



CINEMA SOUND

RESIDENTIAL-2022

Experiencing cinema
as it is intended





Introduction

DX (Dynamic Experience) is the dawn of a ambitious dream which is now coming true. This is the output of a lifetime search for the real sound as we perceive it. The research and analysis of the sound patterns, its reflections, absorptions, the waveguides and their stimulations has lead the path to the invent of our unique speakers.

We use advanced measurement techniques which is designed in Denmark. Every speaker is tested for its acoustics and calibrated using pioneered tools. A thorough research has been done on the behavioral patterns of the sound in various atmospheres and measured accordingly. This has been implemented in our speakers as an effort to achieve the finest quality. This was not a one man's dream, but the combined effort and hard work of my team who believed in me without doubt.

Proprietary horn and wave guide designs have been developed by DX. This horn technology provides exceptionally flat frequency response, precise pattern control and very low distortion. Seamlessly coupled with the dispersion pattern of the woofer, the sound is focused on the audience and away from the walls, resulting in reduced reflections which can muddy the sound. The specially engineered bass drivers are professional low frequency loudspeakers and offer superb bass performance, high peak program power handling and high efficiency, capable of extreme sound pressure levels. The smooth response, wide frequency and dynamic range are features not often achieved in one woofer. The bass drivers have an oversized ferrite magnet structure with components engineered to achieve maximum efficiency. Symmetrical gap geometry combined with the large linear voice coil travel ensures minimum distortion at all levels.

The Goal

Dynamics

The difference between the sound's loudest and quietest moments in the track is called the dynamic range. You can feel both the loudest and quietest sound in our design at any volume.

Distortion

Distortion is the sound heard where there is an unexpected change of the original signal to something else. It can also be the result of a corruption of the signal at the source.

We usually identify it when we say something like, "that doesn't sound right." And we usually are right in that assessment. For some reason, the sound coming out of the system has been negatively altered and we need to fix it.

Linearity

Our loudspeakers capable of linear frequency response within fairly narrow limits, but they still have to interact with your room, which will almost always add peaks and dips far larger than the idealized response curves.

