CDT introduces the ES-300CC 3-way deluxe crossover

CDT now proudly offers a premium quality solution to installation of a front-mounted 3-way system for the most discriminating owner.

ES-300CC adds functionality to the HD-30 and uses larger premium parts for the maximum performance and power handling.

This crossover module offers interactive crossover to and adjustability of the mid-range and tweeter and a high-tech elliptic filter to crossover the tweeter.

New and unprecedented functionality in this unit is highlighted by the superiority of the midrange level setting and the midrange crossover to the tweeter.

Designed to produce a crossover to the midrange around 250 Hz with a seven-inch woofer and four-inch midrange in a typical installation, this crossover produces amazing results with ease in a reasonable occupied space. The proprietary series connected tapped inductor maintains damping to the midrange and woofer on all levels and interacts to vary the crossover Q. Another similar inductor controls the midrange roll-off or EQ to match various mid-range drivers in various mounting positions to the selected installed tweeter. As the midrange level is reduced, the crossover Q to both drivers is parametrically altered to automatically produce an optimal crossover to both drivers at all selected levels.

The midrange is equalized to crossover to the tweeter with a purely first-order adjustable filter. Combined with the elliptic crossover on the tweeter optimal sound quality is achieved.

This flexible approach will produce the best sound in virtually all installations adapting to various midrange drivers. The maximum setting for the midrange EQ duplicates the HD-30 fixed setting. Choose the mounting position and select the drivers to accommodate your vehicle and to facilitate a natural sound. A very small, extended range speaker can also be selected to augment the tweeter response especially if a high mounting position is chosen for the tweeter.

Tweeter crossover is accomplished with a transient-optimized fourth-order elliptic crossover which brings in the tweeter quickly and seamlessly to complement a broad variety of tweeters and midrange drivers in most locations. Crossover will typically be achieved around 4.3 kHz depending on driver selection and relative mounting position. Extended-range midrange speakers can raise the crossover to produce a blend up to 10 kHz when the maximum EQ setting is chosen.

Three-way configurations will create an installation that gives the smoothest midrange, the most flexibility in mounting the drivers for a smooth blend and finally gives the best bass impact. Midrange drivers, because they are small and require minimal enclosure volume, can usually be located conveniently close to the tweeter.

Installation of this unit is totally straightforward and trouble-free.
Terminals are clearly marked with the designated connections and polarity.
Level setting jumpers are clearly marked and each offers 3 positions. The EQ jumper provides four positions to select maximum (natural driver roll-off only) and three other jumper positions. With a typical midrange driver and location this provides a tapered response shape beginning at the corresponding frequencies:

Hi – 4kHz
Med – 2 kHz
Low – 1 kHz

It should be noted the crossover will still take place at 4-5 kHz but the EQ setting will flatten the response of the midrange if necessary in the region below the preset tweeter crossover frequency.

With all tone controls set to flat, set the levels to medium and the EQ to max. With a vocal recording move the midrange level jumper to balance with the woofer sound. Male and female vocals both occur in this crossover frequency range. The upper EQ end of the midrange can next be set with a recording that includes cymbals. Try setting the tweeter level for a natural high at each of the four possible midrange EQ settings. One of these combinations will give an optimized result.

In the case that more adjustability is required our CDT LP-1 may be interposed between the midrange or tweeter driver and its connection to the crossover to dial in the desired level on a continuously variable basis.

For technical support call:1-877-568-3238 8.30-5.00 Pacific time.

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