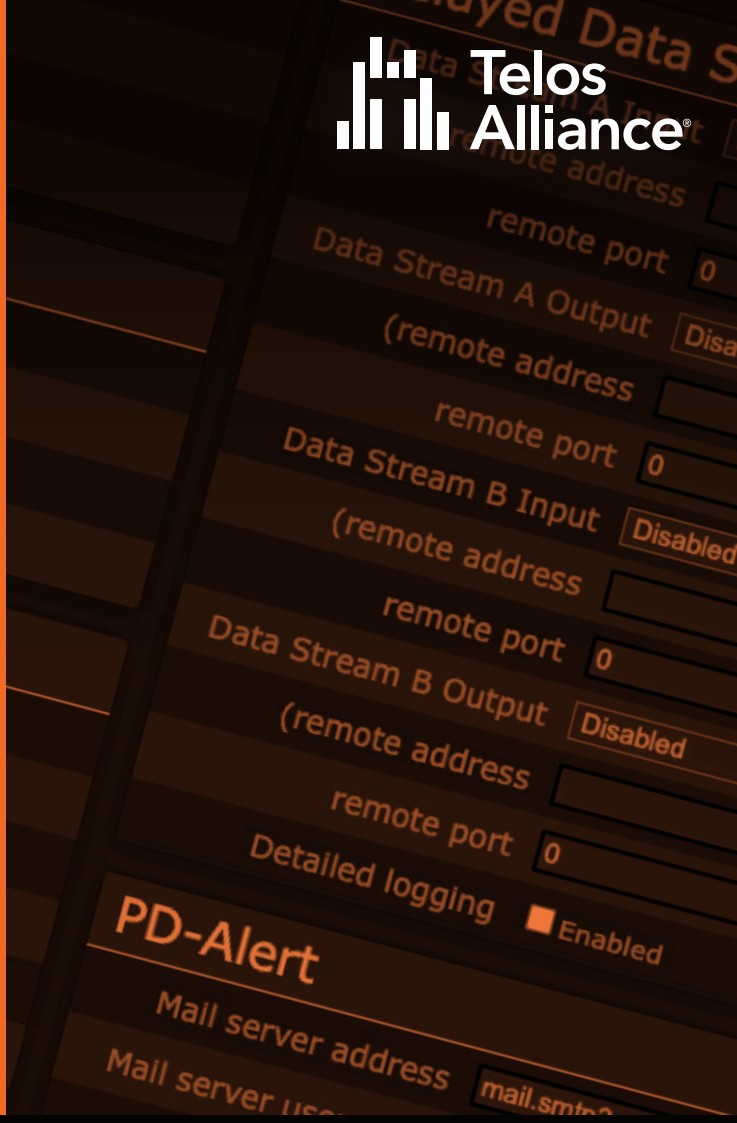
25-Seven® PDMX

PDMX brings the features and functions of the legendary PDM II to a software-based AoIP environment.

Telos Alliance®



25-Seven® PDMX Program Delay Software

Audio Program Delay For Virtual Workflows

Route & Monitor with Pathfinder

AES67 Livewire+™

Superior Audio Algorithm Quality

Overview

- PDMX delivers all the functions of the renowned PDM II delay in a pure software embodiment
- Container-based instances enable high-density, server-based deployment
- Livewire+AES67 I/O powers a purely AoIP-based workflow, including Livewire GPIO
- PD Alert™ instantly emails time-stamped audio files whenever the Dump button is pressed
- “Dump” file captures what took place both on-air and off-air
- Seamlessly builds and exits delay, with configurable delay time, build, and dump options
- Delays IP metadata streams and GPIO, maintaining audio sync

Features

Program Delay, Virtually!

PDMX brings the legendary features of the original PDM (Program Delay Manager) and PDM II broadcast delays into the virtual age. Ease of use, transparent audio quality, and program director-friendly features combine with AES67 AoIP, Livewire GPIO control, and reliable container architecture to take air chain management to the next level.