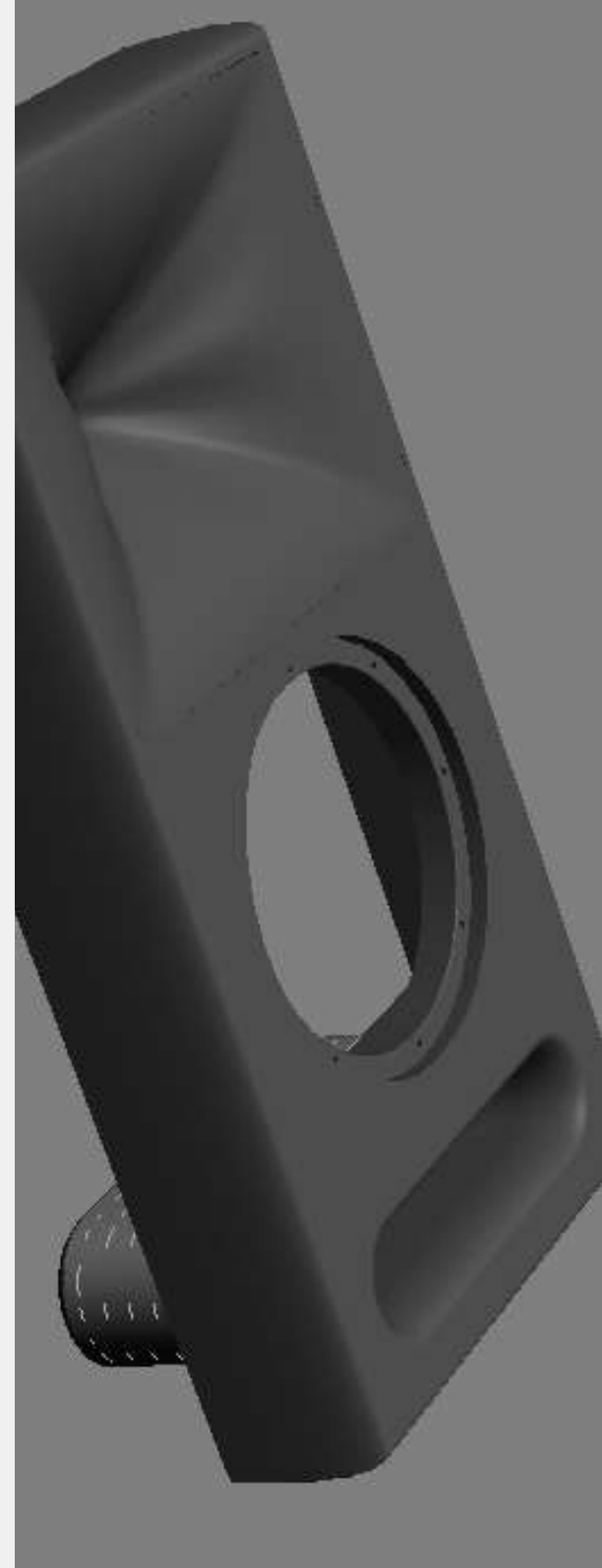
Frequency response

Every component in the signal chain should ideally have a flat frequency response, so that the sound passes through unaltered. But the reality is that many components don't offer ideal performance. Our system has been designed to deliver industrially acceptable flat frequency response.

CUSTOM MADE PARTS AND DEVELOPMENT PROCESS

Lofty goals require custom parts and special attention to details at each step in the path to product realization. Each driver was specially developed from the ground up, requiring much expensive and special tooling. No off-the-shelf drivers were worthy of satisfying all of our goals. Over 2 years in development, following a painstaking progression from theory to reality – each driver is first modeled using advanced FEA (Finite Element Analysis) techniques to meet mechanical, electromagnetic and acoustic goals.

Each component was specially evaluated and specified for each product. From the simplest screw, to crossover inductors, resistors and capacitors, the voice coil wire's thermal characteristics and adhesives; all were selected with the goal of sonic accuracy driving all decisions. After the ground work, comes modeling, CAD and tooling. All speakers and subwoofers are then thoroughly analyzed using state of the art NFI based measurement system,



WAVE GUIDE DESIGN

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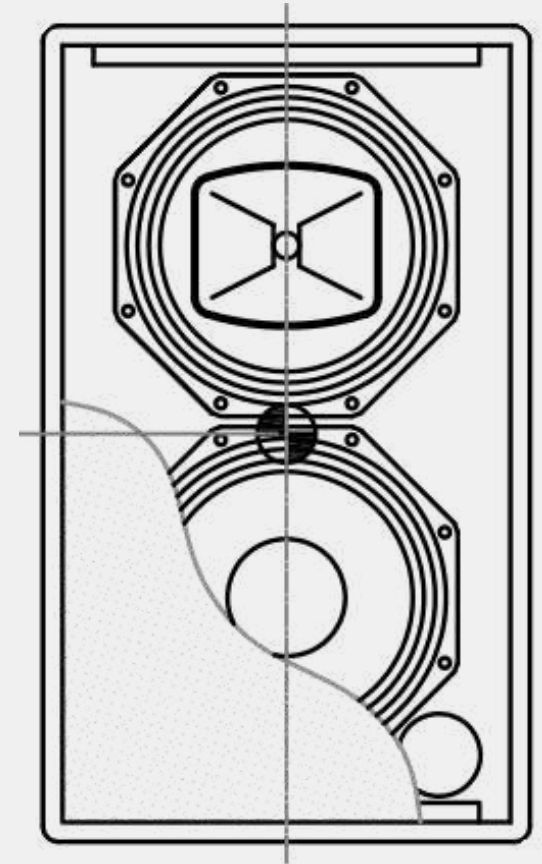


CABINET CONSTRUCTION

Built from MDF with a black vinyl veneer, the cabinets are braced with DX proprietary "Air Compress". This technique holes all the panels of the box in an asymmetrical way and also provides appropriate baffling to virtually eliminate standing waves in the enclosure and reduce panel vibrations.

EASY TO INS TALL

Our screen channel speaker systems are designed to be installed behind an acoustically transparent screen, just like the speakers in a commercial cinema. They create a wall of sound directly from the picture, so everyone gets the full movie experience and impact. The five speaker modules (left, center, right and two sub woofers) in each system are all the same height and depth, making the design of the room and installation of the speaker system much simpler.



