Technomad™

MILITARY AUDIO SYSTEMS

Audio. Anywhere.™

MILITARY PA SYSTEMS

For mission-critical audio, there's only one choice: Technomad.

Technomad Military PA Systems are used by every branch of the US Armed Forces, the White House Communications Agency, the UK MOD and other national Armed Forces in applications including combat simulation, base-wide paging, ceremonial presentations, ship stand-off, vehicle-mounted PA and more.

Impervious to water, rain, snow, sleet, salt, UV radiation and rough handling, Technomad PA systems offer unmatched audio clarity — ideal for projecting speech, music, or sirens at long range. They are easy to setup and use, and are protected with integral flight-case technology from the top manufacturer of military cases, Hardigg Industries.
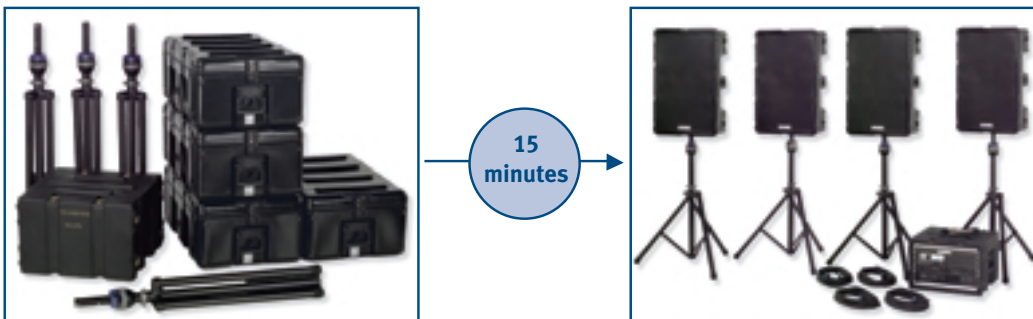
No other commercial or military audio system comes close to the reliability and sound quality of these systems. Technomad military products are available on GSA Schedule GS-15F-0019M, and can be purchased at **www.gsaadvantage.gov**.

KEY ADVANTAGES

- Unmatched Speech Clarity

- Systems Arrive Pre-Wired and Ready to Use

- Long Range (up to 1 mile radius per PA System)

- **No "Horn" Distortion**

- No Audio Experience Required

- Quick Setup (15 minutes or less)

- **Totally Weatherproof Loudspeaker Design**

- Outstanding Music Playback (Integrated CD/Tape Player in Turnkey models)

- Deployed OR Permanent Installation Use

- Self-Casing (Clamp-on Gasketed Lids & Recessed Large-Grip Handles)

- Palletizable & Lightweight for Shipping

- Optional Warning Tone Generator (creates 5 standard sirens with one-button access)

- Available Power Inverter for 24 V DC (Vehicle Powered) Operation

- Available Power Adapter (allows operation from 220V 'Euro' power)

- Available Link Kits (VERY Large Area Coverage via multiple PA systems joined via **Wireless** or fiber-optic connections)

15 minutes setup time, from case mode to ready-to-use

15 minutes

Anyone can connect and use our Turnkey PA systems. And unlike other military audio products, these systems are "open" so you can plug in practically any audio playback device or signal source. Most people can have a system up and running within 15 minutes, even if they have no prior audio experience! The Modular PA systems — used to link one audio source to multiple PAs — are truly 'plug and play' — no programming or complex setup is required.

SELECT THE RIGHT PA SYSTEM FOR YOU

Turnkey Systems *or* Modular Systems

Technomad Military PA Systems come in two varieties: 'all-in-one' Turnkey Systems or flexible Modular Systems. **Turnkey Systems** include everything you need, including loudspeakers, an amplifier, a mic, mixer, CD/Tape player, stands and cables in one pre-wired and easy-to-use package. Turnkey PA Systems are the best choice for all-around military audio use because they can handle everything from voice paging to music playback to siren generation (with the optional Warning Tone Generator). They can also handle base-wide paging for areas up to 1 mile in radius.

More complex needs such as VERY large area paging – bigger than 1 mile radius — require the 'building block approach' of Technomad **Modular Systems.** Modular PA modules include the Audio Source Pack (which generates audio for the whole system), Output Packs (loudspeaker/amplifier clusters), and Link Kits (which distribute audio via wireless or fiber optic connections).

