









# Prequalification Statement

2017



## **Prequalification Statement**

We look forward to your esteemed company's prosperity.

We hope you to gain a robust foothold by ordering **Thunder Technology**'s various system project performance records. This statement has documents and certificates to consider for your construction project.

Thank you.

\_\_\_\_/ \_\_\_\_/ 2017

Thunder Technology, Co., Ltd.

CEO, Yong-Hee Kang

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## Prequalification Statement

HIGHLY QUALIFIED PROFESSIONAL SOUND REINFORCEMENT & PUBLIC ADDRESS SYSTEM THUNDER

## **Contents**

- 1. Introduction
- 2. Patents & Certificates
- 3. Products
- 4. Portfolio

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#### **CEO's Comment**

Thunder Technology is a Professional Audio company in South Korea which has been so active in development and manufacturing of professional sound system to meet any need of quality conscious clients in the cinema installation and touring industries.

Although our company is established in November 2004, CTO and team members have more than 10 years experience in the different fields of development, manufacturing and marketing of professional sound system. All sound products of Thunder Technology are designed to provide natural sound reproduction without adding any unwanted distortion to the original sound.

Now we create systems for almost every type of application, from the portable compact sound system for the solo entertainer, to line array system for the touring of installation for very large stadium or open air venues with audiences of 50,000 and more.





(주)센더테크놀로지 THUNDERTECHNOLOGY

*0*2

**Managerial Ideology** 

# Respect HR, Create the Best Products and Services with the Best Technology





03 Outline

Company Name Thunder Technology, Co., Ltd. Yong-Hee Kang CFO November 5, 2004 Established Registration No. 407-81-12633 **Address** • HQ & Factory: Street No. 15-15, Keobukbawi-ro 3 gil, Jinan-eup, Jinangoon, Jeollabuk-do, South Korea Business Office: #B-209, Sigma 2, Koomi-dong 18, Sung-nam city, Kyoungki-do, South Korea Contact 063-247-1673 Type of Business Broadcasting & Audio/Video Facilities, Developing S/W **Major Products Public Address System** PA AMP, Mixer, Speaker, Power Distributor, CDP, Tuner, etc. SR System SR AMP, Mixer, Speaker, DSP, Wireless/Wired MIC. Receiver, etc. Website www.thunderspeaker.com

	Contents		
Field of Business	AV System, Information & Communication, Automatic Control System, etc.		
Applications	AV System	Concert Hall, Arena, Sports Complex, Government Office, Meeting room, Seminar, Ballroom, Church, Integrated Control System, Interpretation System, etc.	
	PA System	Broadcasting System for Schools, Government Office, Multi-purpose Building, Airport, Bay Area, Industry, et	





04 History



2007

2006

2005

2004

- Participated in Guangzhou Prolight + Sound MESSE
- 2017 KOBA Show



- Participated in Frankfurt Prolight + Sound MESSE
- Patented with Hybrid Mixer
- Performance Authentication from the Small and Medium Business Administration
- Participated in Frankfurt MESSE 2015 (Prolight + Sound) Show
- Selected as Junbook Techno-Park Cooperation Development Business
- · Established R&D center
- Awarded industrial-educational cooperation company (Small and Medium Business Administration)
- Obtained ISO 14001
- International quality certified with power amplifiers & Line-array speaker system
- Launched the all-new power amplifiers FT-series & TD-series
- Registered and 3 others on the Patent Office
- New Factory established
- Launched the outdoor speaker & installed in Asan-city
- Obtained ISO 9001
- · Contracted Procurement MAS (US\$ 52 million)
- Certified as a venture company (technology guaranteed fund)
- Participated in the 2006 Innovation Exhibit for Small-Medium Company
- Awarded industrial-educational cooperation company (Small and Medium Business Administration)
- Launched HF-series & Non-directional TC-series speakers
- Post-BK21 Industry-Academic Programs with Won-kwang Univ.
- Patented with Acoustic Lighting System & OUTPUT sound control
- Registered Software Association membership
- · Patented with Sound system for Lecture
- Patented with Speaker Enclosure & painting
- Factory registered
- Launched DF-Series / TM-Series Speakers
- Established in November 5



**CATV** 

Streets & Village

Satellite Receiver

Government

#### 1. Introduction

05 Business Area

Professional engineers in Thunder Technology is accomplishing Design, Installation and After Service on the various fields such as A/V, PA Systems, CATV and Information Communication for Government office, Exhibit, Concert Hall, Sports Complex, Cultural Center and Education Institutes by taking advantage of technical know-how.