PDMX is purpose-built for server-based, scalable facilities with forward-thinking broadcasters in mind. It is delivered as a container and can be deployed on-premises on a COTS (commercial off-the-shelf) server, on a cloud-based platform such as AWS, or on the Telos Alliance AP-3000 hardware platform.

For those wanting the benefits of a virtualized software processor but with the simplicity of pre-configured hardware, up to four instances of PDMX can be pre-installed on the Telos Alliance® AP-3000 hardware platform.

Flawless Time Expansion/ Compression

The Air Check is in Your Email

Program Directors have more on their plates today than ever before. There's no way anyone can monitor every broadcast hour of every day, but PDs need to be the first to know what happened when that "dump" button gets pressed.

With PDMX's patented PD-Alert™ feature, two time-stamped audio files capturing what took place both on-air and off-air get internally archived and emailed to the PD (or GM, or CE, or the legal team) every time questionable material is "dumped".

For broadcasters who are serious about protecting their license, PDMX provides an instant log record establishing your company's action and intent to keep the airwaves clean.

99 Seconds Of Delay Your Way

PDMX comes standard with 99 seconds of stereo audio delay, and a dump function that can be set to remove any number of seconds you choose.

Build a delay through pre-rolling, time expansion, or audio file playout capabilities built right into PDMX. Exit a delay through time compression or use the Cough button to simply wait and exit.

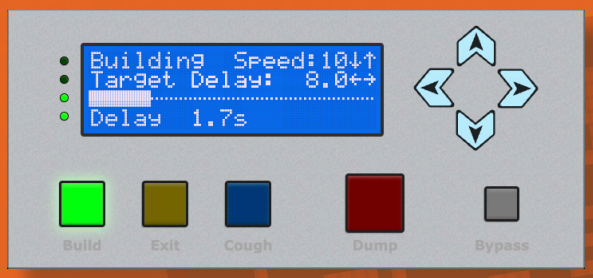
Dump audio through the standard "cut and rebuild" method, or use PDMX's Overkill™ feature to play a show-specific fill file from a list and play it over the dump buffer instead of collapsing the delay.

How PDMX Does It

Superior Algorithm Design for Flawless Time Expansion/Compression

PDMX utilizes the industry's most transparent time compression and expansion algorithms from our PDM and PDM II hardware delays. Your listeners probably won't appreciate our superior, artifact-free audio - because they won't perceive it's in use!

Our algorithms serve up smooth, crisp, stutter-free audio, even on stereo music. Unlike other products, we never splice at level thresholds or alter pitch. Clean audio is what we do best, but now you can be sure the content is "clean" as well Better algorithms mean delays can be rebuilt faster, so you can safely get back to your callers. Build or Exit rates can be adjusted in real-time, so you can be more or less aggressive, depending on the audio content.



Audio, RDS, Data Streams and GPI/O Stay Synced

Audio, RDS, Data Streams, and GPI/O Stay Synced

PAD or “now playing” serial data streams are delayed in precise synchronization with the audio as it grows, shrinks, or whenever the dump button is pressed. PDMX’s data-follow-audio capabilities allow flexible synchronization from data input to data output. For example, serial data over IP can be routed to an IP output while remaining synchronized to the audio. Two independent data delays are supported. Livewire GPI/O closures stay in sync, too.

AoIP Native Livewire+AES67 Audio

PDMX is built for today’s modern AoIP-based facility. Whether you already have a Livewire network or you plan to build an AoIP facility around the AES67 standard, PDMX has you covered with Livewire+AES67 connectivity.

Livewire IP-Based Remote Control

20 Livewire GPIOs are available, with user-selected functions covering every switch and control state available. Full bi-directional serial control over IP includes advanced real-time status monitoring of parameters such as current delay depth and audio levels.

HTML5 Web Configuration and Control

A comprehensive, password-protected HTML5 web interface lets you manage your PDMX instances from anywhere with any device using a modern web browser. Our Multi-View web feature permits network operation centers and large facilities to monitor and manage up to 20 units from a single browser screen.