If you are unsure about which approach is right for your situation, a sales rep can help you determine the best choice.

TURNKEY OR MODULAR

TURNKEY PA SYSTEMS

All Technomad Turnkey Military PA Systems include a pre-wired Control Rack that includes an amplifier, 5 input mixer (2 mic, 3 line inputs), CD & Tape Player. Also included are a hand-held wired microphone, tripod stands, speaker cables and loudspeakers. Turnkey systems differ primarily in the quantity and range of outdoor speakers.

Turnkey Systems ship **ready-to-use:** just remove the protective covers, connect power and plug in the loudspeaker cables. You're ready to project audio. You can even connect your own audio devices (like a computer or mp3 player) to the system using the standard inputs — no proprietary adapters needed! Turnkey Military PA Systems are the best choice for simple deployed use and all-around military audio since they can handle everything from voice paging to music playback to siren generation (with optional Warning Tone Generator).
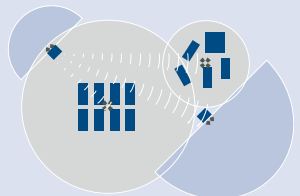
MODULAR PA SYSTEMS

Technomad Modular Military PA Systems are "building blocks" you can use to custom-build a PA system for your special application. While for most applications a Turnkey PA is the best choice, larger facility setups may require the modular approach.

MODULAR PA ELEMENTS

MODULAR PA COVERING A BASE

If you need to use several PA systems to cover a VERY large area (many square miles), the Modular approach is best.

Example: you want to generate audio at a command post and install loudspeaker clusters someplace else. In that situation, you'd use an Audio Source Pack (to generate audio at the Command Post), Link Kits to distribute the audio signal as needed around the base, and several Output Packs (PA systems) to project audio at several locations.

TURNKEY SYSTEMS
Up to 1 Mile Away — Clear Audio Projection

Technomad Turnkey Military PA Systems are simple, complete audio packages. They include everything you need to project voice and music at long distances in real-world applications, both mobile/tactical and permanently installed (with optional wall-mounting brackets). Systems are pre-wired and **ready for use** upon delivery. They include a microphone, CD/Tape player, mixer, tripods, speaker cables, weatherproof loudspeakers and more, and can be set up in 15 minutes. Standard Turnkey PA systems operate from 110V AC power. 220V and 24VDC power supplies are available as well as other **optional accessories** — see page 6.

All systems include:

- MILITARY GRADE WEATHERPROOF LOUDSPEAKERS (impervious to rain, snow, salt, fog, etc.)
- CABLES
- TRIPODS
- CONTROL RACK (prewired flight case with amplifier, 5-input mixer, CD/Tape Player, wired microphone)

DIRECTIONAL PA SYSTEMS — 180 DEGREE/SEMI-CIRCULAR COVERAGE
Choose when you need sound primarily in one direction.

MilPA 1

FOR 180-DEGREE COVERAGE UP TO 1/2 MILE
(based on 2 Pismo loudspeakers)
Product #: 472-TNO-723

MilPA 2

FOR 180-DEGREE COVERAGE UP TO 1 MILE
(based on 2 Omaha loudspeakers)
Product #: 472-TNO-725

OMNIDIRECTIONAL PA SYSTEMS —360 DEGREE / CIRCULAR COVERAGE
Choose when you need sound in all directions.

MilPA 3

FOR 360-DEGREE COVERAGE UP TO 1/2 MILE
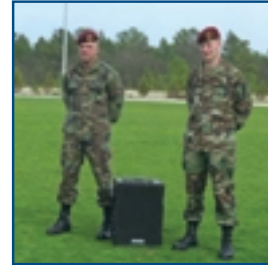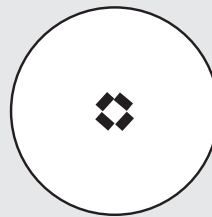(based on 4 Pismo loudspeakers)
Product #: 472-TNO-724

MilPA 4

FOR 360-DEGREE COVERAGE UP TO 1 MILE
(based on 4 Omaha loudspeakers)
Product #: 472-TNO-726

165ºW   150ºW   135ºW   120ºW   105ºW   90ºW   75ºW   60ºW   45ºW   30ºW   15ºW

MODULAR SYSTEMS…EASY AS 1,2,3

Technomad Modular Military PA Systems are "building blocks" you can use to custom-build a PA system for your special application. Please note: for applications like small base paging and mobile audio a Turnkey PA is the best choice — see page 3. All components of Technomad Modular PA Systems are integrated into Hardigg flight cases, and can be set up quickly and easily. Systems can be permanently installed or deployed for mobile use. Systems are linked using digital fiber-optic or wireless spread-spectrum Link Kits. Standard Modular PA systems operate from 110V AC power. 220V and 24V DC power supplies are available as well as other **optional accessories** – see page 6.

