

OWNER'S MANUAL

Route 66 POWER AMPLIFIER FEATURES

	6 × 40W Per Channel
	TRI-LINEAR™ output capability, simultaneous stereo and bridged mono
	9/8/7/6/5/4/3 Channel Operation
	4 Channel Asymmetrical 12dB/Octave High Pass and dedicated Low Pass Crossovers Or 2 Channel Asymmetrical 12dB/Octave High Pass and dedicated Low Pass Crossovers
	Adjustable Bass EQ (0 to +12dB) @ 45Hz
0	Pulse Width Modulated (PWM) MOS-FET Switching Power Supply
	Stable into 1Ω Stereo Loads
	Low RFI/EMI design
	High Current High Voltage Triple Darlington Output Design
Q	2 layer, 2 ounce GOLD PLATED G10 Glass Epoxy PC Board
	Variable input sensitivity (200mV to 2V)
	Thermal Overload Protection
	Fully muted turn-on turn-off circuitry
	Optically isolated input design
	VI limiting circuitry with overcurrent LED
	Extensive burn-in and QC testing for the ultimate in reliability
	Optional LPL44 Kit • Dash Mount Subwoofer Gain Control
	1 Route 66 drink coaster included
	MADE IN THE GOOD OL' USA

Route 66 POWER AMPLIFIER SPECIFICATIONS

	RMS Output Power • Six Channels Driven:	
	Into 4Ω @ 12/13.8V DC	
	3 channels into 2Ω @ 12/13.8V DC	
	Stereo/Stereo/Mono into 4Ω	•
	Total Dynamic Output Power	600W
	THD at rated power 4Ω	< 0.02%
	SMPTE at rated power 4Ω	< 0.05%
	DIM at rated power 4Ω	< 0.01%
۵	Frequency response	5Hz to 30kHz +/-1dB
	Signal to Noise Ratio	> 100dB (20 to 20kHz)
	Input Sensitivity	200mV to 2V
	Minimum Output Load Impedance	1Ω stereo
Q	Input Impedance	20kΩ
	Idle Current	2.5A
0	Idle Current Current Consumption	2.5A
_	Current Consumption @ 4Ω stereo	35A
_	Current Consumption @ 4Ω stereo	35A 50A
_	Current Consumption @ 4Ω stereo	35A 50A
_	Current Consumption @ 4Ω stereo	35A 50A
_	Current Consumption @ 4Ω stereo	35A 50A 50A >80%
_ _	$\begin{array}{lll} \text{Current Consumption} \\ @ \ 4\Omega \ \text{stereo} \\ @ \ 2\Omega \ \text{stereo} \\ @ \ 4\Omega \ \text{mono} \\ \\ \text{Efficiency (Power Supply)} \end{array}$	35A 50A 50A > 80% 500 to 1
0	Current Consumption @ 4Ω stereo	35A 50A 50A > 80% 500 to 1
0 0	Current Consumption @ 4Ω stereo	
	Current Consumption @ 4Ω stereo	
	Current Consumption @ 4Ω stereo	





ROUTE 66 ANNIVERSARY EDITION

America's Dream Highway • Audiophile's Dream Ampli HANDCRAFTED IN THE U.S.A.

REAR SPEAKER OUTPUTS	ON OVR THE	POWER	SUBWOOFER SPEAKER OUTPUTS	HIPASS REAR REAR X-OVER GAIN LINPUT R	REMOTE LOW-PASS SUB BASS LEVEL LOW PASS GAIN EQ CONTROL X-OVER
+ LEFT - + RIGHT -	• • •	REMOTE B+ B-	• LEFT - • RIGHT -		2 2 3 0 +12
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0	A A A	A A A	A	A A A	^ ^ ^ ^
1)	234	567	8	9 10 11	12 13 14 15

1. Rear Speaker Output

This 24kt Gold Plated barrier connector is designed to accept up to 10 gauge speaker cable. We recommend using PHOENIX GOLD PRO404 Gold Plated spade terminals.

- 2. Power On—Green LED Indicator (One per amplifier section.)
 When this LED lights up, the amplifier is ON, with 12V at B+ and
 Remote wires.
- 3. Overload—Red LED Indicator (One per amplifier section.)
 When this LED lights up, the amplifier has an output current overload.
- 4. Thermal—Amber LED Indicator (One per amplifier section.) When this LED lights up, the amplifier has temporarily shut off to protect itself from overheating. The temperature of the heatsink has reached 90°C or 200°F.
- 5. Remote Turn-On (One per amplifier section.)

 This connection allows the Route 66 to be turned on and off by the source unit. Connect the automatic antenna lead and/or "remote" switched 12V DC lead from source unit to this terminal.
- 6. Power B+ Terminal (Positive 12V DC) (One per amplifier section.)
 This 24kt Gold Plated three position barrier type connector is designed to

accept up to 7 gauge power cable. We recommend using PHOENIX GOLD PRO404 Gold Plated spade terminals and an external 30A fuse.

- 7. Power B- Terminal (Chassis Ground) (One per amplifier section.)
 Use the same gauge as the B+ supply cable.
- 8. Subwoofer Speaker Output

This 24kt Gold Plated barrier connector enables the usage of any size speaker wire. We recommend the PHOENIX GOLD PRO404 (10 gauge) or PRO80/81 (7 guage) Gold Plated spade terminals.