#### A/V System

- Concert Hall A/V System
- Church A/V System
- Outdoor SR System
- Studio SR System Facility



#### MAS (Procurement)

- Procurement Quality
- Performance Authentication
- Multiple Award Schedule





#### Interpretation

Provide & Install
 Government
 Office, Church,
 Meeting room &
 Interpretation



#### **Public Address System**

- Government Office
- Schools
- Department Store
- Tunnels and more



#### R&F

- Research & Development New Products
- Technical Support



06

#### Technology for A/V System

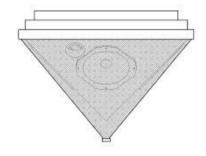
## Technology for Speaker Enclosure Design

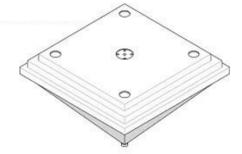
- Painting Enclosure Technology (Patent no. 0506581)
- Poly Urea Coated
  - Water-proof, Rust Resistance, Abrasion resistance, Shock Resistance, Cold Resistance and Durability
  - Used on the field such as Coating Material of Offshore construction



Tensile Strength	Tearing Strength	Hardness	Adhesive Strength
210 ±30 kgf / cm²	100 ±15 kgf/cm²	350 ±100%	15 kgf / cm²

## **Technology for Cabinet Design**

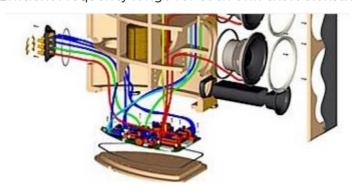




- ➤ 360° Coverage with one speaker
- Close to the original sound

### **Technology for Network Circuit Design**

- Manufacturing (Optimized Network Circuit) by selecting material carefully
- > Distributing Efficient Frequency range for each unit characteristics





**06** Technology for PA System

## Digital - Analog Hybrid PA System



The World's First
Voice-Guidance
PA System



Automatic Configure & Easy of Use by Touching Screen



Digital-Analog Hybrid by Dualized Mixer for Stability



EM, Timer, Fire Detection -Integrated Control By Digital Mixer

## 1. Introduction

## **Head Quarter**



Street No. 6, Inkyo 4 gil, Wooa-dong, Dukjin-gu, Jeonju city, Jeollabuk-do, South Korea



## Factory





Street No. 15-15, Keobukbawi-ro 3 gil, Jinaneup, Jinan-goon, Jeollabuk-do, South Korea

## **Seoul Office**



#B-209, Sigma 2, Koomi-dong 18, Sungnam city, Kyoungki-do, South Korea

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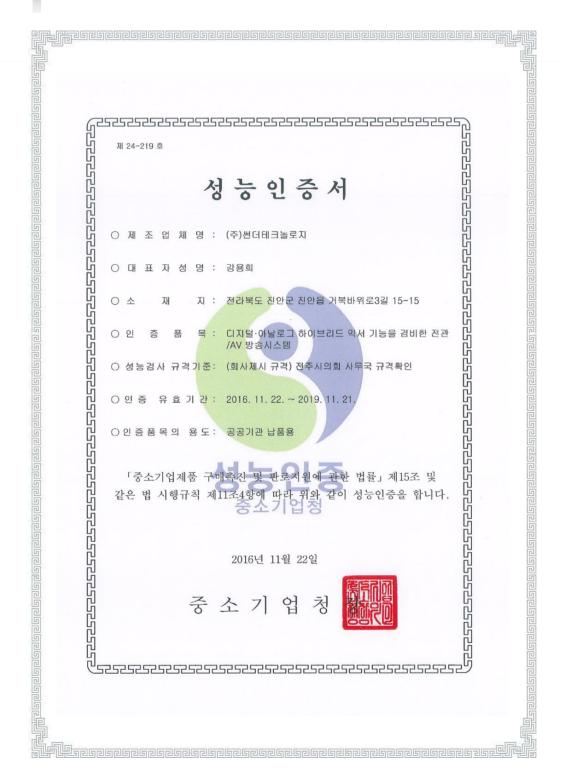
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01

