

## PCL2700 & PCL4700

### Audio Interactive Dynamics Processors

- ▶ Program-adaptive compression circuitry with both hard- and soft-knee properties
- ▶ Intelligent Peak/Limiting circuitry combining aspects of clip and limiter functions for more reliable protection and inaudibility for peaks
- ▶ Dynamic enhancer for exciting and lively audio even through compression
- ▶ Expander/gate circuit with ratio control for cleaner noise suppression
- ▶ Balanced 1/4" TRS and XLR inputs and outputs



Front Panel

### FEATURES:

- ▶ Program-adaptive compression circuitry with both hard- and soft-knee properties
- ▶ Intelligent Peak/Limiting circuitry combining aspects of clip and limiter functions for more reliable protection and inaudibility for peaks
- ▶ Dynamic enhancer for exciting and lively audio even through compression
- ▶ Expander/gate circuit with ratio control for cleaner noise suppression
- ▶ Attack and release times adjustable either automatically or manually (PCL2700 only)
- ▶ Integrated de-esser removes excessive sibilance from vocals (PCL2700 only)
- ▶ Classic tube simulation for adding warmth to your sound (PCL2700 only)
- ▶ 12-segment LED meters for input/output levels (8-segment on the PCL4700)
- ▶ Switchable stereo coupling function
- ▶ Balanced 1/4" TRS and XLR inputs and outputs
- ▶ Auto bypass function in event of power outage
- ▶ Ultra-low noise operation

The Phonic PCL2700 and PCL4700 are powerful yet user friendly 2- and 4-channel dynamic processors with expander, gate, compressor, and limiter functions. Phonic's custom circuitry combines the advantages of hard- and soft-knee compression in a single dynamic function to deliver natural, transparent results. Also equipped with fully automatic and manually adjustable attack and release times, IGC peak-limiting circuit, selectable dual-mono or stereo, 12-segment display, switchable sidechain input with sidechain monitor function, and balanced XLR and 1/4" I/O. All in a convenient single rackspace.

# PCL2700 & PCL4700

## SPECIFICATION

Model Name	PCL2700	PCL4700
<b>AUDIO INPUTS</b>		
Type	1/4" TRS and XLR connectors	
Impedance	+4	90kΩ balanced, 45kΩ unbalanced @ 1kHz
	-10	180kΩ balanced, 90kΩ unbalanced @ 1kHz
Operating Level	+4/-10 dB (switchable)	
Max Input Level	+22dBu, balanced and unbalanced	
CMRR	typ. 40 dB, >60 dB @ 1 kHz	
<b>AUDIO OUTPUTS</b>		
Type	1/4" TRS and XLR connectors	
Impedance	95kΩ balanced, 50kΩ unbalanced @ 1kHz	
Max Output Level	+21dBu, +20 dBm balanced and unbalanced	
<b>SIDECHAIN INPUTS</b>		
Type	1/4" TS connectors	
Impedance	45Ω	
Max Input Level	+24dBu	
<b>SIDECHAIN OUTPUTS</b>		
Type	1/4" TS connectors	
Impedance	50Ω	
Max Output Level	+21dBu	
<b>SYSTEM SPECIFICATIONS</b>		
Bandwidth	20 Hz - 20 kHz, +/- 0.5 dB	
Frequency Range	10 Hz to 31 kHz, +0.5/-1dB	
S/N Ratio	115dB unweighed, 22Hz - 22 kHz	
THD	0.008% @ +4dBu, 1 kHz, unity Gain	
	0.07% @ +20dBu, 1 kHz, unity Gain	
IMD	(SMPTE) less than 0.01%	
Crosstalk	-89 dB, 20-20kHz, +4 dBu, channel-to-channel	
<b>EXPANDER/GATE SECTION</b>		
Type	Ratio-controlled	
Threshold	OFF to +10 dB	
Ratio	1:1 to 1:8	
Attack	<1 msec/50 dB (depends on program)	
Release	Variable: slow (100 ms/1 dB) to fast (100 ms/100 dB)	
<b>COMPRESSOR SECTION</b>		
Type	Automatic Soft/Hard Knee Compression	
Threshold	-40 to +20 dB	
Ratio	1:1 to ∞:1	
Attack/Release	Manual or automatic	Automatic
Auto Characteristics	Adaptive	

Manual Attack Time		0.3msec/20 dB to 300 msec/20dB	N/A
Manual Release Time		0.05sec/20 dB to 5sec/20dB	N/A
Auto Attack Time		15 msec for 10 dB, 5 msec for 20dB	
Auto Release Time		Depends on program, typ. 125 dB/sec	
Output		-20 dB to +20 dB	
<b>PEAK LIMITER SECTION</b>			
Type		Gain controllable	
Level		0 dB to OFF (+21 dBu)	
Ratio		∞:1	
Level		1 Limiter Type Clip	
Attack		0	
Release		0	
Level 2 Limiter Type		Program limiter	
Attack		Depends on program, typ. <5 msec	
Release		Depends on program, typ. 20dB/sec	
<b>DE-ESSER SECTION</b>			
Type		Adaptable to voice	N/A
Filter Frequency		9.5 kHz (female), 7.8 kHz (male)	N/A
Filter Bandwidth		Depends on program	N/A
Level Reduction		Maximum: 15 dB	N/A
<b>DYNAMIC ENHANCER SECTION</b>			
Type		Interactive	N/A
Filter Frequency		2.5 kHz (Low cut-off freq.)	N/A
Characteristic		High pass filter (6 dB/oct)	N/A
Boost		Max. 28 dB @ 7.5 kHz	N/A
<b>POWER SUPPLY</b>			
Mains Voltage	North America	120V, 60Hz	
	UK / Australia	240V, 50Hz	
	Europe	230V, 50Hz	
General Export Model		100V - 120V, 200 - 240V, 50 - 60 Hz	
Power Consumption		Maximum: 15W	Maximum: 18W
Fuse	100-120V	250 mA H	630 mA H
	200-240V	125 mA H	315 mA H
<b>PHYSICAL</b>			
Dimensions		45 x 483 x 217 mm (1.8" x 19" x 8.5")	
Weight 2.1 kg		(4.63 lbs) 2.25 kg (4.96 lbs)	



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# PHONIC

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Information in this document is subject to change without notice.