-qAT
- Spanish: https://www.youtube.com/playlist?list=PLJiMDKQQaTpCZ 6JjOCtwJNBQ1nDKecXv
- Italian: https://www.youtube.com/playlist?list=PLJiMDKQQaTpBm401PsRq8BAiz9XKdODpc

Software downloads:

https://www.bksv.com/Service/Support/downloads/2245-Downloads/BK-2245-Software-downloads

Compliances and type approvals:

• https://www.bksv.com/Service/Support/downloads/2245-Downloads/BK-2245-Compliances-and-type-approvals