Certificates

### **Performance Authentication**



01 Certificates

## Certificates for R&D, Venture companies and more









Registration

**Venture Company** 

Mid-small company

**Direct Production** 









**R&D** Certificate

**Factory Registration** 

**Construction Certificate** 

S/W business Certificate









ISO-9001

ISO-14001

**KEA Membership** 

Citation from Ministry of Knowledge

02

Patents and more

## Patents, Design registrations









10-1522661

10-1616965

10-1530291

10-1325485







0506581

0489981

0467849



Design Registration 30-0520431



Design Registration 30-0546264



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01

#### Digital - Analog Hybrid Public Address System



#### Features

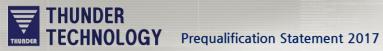
 Digital - Analog Hybrid PA System & HIBS-2000 (Software) are the World's first

#### voice guidance

broadcast equipment (Korea patent 10-1522661) - when detect operator, Hybrid PA system provides guidance of operating method by voice automatically.

- The cutting-edge digital/analog hybrid public address system switches to analog mixer operating mode when failure of digital mixer occurred.
- Anyone can operate multi-source broadcasting by using simple touch screen.
- All devices are using DC that eliminate AC hum noise.
- Easy & simple installation system configuration is very simple and easy to install because many function such as EM, Timer, Fire detection are integrated to hybrid mixer.





*0*2 **SR Speakers** 



#### Features

- ULTRA COMACT LOUD SPEAKER
- Suitable for small concert hall, lecture room and any other various places
- Feedback has been reduced with Thunder Technology's own knowhow
- Optimized Sound is output in narrow places
- Enclosure is stable and solid which is made with Silver Birch in Finland



- Powerful 2-WAY SPEAKER SYSTEM
- Suitable for Studio Monitor & Conference room, etc.
- Neodymium LF driver
- Providing Outstanding resolution & Natural Sound
- Outstanding Water proof & UV protection case

**02** SR Speakers



#### Features

- Thunder Technology's own (Cabinet Design Technology) is applied
- Pyramid shaped so that each face has one full range or LF/HF all-in-one unit
- 360° range is widely covered to provide clear & full sound source
- Suitable for LIVE café, Convention hall, Church with a great interior design effect



- CM Series, TM Series, DM Series, COAXIAL Series
- CM Series apply Coaxial Neodymium Driver
- Back side has 2.2 HF driver & duct for covering audience's shadow zone in front of the stage
- Compact Design
- Suitable for Studio Monitor, Concert hall, Musical and various broadcasting centers
- Maximized for the dynamic Frequency Response and rich sound reproduction



O2 SR Speakers



#### Features

- THUNDER TECHNOLOGY's own Network Circuit Design knowhow is applied
- Horizontal 90°, Vertical 5° Coverage angle shows a great linear direction
- Mechanical Cabinet design is optimized to perform acoustic functions
- Poly Urea Coated Enclosure
- 2-way Line Array Speaker
- Maximum & Dynamic Frequency Response when Concert or Tour Sound



- POWERED Line Array speaker which is suitable for large sized Concert and Tour-Sound
- Integrated Splay
   Bracket for easy & fast rigging
- Poly Urea Coated Enclosure
- Horizontal 90°, Vertical 5° Coverage angle shows a great linear direction
- Total 1200W Digital Power AMP
- Applied 24bit DSP provides compact & powerful sound

*0*2 **SR Speakers** 

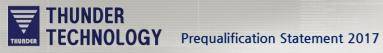


#### Features

- Passive Type High Quality Column Array Speaker
- Virtual Waveguide Technology is applied.
- Wide Frequency Range is covered.
- Reproduce Outstanding Low tone without Subwoofers
- Suitable for Cathedral, Church, Meeting room and Seminar, etc.



- High Quality 2-WAY SPEAKER SYSTEM
- Suitable for the various places such as Studio Monitor and Conference room
- Mixed Structure with Steel & Wood **Enclosure Technology** is applied
- Providing Outstanding resolution & Natural Sound



#### 03 **Digital Power Amplifier**



#### Features

- · Digital Power AMP.
- TD-2000K:
- S/N rate: 117dB
- Power: 1000W@4Ω 500W@8Ω
- TD-10000K: 4CH - S/N rate: 115dB
- Power: 2500W@4Ω 12000W@8Ω



#### Features

- Class-D Amplifier
- Light but powerful sonic performance
- High efficiency & sound quality



- 8CH Digital AMP.
- Suitable for PA system and BGM broadcasting
- High efficiency & low distortion
- Power: 120W per CH 70V 4Ω / 100V 8Ω