Navigating through “set and forget” parameters is a breeze with our built-in HTML5 web server. Change your settings, upload audio files, and manage PDMX’s dump archives remotely using simple, clear browser screens.

Pathfinder Control and Support

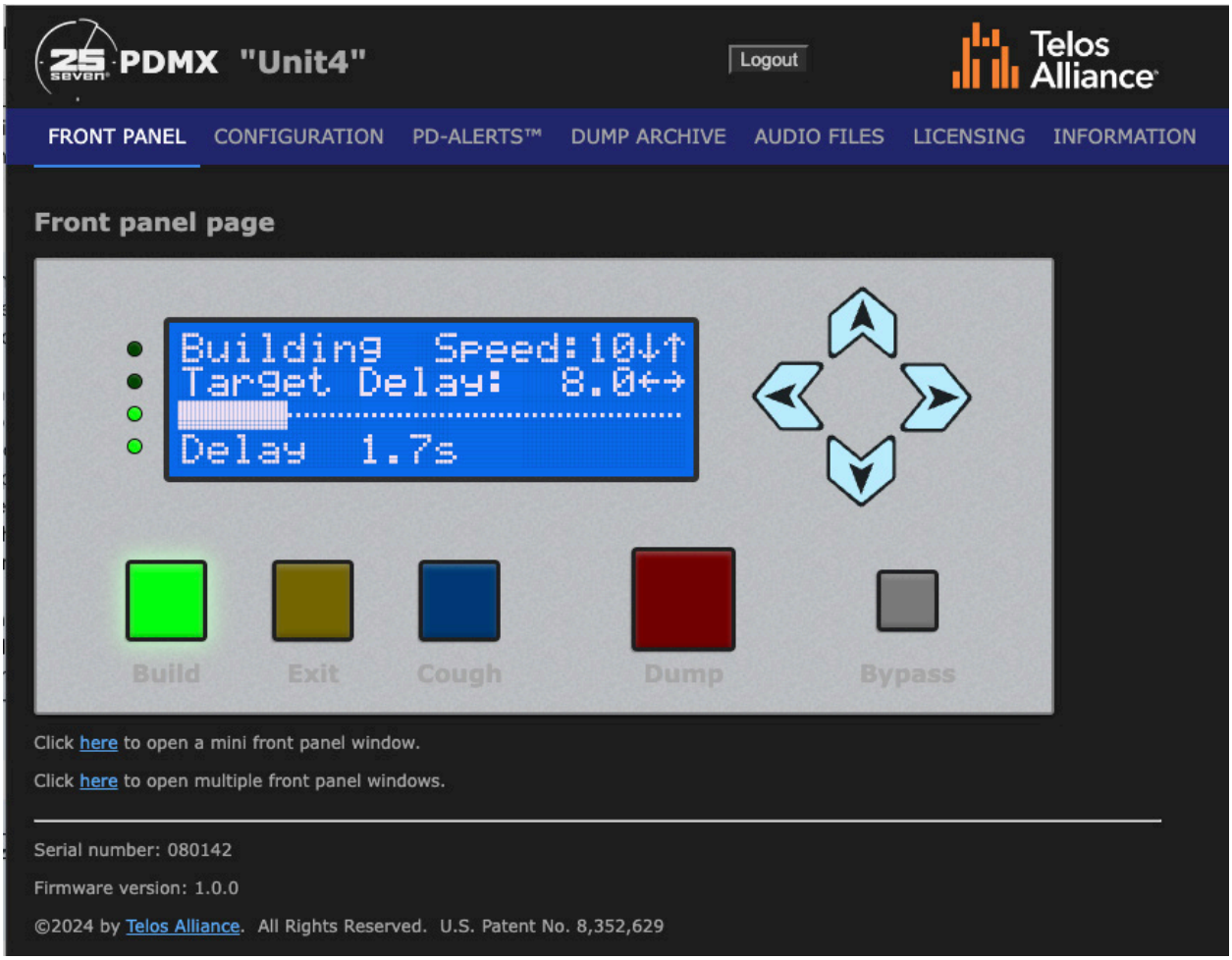
With full support of the LWRP protocol, Telos Alliance’s Pathfinder broadcast controller can monitor, control, and change the AoIP input/output routing of any PDMX instance.