BASE-WIDE PAGING SYSTEM EXAMPLE

Gate House
- Semi-circular coverage
- Up to 1/2 mile radius
- Components: Audio Source Pack, Output Pack 1, Wireless Omni High-Gain Link Kit

Operations Center
- Circular coverage
- Up to 1/2 mile radius
- Components: Output Pack 1, Wireless Directional High-Gain Link Kit

Tent City
- Circular coverage
- Up to 1 mile radius
- Components: Output Pack 4, Wireless Directional High-Gain Link Kit

Firing Range
- Directional coverage
- Up to 1 mile radius
- Components: Output Pack 2, Wireless Directional High-Gain Link Kit

1 **AUDIO SOURCE PACK generates audio for transmission to Output Pack(s) via wireless or fiber optic Link Kits.** Audio Source Pack includes: flight case, cd-player, tape deck, expandable mixer, and a hand-held microphone. Add an optional Warning Tone Generator for additional utility. The Source Rack is pre-wired. No setup is required.

2 **LINK KITS (either wireless or fiber-optic) are used to send audio from the Audio Source Pack to one or more Output Packs.** One Link Kit is required PER location — one at the Audio Source Pack, one at each Output Pack.

3 **Choose from one of four OUTPUT PACKS to complete your modular system.** Output Packs receive the audio signal transmitted by Link Kits and amplify it and project the signal through loudspeakers. There are Directional and Omnidirectional Output Packs available, so you can choose the coverage pattern (and range) you need to provide audio on your facility.

165ºW   150ºW   135ºW   120ºW   105ºW   90ºW   75ºW   60ºW   45ºW   30ºW   15ºW

AUDIO SOURCE PACK

Complete Audio Source Pack generates audio for transmission to Output Pack(s) via Wireless or Fiber Optic Link Kits. Includes CD player, tape deck, 5-input mixer, and hand-held wired microphone, all pre-installed into a weatherproof flight case. Provides room for optional Warning Tone Generator, Telephone Audio Interface, etc. **Product #: 472-TNO-839**

LINK KITS

Link Kits send audio from the Audio Source Pack to one or more Output Packs.
There are two varieties of Link Kit: Wireless (best for most applications) or Fiber Optic.

Wireless Link Kits

LINK KIT, TRANSMIT OR RECEIVE, WIRELESS, STANDARD, OMNI Wireless audio link. Acts as transmitter or receiver of audio (must be pre-set by Technomad). Includes integrated 5 dB omnidirectional antenna. No license required for use, 2.4 GHz spread spectrum. Can be used with Technomad wireless link nodes such as the 472-TNO-913, 472-TNO-911, and 472-TNO-910. **Product # 472-TNO-909**

LINK KIT — WIRELESS, SEND/RECEIVE, HIGH GAIN, OMNI High gain (increased range) version of the Technomad version II wireless link system. Includes 9 dB Omni-directional antenna. Can be used with Technomad wireless link nodes, such as the 472-TNO-909, 472-TNO-911, and 472-TNO-910. **Product # 472-TNO-913**

LINK KIT — WIRELESS, SEND/RECEIVE, HIGH GAIN, DIRECTIONAL High gain (increased range) version of the Technomad wireless link system. Includes 16 dB directional antenna. Can be used with Technomad wireless link nodes, such as the 472-TNO-913, 472-TNO-911, and 472-TNO-909. **Product # 472-TNO-910**

LINK KIT — WIRELESS REPEATER Wireless repeater for Technomad wireless systems. Does not transmit or receive audio — instead, it acts as a repeater to extend the range between send/receive nodes, or to allow routing of signal around obstacles to line-of-sight. Can be used with Technomad wireless link nodes, such as the 472-TNO-913, 472-TNO-909, and 472-TNO-910. **Product # 472-TNO-911**