## 03 Digital Power Amplifier



#### Features

- FT-7000,6000 : Class-H Amplifier
- FT-5000 : Class- AB Amplifier
- Exceptionally high power handling
- High damping factor
- Parallel operation available, automatic clip limiting

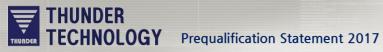


#### Features

- Suitable for PA system and BGM broadcasting
- Low noise & High output power
- Remote port -Remote power on/off control at emergency situation
- Low distortion and high S/N ratio



- Class- D Amplifier
- Exceptionally high power handling
- Fan-Less cooling system
- Low frequency cut point can be selected to fit different load operation



#### 04 **Other Products**



#### Features

- 8CH Power Distributor
- 2400W per CH
- Surge protection
- 6 Channels of AC power supply on/ off sequentially







- LCD Text Display status
- MIC. Unit (TM-900CK/TM-900DK) available to connect up to 60 max.
- 1, 3, All simultaneously control MIC. (FIFO mode, Limit mode)
- In-dashed Anti-Gain-Drop circuit to use multiple MICs.
- Independent monitoring with installing MIC. Speakers
- Available to control with 8bit MIC.







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HIGHLY QUALIFIED PROFESSIONAL SOUND REINFORCEMENT & PUBLIC ADDRESS SYSTEM



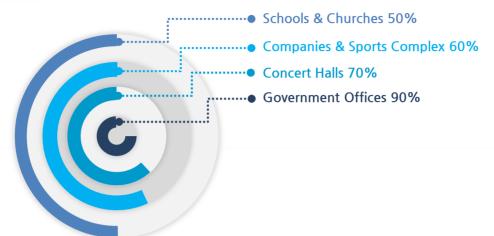
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### 4. Portfolio

