Scope of Work: Court Reporter Black Box with DANTE Integration and Real Time Transcription (RTT) RJ-45 Port

Project Overview

This project involves the design, installation, and configuration of a digital audio black box for a court reporter workstation. The black box will integrate with the existing DANTE network and Biamp Tesira Server, providing audio outputs for the court reporter. The solution will include volume control for both Aux and Headphone mixes, ensuring clear and customizable audio monitoring. Additionally, an RTT RJ-45 port will be included to facilitate additional network connectivity.

Scope of Work

1. Design and Specifications

1. Form Factor:

o Desktop black box with a size ranging from 2-gang to 4-gang.

2. Audio Connections:

- o Two 3.5mm TRS jacks:
 - One for the Aux mix.
 - One for the Headphone mix.
- o Each connection will have an independent volume control knob.

3. Network Integration:

- DANTE audio interface for digital audio integration with the Biamp Tesira Server.
- o RTT RJ-45 port to provide additional network connectivity.

4. Controls:

o Separate volume control knobs for Aux and Headphone outputs.

2. Equipment and Materials

1. Hardware:

- o Black box enclosure (2-gang to 4-gang size).
- Two 3.5mm TRS jacks.
- Two volume control knobs.
- o DANTE-compatible network interface hardware.
- o RTT RJ-45 port.

2. Cabling:

- o Network cable (CAT5e or higher) to connect the black box to the equipment rack.
- o Audio cables for internal connections within the black box.

3. Tools and Accessories:

- o Tone generator and probe for network port identification.
- o Mounting hardware and tools for secure installation.

3. Installation

1. Site Preparation:

- o Confirm availability of a spare network port at the lower bench where the court reporter sits.
- o Prepare the installation area, ensuring it is free of obstructions and accessible.

2. Network Port Identification:

- Use a tone generator and probe to identify a spare network port from the equipment rack to the lower bench.
- Label the identified port for future reference.

3. Black Box Assembly:

- Assemble the black box, installing the 3.5mm TRS jacks, volume control knobs, and the RTT RJ-45 port.
- Connect the DANTE interface hardware and the RTT RJ-45 port inside the black box.

4. Cabling and Connections:

- o Connect the network cable to the identified spare port and the DANTE interface in the black box.
- Connect an additional network cable to the RTT RJ-45 port for supplementary network access.
- o Ensure secure and tidy cable management.

5. Integration with Biamp Tesira Server:

- o Connect the DANTE feed from the Biamp Tesira Server to the network.
- o Configure the DANTE network settings to recognize the new black box.

4. Testing and Configuration

1. Audio Testing:

- o Verify audio signals from the Aux and Headphone mixes.
- o Adjust and confirm the functionality of the volume control knobs for each output.

2. Network Testing:

- Ensure stable and consistent network connectivity between the black box and the Biamp Tesira Server.
- Test the DANTE audio feed to confirm proper integration.
- Verify the functionality of the RTT RJ-45 port for additional network connectivity.

3. System Configuration:

- o Fine-tune audio settings within the Biamp Tesira Server to optimize audio quality and functionality.
- Confirm that the court reporter can adjust volume levels independently for both mixes.

5. Documentation and Training

1. **Documentation:**

- o Provide detailed documentation of the installation, including network port mapping, cable runs, and system settings.
- Include a user guide for operating the black box, focusing on the volume controls, DANTE integration, and the RTT RJ-45 port.

2. Training:

- o Offer a brief training session for the court reporter and relevant personnel on the operation of the new audio black box.
- o Cover basic troubleshooting steps and contact information for support.

Responsibilities

• Installer:

- o Ensure proper identification and use of network ports.
- o Securely mount and configure the black box.
- o Provide thorough testing and documentation.

• Client:

- o Provide access to the installation area and existing equipment.
- o Confirm operational requirements and approve system design.

Acceptance Criteria

- Successful integration of the black box with the DANTE network and Biamp Tesira Server.
- Fully operational Aux and Headphone mixes with independent volume controls.
- Fully functional RTT RJ-45 port.
- Satisfactory completion of all testing and user training.

This scope of work outlines the steps and responsibilities involved in designing and installing the court reporter black box. Please review and provide feedback or approval to proceed.

If you need more specific details or adjustments, feel free to ask!