Fiber-Optic Link Kits

FIBER-OPTIC TRANSMITTER PACK Transmits high-quality audio from output of Audio Source Pack via single mode fiber, not included. Links to receiver —800 below. Maximum range 6 miles. **Product # 472-TNO-799**

FIBER-OPTIC RECEIVER PACK Receives high-quality audio from output of Audio Source Pack via single mode fiber, not included. Links to transmitter – 799. Maximum range 6 miles. **Product # 472-TNO-800**

OUTPUT PACKS

Output Packs receive the audio signal from Link Kits – generated by an Audio Source Pack – and amplify and project it through loudspeakers. There are Directional and Omnidirectional Output Pack models.

OUTPUT PACK 1

FOR 180-DEGREE COVERAGE UP TO 1/2 MILE

(based on 2 Pismo loudspeakers)
Product # 472-TNO-843

Loudspeaker Cluster

OUTPUT PACK 2

FOR 180-DEGREE COVERAGE UP TO 1 MILE

(based on 2 Omaha loudspeakers)
Product # 472-TNO-846

Loudspeaker Cluster

OUTPUT PACK 3

FOR 360-DEGREE COVERAGE UP TO 1/2 MILE

(based on 4 Pismo loudspeakers)
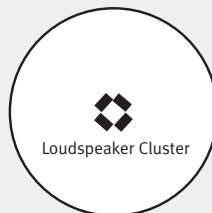Product # 472-TNO-847

Loudspeaker Cluster

OUTPUT PACK 4

FOR 360-DEGREE COVERAGE UP TO 1 MILE

(based on 4 Omaha loudspeakers)
Product # 472-TNO-848

Loudspeaker Cluster

| 15°W | 30°W | 45°W | 60°W | 75°W | 90°W | 105°W | 120°W | 135°W | 150°W | 165°W |

OPTIONAL ACCESSORIES

Technomad offers a complete line of optional accessories to customize or expand your military PA system. Most options can be used with either Turnkey or Modular systems — consult your Technomad sales rep with any system design questions. Options ordered with PA Systems are **normally pre-installed** at the factory if appropriate (i.e. Warning Tone Generators are installed into Turnkey PA Systems unless customer requests otherwise).

472-TNO-849 Warning Tone Generator
This rack mounted device creates switch-selectable tones including: siren evacuator, whoop-tornado, warble-fire, burst 1 and burst 2. Knob sets tone type, switch starts siren.

472-TNO-727 Pismo Expansion Kit
Adds two Pismo military loudspeakers and two 25' cables to either the MilPA1, MilPA3, Output Pack 1, or Output Pack 3 systems. (No more than 6 loudspeakers should be operated from one Technomad PA system)

472-TNO-728 Omaha Expansion Kit
Adds two Omaha military loudspeakers and two 25' cables to either the MilPA2, MilPA4, Output Pack 2, or Output Pack 4 systems. (No more than 6 loudspeakers should be operated from one Technomad PA system)

472-TNO-731 Wireless Microphone
Operating range up to 200 yds on US frequencies, dependent on weather conditions and RF environment. VHF.
Also available: 472-TNO-751 Wireless Mic Headset Wireless headset version of -731 microphone.

472-TNO-793 Step Down Voltage Transformer
Allows Technomad Military PA Systems to operate from 200-240V AC Power ("Euro" power).

472-TNO-918 24 Volt Inverter
Allows Technomad Military PA Systems to operate from 24V DC Power. Note: vehicles must have a 100A or larger capacity alternator for continuous high power operation.

472-TNO-732 Wallmount Bracket — Omaha Speaker
Permanently install your weatherproof Omaha loudspeakers directly on walls or building surfaces. One bracket required per speaker, 4 bolts included.

472-TNO-733 Wallmount Bracket — Pismo Speaker
Permanently install your weatherproof Pismo loudspeakers directly on walls or building surfaces. One bracket required per speaker, 4 bolts included.

472-TNO-773 Outdoor LoudSpeaker Cable, 100'
100' of outdoor loudspeaker cable, weatherproof, 12 gauge

472-TNO-811 Outdoor Loudspeaker Cable 200'
200 feet of outdoor loudspeaker cable, weatherproof, 12 gauge.

