

CAMERIO *TeleEAR*

User Guide

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Version 1.0

FCC Statement on Class B

WARNING

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.**
- Increase the separation between the equipment and receiver.**
- Connect the equipment into an outlet on a circuit different from that to which the receiver is needed.**
- Consult the dealer or an experienced radio/TV technician for help.**

Shielded cables must be used with this unit to ensure compliance with the Class B FCC limits.

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SECTION 1

INTRODUCTION

CAMERIO *TeleEAR* is an audio monitoring system which consists of a transmission unit and a reception software.

CAMERIO *TeleEAR* transmission unit can accept up to 4 audio input signals. It compresses the signals and transmits the compressed digital voice data through a RS-232 serial port to the reception side.

CAMERIO *TeleEAR* reception software runs on a PC. It receives the compressed digital voice data from the transmission unit and decompresses it to recover the voice and output to the PC loudspeaker.

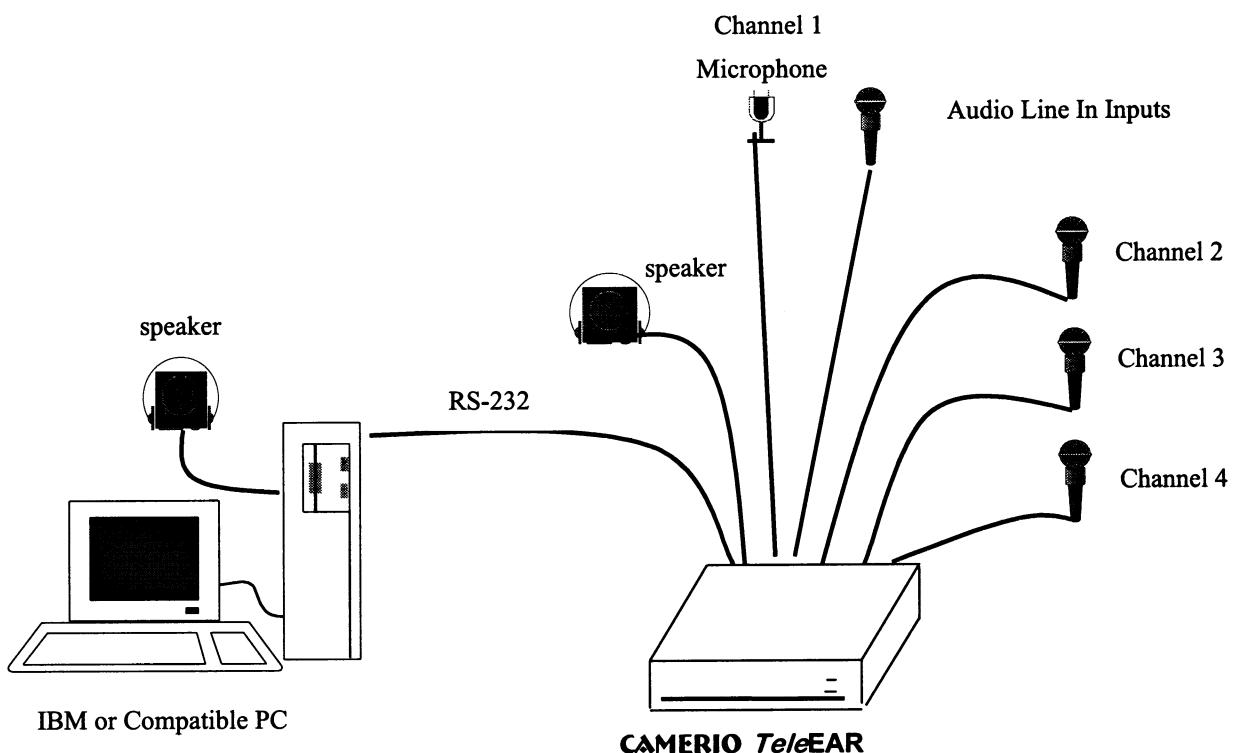


Figure 1: The configuration of the **CAMERIO *TeleEAR*** audio monitoring system

SECTION 2

SYSTEM REQUIREMENT

What You Need

To install and operate the **CAMERIO *TeleEAR*** transmission unit and reception software, the following items are required:

- **CAMERIO *TeleEAR*** Transmission unit
 - Supports up to 4 audio channels.
- Audio sources with RCA jack or condenser microphone.
- RS232 Cable
 - Shielded, DTE (Data Terminal Equipment) – DTE RS232 cable.
- IBM PC/AT compatible computer with
 - Pentium 133MHz processor or above
 - 8MB RAM or above
 - True color display card
 - Serial Port
 - Sound Card
 - Windows 95, 98 or NT operating system
- Speakers
 - Microphone jack PC speaker
 - RCA jack speaker for transmission unit
- **CAMERIO *TeleEAR*** Reception Software
 - Installed in the PC.

CAMERIO *TeleEAR* Transmission Unit

Audio Input Channels:

- Channel 1 is multiplexed by a microphone or Line In audio source.
- Channel 2-4 is Line In audio sources.

Audio Output Channels:

- Line Out audio channel.

Aux In and Aux OutPorts:

1 DB-9 male connector and 1 DB-9 female connector for connecting to RS232 cables.

Power Jack:

A 2.1mm DC power jack for power supply.

