





### Environmental Noise in Goa's Tourism Hotspots

CASE STUDY: Smart Noise Monitoring with the SVANTEK SV 200A in Goa, India

#### **Measurement Operator:**

Welan Technologies and GSPCB Partnership for Noise Control

#### **Monitoring Instrumentation:**

SV 200A Class 1 Noise Monitoring Stations deployed at 12 key locations for 24/7 compliance-grade monitoring







#### **Real-Time Monitoring**

Goa, one of India's most popular tourist destinations, is internationally known for its nightlife, beachside parties, and music festivals. While tourism is central to the state's economy, it also brings the challenge of managing environmental noise. High sound levels, often exceeding permissible limits, disturb residents, disrupt daily life, and risk regulatory noncompliance.

To address this issue, the Goa State Pollution Control Board (GSPCB) launched a pioneering project with Welan Technologies. Their objective was clear: to create a real-time noise monitoring network capable of delivering transparent, actionable data. By deploying **SVANTEK SV 200A Class 1 Noise Monitoring Stations** at key coastal locations, the project marked one of India's first large-scale proactive approaches to noise pollution control.



#### Measurement Operator A Technology Partnership for Compliance

The monitoring network was designed, supplied, and commissioned by Welan Technologies in close collaboration with the Goa State Pollution Control Board. Welan engineers oversaw the installation of **SV 200A** stations across 12 coastal

hotspots, ensuring robust operation in Goa's challenging tropical climate. GSPCB's role was equally critical: to use the collected data for enforcing compliance, supporting police interventions, and providing transparency to the public. This partnership created a sustainable model where technology and governance worked hand in hand to safeguard community well-being.



### Challenge - Balancing Tourism Growth with Noise Regulation

The central challenge lay in balancing Goa's booming tourism economy with the need to protect residents from excessive noise. Clubs, open-air festivals, and beach events often produced levels far above recommended limits, resulting in complaints and tension between stakeholders. Authorities required a solution that would not only measure environmental noise continuously but also deliver real-time alerts, withstand humid coastal conditions, and generate data credible enough for regulatory enforcement. The complexity was amplified by the state's unique context: while national regulations set noise limits, local enforcement demanded reliable, defensible data to act upon in diverse, high-activity environments.







# **Technology Used - SVANTEK SV 200A with Coastal Adaptation**

At the core of the project were **SVANTEK SV 200A Noise Monitoring Stations, Class** 

1 precision instruments designed for long-term autonomous operation. To ensure durability in Goa's humid and saline climate, the systems were mounted on custom-engineered weatherproof stands, providing both stability and protection.

All data streams were consolidated into a centralized control room, where

automated noise maps and daily reports were generated. These visual outputs helped authorities identify silence zones, regulate microphone use during festivals, and plan interventions effectively.

Another defining feature was the system's real-time alert capability, which allowed both GSPCB and local police stations to respond immediately to breaches. This integration of advanced instrumentation withgovernance infrastructure transformed noise monitoring from a reactive process into a proactive enforcement tool.



## **Expert Insight - Data-Driven Enforcement Improves Community Wellbeing**

"By combining advanced Class 1 noise monitoring with realtime reporting, we enabled authorities to take immediate action while giving residents peace of mind. This project proves that sustainable tourism requires not just regulation, but reliable technology and community-focused enforcement."

Atharva Welankar, Noise & Vibration Expert, Welan Technologies

#### Result - Key Outcomes from Goa's Noise Monitoring Network

The project delivered measurable improvements in both compliance and community relations:

Continuous monitoring kept noise levels within regulatory limits in key tourist hotspots.

Residents reported significantly fewer complaints compared to pre-installation levels. Real-time alerts empowered authorities to act swiftly, minimizing disturbance during events.

Goa established itself as a benchmark for smart, technology-driven environmental monitoring in India, setting an example for other tourist regions worldwide.









