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Subject: Siren Capacitor Value

Posted by [toadsoup-1](#) on Sat, 27 Nov 2010 17:23:58 GMT

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I am putting my 1969 Gold Double bottom 2-15" Guitar amp back to original configuration, with the 15" Sirens. What I need to know is what value capacitor was used for the crossover? Thanks, Marty

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Subject: Re: Siren Capacitor Value

Posted by [kustomoholic](#) on Sat, 27 Nov 2010 19:14:49 GMT

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I'll look tonight when I get home and let you know the value...I have my 1-15 + siren cab open. Answer this evening about 9pm CST

Craig

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Subject: Re: Siren Capacitor Value

Posted by [toadsoup-1](#) on Sat, 27 Nov 2010 19:42:54 GMT

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Thanks Craig I would really appreciate it!  
Marty

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Subject: Re: Siren Capacitor Value

Posted by [kustomoholic](#) on Sun, 28 Nov 2010 01:50:00 GMT

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That value is 10MFD at 50 volts It is a non polarized type.Hope that helps....

Craig

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Subject: Re: Siren Capacitor Value

Posted by [toadsoup-1](#) on Sun, 28 Nov 2010 01:53:26 GMT

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Thanks Craig!!! Thats exactly what I needed.

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Subject: Re: Siren Capacitor Value

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Posted by [kustomoholic](#) on Sun, 28 Nov 2010 01:58:34 GMT

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Glad to help...Good luck!!!! Craig

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Subject: Re: Siren Capacitor Value

Posted by [pleat](#) on Sun, 28 Nov 2010 21:29:43 GMT

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My 2x15 and Siren horn cabs have a 4MF cap at 50v non polarized. The Kustom speaker schematic shows the same cap.

My 215+H cabs have the same 4 MFD caps as well. I don't have any information stating that Kustom used a 10MFD cap on the single 15 and siren cabs.

Interesting,  
pleat

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Subject: Re: Siren Capacitor Value

Posted by [kustomoholic](#) on Sun, 28 Nov 2010 21:42:18 GMT

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Pleat....

The cap I read from was in a Frankie 1-15 + horn cab. Looks original to me tho could have been changed for some reason. The original speaker is unknown as there was a D130F in it and some of the speaker mounting bolts have been cut for some reason unknown to me. Cab was pretty clean externally with virtually no nick or cuts in the vinyl. I don't have any other horn cabs tho I must admit I thought the value a bit high from my other ventures in speakerbuilding. I had heard somewhere they were crossed at about 500 hertz rather than 2 k as most tweeter arrays are which would account for the higher value I think...

Craig

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Subject: Re: Siren Capacitor Value

Posted by [C4ster](#) on Mon, 29 Nov 2010 18:07:38 GMT

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I know my siren's had 4uF caps in there also. I calculated the crossover frequency at closer to 800 Hz for the 10uF Someone probably was looking to add more mids to the sound by crossing to the horn sooner. I would think that would just make it tinny sounding. I think I would add a pad to the highs and hide the shaft somewhere and make the level adjustable.

Conrad

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Subject: Re: Siren Capacitor Value  
Posted by [toadsoup-1](#) on Mon, 29 Nov 2010 18:37:50 GMT  
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Thanks for the replies!! Sounds like 4uF may be the ticket??

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Subject: Re: Siren Capacitor Value  
Posted by [toadsoup-1](#) on Mon, 29 Nov 2010 20:55:20 GMT  
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Ok guys, a little update. I havn't had the backs off these cabs in over twenty years. (I had replaced the sirens with spkrs back then) So now that I popped the backs off, low and behold, the capacitors are still in the cab!! They are in fact 10Uf @ 50v caps. Again these are 1968 or 1969 cabs. So thanks again for all the input!!  
Marty

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Subject: Re: Siren Capacitor Value  
Posted by [pleat](#) on Mon, 29 Nov 2010 21:25:00 GMT  
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Unlesss you purchased the cabinets brand new, that only tells you whats in the cabs. It doesn't tell you that the caps are original to the cabinet at the time of manufacture. Your the first one that has ever mentioned the 10 MFD caps as far as I've ever heard of.  
Kustom used two types of caps, the first series were a large goldish colorcap mounted to the baffle board, and the wires were fiber taped to the horn bell. The second series is a white cap that was soldered directly to the horn driver. Those are the only two I've ever encountered, and both are 4 MFD in value. Very interesting. C4ster calculated the 10 mfd to cross around 800hz, I think the 4 mfd were around 2K crossover. Maybe C4ster can calculate where the 4 mfd would cross at. Of course the lower the crossover point, the more the horn has to carry and could damage the driver quicker with the lower crossover point.  
pleat