472-TNO-822 Telephone Interface
This auto pickup and disconnect telephone answering coupler picks up after one ring and interfaces standard phone POTS lines into the Technomad audio system.

472-TNO-921 Automatic Timed Audio Player
This easy-to-use playback device stores up to 6 minutes of audio (at medium quality playback — up to 10 minutes at low), and can be programmed to automatically play audio clips (music, announcements, etc.) at specific times of the day. For example, it can play Reveille at 0600, Taps at sunset, or security announcements throughout the day. No computer required for programming or 24-hour operation — device is configured using standard touch-tone phone (not included).

472-TNO-873 Flash-Ram Recorder/Player
High quality digital audio player/recorder, with available instant-on from contact closure. 1/2 rackspace. User can record and trigger up to 250 audio clips. Over 45 minutes of recording time on included media (depending on user-set recording quality).

472-TNO-833 4 Mounting Plate/Clips, 4
This set of four recessed mounting places installs onto the Rack Case bottom to attach either casters (472-TNO-853) or legs (472-TNO-852) for a secure hold as well as easy release.

472-TNO-852 Legs Kit
Four 25" legs, anodized black aluminum. Raise your military PA control rack above the ground for comfortable operation. Legs clips onto mounting plates – not included (see 472-TNO-833).

472-TNO-853 Removable 3.5" Casters
Get easy-roll transport with these four high quality 3.5" casters that clip onto mounting plates – not included (see 472-TNO-833).

472-TNO-838 Control Rack Upgrade
Upgrades your standard hard-mount case to a 10U Hardigg shock-mounted case with rubber suspension for extreme environment usage. Must be ordered at same time as PA system being upgraded.

472-TNO-895 External Connector Option/Sealed Rack Operation
This connector allows your Technomad Control Rack to operate with lid closed by supplying 2 speaker connectors, weatherproof AC power input and a balanced audio input on the outside of the case.

472-TNO-881 13' High Lift Loudspeaker Tripod
2 Pismo or 1 Omaha capacity tripod comes with a guying system to stabilize (3 guying lines, ground stakes, etc.). Tripod lifts loudspeakers to maximum height of thirteen feet.

472-TNO-351 6' Loudspeaker Tripod
Standard lightweight aluminum and collapsible tripod supports either Technomad Pismo or Omaha loudspeakers and folds away for easy transport.

472-TNO-925 Guyline Kit
Stabilize your standard tripods in high winds with this kit of 3 tensionable guylines and ground stakes. (Not needed for high-lift tripods, which include their own guylines.)

472-TNO-854 Leg/Caster/Tripod Case
Store and transport your tripods, legs, casters and other items in this Hardigg, rotomolded accessory case built to Mil-Spec with two easy-transport handles and a gasketed lid. Internal dimensions: 59" x 10" x 10" (holds 4 standard tripods — does not fit High-Lift tripods).

472-TNO-962 High-Lift Tripod Case
High-quality rotationally molded mil-spec flight case for Military PA high-lift tripods. ATA-III compliant. Two handles for easy transport. Gasketed lid. Internal dimensions: 69" x 12" x 13" (holds 2 High-Lift tripods).

472-TNO-967 Accessory Drawer
2 rackspace high drawer, installed into Technomad military PA Control Rack. Ideal for storing accessories, cables, CDs, etc. Note: confirm with Technomad rep if 2U Drawer will fit with your ordered configuration of acessories.

472-TNO-968 Cable/Accessory Pouch
Cable/Accessory pouch, installed on inner front lid of Technomad Military PA Control Rack. Ideal for storing small items, microphones,etc.

Information and specifications presented in this catalog are subject to change without notice.

TECHNOMAD MILITARY PA SYSTEMS

Frequently Asked Questions

How reliable are Technomad Military PA Systems?

Technomad loudspeakers are completely weatherproof – impervious to rain, snow, sleet, salt fog, UV radiation, insect attack, rough handling, and more. Mil-Spec 810F compliant, they are constructed from thick, one-piece polyethylene and incorporate case technology licensed from Hardigg Industry. The control systems are encased in Hardigg flight cases. No other commercial or military loudspeaker comes close to the physical and electrical reliability of Technomad.

How clear/intelligible will speech be through a Technomad system?

