

JABATAN KERJA RAYA MALAYSIA



UNIT STANDARD, PENGUJIAN & MAKMAL CAWANGAN KEJURUTERAAN ELEKTRIK

TECHNICAL INFORMATION FOR INDOOR LOUDSPEAKERS (PUBLIC ADDRESS SYSTEM)

A. PARTICULARS OF COMPANY

1. Name of Company : -----

2. Address : -----

3. Telephone No. : -----
4. Fax No. : -----
5. Email Address : -----

B. PARTICULARS OF PRODUCT

1. Brand : -----
2. Models : -----

3. Type of Loudspeakers : i) Normal Loudspeaker
(Please tick (✓) accordingly) ii) Emergency Voice Alarm (EVA) Loudspeaker
4. Name of Accredited Laboratory : -----
5. Test Report No. : -----
(note: proof of certification and full type test report to be attached) -----

6. Standards Compliance		<i>To be Filled in by the Manufacturer</i>		<i>For JKR Office Use</i>
6.1	Sound system equipment – Part 1 : General (IEC 60268 or equivalent)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>
6.2	Sound system equipment – Part 5 : Loudspeakers (IEC 60268-5 or equivalent)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>
6.3	Fire Detection and Fire Alarm Systems for Buildings – Part 8 : Code of practice for the design, installation, commissioning and maintenance of voice alarm systems (BS 5839-8 or equivalent)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>
6.4	Sound Systems for Emergency Purposes (BS EN 60849 or IEC 60849 or equivalent)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>
6.5	Fire Detection and Fire Alarm Systems – Part 24 : Components of voice alarm systems – Loudspeakers (BS EN 54-24 or equivalent)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>
6.6	Audio, video and similar electronic apparatus - Safety Requirements (IEC 60065 or EN 60065)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>
6.7	Others :	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>
 <i>(please specify and attached the copy of standards)</i>			
6.8	Quality Management Systems (MS ISO 9001 or ISO 9001 or equivalent)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>
6.9	Supplier's declaration of conformity (ISO/IEC 17050-1)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>
7. Loudspeaker				
7.1	The loudspeaker shall be suitable for indoor environment.	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>
7.2	The loudspeaker shall be suitable for both speech and music reproduction.	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>
7.3	The loudspeaker has built-in protection to ensure that in the event of fire, damage to the loudspeaker does not result in failure of the circuit to which it is connected.	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>
7.4	The loudspeaker has terminal blocks, thermal fuse, heat resistant and high-temperature wiring.	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>
7.5	The loudspeaker must be fitted with a metal back box enclosure and suspension facility.	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>
7.6	The loudspeaker shall be equipped with a built-in multiple tapping transformer.	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>
7.7	To provide the results of Frequency Response measurement	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>
7.8	To provide the results of Polar Diagram measurement.	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>

8. Marking

8.1 Markings shall be legibly, durably, permanent,comprehensible Yes No
and easily discernible on the loudspeaker

9. Approval

9.1 The loudspeaker is CE approved Yes No

10. Technical Particulars

Description		JKR Specifications	Model Category: <i>(Please tick (√) accordingly)</i> <input type="checkbox"/> 6W <input type="checkbox"/> 10W <input type="checkbox"/> Others:.....	For JKR office use (√) <input type="checkbox"/> Yes <input type="checkbox"/> No
LOUDSPEAKERS	Brand/Model No. <i>(As per catalogues)</i>			<input type="checkbox"/> Yes <input type="checkbox"/> No
	Rated voltage (Volt) / Rated power (Watt)			<input type="checkbox"/> Yes <input type="checkbox"/> No
	Max. Power (Watt) <i>(@ 100V)</i>			<input type="checkbox"/> Yes <input type="checkbox"/> No
	Frequency Response (Hz), <i>(@ - 3 dB)</i>	120Hz – 10kHz		<input type="checkbox"/> Yes <input type="checkbox"/> No
	SPL level (dB), <i>(1W, @1m_1kHz)</i>	≥ 85dB		<input type="checkbox"/> Yes <input type="checkbox"/> No
	Opening Angle (° - degree), <i>(@ 1kHz / - 6dB)</i>	≥ 90°		<input type="checkbox"/> Yes <input type="checkbox"/> No
TRANSFORMER	Power Rating / Impedance (Watt / kΩ)			
	• Tapping 1			<input type="checkbox"/> Yes <input type="checkbox"/> No
	• Tapping 2			<input type="checkbox"/> Yes <input type="checkbox"/> No
	• Tapping 3			<input type="checkbox"/> Yes <input type="checkbox"/> No
	• Tapping 4			<input type="checkbox"/> Yes <input type="checkbox"/> No
PHYSICAL	Grille / Enclosure			<input type="checkbox"/> Yes <input type="checkbox"/> No
	Material			<input type="checkbox"/> Yes <input type="checkbox"/> No
	Loudspeaker Diameter (mm)			<input type="checkbox"/> Yes <input type="checkbox"/> No
	Loudspeaker Height (mm)			<input type="checkbox"/> Yes <input type="checkbox"/> No
	Metal Enclosure Height (mm)			<input type="checkbox"/> Yes <input type="checkbox"/> No
	Weight (kg)			<input type="checkbox"/> Yes <input type="checkbox"/> No

