Compunetix, an ISO 9001:2008 company, is a small business with over 45 years of experience in designing and manufacturing communications equipment that is located 15 miles east of Pittsburgh in Monroeville, Pennsylvania.

The Federal Systems Division of Compunetix specializes in the design, manufacture, installation and lifetime support of its mission-critical voice communications systems for the aerospace, military, civilian government, emergency response, and other markets where reliable mission-critical communication is a necessity.

For assistance in determining the best solution for your application, contact sales at the Federal Systems Division:

Compunetix, Inc.
Federal Systems Division
2420 Mosside Boulevard
Monroeville, PA 15146
1-800-879-4266
412-373-8110
fsdsales@compunetix.com
Mission Voice

Mission Voice is the use of specialized audio teleconferencing equipment to interconnect all those people who have a role in the implementation and execution of a mission. The mission may involve launching a rocket, downloading data from a satellite, supervising a training mission, or any other activity intended to accomplish a mission-related goal. The mission voice parties may be supervisors, coordinators, technicians, specialists, or support personnel.

There are three basic components of a mission voice system:
• Voice Switch
• Mission Instruments
• Instrument Connectivity

Mission Voice Conferencing Switch

The conferences associated with a mission voice system are created by combining the audio from selected sources. This is done within the central voice switch. For this task, Compunetix offers the fully digital CONTEX® MVP, an extremely flexible mission voice switch that has powerful configuration and diagnostic capabilities. With the CONTEX MVP, you can create conferences of various types to interconnect telephones, mission instruments, and radios in virtually any combination. You can compartmentalize voice by assigning security levels and domains to resources such as conferences, ports, administrators, and end users. You can also grant or deny access to instrument functions such as conference join and conference broadcast.

Mission Instruments

End users access mission voice at a mission instrument. Compunetix offers a wide range of full-featured mission instruments, including rack mount, desktop, and PC-based models. These mission instruments feature the GT touchscreen user interface, which displays multiple pages of soft line keys, soft function buttons, a conference detail panel, and a call queue with a dial pad and phone book. Compunetix also offers the HAI-32, a hazardous area instrument with a traditional user interface. The user simply taps a line key to select its assigned conference. If granted permission, a mission instrument user can join conferences together and break them apart again or broadcast to a number of selected conferences. Mission instruments can be independently configured as either fixed or follow-me positions.

Mission Instrument Connectivity

Within the local CONTEX MVP mission voice system, mission instruments interface with the central switch via a copper or fiber-optic cable. However, the CONTEX MVP also interfaces with T1 lines and IP/Ethernet. To transport mission voice to a remote location via T1, Compunetix offers the KNX to transport mission voice via VoIP. Compunetix offers the KNX. These products make it possible to locate a CONTEX MVP system’s mission instruments at virtually any remote location.

Mission Voice Applications

The mission voice equipment described above is interconnected in a custom configuration to support mission-related activities. For example, mission voice systems are used by various branches of the military to coordinate shipboard activities, supervise training exercises, and launch missiles. Various departments of the U.S. Federal government use mission voice to interconnect offices and administer departments. Private companies use mission voice to support their customers during missions and coordinate tests associated with research and development projects.
**Voice Management and Coordination**
- Collaboration of VoIP/PSTN, Radio, Cellular, Satellite ...
- Secure/Encrypted Conferencing

**Powerful User Positions**
- Access to All Voice Assets
- Simultaneous Monitor of Conferences
- Red/Black Operations

**Conference Types**
- Intercom
- VDL (Voice Direct Line)
- Admin
- Hotline
- Radio
- Preset
- Meet-me with Enunciation

**CONTEX MVP**
The MVP is a multimedia processing hub designed for the mission voice and video conferencing markets.
The MVP is a high performance processing platform that is capable of performing mission voice and multimedia video functions in the same Compunetix system hardware.