You'll find unmatched speech and voice clarity, free of horn-mouth distortion and the limited frequency range of other systems. Technomad systems excel not only at being audible, but intelligible even in noisy environments.

Where can I install them?

Technomads can be installed on any ship or building using the optional wall-mounting brackets. All Turnkey systems also include tripods for deployed/field use. They can be installed in any environment, including tropical, arctic, and desert environments without fear of loudspeaker failure.

Can I mount a Technomad Military PA system on a vehicle?

YES. With the optional power-inverter, any Technomad system can operate off of 24V vehicle power (AND off of standard US AC power). IMPORTANT: your vehicle must have a 100A alternator and Technomad does not provide mounting hardware to attach loudspeakers to a specific vehicle model. All of our loudspeakers, however, include many strong, molded-in threaded inserts which can be used to bolt the loudspeaker to a support frame or other hardware.
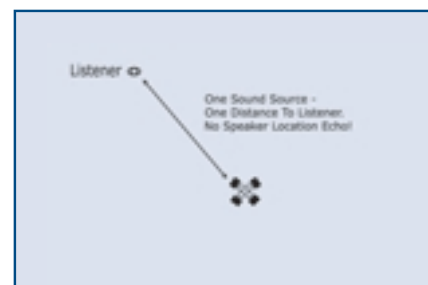
Should I install speakers at the edges of my base pointing in OR in the middle of my base pointing out?

For smaller, "one-PA" facilities it is better to install speakers in a central cluster rather than at the edges of a facility pointing in — this results in all sound originating from the same place, and reduces echo. See our website for more details **(http://military.technomad.com)** and feel free to call us with questions about your particular setup.

Wrong	Right

Can the Technomad Military PA Systems be run from solar panels? Vehicles?

Yes. If your power generating system charges a 24V battery rig, then the Technomad Military PA can be driven from the batteries (just as in a vehicle mounted system) using the Power-Inverter Option. Note that the length of time the system will operate is determined by the amp-hour capacity of the battery rig, the recharge rate provided by the solar panels, and by the type of audio the PA system is reproducing. A 100A alternator is needed for continuous high-volume use from vehicle power.

FREQUENTLY ASKED QUESTIONS

165ºW   150ºW   135ºW   120ºW   105ºW   90ºW   75ºW   60ºW   45ºW   30ºW   15ºW

Does Technomad offer WIRELESS controlled PA systems?

Yes. Optional wireless Link Kits will allow you to send audio from any audio source to one (or many) receivers. Commonly used to relay audio from an Audio Source Pack to remote Output Pack PA systems, the Link Kits operate at 2.4GHz and use a digital mesh networking system for reliability and ease of setup. The result is VASTLY better audio than typical analog military audio systems, especially narrowband systems. No in-the-field programming is needed — just add power and your system is up. See page 4–5 for details.

What frequencies and certifications apply to Technomad's Military PA wireless Link Kits?

In general, Technomad Wireless Link kits can be used around the globe without conflict with other military communications systems or local regulations. The typical radiated power from the wireless systems is 200 mW @ 2.4 GHz spread-spectrum, digital and frequency-hopping. The system uses the "WiFi" band (used world-wide without license requirements), but employs a proprietary digital encoding method with powerful error-correction. FCC Part 15C, Identifiers NCBSL9000 , NCBSL9100, NCBSL9102.

Is any programming required when setting up a Technomad wireless system?

No! Technomad systems don't require a computer and are designed to require zero programming or other technical setup in the field. The Link Kits are pre-configured at the Factory, and automatically locate and connect to each other. Turnkey setups can be out of the box and running in about 15 minutes. Note that simple reconfiguration of your systems will be required if you need to combine them with systems used by other units or other locations, or if you need to change your systems functionality (add/remove transmitters, etc).

Are there FIBER OPTIC controlled systems?

Yes. Technomad also offers optional fiber optic Link Kits which allow you to send audio from any audio source to one (or many) receivers — while preserving CD quality sound.

Can Technomad Military PA Systems be used for shipboard/marine applications?

Yes. Our systems are ideal for use on ships. The speakers are resistant to salt fog and corrosion, and provide clear speech and music for "standoff" warnings to small craft up to 1 mile away. The Military PA control rack should be operated in a dry location, but the loudspeakers can be permanently installed on-deck. The provided protective lids should be attached during extreme weather/hurricanes, etc.

