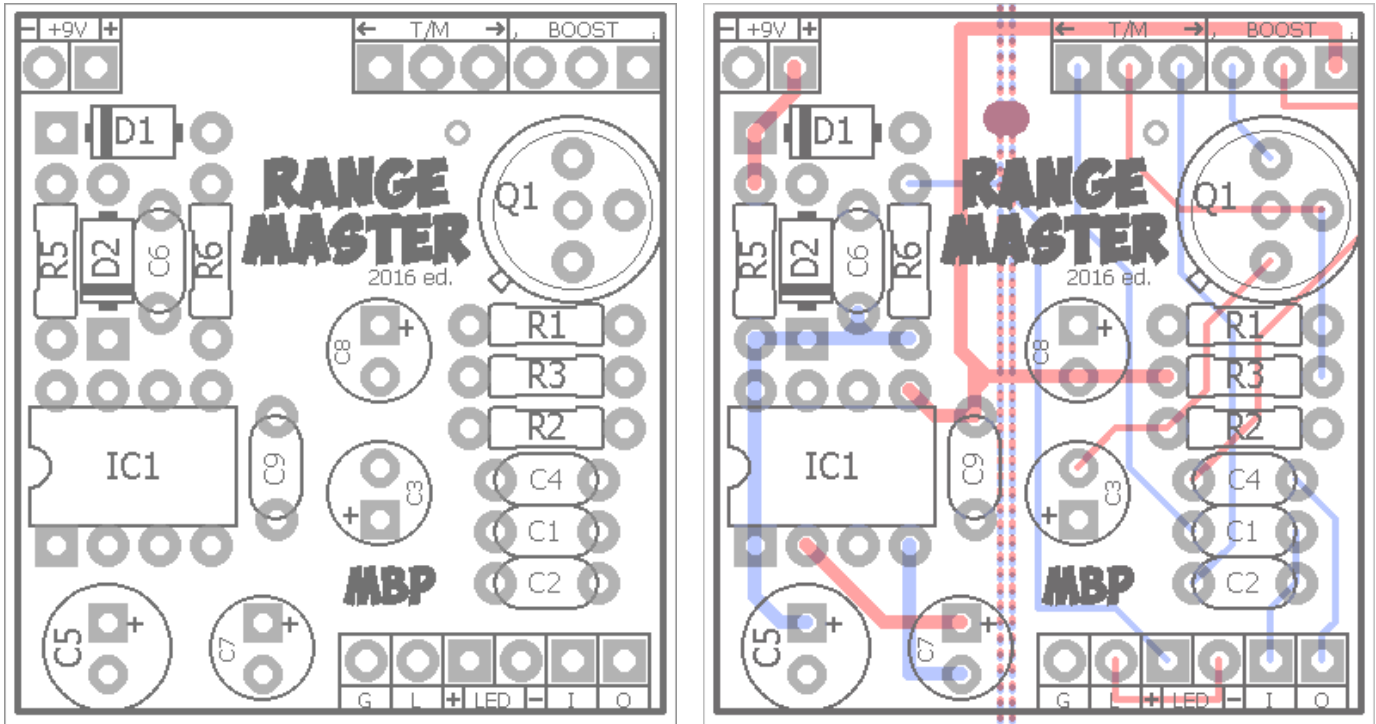


# RANGEMASTER

FX Type Classic Boost

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1.3" W x 1.4" H



Previous version: <http://www.madbeanpedals.com/projects/ARCHIVE/Fuzz/Rangemaster.zip>

**Terms of Use:** You are free to use purchased **Rangemaster** circuit boards for both DIY and small commercial operations. You may not offer **Rangemaster** PCBs for resale or as part of a "kit" in a commercial fashion. Peer to peer re-sale is, of course, okay.

B.O.M.			
Resistors		Diodes	
R1	68k	D1	1N4001
R2	3k9	D2	12v Zener
R3	470k	Transistor	
R5	100R	Q1	OC44
R6	4k7	IC	
Caps		IC1	TC1044SCPA
C1	4n7	Switch	
C2	22n	T/M	On/On
C3	47uF	Pot	
C4	10n	Boost	10kA
C5	100uF		
C6	100n		
C7	10uF		
C8	10uF		
C9	100n		

Shopping List			
Value	QTY	Type	Rating
100R	1	Metal / Carbon Film	1/4W
3k9	1	Metal / Carbon Film	1/4W
4k7	1	Metal / Carbon Film	1/4W
68k	1	Metal / Carbon Film	1/4W
470k	1	Metal / Carbon Film	1/4W
4n7	1	Film	16v min.
10n	1	Film	16v min.
22n	1	Film	16v min.
100n	2	Film	16v min.
10uF	2	Electrolytic	16v min.
47uF	1	Electrolytic	16v min.
100uF	1	Electrolytic	16v min.
12v	1	Zener	1W
1N4001	1		
OC44	1		
TC1044SCPA	1	or, MAX1044CPA	
SPDT	1	On/On	
10kA	1	Solder Lug	9mm

