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Horn Array Speaker

Introduction of references in Japan and suitable applications

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1-1. Features of Horn Array Speaker

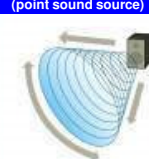
- * **Outdoor long-range speaker** based on "line array speaker technology" which is often used for speakers in concert hall, etc.
- * **Horn array speaker has less sound decay** than conventional outdoor speaker, and can deliver the sound approx. twice as far.
(Compared with TOA reflex horn speaker and straight horn speaker.)
- * **The sound is softer nearby the speaker and clearer far away from the speaker.**



Conventional horn speakers



Conventional speaker (point sound source)



Sound spreads both horizontally & vertically.

Horn array speakers



Line array speaker (line sound source)



Sound spreads horizontally, but not vertically.

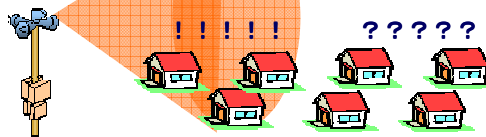
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1-2. Sound Covering Range

Conventional Speaker

Maximum Range : 200 ~ 300m

Loud near speakers and difficult to hear far away from speakers



Horn Array Speakers

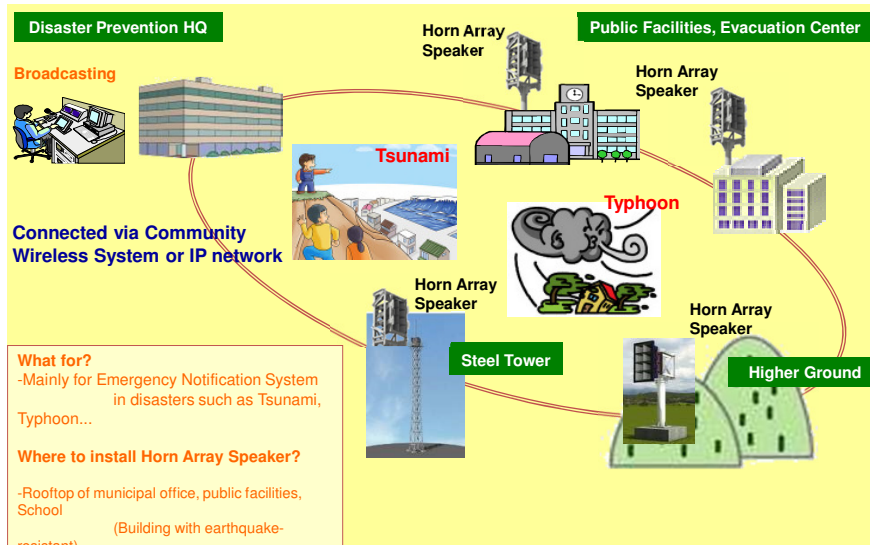
Maximum Range : 500m ~ 1km

Softer sound near speakers and clearer far away from speakers.



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1-3. Installation examples in Japan



Recommend to install on the rooftop of the building over 15-meter-high



1-3. Installation examples in Japan



1-4. Installation references in Japan

References

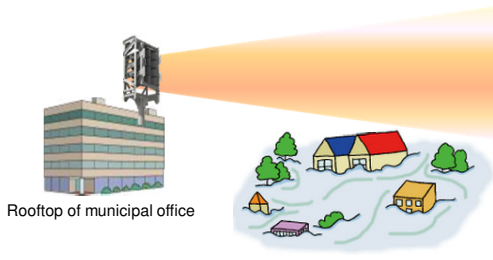
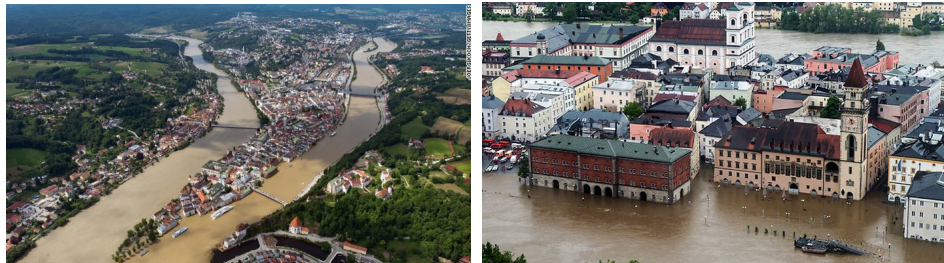
Over 80 municipalities in Japan (From February 2012)



2. Application Examples with Horn Array Speaker



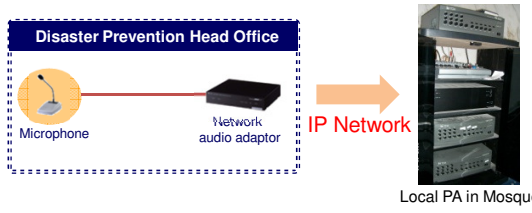
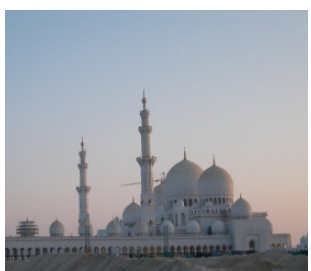
2-1. Emergency PA system in case of Flood



- ◆ Floods are the most common and widespread of all natural disasters.
- ◆ Before a flood, evacuation message or siren is announced from the rooftop of the public building such as municipal office.
- ◆ After a flood, it is usable as the general PA system.

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2-2. Azan & Emergency PA system for Mosque



- ◆ Use for Azan announce in normal times. Convey sound clearer and farther.
- ◆ In case of emergency, emergency message is announced from Disaster Prevention Head Office via IP network and overrides local PA system.

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2-3. Emergency PA system for plant



Rooftop of the office in plant



- ◆ Suitable for huge plants such as oil, gas, chemical, water treatment, power and so on.
- ◆ In case of emergency, siren beeps and emergency message is announced to order an evacuation.

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Thank you so much.

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