To learn more, visit www.compunetix.com, send email to fsdsales@compunetix.com, or call the FSD sales team at 412-373-8110 or 1-800-879-4266.
**Mission Instruments**

**DESKTOP**

- CDI-17/CDI-17 II
- SDI-12/SDI-12 II
- TDI-17/TDI-17 II
- SDI-7
- GT-PC
- TDI-7/TDI-7 II

**RACK MOUNT**

- TRI-D6/TRI-D6 II
- TRI-6
- TRI-17/TRI-17 II
- SRI-12 II
- HAI-12/HAI-12 II

**Mission Instrument Characteristics**

<table>
<thead>
<tr>
<th>Model</th>
<th>Rack Mount</th>
<th>Line Key Type x # Line Keys</th>
<th>Line Key Size (Inches)</th>
<th>Voice Activity Indicator</th>
<th>Speaker Mute</th>
<th>Focus</th>
<th>Monitor</th>
<th>Join/Unjoin</th>
<th>Broadcast</th>
<th>Voice Activity Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDI-17</td>
<td>Desktop</td>
<td>4x48 17” 3x10</td>
<td>10.50” x 12.75” x 3.75”</td>
<td>Shows which line keys have voice activity.</td>
<td>Speaker Mute</td>
<td>Focus</td>
<td>Monitor</td>
<td>Join/Unjoin</td>
<td>Broadcast</td>
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<td>Broadcast</td>
<td>Voice Activity Indicator</td>
</tr>
<tr>
<td>GT-PC</td>
<td>Desktop</td>
<td>5x16 17” 3x10</td>
<td>10.50” x 12.75” x 3.75”</td>
<td>Shows which line keys have voice activity.</td>
<td>Speaker Mute</td>
<td>Focus</td>
<td>Monitor</td>
<td>Join/Unjoin</td>
<td>Broadcast</td>
<td>Voice Activity Indicator</td>
</tr>
<tr>
<td>HAI-12</td>
<td>Rack Mount</td>
<td>8x12 -- 2x10</td>
<td>10.50” x 12.75” x 3.75”</td>
<td>Certified for Class I Division II use.</td>
<td>Speaker Mute</td>
<td>Focus</td>
<td>Monitor</td>
<td>Join/Unjoin</td>
<td>Broadcast</td>
<td>Voice Activity Indicator</td>
</tr>
<tr>
<td>HAI-12 II</td>
<td>Rack Mount</td>
<td>8x12 -- 2x10</td>
<td>10.50” x 12.75” x 3.75”</td>
<td>Certified for Class I Division II use.</td>
<td>Speaker Mute</td>
<td>Focus</td>
<td>Monitor</td>
<td>Join/Unjoin</td>
<td>Broadcast</td>
<td>Voice Activity Indicator</td>
</tr>
<tr>
<td>SRI-7</td>
<td>Rack Mount</td>
<td>9.25” x 6.75” 2x10</td>
<td>3.50” x 19.00” x 2.50”</td>
<td>VoIP-only</td>
<td>Speaker Mute</td>
<td>Focus</td>
<td>Monitor</td>
<td>Join/Unjoin</td>
<td>Broadcast</td>
<td>Voice Activity Indicator</td>
</tr>
<tr>
<td>TDI-6</td>
<td>Rack Mount</td>
<td>4x12 6” 3x10</td>
<td>3.50” x 19.00” x 2.50”</td>
<td>VoIP-only</td>
<td>Speaker Mute</td>
<td>Focus</td>
<td>Monitor</td>
<td>Join/Unjoin</td>
<td>Broadcast</td>
<td>Voice Activity Indicator</td>
</tr>
<tr>
<td>SRI-12</td>
<td>Rack Mount</td>
<td>4x24 17” 3x10</td>
<td>10.20” x 16.40” x 3.75”</td>
<td>Certified for Class I Division II use.</td>
<td>Speaker Mute</td>
<td>Focus</td>
<td>Monitor</td>
<td>Join/Unjoin</td>
<td>Broadcast</td>
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<td>Rack Mount</td>
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<td>10.20” x 16.40” x 3.75”</td>
<td>Certified for Class I Division II use.</td>
<td>Speaker Mute</td>
<td>Focus</td>
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<td>Broadcast</td>
<td>Voice Activity Indicator</td>
</tr>
<tr>
<td>SRI-12</td>
<td>Rack Mount</td>
<td>6x18 12” 3x10</td>
<td>8.75” x 19.00” x 10.00”</td>
<td>Certified for Class I Division II use.</td>
<td>Speaker Mute</td>
<td>Focus</td>
<td>Monitor</td>
<td>Join/Unjoin</td>
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<td>Rack Mount</td>
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<td>Certified for Class I Division II use.</td>
<td>Speaker Mute</td>
<td>Focus</td>
<td>Monitor</td>
<td>Join/Unjoin</td>
<td>Broadcast</td>
<td>Voice Activity Indicator</td>
</tr>
<tr>
<td>TDI-7</td>
<td>Rack Mount</td>
<td>4x16 7” 3x10</td>
<td>7.25” x 19.00” x 2.25”</td>
<td>Internal DAP.</td>
<td>Speaker Mute</td>
<td>Focus</td>
<td>Monitor</td>
<td>Join/Unjoin</td>
<td>Broadcast</td>
<td>Voice Activity Indicator</td>
</tr>
<tr>
<td>TDI-7 II</td>
<td>Rack Mount</td>
<td>4x16 7” 3x10</td>
<td>7.25” x 19.00” x 2.25”</td>
<td>Internal DAP.</td>
<td>Speaker Mute</td>
<td>Focus</td>
<td>Monitor</td>
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<tr>
<td>TDI-17</td>
<td>Rack Mount</td>
<td>4x48 17” 3x10</td>
<td>16.00” x 19.00” x 4.00”</td>
<td>Internal DAP.</td>
<td>Speaker Mute</td>
<td>Focus</td>
<td>Monitor</td>
<td>Join/Unjoin</td>
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<td>Speaker Mute</td>
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<td>Join/Unjoin</td>
<td>Broadcast</td>
<td>Voice Activity Indicator</td>
</tr>
<tr>
<td>TRI-6</td>
<td>Rack Mount</td>
<td>4x24 6” (2) 3x10</td>
<td>3.50” x 19.00” x 12.00”</td>
<td>Internal DAP.</td>
<td>Speaker Mute</td>
<td>Focus</td>
<td>Monitor</td>
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<td>Rack Mount</td>
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<td>3.50” x 19.00” x 12.00”</td>
<td>Internal DAP.</td>
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</tr>
</tbody>
</table>