Why should I used Technomad Military PA Systems instead of a "horn" system?

Horn systems degrade speech and destroy music quality. Technomad systems provide unmatched speech intelligibility, AND can play warning tones, sirens and music with outstanding results.

How is the sound quality? Can I play music through a Technomad PA?

Technomads deliver music playback quality equal to the finest commercial PA systems with "no-compromises" music quality, deep bass and clear, detailed highs. Speech, singing voice and amplified instruments all sound great. Warning tones, local-language announcements, sirens and other sounds are faithfully reproduced. This is essential for clear communications, for deception/PSYOPS use and for music playback.

Can I hook up my existing audio equipment to a Technomad Military PA?

Yes. Unlike other military audio products, Technomad systems are "open." We provide mixers with standard XLR, 1/4" and RCA connectors, allowing you to plug virtually any audio playback device or signal source into the PA system.

Technomad Military PA Systems can be deployed in 15 minutes or less by one operator, and are used for permanent installations or mobile/tactical operations. Systems are palletizable. Operating range: up to 1 mile. If tactical applications, force protection, PSYOPS, high quality music and speech reproduction, or site-wide paging is your priority, Technomad is your solution.

FREQUENTLY ASKED QUESTIONS

FREQUENTLY ASKED QUESTIONS

I need to record custom announcements, music, warning tones and sound effects, and play them back. How can I do this?

(a) If you have the capability to burn CDs you can play them using the CD Player included in all Technomad Turnkey Military PA Systems and Audio Source Packs. (b) The Turnkey PA Systems include a cassette recorder for in-the-field message recording and playback. (c) You can order the optional Flash-RAM Audio player and record any audio you want onto this flash-RAM player. (d) You can order the optional Automatic Timed Audio Player (472-TNO-921) that can record up to 6 minutes of audio and play sound clips back at pre-programmed times (i.e. Reveille at 0600 every day, etc.).

Can I mount a Technomad Military PA permanently on a building?

Yes. Technomad offers optional wall-mount brackets, which allow you to bolt a loudspeaker directly to a wall, pole or other strong stable structure. (472-TNO-732 AND 472-TNO-733)

How easy to transport is a Technomad Military PA? Can one person move it? Is it palletizable?

Technomads can be broken down and moved in compact (1-2 person lift) elements. No part of the system weighs more than 100 lb (45 Kg). The total weight of the systems ranges from 200 lbs (MilPA1) to 600 lbs (MilPA4DC). The largest Technomad Military PA, with a 1 mile radius range, takes up only 25% of a standard Air Force 463L pallet.

Are Technomad Military PA Systems expandable? Can I add more speakers to a basic system later?

YES. You can add like-type loudspeakers to any Technomad system to bring the total quantity up to 6 loudspeakers. You can order expansion kits directly from us (472-TNO-727 and 472-TNO-728). Each set arrives with 2 additional loudspeakers and cables.

I want to cover a LARGE area (i.e. an entire base). How can I do this?

It is simple to "link" several Technomad systems with optional microwave wireless Link Kits or fiber-optic Link Kits. Technomad Sales can help you determine how many Modular PA Systems and link modules you'll need for your large area. Keep in mind that just one omni-directional Turnkey Technomad PA — like the MilPA3 or the MilPA4 — can cover a small base by itself. See pages 4–5 for more information on wide area audio.

Can I use Technomad Military PA Systems for Force Protection/Mass Notification?

Yes! Technomad Military PA Systems offer significant advantages over traditional force protection/mass notification PA systems, such as those that use "horn" loudspeakers. Advantages include: better speech intelligibility, multi-mode use (sirens/speech) and quick setup in tactical and emergency environments.

I am considering upgrading my Whelen PA system. What advantages does Technomad offer vs. Whelen?

Technomads offer a number of advantages over Whelen's military audio products, including: lower system cost for many typical applications, much better speech clarity and music quality, easier setup, no-programming deployment of wireless systems, lighter weight, self-casing design, smaller total volume when palletized, digital audio links with CD quality, no "triggering delay" between multiple speaker locations, open system allowing attachment of standard audio gear (no proprietary connectors), and much more.

165ºW   150ºW   135ºW   120ºW   105ºW   90ºW   75ºW   60ºW   45ºW   30ºW   15ºW

What kind of operating range can I expect from my Technomad PA system?