IMMERSIVE CINEMA EXPERIEN

The object of a home cinema is to reproduce the experience of going to the movies, but in the convenience of your own home. DX speaker systems bringing the cinema experience closer with the release of these uniquely designed modular screen speaker systems. Completely surround yourself in the immersive audio formats found on the latest movies by adding DX surround and overhead speakers, all sonically matched across the range.



BAFFLE WALL

Unique to every THX® Certified Cinema is the THX® “baffle wall.” If you were to peel away the screen at any THX® Certified Cinema, you will see a large wall of speakers housed in an acoustic baffle. This is called the speaker system enclosure.

The baffle wall is approximately the same size as the screen, providing a solid, smooth uninterrupted surface to distribute sound throughout the auditorium. It produces a large sound image and accurately tracks sound elements with the onscreen action. This makes panning shots and off-screen sounds more believable and natural, helping to pull audiences into the storyline



Table Of Contents

FOR LIVING HALL

FOR DEDICATED CINEMA HALL

SURROUND SPEAKER

SUB-WOOFER

FOR MUSIC



HT235P Speakers



Specification

Frequency Range - 100Hz-20kHz (-3dB) In Room Response

Power Handling

60-120 Watts recommended amplifier power

Sensitivity

90dB for 2.83 volts at 1 meter

Impedance

8Ω (minimum 4Ω)

Configuration

Full range

Enclosure Type

Sealed

Driver

Dual 3-1/2" Full Range Paper Cone Woofer

Input Terminal

Push To Hold type

Dimensions

230mm high x 147mm wide x 142mm deep



HT235 Sub-Woofer

Sub woofer:

Frequency Range

25Hz-200Hz in room response

Power Handling

70-210 Watts RMS

Sensitivity

87.5dB for 2.83 volts at 1 meter

Impedance

8 Ohms

Enclosure Type

Bass reflex front vented

Low Frequency Driver-Nominal-10" diameter coated paper cone, and a ferrite magnet motor with aluminum shorting ring for improved distortion performance.

Dimensions

380mm high x 380mm wide x 534mm deep

HT235P Pack



HT16P



HT16P Front LCR Speakers

Frequency Range

85Hz-20kHz (-3dB) In Room Response

Power Handling

60-120 Watts recommended amplifier power

Sensitivity

84dB for 2.83 volts at 1 meter

Impedance

8 Ω (minimum 4 Ω)

Configuration

2 way

Enclosure Type

Sealed

Driver

Low Frequency Driver-Dual 4" paper cone driver/Center-Dual 4"

High Frequency Driver-25mm (1") Fabric Dome Tweeter with Neodymium Magnet

Input Terminal

Push To Hold type

Dimensions

230mm high x 147mm wide x 142mm deep

HT16P



HT16P Surround Speakers

Frequency Range

90Hz-20kHz (-3dB) In Room Response

Power Handling

60-110 Watts recommended amplifier power

Sensitivity

81dB for 2.83 volts at 1 meter

Impedance

8Ω (minimum 4Ω)

Configuration

2 way

Enclosure Type

Sealed

Driver

Low Frequency Driver-Single 4" paper cone driver

High Frequency Driver-25mm (1") Fabric Dome Tweeter with Neodymium Magnet

Input Terminal

Push To Hold type

Dimensions

130mm high x 147mm wide x 142mm deep

HT16P



HT16P Sub-Woofer

Sub woofer:

Frequency Range

25Hz-200Hz in room response

Power Handling

125-450 Watts RMS

Sensitivity

915dB for 2.83 volts at 1 meter

Impedance

4 Ohms

Enclosure Type

Bass reflex front vented

Low Frequency Driver

10" diameter coated paper cone, and a Ferrite magnet motor

Dimensions

320mm high x 320mm wide x 451mm deep

HT16P Pack



Dedicated Cinema Hall

02





SC24 Speakers

Frequency Range

55Hz-20kHz (-3dB) In Room Response

Power Handling

50-150 Watts recommended amplifier power

Sensitivity

90dB for 2.83 volts at 1 meter

Impedance

8Ω (minimum 4Ω)

Configuration

2 way

Enclosure Type

Bass reflex, front vented

Driver

Low Frequency Driver-Dual 4" paper cone driver

High Frequency Driver-25mm (1") Fabric Dome Tweeter with Neodymium Magnet

Input Terminal

Push To Hold type

Dimensions

551mm high x 172mm wide x 160mm deep



SC25 Speakers

Frequency Range

50Hz-20kHz (-3dB) In Room Response

Power Handling

110-360 Watts recommended amplifier power

Sensitivity

92dB for 2.83 volts at 1 meter

Impedance

8Ω (minimum 4Ω)