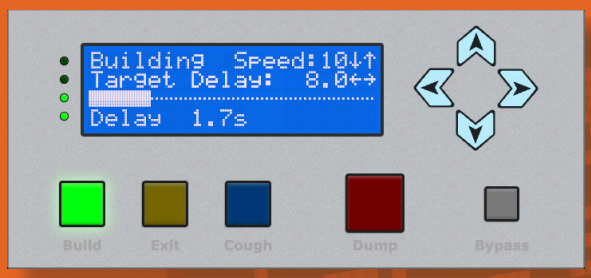
Remote UI Looks and Operates Just Like the PDM II Front Panel

In Depth

Virtual Front Panel

An HTML5 interface replicates the same familiar interface as our PDM II's front panel. Every button and display is present and functions just like its hardware counterpart. Through careful client-server communications management, round-trip latency is almost imperceptible, creating a seamless user experience. You can even control PDMX from multiple browsers at the same time. Just open a web browser interface, and anything you do on one device will be reflected on others.

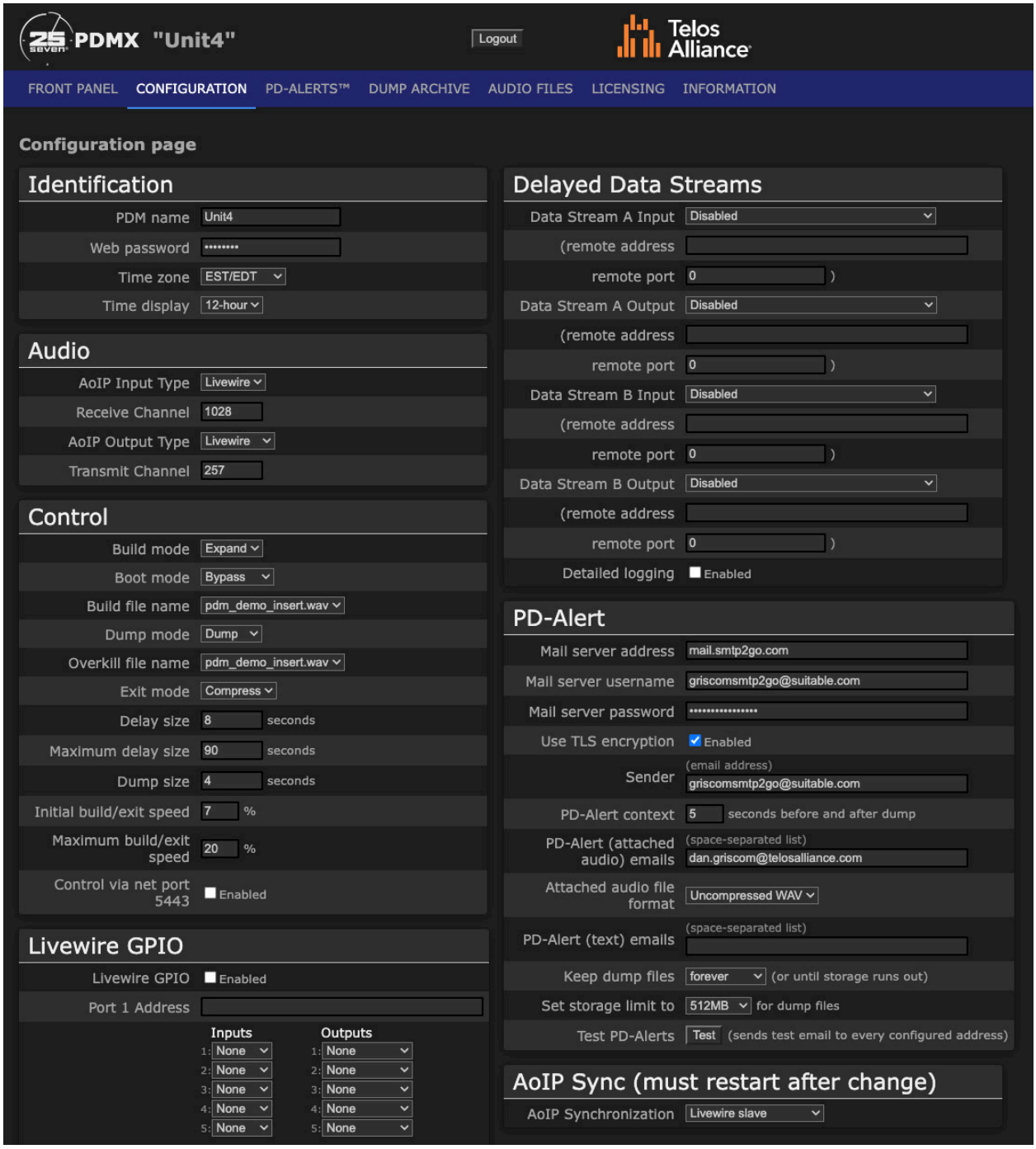




Native AoIP Workflow Using Livewire+AES67 I/O

Configuration

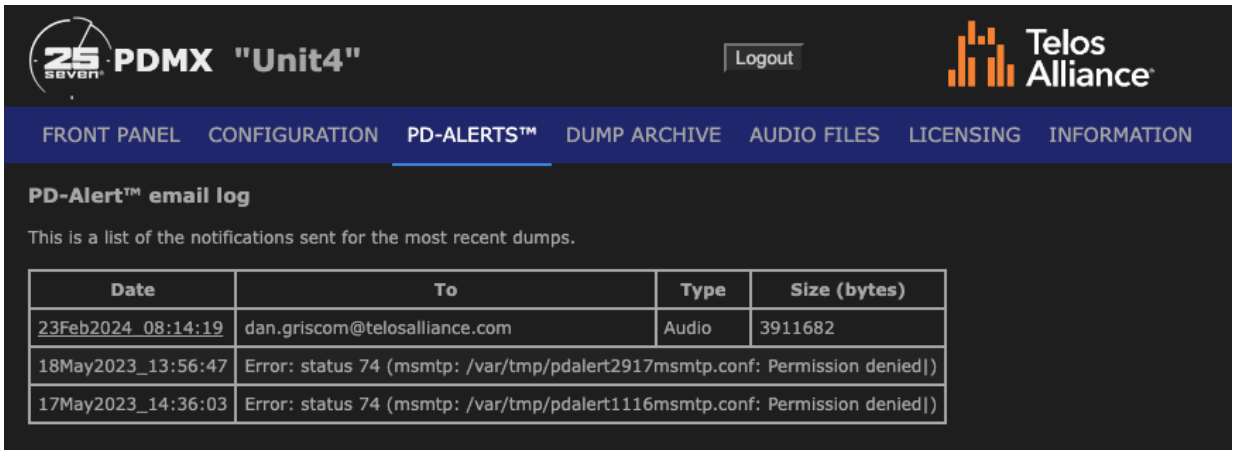
Navigating through “set and forget” parameters is a breeze from PDMX’s Configuration page. You’ll find obvious control with all your settings on one simple screen.