• Korea Hydro & Nuclear Power

#### Summary

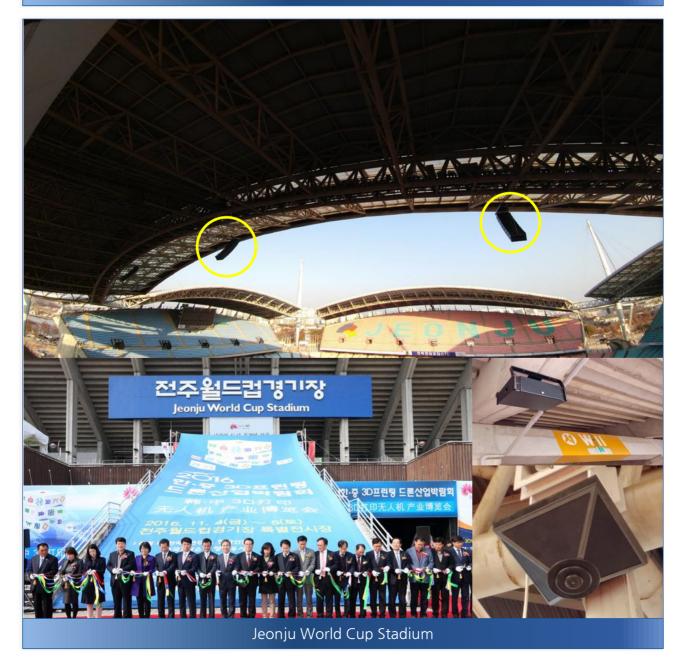


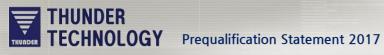
Schools & Churches	Companies & Sports Complex	Concert Halls	Government Offices
Seoul National Univ. Kyoungbook University Daejeon Emoon Highschool Kwan-ak Highschool Gwang-ju University of Education Jeonbook University of Education Jeonbook University Iksan Campus On-yang Jaeil Church Chunho Cathedral (Resurrection) Kwang-ju Seonam Church Nam-won Ssankyodong Cathedral Russia University of Agriculture Ik-san Highschool Auditorium Haga Elementary School Gyeryongdae Hoguksa Temple Kwang-ju Shinwon Bethel Church Song-jung Central Church Gyeongsan middle school	<ul> <li>Pyeongchang Ice Hockey Stadium</li> <li>Jeon-ju World Cup Stadium</li> <li>Koksung Sports Complex</li> <li>Dam-yang Sports Complex</li> <li>NH Insurance Institute</li> <li>Yang-Pyeong Sports Complex</li> <li>Sk Corp. @ Kwang-ju branch</li> <li>Jeon-ju Hwasan Gymnasium</li> <li>Busan Centum City</li> <li>Im-sil County hall</li> <li>National Agricultural Cooperative Federation</li> <li>Moo-Rim Paper</li> <li>Daejeon Rehabilitation Center</li> <li>Koonsan Badminton Stadium</li> <li>Koonsan Wolmyoung Baseball Stadium</li> <li>Hwa-soon Public Stadium</li> <li>Shin-Pyoung Culture &amp; Sports Center</li> <li>Koon-san Baseball Stadium</li> <li>Koon-san Wolmyoung Sports Complex</li> <li>Yeo-su Jin-nam Sports Complex</li> <li>Kochang Sports Complex</li> <li>Jin-an Culture &amp; Art Complex</li> </ul>	Nam-won Choonhyang Culture Center Dongdoochun Women's Culture Center LG Art Center (Small Theater) Yeo-su Art & Culture Center Hanwoori Art & Culture Center Jeon-ju Traditional Culture Center Bo-sung Culture & Art Center Bo-sung Culture & Art Center Jeon-ju Hanbyuk Cinema Koon-san Culture Center Yeo-su Civic Center	Jeonju City Council     Namsan Park in Asan     Shinjung Lake in Asan     National Brand Committee     Memorial for Seoul Olympic     Ma-san City Council     KEPCO Central Institute     Wonkwang Temple for the Ministry of National Defense     Jeon-book Government Institute     Jang-su County Broadcasting Facility     A-san City hall Auditorium     Disaster and Emergency Operations Center @ Jeonbuk Provincial Government     Jeon-book New Regeneration Energy Center     Wolmyoung-dong Community Center     Seoul Highway PA System     Moon-kyoung Women's Center     Kwang-myoung Community Center     Kwang-myoung Community Center     Koon-san Convention Center     Korea Food & Drug Administration     Wan-san Library     Chung-song County Culture Center     Jeon-ju Dukjin Youth Training Center     Jeollabukdo Office of Education     Jin-an County Council     Jeonbuk Development Corporation     Jeon-ju Teenager's Street     National Forestry Cooperative Federation forestry training center
'inn	LOTTE Duty Free shop @ Inchon     International Airport		<ul><li>Liquor Them Museum</li><li>Jeon-nam Agricultural</li></ul>



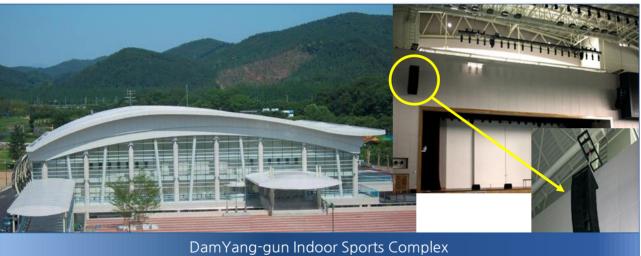


Jeonju City Council (Auditorium A/V Speaker System & Public Address System)









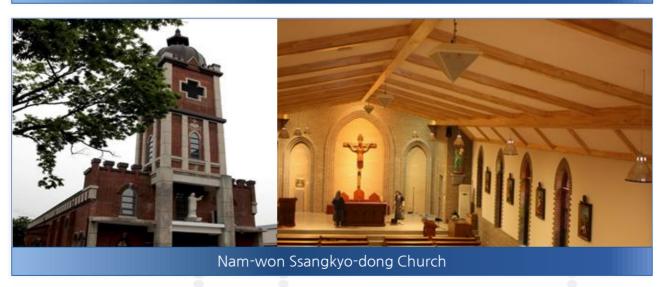


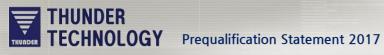


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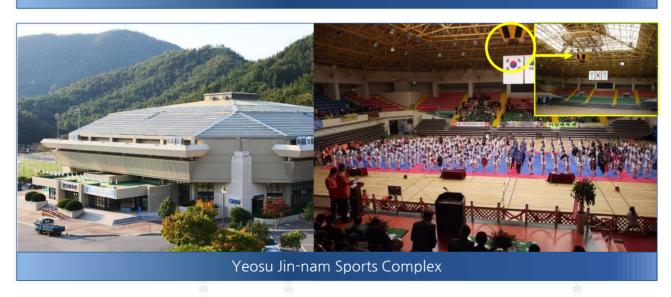