Configuration

2 way

Enclosure Type

Bass reflex, front vented

Driver

Low Frequency Driver-Dual 5" paper cone driver

High Frequency Driver-1" exit compression driver with 90x60 Nominal Coverage waveguide

Input Terminal

Push To Hold type

Dimensions

560mm high x 180mm wide x 212mm deep

SC18



SC18 Speakers

Frequency Range

45Hz-20kHz (-3dB) In Room Response

Power Handling

100-250 Watts recommended amplifier power

Sensitivity

93dB for 2.83 volts at 1 meter

Impedance

8Ω (minimum 4Ω)

Configuration

2 way

Enclosure Type

Bass reflex, front vented

Driver

Low Frequency Driver-Single 8" paper cone driver

High Frequency Driver-1" exit compression driver with 90x60 Nominal Coverage waveguide

Input Terminal

Push To Hold type

Dimensions

736mm high x 246mm wide x 236mm deep

SC110



SC110 Speakers

Frequency Range

40Hz-20kHz (-3dB) In Room Response

Power Handling

150-310 Watts recommended amplifier power

Sensitivity

95dB for 2.83 volts at 1 meter

Impedance

8Ω (minimum 4Ω)

Configuration

2 way

Enclosure Type

Bass reflex, front vented

Driver

Low Frequency Driver-Single 10" paper cone driver

High Frequency Driver-1" exit compression driver with 90x40 Constant Directivity wave guide

Input Terminal

Push To Hold type

Dimensions

940mm high x 315mm wide x 254mm deep

SC11526



Frequency Range

40Hz-20kHz (-3dB) In Room Response

Power Handling

260-1020 Watts recommended amplifier power

Sensitivity

96dB for 2.83 volts at 1 meter

Impedance

8Ω (minimum 4Ω)

Configuration

3 way

Enclosure Type

Bass reflex, front vented

Driver

Low Frequency Driver-Single 15" paper cone driver

Mid. Frequency Driver-Dual 6" paper cone driver

High Frequency Driver-1.4" exit compression driver with 60x40 Exponential wave guide

Input Terminal

Push To Hold type

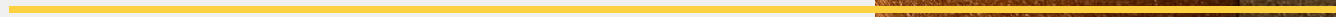
Dimensions

1168mm high x 450mm wide x 450mm deep

Surround Speaker



03



SR14



Frequency Range

55Hz-20kHz (-3dB) In Room Response

Power Handling

50-90 Watts recommended amplifier power

Sensitivity

84dB for 2.83 volts at 1 meter

Impedance

8Ω (minimum 4Ω)

Configuration

2 way

Enclosure Type

Bass reflex, front vented

Driver

Low Frequency Driver-Single 4" paper cone driver

High Frequency Driver-25mm (1") Fabric Dome Tweeter with Neodymium Magnet

Input Terminal

Push To Hold type

SR15



Frequency Range

55Hz-20kHz (-3dB) In Room Response

Power Handling

50-90 Watts recommended amplifier power

Sensitivity

87dB for 2.83 volts at 1 meter

Impedance

8Ω (minimum 4Ω)

Configuration

2 way

Enclosure Type

Bass reflex, front vented

Driver

Low Frequency Driver-Single 5.25" paper cone driver

High Frequency Driver-25mm (1") Fabric Dome Tweeter with Neodymium Magnet

Input Terminal

Push To Hold type

SR16



Frequency Range

50Hz-20kHz (-3dB) In Room Response

Power Handling

60-105 Watts recommended amplifier power

Sensitivity

88dB for 2.83 volts at 1 meter

Impedance

8Ω (minimum 4Ω)

Configuration

2 way

Enclosure Type

Bass reflex, front vented

Driver

Low Frequency Driver-Single 6.5" paper cone driver

High Frequency Driver-25mm (1") Fabric Dome Tweeter with Neodymium Magnet

Input Terminal

Push To Hold type

SR18



Frequency Range

48Hz-20kHz (-6dB) In Room Response

Power Handling

50-150 Watts recommended amplifier power

Sensitivity

90dB for 2.83 volts at 1 meter

Impedance

8Ω (minimum 4Ω)

