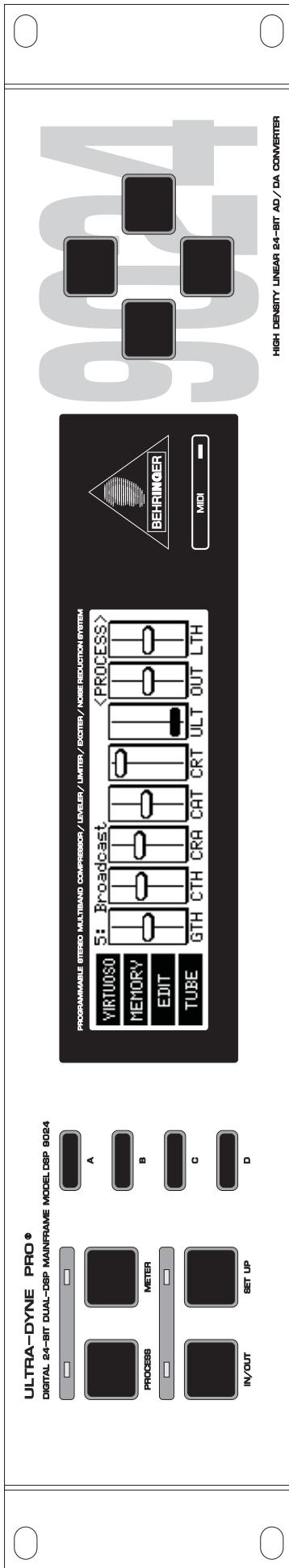


# ULTRA-DYNE<sup>®</sup> PRO DSP9024



## Tech. Specifications

Version 1.1 May 2000

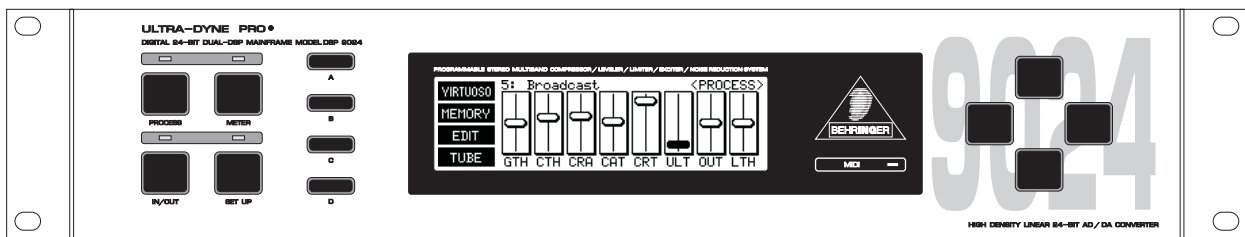
ENGLISH



[www.behringer.com](http://www.behringer.com)

# ULTRA-DYNE PRO

Ultra-high performance Digital Stereo Mainframe powered by two 24-bit High-Speed Signal Processor



- ▲ High-end 24-bit AD/DA converters for ultra-high dynamic range and resolution of detail with selectable Sampling Rate of 44.1 or 48 kHz
- ▲ Ultimate 6-way Multiband Dynamics Processor for analog and digital Mastering and Sound Reinforcement systems
- ▲ ULTRAMIZER® automatically adjusts output level and signal density for maximum perceived loudness
- ▲ 6-Band Compressor / Leveler / Peak Limiter for “inaudible” compression. No side-effects, such as “bass pumping” etc.
- ▲ 6-Band Noise Gate with BEHRINGER’s IRC (Interactive Ratio Control) for ultra musical performance, can be setup as a program adaptive 6-band noise reduction system that removes any noise without altering your sound
- ▲ BEHRINGER VIRTUOSO® function for super-easy, program dependent and self learning program setup
- ▲ 3-Band Harmonics Exciter with user-definable balance for odd / even harmonics and unique “kick” control
- ▲ Extremely sophisticated Tube emulation with selectable tube types (12AX7, EL34) for ultra-warm sound
- ▲ Built-in 600 msec. Delay enables a “Look Ahead” for intelligent, anticipating processor function
- ▲ Ultra-accurate Level Peak Meter with Peak Hold and selectable Reference Levels (+4 dBu / -10 dBV / Dig Max)
- ▲ Full MIDI parameter and snapshot control allow for real time editing
- ▲ Free ULTRA-DYNE software allows for total remote control via PC (download at [www.behringer.com](http://www.behringer.com))
- ▲ Extremely versatile presets give you outstanding and instant sound results for numerous standard applications
- ▲ 100 settings can be stored under any alphabetic name. Memory backed up by a long life battery
- ▲ Security Key Password can be installed for programs or unattended use
- ▲ Open-ended and “future-proof” architecture allows for future Software Upgrades
- ▲ Extremely flexible Stereo Link, Band Link & Clone functions
- ▲ 24-bit AES/EBU Interface for Digital inputs and outputs at 32, 44.1 and 48 kHz (optional)
- ▲ Large high-resolution LCD Graphic Display with high-contrast LED backlight
- ▲ Servo-balanced inputs and outputs on gold-plated XLR and jack connectors for high signal integrity
- ▲ Relay-controlled hard-bypass with an auto-bypass function during power failure (fail-safe relay)
- ▲ High-quality components and exceptionally rugged construction ensure long life and durability
- ▲ Internal power supply design for professional applications
- ▲ Manufactured under ISO9000 certified management system

