

## RACKS AND CASES

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Date: Mon, 12 Feb 2001 09:44:04 -0600  
From: "Scott, Barry (Clyde B)" <cbscott@ingr.com>  
Subject: [R-390] My radio is on the skids

I finally got some time scheduled to get into an old friend's machine shop this last Saturday. The cabinet I'm putting the R390A into is 10.5" high and has is flat on the bottom where the sides of the R390A frame will sit.

I recently located some 1/2" thick nylon bar and now have a nicely-machined set of skids that raise the frame about 0.420". They are "L" shaped and secure to the frame where the lower cover bolts are located. These are great! Outside the cabinet, the radio rests perfectly straight on the table top with the lower edge of the front panel at just a whisper above the table top. With them being made of nylon, the radio glides around the formica table top almost effortlessly. Makes me wonder why something like this wasn't standard issue. I suppose each cabinet/rack is a different situation, but I would think there would be many cabinets with a flat opening like mine. <snip>

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Date: Thu, 15 Feb 2001 15:31:09 -0800  
From: Ed Zeranski <ezeran@concentric.net>  
Subject: Re: [R-390] Rack-mount clip-on nuts

You mean the 10-32 clip ons that that slip on to untapped chassis rails. I have both types, the non nut being 10/24. If you only have a receiver or two let me know your address and I'll pass some along.

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Date: Thu, 15 Feb 2001 17:09:30 -0800  
From: jan@skirrow.org  
Subject: Re: [R-390] Rack-mount clip-on nuts

Aren't these called Tinnerman nuts? I know there are a lot of different kinds - McMaster Carr lists quite a few kinds in most of the sizes we'd be interested in.

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Date: Wed, 5 Sep 2001 20:06:18 -0500  
From: mikea <mikea@mikea.ath.cx>  
Subject: Re: [R-390] Rack-mounting, slides, etc.

> Ah, Mike, You're making this way too hard.  
> You could put a threaded stud into one of the holes before placing the radio in  
>the rack and let it protrude through the front panel until you get the other >screws  
in place then exchange it for a screw. Or, you could just tip the rack >over on its  
back and GENTLY drop the radio into the hole, then tip the rack >back up. Or, you  
could bolt angle iron slides into the rack on each side and slide >the radio in on  
them, put one flange down, the other protruding into the rack >space.

Yeah, but ... I'd really like to be able to pull the damn thing out and then pivot it so I

could see the top or bottom. I.e., Front panel up or front panel down. Pivoting slides are available, and the military gear I worked on used them. They were absolutely the best thing since sliced bread or R-390s for working on heavy rack-mounted gear. And I'm not really up to horsing an R-390 around. The cabinet weighs something like 90 pounds itself, and pretty soon it'll have an R-390 and an R-390A in it, so I'm not going to be laying that over on its back too often. I won't say that money's no object, but I'm not doing badly right now.

Humor me.

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Date: Thu, 6 Sep 2001 13:17:44 -0500  
From: "Dutch WB7DYW" <WB7DYW@ev1.net>  
Subject: [R-390] Cabinets for Boat anchors.

It seems I fat fingered the phone # to order the cabinets for the Collins R-390 and other boat anchors, Sorry bout that, here is the CORRECT contact info:

Accu-Tech Corp.  
1812 Brittmoore Road, Suite 200  
Houston, Texas 77043-2216  
Contact Corey Kizer; tell him I said "Hello".  
1-800-909-5995  
Ask for cabinet EC-9904-S for the R-390. You may want to get screws & nuts also.

Pictures on my web page of the cabinet:  
<http://users2.ev1.net/~wb7dyw/R-390.htm>

NOTE: I am not affiliated nor do I receive any compensation for this, it's just a great source for a very hard to find cabinet for these fine old radios.

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Date: Thu, 06 Sep 2001 18:00:54 -0700  
From: Leo Jormanainen <lexa@mail.island.net>  
Subject: Re: [R-390] Cabinets for Boat anchors.

I got a solid cabinet for my R-390A from Jan. I installed two 220VAC muffin fans running at 110VAC on the back panel, they're plugged into a rack mount power bar. Everything is cool.