- 9. Hi-Pass Crossover Front and Rear (One per amplifier section.) These four position rotary Hi Pass selectors control the frequency output of front and rear speaker outputs. The corner frequencies are 0Hz (All Pass,) 75Hz, 125Hz, and 175Hz.
- 10. Rear Gain Control

Allows for the correct matching of any signal source from its pre-amp output into the Route 66. Adjustments range from .2V (200 mV) to 2V AC.

11. Front and Rear Inputs (One per amplifier section.)

Any source unit with RCA outputs will operate correctly with all Phoenix Gold amplifiers. The Front inputs drive both the Front and Rear channels unless a signal source is also connected to the Rear inputs



AMPLIFIER CONTROLS AND FUNCTIONS

ROUTE 66 ANNIVERSARY EDITION

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SUBWOOFER SPEAKER OUTPUTS	HIPASS REAR REAR X-OVER GAIN LINPUT R	REMOTE LOW-PASS SUB BASS LEVEL LOW PASS GAIN EQ CONTROL X-OVER	ON OVE THE	POWER	FRONT FRONT HI PASS L INPUT R GAIN X-OVER	FRONT SPEAKER OUTPUTS
+ LEFT - + RIGHT -)75 (25 00)175 (10)	(a) (b) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	• • •	REMOTE B+ B-	75, 125 2 0 0 175	+ LEFT - + RIGHT -
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	***	⊖ ⊖ • *©"	• • •			9 2 2 3
A	A A A	A A A	A A A	A A A	A A A	A O
8	9 10 11	12 13 14 15	2(3(4)	567	11 16 9	17

accept up to 7 gauge power cable. We recommend using PHOENIX GOLD PRO404 Gold Plated spade terminals and an external 30A fuse.

- 7. Power B- Terminal (Chassis Ground) (One per amplifier section.)
 Use the same gauge as the B+ supply cable.
- 8. Subwoofer Speaker Output

This 24kt Gold Plated barrier connector enables the usage of any size speaker wire. We recommend the PHOENIX GOLD PRO404 (10 gauge) or PRO80/81 (7 guage) Gold Plated spade terminals.

- 9. Hi-Pass Crossover Front and Rear (One per amplifier section.) These four position rotary Hi Pass selectors control the frequency output of front and rear speaker outputs. The corner frequencies are 0Hz (All Pass,) 75Hz. 125Hz, and 175Hz.
- 10. Rear Gain Control

Allows for the correct matching of any signal source from its pre-amp output into the Route 66. Adjustments range from .2V (200 mV) to 2V AC.

11. Front and Rear Inputs (One per amplifier section.)

Any source unit with RCA outputs will operate correctly with all Phoenix Gold amplifiers. The Front inputs drive both the Front and Rear channels unless a signal source is also connected to the Rear inputs

12. Sub Gain Control

This control adjusts the gain of the sub-amplifier and allows for the correct matching of any signal source from its pre-amplifier output into the Route 66. Adjustments range from .2V (200 mV) to 2V AC.

13. Bass EQ

This bass equalizer circuit boosts sub bass up to +12dB at 45Hz.

- 14. Optional Low Pass Level Control (LPL)
- 15. Low Pass Crossover

This four position rotary Low Pass selector controls the frequency range of the subwoofer outputs. The corner frequencies are 50Hz, 75Hz, 125Hz, and 175Hz.

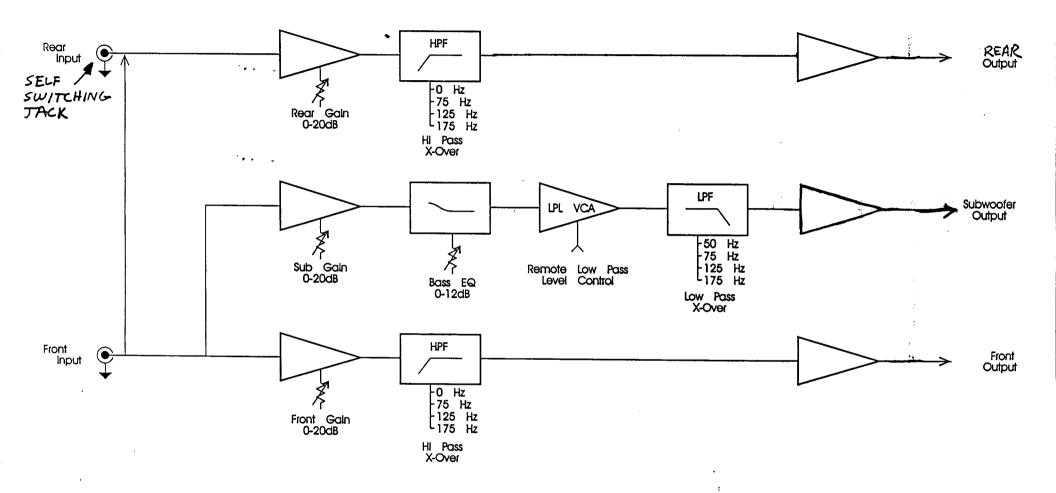
16. Front Gain Control

Allows for the correct matching of any signal source from its pre-amp output into the Route 66. Adjustments range from .2V (200 mV) to 2V AC/Audio.

17. Front Speaker Output

This 24kt Gold Plated barrier connector is designed to accept up to 10 gauge speaker cable. We recommend using PHOENIX GOLD PRO404 Gold plated spade terminals.





ROUTE 66 Block Diagram
ONE Channel Shown FOR CLARITY