Configuration

2 way

Enclosure Type

Bass reflex, front vented

Driver

Low Frequency Driver-Single 8" paper cone driver

High Frequency Driver-25mm (1") Silk Dome Tweeter

Input Terminal

Push To Hold type

SR18 FLAT



Frequency Range

48Hz-20kHz (-6dB) In Room Response

Power Handling

50-150 Watts recommended amplifier power

Sensitivity

90dB for 2.83 volts at 1 meter

Impedance

8Ω (minimum 4Ω)

Configuration

2 way

Enclosure Type

Bass reflex, front vented

Driver

Low Frequency Driver-Single 8" paper cone driver

High Frequency Driver-25mm (1") Silk Dome Tweeter

Input Terminal

Push To Hold type



SW18



Frequency Range

33Hz-400Hz (-3dB) In Room Response

Power Handling

150-375* Watts recommended amplifier power.

* The use of a power amplifier with high pass filter and soft limiter function is strongly recommended on Passive sub woofers(If use Passive Models).

Sensitivity

91dB for 2.83 volts at 1 meter

Impedance

4Ω

Enclosure Type

Bass reflex, front vented

Driver

Low Frequency Driver-Single 8" paper cone driver with 50mm (2") long throw voice coil developed for high level, low frequency reinforcement

Input Terminal

Push To Hold type

Dimensions

356mm high x 356mm wide x 451mm deep

SW110A



Frequency Range

25Hz-400Hz (-3dB) In Room Response

Power Handling

150-450* Watts recommended amplifier power.

* The use of a power amplifier with high pass filter and soft limiter function is strongly recommended on Passive sub woofers(If use Passive Models).

Sensitivity

89dB for 2.83 volts at 1 meter

Impedance

4Ω

Enclosure Type

Bass reflex, front vented

Driver

Low Frequency Driver-Single 10" paper cone driver with 50mm (2") long throw voice coil developed for high level, low frequency reinforcement

Input Terminal

Push To Hold type

Dimensions

366mm high x 366mm wide x 446mm deep

SW110B



Frequency Range

25Hz-400Hz (-3dB) In Room Response

Power Handling

150-600* Watts recommended amplifier power.

* The use of a power amplifier with high pass filter and soft limiter function is strongly recommended on Passive sub woofers(If use Passive Models).

Sensitivity

90dB for 2.83 volts at 1 meter

Impedance

4Ω

Enclosure Type

Bass reflex, front vented

Driver

Low Frequency Driver-Single 10" paper cone driver with 65 mm (2.56 in) long throw voice coil developed for high level, low frequency reinforcement

Input Terminal

Push To Hold type

Dimensions

426mm high x 426mm wide x 609mm deep

SW112A



Frequency Range

23Hz-400Hz (-3dB) In Room Response

Power Handling

200-700* Watts recommended amplifier power.

* The use of a power amplifier with high pass filter and soft limiter function is strongly recommended on Passive sub woofers(If use Passive Models).

Sensitivity

90dB for 2.83 volts at 1 meter

Impedance

4Ω

Enclosure Type

Bass reflex, front vented

Driver

Low Frequency Driver-Single 12" paper cone driver with 51 mm (2 in) long throw voice coil developed for high level, low frequency reinforcement

Input Terminal

Push To Hold type

Dimensions

436mm high x 436mm wide x 596mm deep

SW112B



Frequency Range

25Hz-400Hz (-3dB) In Room Response

Power Handling

200-375* Watts recommended amplifier power.

* The use of a power amplifier with high pass filter and soft limiter function is strongly recommended on Passive sub woofers(If use Passive Models).

Sensitivity

92dB for 2.83 volts at 1 meter

Impedance

4Ω

Enclosure Type

Bass reflex, front vented

Driver

Low Frequency Driver-Single 12" paper cone driver with 51.32mm (2 in) long throw voice coil developed for high level, low frequency reinforcement

Input Terminal

Push To Hold type

Dimensions

421mm high x 421mm wide x 516mm deep

SW112B



Frequency Range

25Hz-400Hz (-3dB) In Room Response

Power Handling

200-375* Watts recommended amplifier power.