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Date: Fri, 07 Sep 2001 08:05:57 -0400  
From: Bob Camp <bob@cq.nu>  
Subject: Re: [R-390] Cabinets for Boat anchors.

I assume that they are at least as sturdy as similar cabinets that I have seen. That's not anything like the level of construction on the original MIL cabinets for the R-390. I have some of each and there is *\*definitely\** a difference.

My thought is that with some work you could put enough holes in the right places to make it a very usable cabinet for a 390 on a table top. It would never work on shock mounts in the back of a truck. It obviously would be new and not original. Provided

that the cost was low enough none of that would be a major problem.

The MIL cabinets seem to go for \$200 to \$400 or so in used condition. That's enough to buy another radio. With a large enough order we \*might\* be able to get a semi custom cabinet for about the price they sell single copies of the standard cabinet. A lot depends on how they are set up and just how hungry they are. If there business is down as far as our business at work, I'd bet they are pretty darn hungry right now.

Here's a short list of what I \*think\* you would need to do:

- 1) Ventilation in top bottom and sides of the cabinet. A mounting hole set for a fan would be a plus.
- 2) Adequate room out the back to get at all the connectors. This is probably not an issue.
- 3) Some kind of support for the sides of the radio. The military cabinets have a little shelf on each side that the radio sits on. Support just at the rear of each side would probably do the trick as well.

Of course if we could get the original cabinets for \$100 or so brand new that would be fine with me :)

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Date: Fri, 07 Sep 2001 08:28:23 -0700  
From: "Terry O'Laughlin" <terryo@wort-fm.terracom.net>  
Subject: Re: [R-390] Cabinets for Boat anchors.

Custom made oak cabinets are best.

The University of Wisconsin here in Madison had them made for all their HP, Boonton, GR and similar rack mount test equipment from the 40s to the late 70s. I buy the surplus test equipment at the UW Swap Shop, which has a URL, just for the cabinets. I believe they were made by the University cabinetry shop because I have never seen them anywhere else. I have a 51J3 in one on my desk and one encasing an R-390 in my shop. I've even seen big ones for the HP selective voltmeter monsters (HP-312?)

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Date: Fri, 7 Sep 2001 08:50:20 -0700 (PDT)  
From: Fernando Quinones <nf6q@yahoo.com>  
Subject: Re: [R-390] Cabinets for Boat anchors.

I'm just a reader and wanted to add that Ten-Tec makes custom cabinets and enclosures according to their website. <http://www.tentec.com>.

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Date: Fri, 7 Sep 2001 18:48:25 -0500  
From: "Richard Biddle" <theprof@texoma.net>  
Subject: Re: [R-390] Cabinets for Boat anchors

The EC-9904-S is a standard BUD cabinet available from several distributors under that same part number. It is the BUD economy line, more or less. The source in Houston is selling it significantly under the quantity one price I saw from Allied or Newark for off-the-street customers.

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Date: Sat, 12 Jan 2002 15:42:42 -0800  
From: Dan Merz <djmerz@3-cities.com>  
Reply-To: djmerz@3-cities.com  
To: R-390@mailman.qth.net  
Subject: [R-390] Cabinet for R-390a

Hi, think I got back on after some good advice about how to resubscribe. We were gone for some time off and on in Nov/Dec so decided to stop the 390 mail for that period. I finished the modification of the modern Bud cabinet for my R-390a by whacking off about 4 1/2 inches (from the cabinet/not the R-390a), still leaving a good 1 1/2 inches in the back. What a job, since at the last minute I decided not to chase down a local metal fab shop to shear the alum. side panels. I used a sawzall, some clamped-on wood pieces to stiffen while cutting and then a file which took some time but worked out - then modified the side braces with the attached handles to remain centered thru the side walls. Despite the bending required at the four ends of these handle supports, they fit just right - am I lucky or what. I did take the trouble to make a piece of wood that was just the right length to use as a pattern for length. This cabinet looks very good on the set and I've got it on the Gorilla rack and playing and off my workbench so I can play with other radios now as well. My first experiment was running the RAL-8 which is right next to it to compare reception - I could find the stations easier on the R-390a but was able to receive anything I heard on the R-390a on the RAL-8 once I knew it was there. One has to me pretty familiar with the regeneration control on the RAL-8 to get the most out of it - though it's a dream compared to most regen's I've tried. I won't talk about crowded signals at this point. I was listening today to some AM on 10 meters and the 6360 amp that I put in the R-390a makes for good audio. Dan

