

HEADPHONE/AUDIO DISTRIBUTION SYSTEM AND REMOTE MIXER

MODELS HDS-16, HRM-16



HRM-16 Headphone/Audio Remote Mixer



HDS-16 Headphone/Audio Distribution System

FEATURES

- Every artist in the studio or on stage can have a custom headphone/monitor mix without any adjustments at the board
- Perfect for tracking, overdubbing, rehearsal sessions, and onstage monitor mixing
- HDS-16 rackmount distribution system connects to the studio console and routes 8 mono and 4 stereo signals to HRM-16 remote mixing stations via a single multi-pair cable
- The HRM-16 Remote Mixer may either attach to a mic stand or be set on a shelf or table, allowing headphone/monitor mixes to be created on the fly
- Talkback system allows each HRM-16 mixer user to communicate with other users and the main mixing location
- One 25 foot (7.7m) HDS-16 to HRM-16 linking cable is included with each HRM-16 unit, eliminating the need for a costly "console snake"
- HDS-16 provides ultra low distortion (less than .002%), low crosstalk, high dynamic range (greater than 105 dB) drive for the HRM-16's
- All inputs are balanced; line outputs are balanced or single ended
- Three year limited warranty

DESCRIPTION

Following up on the tremendous success of its HDS-6/ HR-6 Headphone/Audio Distribution System, Furman introduces an enlarged and enhanced system, the **HDS-16/HRM-16 Headphone/Audio Distribution System**.

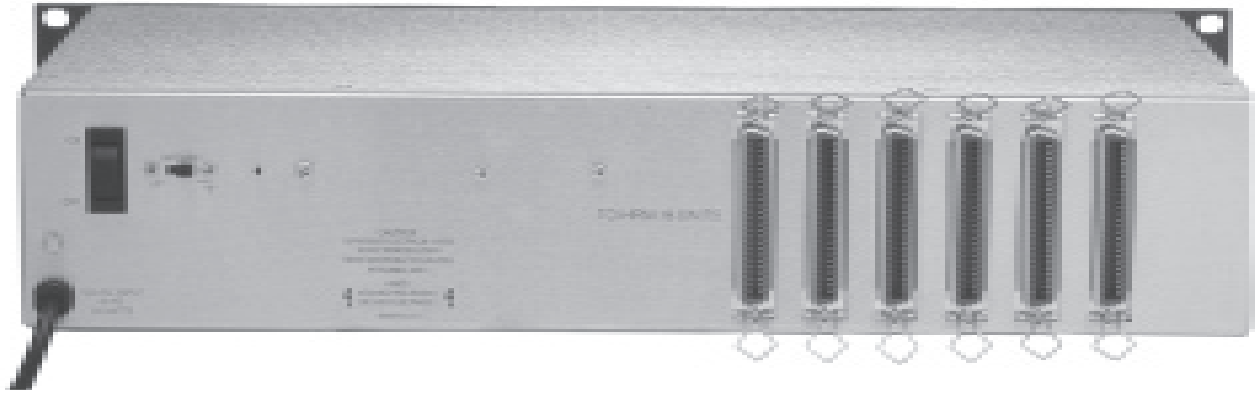
The HDS-16 Headphone Distribution System and HRM-16

Headphone Remote Mixer are the logical extension to Furman's very popular headphone amp/audio distribution lineup. These models are designed to function equally well for both live (in-ear or stage monitors) and studio applications, allowing greater flexibility and ease for both the user and the engineer.

The HDS-16/HRM-16 Headphone/Audio Distribution System cleanly routes 8 mono and 4 stereo signals to remote mixing locations via Centronics 50 pin cables. Up to eight HRM-16's can be connected directly or daisy chained to a single HDS-16, allowing as many as sixteen users (two per each HRM-16) to customize eight different mixes. A unique talkback system allows each user to communicate with other users and the main mixing location. Additionally, a SOLO system allows the engineer to mute all but one stereo send from the mix location – very handy for reviewing recent takes or rough mixes. Additional HRM-16 features include local effects send/return, line out, overall bass/treble controls, talkback level, and a master level control.

The double rack-space HDS-16 provides full patching functions on its front panel via 1/4" and TT input jacks, and is intended to be installed at the mixing console location. The HDS-16 provides power and signal conditioning to drive the HRM-16 Remote Mixers. There is no power cord or wall wart required for the HRM-16's. In addition, it includes two 1/4" jacks for the two-way talkback functions, and a SOLO REMOTE switch with an indicator that allows muting of all but one stereo feed at all HRM-16's. This comes in handy for isolating tracks for critical listening without having each HRM-16 user turn down all but one channel. The SOLO function also includes a 1/4" jack so actuation can be done with a footswitch. Front panel indicators include POWER ON and SOLO ON. The rear panel includes six Centronics 50 pin connectors to link up to six HRM-16's (more if daisy chaining is used), and the standard Furman ON/OFF and GROUND LIFT switches.