Under optimal conditions (still dry air, no obstacles), the MILPA1, MILPA3, Output Pack 1, and Output Pack 3 systems have a range of 1/2 mile (delivering 57.5 dB). Under optimal conditions the MILPA2, MILPA4, Output Pack 1, Output Pack 4 systems have a range of 1 mile (delivering 57.5 dB). Note that these maximum ranges will be reduced by high winds, trees or other obstacles blocking the audio path between loudspeakers and listeners, and high levels of background noise. A flat desert will allow better operating ranges than dense, hilly, jungle. It is wise to plan for partial degradation of any system's range in real world conditions. Note that multiple PA systems can be combined using Technomad Link Kits, providing virtually unlimited coverage/range even in the harshest conditions.

Who uses Technomad Military PA Systems?

Technomad Military PA Systems are uses by all branches of the US Armed Forces, by the White House Communications Agency, by the UK MOD, the Canadian Armed Forces, and by other National Armed Forces. Applications include combat simulation, presentations and ceremonial use, PSYOPS, base-wide paging, deployed site communications, ship stand-off/warning systems, mobile/vehicle mounted audio, and much more. We look forward to supporting YOUR mission.

What is the Technomad Warranty?

Technomad loudspeakers are covered by a 10 year unconditional warranty on the plastic loudspeaker cabinet, a 5 year warranty against manufacturing defects in metal cabinet parts (grill, inserts, etc.), and a 2 year warranty against manufacturing defect in loudspeaker electronic parts (drivers, crossovers, etc.). Failure of any electronic speaker component due to excessive input signal (including but not limited to voice-coil burn-out) is not covered by this warranty. All Control Rack (non loudspeaker) electronic components are covered by a 1 year warranty. This is not a complete statement of the Technomad warranty, which is available at the Technomad website.

Why are Technomad Loudspeakers so Weatherproof?
Here are some of the key elements:

We start with a thick, military-specification, rotationally-molded shell that has outstanding acoustic properties and is virtually indestructible — heat, UV radiation, cold and other sources of damage are inconsequential to our loudspeaker cabinets. Technomad cabinet walls are as thick as the best Baltic-birch touring sound cabinets, and are 3 to 4 TIMES thicker than ordinary injection molded loudspeaker cabinet walls.

The Technomad WeatherTech™ three-layer grill system is unmatched by anything in the industry. This grill consists of:

• A small-diameter perforated stainless steel layer

• A nylon mesh layer to further break down precipitation

• A acoustically-transparent foam layer — which is treated with a proprietary hydrophobic coating. This special coating causes rain and moisture to "run screaming" away from the loudspeaker's drivers.

Technomad high-frequency and low frequency drivers are weatherized at the component level — for example, our smaller bass drivers use polypropylene cones with pure rubber surrounds. Our larger bass drivers use a fiber cone that is plasticized via a proprietary three-step process, resulting in a driver with outstanding acoustic properties and incredible resistance to moisture and humidity. The spiders and surrounds of all Technomad cone drivers are specially treated to resist water damage, and our high-frequency drivers are mechanically and chemically protected.

Unlike our competitors, we don't pretend that water will never enter our loudspeaker cabinets — we know it will! For example, no matter how excellent a grill system one uses, moisture WILL build up inside a ported loudspeaker through condensation (especially in humid environments with a significant temperature change during the day/night cycle). We solve the problem of in-cabinet condensation by drilling tiny bleed holes through the corners of our cabinets — this allows condensation and water forced through the WeatherTech™ grill to drain harmlessly away. One never opens a Technomad cabinet to find half an inch of disgusting, algae-infested water trapped inside!

Technomad crossovers and internal electronics are sealed, and are totally unaffected by moisture. Proprietary anti-fungal treatments protect the inside of the cabinet, killing mold, fungus, and other biological sources of damage.

ABOUT THE COMPANIES

Since 1994 Technomad Inc. has built the "Toughest Loudspeakers in the World."
With thousands of loudspeakers installed around the globe and used for demanding mobile applications, Technomad delivers unmatched audio quality AND reliability in the harshest environments. Technomad PA systems offer a unique combination of fidelity, power, clarity, wide coverage, and long range.

HOW TO BUY

please visit: http://military.technomad.com