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From: "William G Feldmann" <n6py@QNET.COM>  
Date: Thu, 17 Jan 2002 09:24:14 -0800  
Subject: [R-390] MORE GRAY MILITARY R390 CABINETS ARE AVAILIABLE

Mac, W5HPM, has found an additional twenty Military R390 cabinets. He will obtain them if we can get twenty buyers for these cabinets. These are like the first 40 he obtained which are being packaged and shipped to those on the original buyer list we made last month. The price on the original 40 was \$320 each including packaging and shipping in the lower 48 states. These cabinets are genuine military cabinets, gray in color, never used, and probably ordered by the government during Desert Storm. Mac has asked that I make a list of buyers interested in obtaining one or more of the 20 additional cabinets since. The estimated price is \$320 each like the first lot but won't be firm until he makes the deal. These are most likely the last he can find.

If you would like one of these, please send me a email and I'll put you on the buyer list. I'll then confirm your on the list by return email. However please be patient

since it will take a little time for him to obtain the cabinets and we will not ask for any money until he knows he can get the cabinet, and we have enough buyers on the list. When he makes the deal, I'll then email you with the firm cost and instructions.

If you want a cabinet be sure to give me a good email address to contact you by. One guy didn't on the original list and has lost his chance to get a cabinet since there is no way to contact him. I even tried the ARRL forwarding service and it didn't work.

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From: "William G Feldmann" <n6py@QNET.COM>  
To: "R390 LISTINGS" <r-390@mailman.qth.net>  
Date: Fri, 18 Jan 2002 13:35:01 -0800  
Subject: [R-390] R390 Cabinet all sold

All the 20 additional cabinet are now spoken for and I have about 5 buyers on a back up list. Seems to be lots of interest and demand for these so maybe Mac can find more before the commercial guys get them.

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Subject: Re: [R-390] Best way to mount rack rails  
From: Richard.McClung@Dielectric.spx.com  
Date: Wed, 27 Feb 2002 13:14:34 -0500

The only rack slides for the R-390(\*) that I saw/used were in the AN/TSC-26. There was a large cast aluminum plate that had counter bored hole for the screws that mounted the plate to the sides of the receiver and drilled and tapped holes for attaching the rack slides which were heavy duty ones made by General Devices. At fixed sites we had angle brackets that were bolted to the front and rear vertical rails and each side of the rack to support the receivers. I have aluminum angle bracket supporting most my equipment here. I got it at the hardware store. It's Reynolds Aluminum standard stock that comes in 10 foot lengths.

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Subject: Re: [R-390] Best way to mount rack rails  
From: "Roger L Ruskowski" <rlruszkowski@west.raytheon.com>  
Date: Wed, 27 Feb 2002 11:00:29 -0800

.....I have both a R-390A and SP-600 receivers which I would like to mount into a 6 ft tall x 19" wide standard rack cabinet. ....

The R390's had angle brackets under then. about 2 1/2 x 2 1/2. These fit the RETMA rail pattern. When bolted to the sides, the rails held a receiver just right so the front panel bolt holes all lined up just right. 3/4 pine 22" long and 1 1/2 wide with two holes through the 1 1/2 dimension will let you bolt the wood slat to the side rail with a 2 inch 10 - 32 bolt. Use washers and do install several front panel bolts once you get the receiver into the rack. Angle iron from the salvage yard can be drilled and works well. Larger wood slats (2 x 2 ) and 1U (1 3/4) blank panels work well. There is room for the slides between the rail and the radio. You can bolt an angle to the slide rail and set the radio on the angles this will make slide out drawers. You can install U pans between the rails or slides. This causes a

ventilation problem. So a hole saw to open up some air flow in the pans is in order. An angle rail that is wide enough so that when the receiver is moved all the way over to one side, the other side will not drop off the rail is normal. You can mark and drill the angle to fit the rack pattern. Blots and washers will hold the rail in place with oversize (slotted) adjustment holes.

