sanako
TANDBERG EDUCATIONAL

AN EASY TO INSTALL LANGUAGE LAB

SANAKO Lab 100 is a versatile language learning center that only requires one computer - the teacher's. Students are equipped with durable, low cost and simple to operate User Audio Panels with high-quality digital audio that is ideal for language learning.

SANAKO Lab 100 User Audio Panel

Teacher Position Components

The Sanako Lab 100 Software is easy to install onto the teacher PC.

The **System Connection Unit** connects User Audio Panels (both teacher's and students') with program source audios. Depending on the model, the Connection Unit contains either 32 or 64 ports.

The **Media Storage Unit** is a media warehouse, where the master tracks can be saved or copied to/from. Once stored in this unit, the saved audio files can be used by the teacher or the students. Depending on the model, the maximum storage capacity is either 120 or 240 hours of program files, which can be extended by using shared network areas.

The **User Audio Panel** connects the teacher's headset to the system. With the User Audio Panel, the teacher can adjust the volume for the headset and for the program.

The **Program Source Interface** connects two external source devices (such as MP3 player, tape recorder, etc.) to the System Connection Unit.

Student Position Components

The **User Audio Panel** and a **Headset** at each student position are the components students use to participate in a Sanako Lab 100 class.
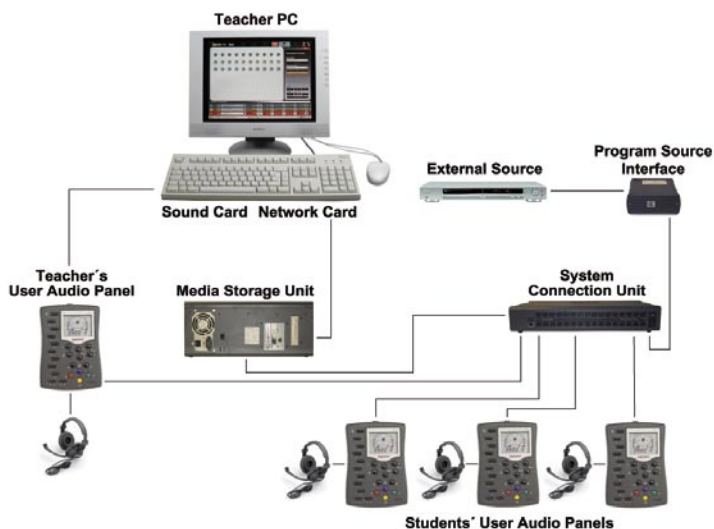
Other Components

A **System Serial Interface** (optional) is needed if the system doesn't include a Media Storage Unit. The System Serial Interface connects the teacher PC to the teacher's User Audio Panel. This way Lab 100 can be used as an Audio-Active / Level II Lab.

Standard CAT 5 **cables** are used for connecting User Audio Panels and Program Source Interface to the Connection Unit.

A **Video** source can be integrated into the Lab 100 system and used as program source in the Lab 100 sessions.

Minimum Maintenance

This modular system is quickly installed, and requires very little maintenance - the User Audio Panels do not need updating. Additionally, since no separate hardware is needed, compatibility of different system components will never be an issue.

SANAKO Lab 100 system architecture

SANAKO LAB 100 TECHNICAL SPECIFICATIONS

Lab 100 System Components

- SANAKO Lab 100 Software (LSW100)
- Media Storage Unit (MSU322/MSU642)
- System Connection Unit (SCU032/SCU064)
- Program Source Interface (PSI046)
- User Audio Panel
  (UAP036/UAP037/UAP038/UAP039)
- Cable (CAB100)
- System Serial Interface (SSI100)
- SANAKO Lab 100 Master Recorder
  (CRE100/CRU100)

Media Storage Unit

- Operating voltage ~115/230 V, 50 – 60 Hz
  360 W max
- 150 W nominal
- Sampling rate 32 kHz

Program Source Interface

- Line in, line out
- Isolation On/Off switch
- Max isolation 3 Vpp
- Line input 47 kohm, -10 dBV
- Line output 1 kohm, -10 dBV

SANAKO Lab 100 Software

System Connection Unit

- Operating voltage ~100-240 V, 50-60 Hz,
- 100 W max (1+31 students)
- 200 W max (1+ 63 students)

Headset (typical)

- Microphone 30 mV/2.2 kohm (+6V), electret
- Headphones impedance 200 ohm
- Nominal level –10 dBV (0.3 V)

Cables

- Student cable CAT-5 UTP
- Wiring T568A
- Connector RJ-45

User Audio Panel

- Headset SLH 07, connectors
  2 modular 6 pin
- Audio source connector line in, line out
- Volume adjustment separate for both channels
  12 steps
- Frequency response
  20 Hz - 15 kHz +/-3 dB
- Distortion <1%, 1 kHz, 0 dBV
  S/N >70 dBA, 1 kHz, 0 dBV
- Microphone input impedance 2.2 kohm
- Nominal level 30 mV
- Headphones output impedance 200 ohm
- Nominal level -10 dBV

Headset SLH 07

Minimum System Requirements for the Teacher Computer

- Microsoft® Windows® XP or
  Windows Vista™ operating system
- 1,5 GHz processor
- 512 MB RAM
- Resolution 1024 x 768 or higher and
  16-bit color
- Sound card
- DVD-ROM drive
- Mouse
- Network interface card
- MediaPlayer 7.0 or later

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SANAKO Software Maintenance (recommended)

Software Maintenance gives added value to the customer's technology investment. Software Maintenance allows Sanako software users to receive updates that are available in the coverage period without paying an update charge. Sanako works with its customers to ensure long-term customer success and satisfaction. For further information on Software Maintenance and pricing, please contact your local representative.

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