# SPECIFICATIONS

## ANALOG AUDIO INPUTS

Connections	XLR and balanced 1/4" jacks
Type	RF-suppressed, servo-balanced input
Impedance	50 kOhm balanced, 25 kOhm unbalanced
Max. Input Level	+21 dBu balanced and unbalanced
CMR	typ. 40 dB, >55 dB @ 1 kHz

## ANALOG AUDIO OUTPUTS

Connections	XLR and balanced 1/4" jacks
Type	electronically controlled, servo-balanced output amplifier
Impedance	60 Ohm balanced, 30 Ohm unbalanced
Max. Output Level	+16 dBu balanced and unbalanced

## BYPASS

Type	relay controlled hard-bypass
------	------------------------------

## SYSTEM SPECIFICATIONS

Frequency Range	20 Hz to 20 kHz, +/- 0.5 dB
S/N Ratio	> 88 dBu, non-weighted, 22 Hz to 22 kHz
THD	0.004 % typ. @ +4 dBu, 1 kHz, unity gain
Crosstalk	< -103 dB, 22 Hz to 22 kHz

## DIGITAL INPUT (optional)

Type	AES / EBU transformer-balanced
Impedance	10 kOhm balanced
Input Level	3 to 10 V (peak to peak)

## DIGITAL OUTPUT (optional)

Type	AES / EBU transformer-balanced
Impedance	100 Ohm balanced
Output Level	5 V (peak to peak)

## MIDI INTERFACE

Type	5-pin DIN socket: In, Out and Thru
------	------------------------------------

## DIGITAL PROCESSING

Converters	24-bit sigma-delta
Sampling Rates	48 kHz, 44.1 kHz and 32 kHz (32 kHz only with AES/EBU)

## CONTROLS

Process	switch to PROCESS mode
Meter	switch to METER mode
In/Out	inserts the device into the signal path
Setup	access to both setup levels
4 Softkeys	functions corresponding to the pictogram
4 Cursor Keys	modification of parameters and scrolling in menus

## DISPLAY

4 Function Switch LEDs	indicate the active functions
MIDI LED	LED for monitoring the reception of MIDI data

## DISPLAY

Type	240 x 64 dot matrix, liquid crystal display (LCD)
Backlight	LED array
Contrast	adjustable via software

**POWER SUPPLY**

AC Power	USA/Canada	120 V ~, 60 Hz
	U.K./Australia	240 V ~, 50 Hz
	Europe	230 V ~, 50 Hz
	General export model	100 - 120 V ~, 200 - 240 V ~, 50 - 60 Hz
Power Consumption		max. 30 W
Fuse	100 - 120 V ~:	<b>T 630 mA H</b>
	200 - 240 V ~:	<b>T 315 mA H</b>
AC Connection		Standard IEC receptacle

**DIMENSIONS/WEIGHT**

Dimensions (H * W * D)	app. 3.5" (89 mm) * 19" (482.6 mm) * 12" (304.8 mm)
Weight	app. 4.8 kg
Shipping Weight	app. 6.0 kg

---

The information contained in this sheet is subject to change without notice. No part of this sheet may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording of any kind, for any purpose, without the express written permission of BEHRINGER Spezielle Studioteknik GmbH.

BEHRINGER, VIRTUOSO, ULTRAMIZER and ULTRA-DYNE are registered trademarks. ALL RIGHTS RESERVED.

© 2000 BEHRINGER Spezielle Studioteknik GmbH.

BEHRINGER Spezielle Studioteknik GmbH, Hanns-Martin-Schleyer-Str. 36-38, 47877 Willich-Münchheide II, Germany

Tel. +49 (0) 21 54 / 92 06-0, Fax +49 (0) 21 54 / 92 06-30

---