RS232 connection diagram

TeleEAR		PC(DB25)	
2	RXD	RXD	3
3	TXD	TXD	2
1	CD	CD	8
4	DTR	DTR	20
5	GND	GND	7
7	RTS	RTS	4
8	CTS	CTS	5

System Requirement

SECTION 3

INSTALLING CAMERIO *TeleEAR*

Hardware Installation

Setup Procedure:

1. Turn off the **CAMERIO *TeleEAR*** Transmission Unit, PC and all audio sources.
2. Plug the audio sources to the appropriate channels. It is preferable to plug a microphone in Channel 1.
3. Connect the Aux In Port of the Transmission Unit to the COM Port of the PC by a RS232 cable. Tighten the screws to ensure proper connection.
4. Plug the round end of the AC adaptor into the socket marked POWER on the Transmission Unit, it can support 9V – 12V supply voltage.
5. Turn on the Transmission Unit, the audio sources and the PC.

Software Installation

Insert the floppy disk into the floppy drive and execute SETUP.EXE. To complete the setup procedure, please follow the on screen instructions. After the installation, restart the PC.

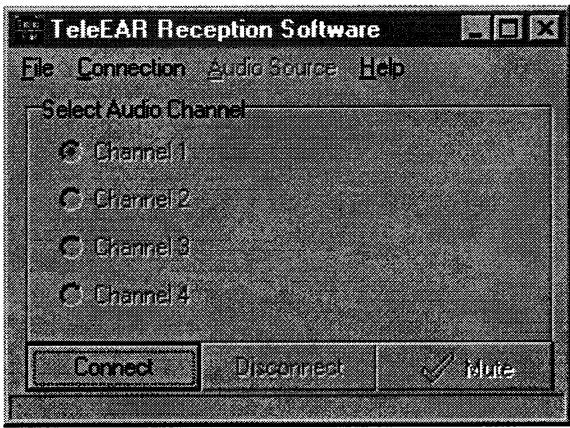
System Requirement

System Requirement

SECTION 4

CAMERIO *TeleEAR* RECEPTION SOFTWARE

To start the reception software, select *TeleEar* from *Programs* in the Start menu. The main screen of the reception software is shown in Fig. 4.1.



4.1. Main Screen of TeleEAR Reception Software

Connect to the Transmission Unit

To connect the Transmission Unit, make sure the Transmission Unit is on, then click the *Connect* button or select *Connect* from the pull down menu. A menu shown in Fig. 4.2 will pop up to let you select the COM Port e.g. Direct to COM 1, please check what COM Port of your PC you are using to connect to the Transmission Unit. Please make sure you have chosen the correct baud rate (must be 38400bps) from Properties.

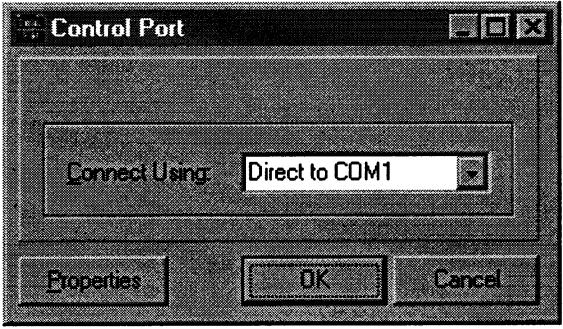


Fig. 4.2 Control Port

After successful connection, a statement 'Connected' will be displayed on the status bar. If the channel is active, you can hear the sound from the audio source. The screen will change and shown in Fig. 4.3.

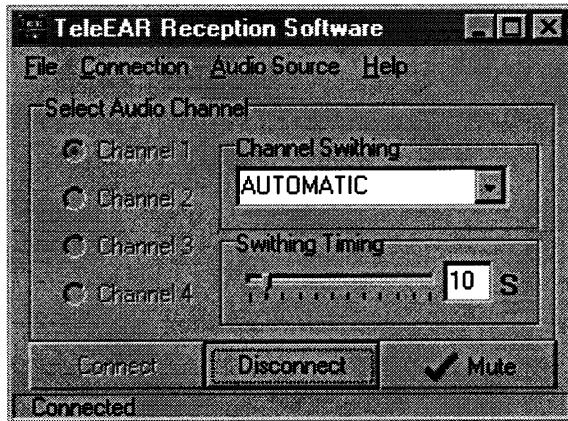


Fig. 4.3. Connected to the Transmission Unit

Disconnect from the Transmission Unit

To disconnect the Transmission Unit, click the *Disconnect* button or select Disconnect from the pull down menu. A statement 'Disconnecting...' will be displayed on the status bar.

Select Audio Channels

There are two modes for selection of audio channels, automatic and manual. You can select the mode from *channel switching*.

Automatic Mode:

The audio channels will be auto switched sequentially, the switching time can be specified from 5 seconds to 60 seconds.

Manual Mode:

You need to specify the audio channels to listen by checking the appropriate box against the channel, or by selecting it from the pull down menu.

Mute

While listening to the sound, you can mute it simply by clicking the *Mute* button or Mute from the pull down menu.

SECTION **5**

SPECIFICATION

Physical

- Dimension 25mm(L) x 183mm(W) x 43mm(H)
- Weight 1.1kg (AC adaptor not included)
- Casing Metal

Electrical

- AC Adaptor Input: 110V AC 60Hz, Output: 9V DC 300mA
- Transmission Unit Input: 9V –12VD DC 300mA

Others

- 4 audio channels, channel 1 is multiplexed by a microphone and a Line In audio source. Channel 2 to Channel 4 are Line In audio sources
- Selectable audio sources
- 1 Line Out audio output, local feedback form audio inputs
- EIA-232D interface
- Data format: none parity, 8 data bits and 1 stop bit