* The use of a power amplifier with high pass filter and soft limiter function is strongly recommended on Passive sub woofers(If use Passive Models).

Sensitivity

92dB for 2.83 volts at 1 meter

Impedance

4Ω

Enclosure Type

Bass reflex, front vented

Driver

Low Frequency Driver-Single 12" paper cone driver with 51.32mm (2 in) long throw voice coil developed for high level, low frequency reinforcement

Input Terminal

Push To Hold type

Dimensions

421mm high x 421mm wide x 516mm deep

SW112C



Frequency Range

25Hz-400Hz (-3dB) In Room Response

Power Handling

4000-1000* Watts recommended amplifier power.

* The use of a power amplifier with high pass filter and soft limiter function is strongly recommended on Passive sub woofers(If use Passive Models).

Sensitivity

91dB for 2.83 volts at 1 meter

Impedance

4Ω

Enclosure Type

Bass reflex, front vented

Driver

Low Frequency Driver-Single 12" paper cone driver with 77mm (3 in) long throw voice coil developed for high level, low frequency reinforcement

Input Terminal

Push To Hold type

Dimensions

456mm high x 456mm wide x 626mm deep

SW115



Frequency Range

18Hz-400Hz (-3dB) In Room Response

Power Handling

2700-3500* Watts recommended amplifier power.

* The use of a power amplifier with high pass filter and soft limiter function is strongly recommended on Passive sub woofers(If use Passive Models).

Sensitivity

87dB for 2.83 volts at 1 meter

Impedance

4Ω

Enclosure Type

Bass reflex, front vented

Driver

Low Frequency Driver-Single 15" Carbon cone driver with 188mm (7.4 in) long throw voice coil developed for high level, low frequency reinforcement

Input Terminal

Push To Hold type

Dimensions

526mm high x 526mm wide x 676mm deep

For Music

05



ST165



Frequency Range

40Hz-20kHz (-3dB) In Room Response

Power Handling

110-230 Watts recommended amplifier power

Sensitivity

86.7db for 2.83 volts at 1 meter

Impedance

6-8 Ω (minimum 4 Ω)

Configuration

2 way

Enclosure Type

Bass reflex, front vented

Driver

Low Frequency Driver-Single 6.5" paper cone driver

High Frequency Driver-1" Dual Ring Radiator Tweeter

Input Terminal

Push To Hold type

WHY ?

Reliability.

It is highly reliable and robust enough to take continuous high volume use in it's stride, all day, every day and sound damn good while doing it.

Engineering.

The Acoustic engineering with it's measurement using different types of drivers and topologies,we employed the most trusted technologies making it suitable to be used in it's way.

Quality.

Quality will be experienced along with it's reliability.Our product should make us proud and hence there is no compromise in any of the parts regarding quality. Drivers are Made In Germany and Passive Components are made in USA.

Warranty.

DX is extremely durable and it will have upto 5 years warranty which covers all cost for a customer



Dynamics

In short it really means how well a speaker copes with the range of volume from soft to loud during music playback or movies. A speaker/sub woofer that is not able to reproduce the entire dynamic range of the source will sound very dull, laid back and flat. Some speakers/sub woofers are able to handle the dynamic range of the content, which means they hit the SPL levels they should according to the input signal – but that is just half of the equation, they need to be able to follow the input signal also without any sign of compression or distortion. It is not an easy feat, but when done right it makes listening to music and watching movies so that much more engaging and lifelike.

A really dynamic speaker/sub woofer can scare you when they are supposed to. Like when an entire orchestra hit each of their instruments at the same time with all their effort, or an explosion or gunshot in a movie. In real life these events can really scare or at least startle you, and a very dynamic speaker/sub woofer will do the same. These are what one refer to as macro dynamics.

Micro dynamics on the other hand has more to do with the detail of for example percussive instruments, the finger nails touching guitar strings, a drum stick lightly tapping a drum or similar sounds – if a speaker represents good micro dynamics these type of sounds will have a real sound to them, somewhat distinct and absolutely discernable from other sounds.

Designed In Denmark
Made In India.

DX SOUND

#5-Rishiram Nagar,
KNG Pudur Main Road,
SM Palayam,GN Mills-post
Coimbatore-641 029.Tamil Nadu,India.

support@dx-sound.com

Tel.:+91 98430 78999.

www.dx-sound.com