OC44: <http://smallbear-electronics.mybigcommerce.com/transistor-the-rangemaster-oc44/>

TC1044SCPA:

<http://www.mouser.com/ProductDetail/Microchip/TC1044SCPA?qs=%2fha2pyFadujneYfXSx2MlxxJDFFMj5iGawG%252bbwP%252bc28%3d>

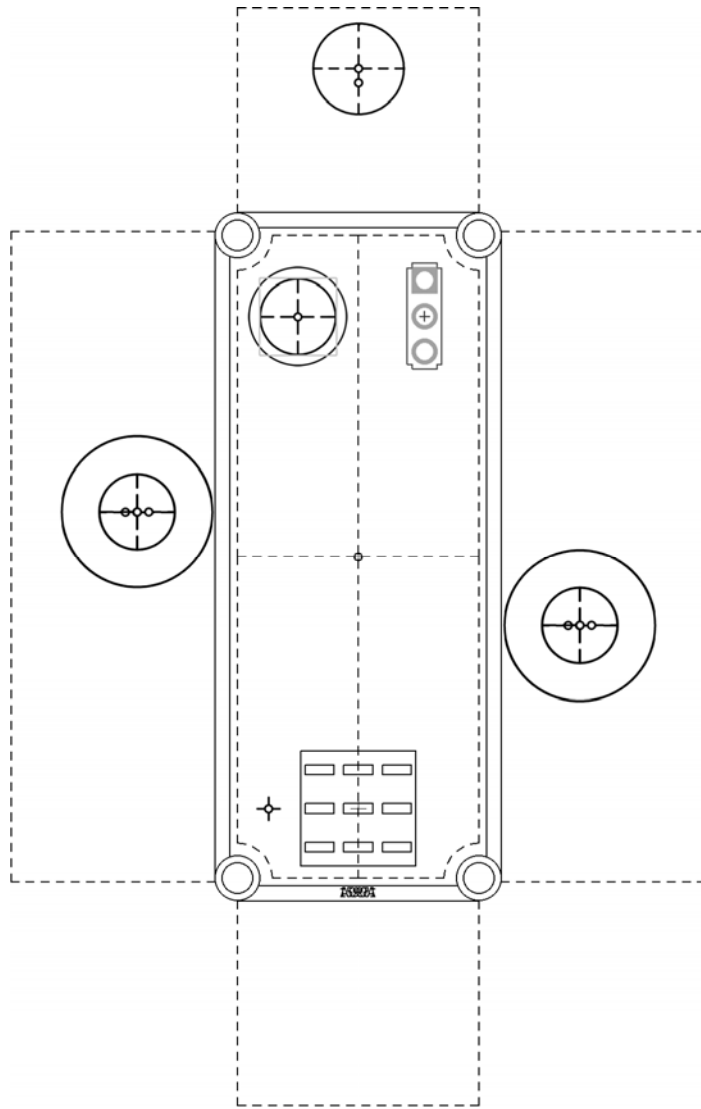
MAX1044CPA: <http://smallbear-electronics.mybigcommerce.com/ic-max1044cpa/>

**If you are building this project in a 1590A, use low-profile electrolytic caps.** See the 1590G component buying guide for info on these types of components:

[http://www.madbeanpedals.com/projects/1590G/1590G\\_PartsGuide.pdf](http://www.madbeanpedals.com/projects/1590G/1590G_PartsGuide.pdf)

# 1590B Drill Template

3.62" W x 5.73" H



Photoshop Drill Template:

[http://www.madbeanpedals.com/projects/Rangemaster/Rangemaster\\_Drill.zip](http://www.madbeanpedals.com/projects/Rangemaster/Rangemaster_Drill.zip)

The **Rangemaster** is a classic treble boost with a long history in the world of guitar effects. Its unique character is that it boosts high frequency content to make notes on the guitar sing when playing. It also works very well in front or behind a Fuzz Face. This type of effect is most suited for tube based amps and is not recommended for solid state devices. The MBP Rangemaster also allows you to use a switch to increase the boosted frequency range.

**BOOST:** This control provides over 20dB of gain as it is turned up.

**T/M:** The Treble/Mids switch allows you to switch between treble boost and a mid-range range boost.

**2016 changes:** the PCB has been re-designed to use in a 1590A enclosure. Minor adjustments to the power supply section.

Note: you may get a bit of “pop” when switching between mid and treble boost. If so, try placing a 1M resistor between the two outer lugs of the switch to lessen it.