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Subject: Re: Siren Capacitor Value  
Posted by [Bill](#) on Mon, 29 Nov 2010 21:41:33 GMT  
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My Frankie was original, never even had the back off, according to the shape of the screws. It had a 10 uF cap in it for the crossover.  
Thrill Bill C

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Subject: Re: Siren Capacitor Value  
Posted by [toadsoup-1](#) on Mon, 29 Nov 2010 21:44:13 GMT

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Ok...A little history on this amp. It was purchased brand new in 1969. The guy that bought it committed suicide a month after purchase. My father bought this from the family shortly after the funeral. So prior to me pulling the sirens out, they were not taken apart. The caps ARE mounted to the baffle board and in fact are a "goldish" color. So i guess I'm going with the 10uF as it APPEARS and I stress APPEARS to be this way on this amp from the factory. Hey if it sounds like crap, I'll throw some 4uF in. THANKS GUYS!!!!

Marty

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**Subject: Re: Siren Capacitor Value**

Posted by [pleat](#) on Mon, 29 Nov 2010 22:12:05 GMT

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I don't think it's crap, it's just that until now, Craig and Bill having weighed in, the 10 mfd did sound strange. All the schematics I have from being a kustom dealer back in the 60's only show a 4 mfd cap. So now that there are two different caps that appear to be original, I guess the question would be if Kustom used 4 mfd in the start, and then changed to the 10 mfd or if they used both, depending on if the cabinet were designated to be a guitar cab or a PA cab.

Guess we'll have to have more collectors tear open their siren cabs and see what it's using for a crossover.

pleat

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**Subject: Re: Siren Capacitor Value**

Posted by [toadsoup-1](#) on Mon, 29 Nov 2010 22:29:09 GMT

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Thanks Pleat...

Yeah it does appear they may have used both. I know the guy that bought it new was a guitar player, and the head is a guitar head. So I don't know!! The top is a K200A-2 with S/N 19552. I may be off a year on it being a 1969, it may be a 67 or 68. I seems like the posts fo 10uF caps were from Frankenstein amps which this is not. Do you have a way of dating this from the Model or S/N??

Marty

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**Subject: Re: Siren Capacitor Value**

Posted by [pleat](#) on Tue, 30 Nov 2010 00:06:53 GMT

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Marty, LesS did a serial number chart here on the website a while ago, and from his findings, it would be between July 67 to April 68 according to the serial number.

Is your K200A-2 head a dull etched aluminum control panel that would have the two white circuit breakers on the front of the amp, or the black plexi face control panel. I'm guessing your cabinet has the 4 port holes behind the grill cloth.

pleat

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Subject: Re: Siren Capacitor Value

Posted by [toadsoup-1](#) on Tue, 30 Nov 2010 00:36:04 GMT

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Thanks Pleat!

Black Plexi, with TWO portholes behind grille cloth.

Marty

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Subject: Re: Siren Capacitor Value

Posted by [kustomoholic](#) on Tue, 30 Nov 2010 02:30:45 GMT

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Mine appears to be original...save for the D130 in it. My 10uf is mounted to a pair of terminal strip on the wood peice the the cab back screws into. Bryan Sawyer has a 1-15 + H A series siren cab that I recently delivered to him ...Might be interesting to see what he has mounted in it for cap value. I may change mine... I wonder if the higher value cap was mounted with the CTS driver normally found in a bass cab to get a bit brighter sound... Would be a good question to ask Bud about sometime....

Craig

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Subject: Re: Siren Capacitor Value

Posted by [cassent5150](#) on Sun, 05 Dec 2010 16:56:01 GMT

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I was wondering about the same thing. I have a couple of 3X15 cabs with the horns removed and I want to put them back in. My problem is, how is the cap installed. Across positive to negative on the driver or is it just in the positive wire? Steve C

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Subject: Re: Siren Capacitor Value

Posted by [toadsoup-1](#) on Sun, 05 Dec 2010 18:18:22 GMT

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Steve,

The cap is in series with the positive side of the siren.

Marty

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Subject: Re: Siren Capacitor Value

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Posted by [cassent5150](#) on Mon, 06 Dec 2010 13:54:50 GMT

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Thats what I thought. Thanks for the info!!! Steve C

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Subject: Re: Siren Capacitor Value

Posted by [pleat](#) on Mon, 27 Dec 2010 02:19:16 GMT

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I've been doing some research on the values of the caps used. There are two, a 4 mfd and a 10mfd.

The 4 mfd was used on the cabinets that also contained 16 ohm speakers such as the siren 3x15 cabinets and crossed at about 2500 Hz. The newer 215+H cabs that were designed for guitars used the 10mfd with the 8 ohm speakers and crossed at about 2K Hz.

As far as I can tell the larger 215+H cabs that were used for PA has 16 ohm speakers and used the 4 MFD caps.

pleat

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