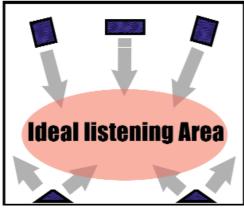
DFS







The Wharfedale DFS is bipolar – specifically engineered to hang on a rear wall. This should not be confused with dipole designs (which are more usually placed parallel to the listening position on a side wall). The bipolar principle produces both ambient and direct sound (for accurate stereo rear effects), whereas a dipole is weighted much more heavily towards just ambience. This is largely because when dipoles were first used, the rear sound field was mono (Dolby Surround\*). Now with the huge growth of DVD and multi-channel digital music, the rear sound fields are stereo (Dolby Digital\*, DTS, Dolby Prologic II\*), offering a totally different sound and experience.

\*Dolby is a registered trademark of Dolby Laboratories



#### The DFS

DFS stands for 'Diffuse Field Surround', an ideal for the reproduction of rear surround effects in a 'Home Cinema' or multi-channel music system. The range is based upon two basic designs, those with an MDF backplate (DFS-21 and DFS-23), which are finished in a choice of furniture grade real wood veneers or a choice of vinyl wraps. These are designed for high-quality installations where the speakers a a feature of the room, to be proudly displayed. For more discreet applications where something less conspicuous is required, but without any compromise on sound quality, there are the new DFS-18 and DFS-20 models. All are available with KEVLAR or Polypropylene cones for superb sonic integration into virtually any system and there are special models designed to integrate with our other ranges.

A good rear sound field requires both ambient sound and pinpoint stereo imaging. There have been several proposed solutions to these conflicting ideals; most of them involve using additional speakers. With the Wharfedale DFS series you can recreate a convincing and realistic rear sound field using a single pair of loudspeakers. The result is less cumbersome, better looking and is an incredible sounding speaker.

Ambience is necessary to create the spatial awareness and to set the limits of the sound field - when a voice is heard in an enclosed space, it should sound as such, with a slight ambient echo. Different environments produce different tones. They may only be slight differences, but these are essential to the brain's perception of realism and space.

Pinpoint stereo imaging is also essential. If there is a sound coming from behind you, you need to know where from. Sounds, as well as having ambiance, need localisation. Whilst the ambience establishes the soundstage, the imaging then places sounds and voices within that soundstage. The combination of the two types of sound work synergistically to enhance the experience and draw you into a movie or soundtrack in a way like never before.

The opposing drive units are configured as bi-polar - all of them fire at the same time (or in phase). This gives them an excellent smooth bass response, as there is little bass cancellation or interference. This also gives them a better efficiency, to reveal more detail and resolution.

DFS speakers should ideally be positioned on a rear wall, equidistant from the central listening position and above ear level.

Modern, sweeping curves and finishes are the epitome of modern design, but the extraordinary styling is as much a function of purpose as

aesthetic flair. The profiled baffle provides exceptional dispersion characteristics for an open and revealing sound while the extruded triangular cross-section is essential for the acoustic nature of rear sound field.

"Modern, sweeping curves and finishes are the epitome of modern design, but the extraordinary styling is as much a function of purpose as aesthetic flair."





### The DFS-18 and DFS-20

Designed to be unobtrusive and elegant, yet without any compromise in performance, the DFS-18 and DFS-20 models are the ideal solution for multi-function rooms and lounges with Home Cinema or multi-channel systems. Using the same arrangement of drive units as the larger models, the DFS-18 and 21 produce the same direct and ambient sound fields, yet are lighter and smaller, with a choice of either black or white cloth grilles (non-removable).

The DFS are suitable for use with any front loudspeakers, with a wide choice of options to facilitate 'tonal matching'. Any rear sound field needs to integrate tonally with your front speakers, to produce a 'wrap-around' effect, where the transition of a sound from front to rear sound field is seamless.

The DFS-18 is available with either bidirectionally woven KEVLAR Bass/Mid cones (DFS-18 Diamond) or with a polypropylene alternative. Whilst the specifications of both systems are identical, tonal matching of a Home Cinema is achieved by using the KEVLAR cones with KEVLAR or carbon based front speakers, whilst the polypropylene version is more appropriate for other cone materials such as paper/pulp based cones, or indeed, other polypropylene based models.

DFS-20 has a larger bass/mid drive unit to tonally match with larger speakers and floorstanders. Otherwise, it is very similar to the DFS-18. Again, this model is available with either bi-directionally woven KEVLAR cones (DFS-20 Evolution), or with the more traditional Polypropylene cones. The external dimensions are identical to the DFS-18, and again, they are available with either black or white fixed cloth grilles. Both models have high-quality gold-plated terminals recessed into the rear panel and are mounted with twin keyhole slots.

DFS

Tonal matching of a Home Cinema is achieved by using the KEVLAR cones with KEVLAR or carbon based front speakers, whilst the polypropylene version is more appropriate for other cone materials such as paper/pulp based cones, or indeed, other polypropylene based models.

