

# Re: 3 Isolated AC Outputs from 1 AC Source

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- *From:* D from BC <[myrealaddress@xxxxxxxxx](mailto:myrealaddress@xxxxxxxxx)>
  - *Date:* Fri, 12 Jan 2007 05:17:28 GMT
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I speak "newbie" and I'm going to try to translate the following :)  
(With reference to the movie Airplane... Old lady says..."I speak Jive" )

On 11 Jan 2007 19:48:04 -0800, "jeff1981@xxxxxxxxxxxxxxxxx"  
<[jeff1981@xxxxxxxxxxxxxxxxx](mailto:jeff1981@xxxxxxxxxxxxxxxxx)> wrote:

[snip]

I have a single power supply creating between 0 and 90V AC (Adjustable in roughly 1V increments). I need to 'split' this current source into THREE completely isolated AC Power Sources which are of equal voltage to the input current (1:1).

Translation: I have a controllable AC supply and want to split that up into 3 isolated outputs.

My thought is three simple transformers with 1:1 windings. All the primary sides connected to the 0-90V Supply which would give me 3 isolated 0-90V Secondaries.

Translation: I'm looking for isolation transformers or a 1:1:1:1 that can handle 90VACrms.

I only need about 20mA on each of the three outputs... 25 MAX.

Translation: I don't want a big honking transformer just something that has a 20mA to 25mA rating.

So, My two questions...

1. Is this an appropriate solution to my problem?
- and

Translation: What are the limitations of an isolation transformer? And

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is this the only way?

2. Can anyone recommend a small transformer (PCB Mount) that could handle the task? I've searched a bit on Digi-Key and Mouser, but frankly, I'm not even exactly sure what I'm looking for so it's a bit hard to find.

Translation: How do you search for isolation transformers?

Thank You for your time!  
Jeff

One way to best understand the newbie language is to block out everything you know :)

D from BC

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