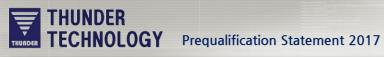




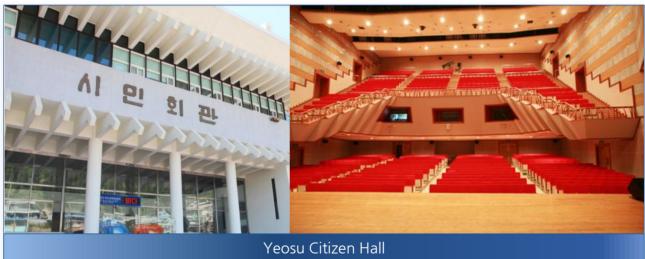




























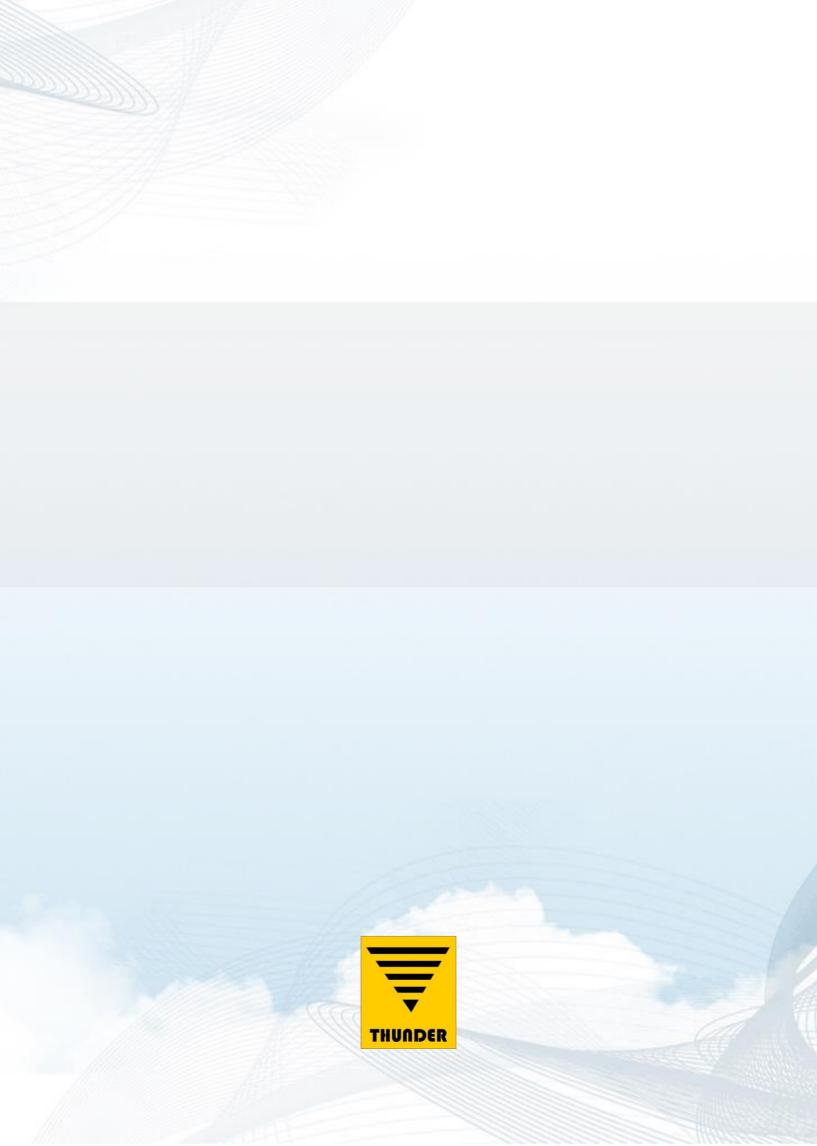


4. Portfolio











- > HQ & Factory: Street No. 15-15, Keobukbawi-ro 3 gil, Jinan-eup, Jinan-goon, Jeollabuk-do, South Korea
- > Business Office: Street No. 6, Inkyo 4 gil, Wooa-dong, Dukjin-gu, Jeonju city, Jeollabuk-do, South Korea
- > Office in Seoul: #B-209, Sigma 2, Koomi-dong 18, Sungnam city, Kyoungki-do, South Korea
- > TEL: (HQ) +82-63-247-1673, (Seoul) +82-2-6417-1673
- > Website: www.thunderspeaker.com