## Sound Fundamentals

Ultra strong baffles and carefully balanced drive units provide a high-octane blend of music and effects for an amazing surround sound experience. The high-gauss neodymium tweeter unit is one of our famous 25mm textile dome units – accurate and detailed enough to position sounds within a three-dimensional soundstage well beyond the confines of the listing area. Allied with a choice of either a polypropylene laminate or our own unique KEVLAR woven cones, driven in turn with double hand-wound voice coils, the overall effect is a seamlessly integrated sound field with sparkling musicality.

A bi-polar rear-channel loudspeaker offers the best of both worlds. When placed on a rear wall, a direct and precise stereo image is created from the inward facing drivers, while the outward facing drivers fire into the walls to create both reverb and ambience.









DFS-18



Both DFS-18 and DFS-20 are bass reflex models with forward facing ports to disperse bass evenly and over a wide area. The pictures here show both models with the cloth grill removed, although both are supplied with a fixed grille.





\*Above images show the DFS with cloth grille removed

DFS-18 280mm Wharfedale 132mm 290mm **DFS-20** Wharfedale 140mm 365mm **DFS-20** EVO DFS 20\*\* DFS-18 Diamond DFS 18\*\* Model Bass 5" b/m x 2 125mm x 2 100mm x 2 100mm x 2 25mm x 2 Tweeter 25mm x 2 25mm x 2 25mm x 2 Cone type Polypropylene Black Kevlar Polypropylene Black Kevlar 25-200W 25-200W Power 25-120W 25-120W 6\* 6\* 6\* Nominal Impedance 6\* Sensitivity 1W @ 1m 90 88 86 86 Frequency Range @ -6dB 70-20kHz 80-20kHz 70-20kHz 70-20kHz

Crossover Frequency	3k	3k	3.5k	3.5k		
Frequency Fb	70	70	80	80		
Size mm (H x W x D)	352 x 365 x 140	352 x 365 x 140	280 x 290 x 132	280 x 290 x 132		
Finishes	No Frame Black or White Cloth					
Matching Range	Any	Pi EVO Any	Any	Diamond 8 Any		
Net Weight Gross Weight (pair)	4kg 10kg	4kg 10kg	2.7kg 6.2kg	2.7kg 6.2kg		
**Diamond DFS-18 and EVO DFS-20 are special edition models matched to the Diamond 8 series and Pacific Evolution respectively						



and heavier than the other models. Both feature 5" or 125mm bass/mid drive units. The main difference is that the DFS-23 uses woven KEVLAR cones, whilst the DFS-21 uses our special polypropylene design. The DFS-23 is also offered with a choice of furniture grade, real wood veneers, whilst the DFS-21 has a choice of wood-effect vinyl wraps. The cloth grilles for both models are supplied in black. As with the other models, the DFS-21 should be used in systems where the front speakers' main cone material is of paper, treated pulp, polypropylene or similar. The DFS-23 is a better tonal match for systems with front speakers using either KEVLAR or carbon/graphite based diaphragms.

Both units use 2 bass/mid drivers and 2 of our 25mm soft-dome tweeters per speaker, in the

essential element of the room design, not to be hidden or concealed.

These superbly finished surrounds are offered in a wide choice of wood finishes, to co-ordinate both with our models and with those from other

The additional weight and size of these models adds to their dynamic attack and makes for a very intense listening experience.

As with the smaller DFS models, high quality gold-plated terminals, oxygen-free copper wiring and crossover components are used throughout the construction. Mounting is easily achieved with a pair of keyhole slots for each speaker.

#### **Hardwood Veneers**



Black



Walnut Light



Rosewood



Beech



Cherry Medium



Light Oak



Maple



**Birds Eye** Maple



Light Maple

#### 25mm soft dome tweeters



**KEVLAR** or Polypropylene cones

# DFS models guide







Model	DFS-23	DFS-21	Diamond DFS-23**
Bass / Mid Tweeter	125mm x 2 25mm x 2	125mm x 2 25mm x 2	125mm x 2 25mm x 2
Cone type	Black Kevlar	Polypropylene	Black Kevlar
Power	25-200W	25–200W	25-200W
Nominal Impedance	6*	6*	6*
Sensitivity 1W @ 1m	90	90	90
Frequency Range @ -6dB	70-20kHz	70-20kHz	70-20kHz
Crossover Frequency	3k	3k	3k
Frequency Fb	70	70	70
Size H x W x D	365 x 415 x 175	365 x 415 x 175	365 x 415 x 175
Finishes	Real Wood Veneer Frames Black Cloth	Vinyl Veneer Frames Black Cloth	Maple, Beech or Black Vinyl Black Cloth
Matching Range	Pacific, Pi EVO, Emerald	Atlantic, Crystal, Xarus, Valdus	Diamond 8
Net Weight Gross Weight (pair)	4.2kg 10.5kg	4.2kg 10.5kg	4.2kg 10.5kg

<sup>\*\*</sup>Diamond DFS-23 is a special edition model matched to the Diamond 8 series \*All speakers are compatable with 8 ohm amplifier outputs



Wharfedale International Ltd.

IAG House,

Sovereign Court,

Ermine Business Park,

Huntingdon. PE29 6XU

Tel : 0845 458 0011 / +44 (0) 1480 447700

Fax: +44 (0) 1480 431767

www.wharfedale.co.uk