Description		JKR Specifications	Model Category: <i>(Please tick (√) accordingly)</i> <input type="checkbox"/> 6W <input type="checkbox"/> 10W <input type="checkbox"/> Others:.....	For JKR office use (√)
LOUDSPEAKERS	Brand / Model No. <i>(As per catalogue offer)</i>			<input type="checkbox"/> Yes <input type="checkbox"/> No
	Rated voltage (Volt) / Rated power (Watt)			<input type="checkbox"/> Yes <input type="checkbox"/> No
	Max. Power (Watt) (@ 100V)			<input type="checkbox"/> Yes <input type="checkbox"/> No
	Frequency Response (Hz), (@ - 3 dB)	120Hz – 10kHz		<input type="checkbox"/> Yes <input type="checkbox"/> No
	SPL level (dB), (1W, @ 1m _ 1kHz)	≥ 85dB		<input type="checkbox"/> Yes <input type="checkbox"/> No
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	• Tapping 3			<input type="checkbox"/> Yes <input type="checkbox"/> No
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	Loudspeaker Height (mm)			<input type="checkbox"/> Yes <input type="checkbox"/> No
	Metal Enclosure Height (mm)			<input type="checkbox"/> Yes <input type="checkbox"/> No
	Weight (kg)			<input type="checkbox"/> Yes <input type="checkbox"/> No

11. Lists of Testing *(Fill in by manufacturer/supplier)*

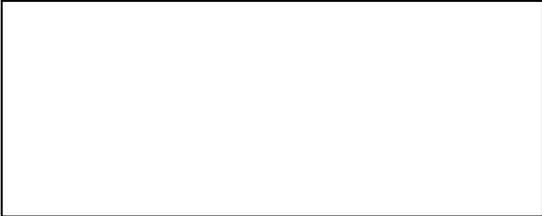
No.	Name of Testing	Standard	Clause	Equipment Name	Brand	Type/Model
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

I, hereby declare that the
(Ceiling Speaker Manufacturer/supplier – Name of Person in Charge)
information given by me on behalf of the Company in this form and in any document
attached is correct, valid, complete and true.

Date:.....

Designation:.....

Signature:.....



Company's Stamp



FOR OFFICE USE

Comment:

.....
.....
.....
.....
.....

ANNEX A

(Company's Letter Head)

Manufacturer's Declaration of Conformity
(in accordance with ISO/IEC 17050-1)

No.

Issuer's Name:

Issuer's Address:
.....

Object of the Declaration:
.....
.....

The object of the declaration described above is in conformity with the requirements of the following documents:

Documents No.	Title	Edition/Date of Issue
.....	<u>Type Test report</u>
.....	<u>Technical catalogues</u>
.....	<u>Company profile</u>
.....	<u>Test procedures</u>
.....	<u>Operation and maintenance manual</u>
.....	<u>Instruction manual</u>

Additional Information:
.....
.....
.....

Place:)

Date of issue:)

Name:)

Function:)

.....
(Signature by the issuer)

CHECK LIST FOR APPLICANT

Please enclose the following items (non-returnable) in order to expedite the process and tick (✓) accordingly.

- | | | | | | |
|----|--------------------------|--|----|--------------------------|--|
| 1 | <input type="checkbox"/> | Application Letter on the Company's Letter Head | 11 | <input type="checkbox"/> | ISO certificate <i>(if applicable)</i> for Loudspeaker manufacturer |
| 2 | <input type="checkbox"/> | USPM/B/PP Borang 1A | 12 | <input type="checkbox"/> | Manufacturing process Quality Assurance (Q.A) system <i>(If registration direct by manufacturer)</i> |
| 3 | <input type="checkbox"/> | UKBF/CS Form | 13 | <input type="checkbox"/> | Test procedures complete with circuit diagrams |
| 4 | <input type="checkbox"/> | Surat Akuan Bersumpah Form (SAB-Februari 2006) | 14 | <input type="checkbox"/> | Technical Catalogue for Loudspeaker |
| 5 | <input type="checkbox"/> | Authorization Letter as an authorized dealer issued by the manufacturer | 15 | <input type="checkbox"/> | Instruction manual / O & M manual |
| 6 | <input type="checkbox"/> | Type Test Reports | 16 | <input type="checkbox"/> | Warranty Letter |
| 7 | <input type="checkbox"/> | Loudspeaker Manufacturer's Company Profile <i>(For new registration only)</i> | 17 | <input type="checkbox"/> | Suggested retail price |
| 8 | <input type="checkbox"/> | Supplier's Company Profile <i>(For new registration only)</i> | 18 | <input type="checkbox"/> | Track Record <i>(Project references - for new registration only)</i> |
| 9 | <input type="checkbox"/> | Form 49 | 19 | <input type="checkbox"/> | Copies of documents forwarded must be certified by the Company <i>(signed and company's stamped)</i> |
| 10 | <input type="checkbox"/> | Business License from local authority for loudspeaker manufacturer <i>(local manufacturer)</i> | | | |

Note: 1. Additional documents may be requested during processing.
2. Approval is subject to the Technical Committee of the Electrical Engineering Branch, Public Works Department Malaysia
3. Application forms can be downloaded from the website <http://jmal.jkr.gov.my/emal/>