Compunetix mission instruments support a wide range of voice features, including:

**Monitor**
Simultaneously monitor audio from any conference with the headset/handset or the front panel loudspeaker.

**Focus**
Apply Focus to a specific line key or to whichever line key is selected in talk-listen mode to increase its volume relative to other audio.

**Join/Unjoin**
Join conferences and calls together to create a large talk group, then Unjoin the talk group to recreate the original conferences and calls.

**Broadcast**
Start Broadcast mode, then select multiple conferences in talk-listen mode. All conferences can hear you, but they can’t hear one another.

**Speaker Mute**
Mute the instrument’s loudspeaker with a single action.

**Voice Activity Indicator**
Shows which line keys have voice activity.

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*Other mission instrument options are available. Contact Compunetix for details.
**SDAP=digital audio processor.
***DAP=digital audio processor.
Switching and Transport Equipment

Features and Capabilities

CONTEX MVP

Fourteen Slot ATCA Chassis
Six Slot ATCA Chassis
Two Slot ATCA Chassis

Now there is one mission voice system that meets the most demanding mission critical requirements. The CONTEX MVP mission voice switch utilizes the latest technology to meet your mission’s requirements. It combines a huge port capacity with mission-critical reliability, rich features, and a small footprint. The MVP allows people to meet in a secure fashion at any time, from anywhere in the world, to support virtually any mission.

The CONTEX MVP is a new class of mission voice equipment. This new platform combines the mission critical reliability of Compunetix’ mission voice hardware with the scalability and flexibility of a media server to smooth the transition from circuit-switched to packet-switched telecom networks.

KTMX

The KTMX provides a means of connecting up to twelve mission instruments via a T1, E1, or J1 interface. The KTMX can be used as a mission instrument distribution point within your facility or across the world. Up to three KTMX units can be located at remote sites. Each KTMX supports up to twelve mission instruments. The KTMX supports all Compunetix mission instruments.

iKTMX

The iKTMX provides a means of connecting up to twelve mission instruments at a remote location via an IP/Ethernet interface. The iKTMX can be used as a mission instrument distribution point within your facility or across the world. Up to three iKTMX units can be located at remote sites. Each remote iKTMX supports up to twelve mission instruments. The iKTMX supports all Compunetix mission instruments.

www.compunetix.com