# PHONIC

### DYN2000

Compressor / Limiter / Gate



#### Features

- > Stereo or Dual Mono operation of gating, compression and peak limiting
- ▶ Expander/Gate Circuit with variable release time and +15dBu maximum threshold
- > Hard Knee Selection allows selection between compression curve and the classic Hard Knee curve
- ▶ Low Frequency Shelf (via Contour button) in the Sidechain Path function
- > Limiting provides control of maximum peak levels at output regardless of other controls
- > Peak Limiter comes after the compression, gating and other circuitry including the output gain
- Absolute limit for peak excursions before they reach the output
- True RMS Level Detection senses the power in the program, in a similar way as human hearing does, giving results superior to peak or average detection
- > Bypass Buttons on both channels comparing the processed and unprocessed signals
- LED Display for Gain Reduction and output
- ▶ Balanced XLR and 1/4" TRS Input and Output Jacks
- > Separate Sidechain Inserts enable an outboard processor or signal to control compression or gating

#### Description

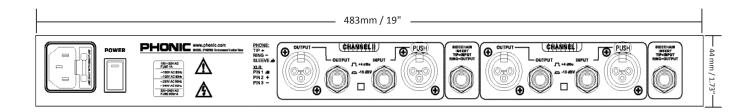
The DYN2000 compressor / limiter / gate from Phonic provides extremely musical compression, together with gating capable of completely eliminating unwanted transient sounds. Attack and release controls give complete control of compression to the engineer or artist, enabling the soft- and hard-knee compression to be easily adjusted between minimal – allowing users to smooth out uneven levels – and aggressive peak-limiting. Able to run in dual mono or stereo couple modes, and featuring versatile sidechain functionality, the DYN2000 is the ideal studio companion for all; delivering quality audio performance and reliability synonymous with Phonic products.

Information in this document is subject to change without notice.

DYN2000 Data Sheet 11/15/2011

Page 1





## **Specifications**

INPUT	
Connector:	1/4" TRS and XLR, Floating Balanced; XLR: Pin 2 hot Phone: Tip Hot HI
Impedance:	$>50 k\Omega$ balanced, $>25 k\Omega$ unbalanced
Maximum Level:	+24dBu, Balanced or Unbalanced
CMRR:	>40dB at 1kHz, typically >55dB
SIDECHAIN INSERT	
Connector:	1/4" TRS Phone, Normalled: Ring = Output (send); tip = Input (return)
Impedance:	Tip = >10kΩ (Input), Ring = 2kΩ (Output)
Maximum Level:	+24dBu
OUTPUT	
Connector:	1/4" TRS phone and XLR floating balanced, XLR: Pin 2 and Tip Hi
Impedance:	120Ω balanced, 60Ω unbalanced
Maximum Level:	+21dBu,>+20 dBm into 600Ω, balanced or unbalanced
Frequency Response:	20Hz - 20kHz; +0, -0.5dB,Typical 3dB points are 0.35Hz and 110kHz, unity gain
Noise:	<-90dBu, 22Hz to 22kHz, no weighting, unity gain
THD + N:	Typically <0.04%; Any Amount of Compression Up to 40dB@1kHz
SMPTE IMD	Typically <0.08% @ +10dBu (15dB Gain reduction)
COMPRESSION	
Threshold Range:	-40dBu to +20dBu
Threshold Characteristic:	Selectable easy or hard knee
Compression Ratio:	Variable; 1:1 to Infinity:1; 60dB Maximum Compression
Attack Time:	Variable program-dependent; 3ms to 340ms for 15dB gain reduction
Release Time:	Variable program-dependent; 200dB/Sec to 3dB/Sec
EXPANDER/GATE	
Threshold Range:	OFF to +15dBu
Expansion Ratio:	10:1
Maximum Depth:	>60dB
Attack Time:	<500µs (from Maximum Depth)
Release Time:	Adjustable, 30ms to 3sec (to 30dB attenuation)
SYSTEM	
Gain Adjustment Range:	OdBu to +20dBu
Limiter Threshold Range:	Variable; -20dB to +20dB
Interchannel Crosstalk	<-80dB, 20Hz to 20kHz
Dynamic Range:	>115 dB
POWER	
Power Consumption:	15 Watts Maximum
Operating Temperature:	0°C to 45°C (32°C to 113°C)
PHYSICAL Dimonsions:	$1 7'' \times 10'' \times 7 7'' / 4 4 cm \times 40 7 cm \times 10 7 cm^{1}$
Dimensions:	1.7" x 19" x 7.2" (4.4 cm x 48.2 cm x 18.3 cm)
Weight: Net weight:	5.05 lb (2.29 kg)
Shipping weight:	7.20 lb (3.27 kg)
Note: 0dBu = 0.775Vrms	

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DYN2000 Data Sheet 11/15/2011

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Page 2