

TECH TIPS

2023 – VOL-1

Streaming SIP Audio Across the Network

APPLICATION

There are times when it is desired to be able to "stream" a SIP call's audio across the network. One application is to be able to trigger external devices that use the IGMP streaming audio to turn on or off. Another application is monitoring/recording SIP calls at a remote location – such as in the correctional market.

The Terra-Com modules can stream any of their analog audio inputs and their internal stored audio but not stream the SIP input, but there are a couple of ways to easily handle this.

Note: This application is only available with Terra-Com Version-1. Please check with Penton tech support to see if Version-2 devices are compatible with this application prior to ordering.

METHOD-1

Using a Terra-EX and IEX module in tandem:

- Set up the Terra-EX module to receive the SIP call from either the PPM-IT5, Terra-Manager GUI and/or from the VoIP phone system.
- Wire one of the Terra-EX module's audio output to the Terra-IEX's audio line-level input (input #2) see image below:

• Page 2

| FRONT VIEW | REAR VIEW |
|---|-----------|
| ATEIS TERRA-IEX ETHERNET POWER STATUS POWER STATUS SERVIL SERVIL V- B A SKD POE | |
| FRONT VIEW | REAR VIEW |

- Make sure your SIP input is mapped to the correct output channel – 1(A) and/or 2(B).
- Set up the Terra-IEX module to stream out this audio input as IGMP stream in the "Audio Matrix" tab set IGMP streaming address as desired see image below:

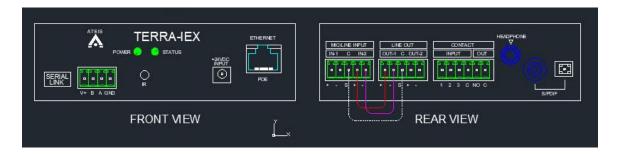
| TERRACOM" | | | | | | | | SIP-based audio and control over local network and internet | | | | | | | | Version 3.2.0.8, 2011/05/17 04:5- TERRA-IEX536, TerraIEX@192.168.10 OUT-1: N/A / OUT-2: | | | | | | | | | |
|--------------|--------|----------|----------|--------|-------------------|-----------------------|------|---|------------|-----------------|---------------|---------|-----------------|-----|-----|---|--------------|----------|-----|------------|----|---|--|--|--|
| Setup1 | Setup | 2 | Update | | Sta | itus | Abo | out | .ogout | | | | | | | | | | | | | | | | |
| asic Setting | De | evice | | Functi | on Libra | ries | Aud | io Matrix | 1/0 C | ontrol Media Se | tting Output | Volume | | | | | | | | | | | | | |
| INPUT | MOD | E | PRIORITY | | Mute | LINE OUT (AMP OUT) | | | STREAM OUT | | | | CONTROL OPTIONS | | | | | | | BUFFER | | | | | |
| | | 1117 | | | | 1(A) | 2(B) | S/PDIF | OUT | IP ADDRESS | PORT | | SELECT | | | | INPUT VOLUME | | | | | | | | |
| SIP | Mono | v | 1 | ×) | | | | N/A | | | | | | | | | Fix | ~ | 28 | •)(| RT | × | | | |
| MIC IN | Mono | * | 6 | * | | | | N/A | OFF v | | 0 | F | ΪX | •)(| - ` | • | Fix | * | 28 | ~ | | | | | |
| LINE IN | Mono | ~ | 2 | ~ | | | | N/A | G.72 ¥ | 239.240.102.2 | 9012 | F | ΞX. | -)(| - * | • | Fix | ~ | 28 | ~ | | | | | |
| MESSAGE | Auto | ~ | 1 | ~ | | | | N/A | OFF V | | 0 | F | İX | •)(| ~ | • | Fix | × | 28 | ~) | | | | | |
| MONITOR | Mono | • | 2 | ~ | | | | N/A | | | | | | | | | Fix | v | 28 | •)(| RT | ~ | | | |
| NET1 | Local | • | 6 | • | | | | N/A | | | | | | | | | Fix | • | 28 | •)(| RT | ~ | | | |
| NET2 | Local | ~ | 6 | • | | | | N/A | | | | | | | | | Fix | ~ | 28 | •)(| RT | ~ | | | |
| N/W IN | MODE | | | | SHOUTCAST/ICECAST | | | | | | STREAM | MULTICA | ST | _ | | | | | | | | | | | |
| , | | | | | URL | | | | | | P | ORT | 1 | | NET | Г1 | 24 | - | NET | r2 | _ | | | | |
| SOURCE 1 | Stream | n Mu | lticas | t v) | | | | | | | 239.240.100.1 | 90 | 12 | | Fb | • • | - | ~ | Fix | ~ | | × | | | |

METHOD-2

Using a single Terra-IEX module:

- Set up the Terra-IEX module to receive the SIP call from either the PPM-IT5, Terra-Manager GUI and/or from the VoIP phone system.

- Make sure your SIP input is mapped to the correct output channel
 1(A) and/or 2(B) depending on your wiring 1(A) is shown in example below.
- Wire one of the Terra-IEX module's audio output to the same Terra-IEX's audio line-level input (input #2) see image below:



- Set up the Terra-IEX module to stream out this audio input as IGMP stream in the "Audio Matrix" tab - setting IGMP streaming address as desired – as detailed in Method-1 above.

In either of these 2 examples – the IGMP stream will be active as long as the SIP call/session is active. The IGMP stream will be shut off when the SIP call hangs up. This is the case in Terra-Com, V1 devices.

The Terra-Com V2 devices currently have no audio threshold gate for their audio inputs. This means that the IGMP stream will be active, regardless of whether any audio is present on the input or not. This will be changed in future firmware updates, but as of end of Sept. 2023 – it has not been implemented. Please check with tech support prior to ordering if you need this function in your design.

Using Method-1 – you have the ability for the EX module to trigger 2 different Terra-IEX modules – thus activating 2 IGMP streaming channels across the network – with only a single SIP extension. Otherwise – using a single IEX will do the for just a single active stream per SIP session.

Have fun and thank you again for choosing Penton Audio – USA products!!

Terra-Com Products Catalog: https://drive.google.com/file/d/1xC1utbkTbcevdZk61demxdY3J BeA3D/view?usp=sharing