Superior Control

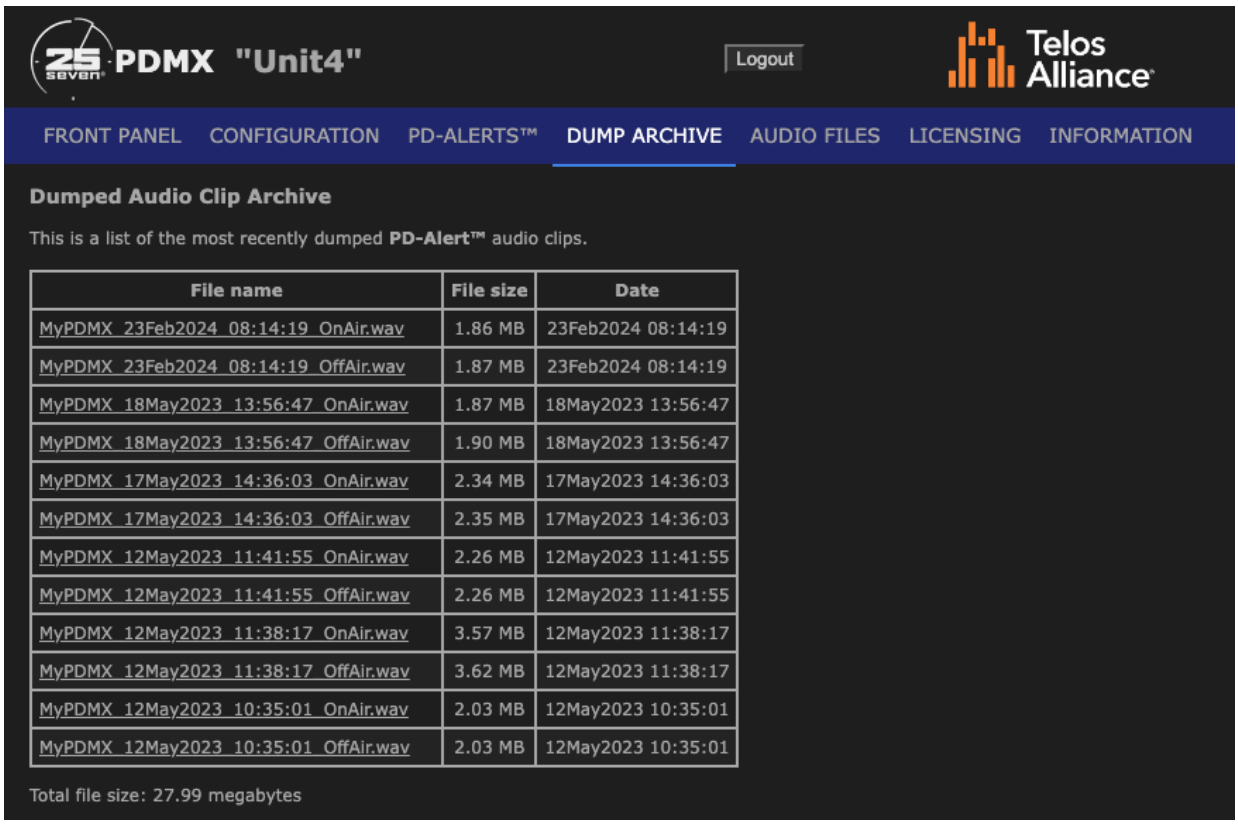
PD Alerts™

A dedicated page lists all of the PD Alert emails the unit has sent to your chosen staff.



Dump Archive

A Dump Archive displays before/after audio file pairs created whenever Dump gets pressed. Easily download and review what took place both on and off air.



HTML5 Web Configurable

Audio Files, Utilities & Information

- Easy management of audio files available for quickly building your buffer at the beginning of your show, or for our exclusive Overkill™ feature.
- Utilities such as system log files and Telos Connect support sessions
- System information display of status, setup, and version information

PDMX Requirements

PDMX System Requirements

The information below is intended to provide general operational guidance for software container deployment on a Linux Server and is subject to change. When running multiple instances, assume a single core allocation for OS & overhead tasks.

PDMX instance requirements:

- Cores needed per instance: 1 core (x86-64 V3, 4th generation “Haswell” or preferably later Intel Core architecture, or Gen 1 Xeon server CPU)
- CPU speed requirement: 2 GHz
- Memory requirements: 256 MB RAM per instance
- Latency: 80ms typical; CPU speed, AoIP setup, and other factors will affect system latency
- Required Linux distribution: Ubuntu v20.04, or 22.04 (64-bit)

1241 Superior Ave, Cleveland, OH 44114 USA | TelosAlliance.com | +1.216.241.7225