HDS-16 Rear View



The unique talkback system is extremely versatile. It can be configured two different ways by moving a jumper on the circuit board in the HDS-16. One way allows the talkback mic on each HRM-16 to be fed to all of the other HRM-16 units as well as the HDS-16. The other configuration allows communication to the HDS-16 only. This is particularly useful for stage use where the user's talkback mic should not feed into all of the monitors (including the user's own monitor).

The HRM-16 Remote Mixer may either attach to a mic stand with the included mic stand clip and hardware, or be placed on a table or shelf. The unit requires no external power, and allows full volume/low distortion headphone mixes to be created on the fly.

The eight mono and four stereo signals each have level controls. Each mono channel also has a pan control and an effects send control which feeds its own rear panel 1/4" send/return jacks; the affected signal is returned into the mix and controlled via a stereo effects return knob. Also on the rear panel of the HRM-16 is a mono line out 1/4" jack to drive stage or in-ear monitors, a jack for a talk-back footswitch, and two 50 pin Centronics connectors to allow daisy chaining of up to four HRM-16's.

Connecting HDS-16 and HRM-16's is easy, as each mixer is supplied with a 25-foot super-flexible interconnect cable which can easily be extended or routed through walls and daisy chained to other HRM-16's. Cable extenders and thru-wall installation kits are available as well (see below).

The HDS-16 and HRM-16 are sold separately.

THREE YEAR LIMITED WARRANTY

The HDS-16 and HRM-16 are protected by a three-year limited warranty covering defects in materials and workmanship.

OPTIONS

- | **Model HDS-16E:** "E" suffix version is for use in countries with 220/240 VAC mains. Since HRM-16 units derive their power from the HDS-16, no special HRM-16 model is needed.

OPTIONAL ACCESSORIES

- | **HRM-CABL:** Replacement 25 foot (7.7m) Centronics cable for linking or daisy-chaining HRM-16's, or for extending existing cables.
- | **HRM-16EX:** Extension adapter which allows two HRM-CABLs to be joined together to create extended cable lengths. Up to eight HRM-CABLs may be joined, making a total

length of up to 200 feet (62m), using one HRM-16EX adapter per cable segment (see Cable Specifications below).

- | **HRM-THRU:** Wallmount kit consisting of two Centronics connectors linked with an 18 inch flat cable. Includes two wall plates and gaskets.
- | **HRM-RAW:** Raw HRM-16 cable, priced per foot, for those desiring to make their own cables in exact, custom lengths.
- | **HRM-CONN:** Cable-mount Centronics connector, for making custom cables.

HDS-16 AND HRM-16 SPECIFICATIONS

Inputs:	Balanced, 50k Ω impedance, 90 dB CMRR
Line Outputs:	Balanced or single ended, 50 Ω impedance, 68 dB output CMRR
Sensitivity:	+4 dBu for rated output
Power Output:	750 mW at 32 Ω , 770 mW at 100 Ω , 260 mW at 600 Ω
Distortion and Noise:	Less than .002% THD, 20 Hz to 20 kHz at full rated power
Dynamic Range:	Greater than 105 dB
Crosstalk:	Less than -95 dB at 10 kHz
Frequency Response:	+0, -1 dB from 13 Hz to 32 kHz
Power Requirements:	HDS-16: 120 VAC, 60 Hz, 82 Watts HDS-16E: 230 VAC, 50 Hz, 82 Watts
Mechanical:	HDS-16: Dimensions: 3.5" H x 19" W x 8" D; Weight: 9.4 lbs. (4.3kg) HRM-16: Dimensions: 2.875" H x 11" W x 7" D; Weight: 3.5 lbs. (1.6kg)

CABLE SPECIFICATIONS

25 twisted pair, 24 AWG, with overall shield, Centronics 50 pin plug (male) each end. The length of cable used only affects the maximum continuous power out.

Losses for additional cable beyond 100 feet:

32 Ω headphones:	-0.34 dB (693 mW vs. 750 mW maximum output) per 100 feet of cable
100 Ω headphones:	-0.16 dB (746 mW vs. 770 mW maximum output) per 100 feet of cable