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Date: Wed, 27 Feb 2002 15:10:28 -0500  
Subject: Re: [R-390] Best way to mount rack rails  
From: twleiper@juno.com

> At fixed sites we had angle brackets that were bolted to the front  
> and rear vertical rails and each side of the rack to support the receivers.

I may be able to pick up a couple dozen more of these...I got brand new ones (gold anodized!) at a local scap yard, and I think I saw a couple more packs the other day, so I'll check it out...

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Date: Mon, 04 Mar 2002 09:42:03 +1000  
From: tbigelow@pop.state.vt.us (Todd Bigelow - PS)  
Subject: Re: [R-390] New Subscriber with questions

<snpi> > Was there/is there a cabinet enclosure for the R390 .....

I'd suggest an old Air Force surplus rack if you can find one. They have a squirrel-cage blower at the bottom and a more typical fan on top for exhaust. Not only will a rack keep your rig cooler, it's also a good place to stash the R-390A and SP-600, as well as a speaker and other goodies. <snip>

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Date: Sun, 03 Mar 2002 17:46:24 -0600  
From: "William J. Neill" <wjneill@lcc.net>  
Subject: Re: [R-390] New Subscriber with questions

Mention of the rack used for R-390( ) mounting brought back the memory that the std military rack, with brackets, for fixed station use was/is the CY-1119/U, of which I have three. Anyone ever see these relics at any auctions or surplus dealers? The racks used in the mobile GRC-26D, MRR-5, MRR-6. and MRR-8, to name a few, are identified in their respective TM's/TO's but I cannot recall their identities here and now.

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Date: Wed, 01 May 2002 22:45:30 -0500  
From: Ron Evans <cosmos41@ix.netcom.com>  
Subject: [R-390] CY-979A/URR Problem -- Can't Install Receiver

R-390 Guys, Some of you have probably endured my whining on the Collins list already. I \*should\* have asked my question here first. I recently bought one of the CY-979A/URR cabinets and finally got to ATTEMPTING to install my R-390A/URR today. The problem is that the rcvr will not go all the way into the cabinet. It stops about a half inch short, apparently when the bottom rear edge of the receiver contacts the folded over structural member of the cabinet. I believe that the lip of

the receiver is supposed to go between the bottom of the cabinet and this folded over piece (the bottom of the cabinet opening at the rear). Am I supposed to take the bottom cover off the receiver before trying to install it into the cabinet? Help! I've tried like crazy to force the bottom lip of the receiver into this "space," but it just won't go. All input appreciated. Very much!

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Date: Wed, 01 May 2002 23:29:01 -0500  
From: Don Reaves W5OR <w5or@comcast.net>  
Subject: RE: [R-390] CY-979A/URR Problem -- Can't Install Receiver

Take the bottom and top covers off before installing in the CY-979. The receiver won't fit with the bottom cover on, and it will get too hot with the top cover on.

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Date: Wed, 01 May 2002 23:38:16 -0500  
From: Ron Evans <cosmos41@ix.netcom.com>  
Subject: [R-390] Never Mind! (CY-979A Woes Banished)

Forget I asked about taking the bottom cover off my R-390A/URR before trying to get it to fit into the CY-979A/URR cabinet. I took it off and the rcvr slides in smoothly! Finally! No more from me for awhile! Is that a deep sigh of relief I hear?! My gratitude to you all.

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Date: Wed, 01 May 2002 23:50:51 -0500  
From: Ron Evans <cosmos41@ix.netcom.com>  
Subject: [R-390] Success! Receiver Installed

Thanks to all who gently took me by the hand and guided me into the R-390 Promised Land. I took the bottom cover off, but I guess my R-390A doesn't have the top cover. It has some smaller covers over certain assemblies but no overall sheet metal cover like the bottom one. Am I correct in assuming that the top cover would be similar to the bottom one? If so, my rcvr lost its top cover somewhere or other in some distant past. Wow...I may get to sleep tonight after all. Grateful to all, Ron, KD5S

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From: "Chuck Wells" <cwells@floydvwells.com>  
Date: Thu, 9 May 2002 11:16:08 -0700  
Subject: [R-390] Cabinet Screws

Hello, What type and size of screws were used to attach the R390 to the CY-979A/URR cabinet? Thanks for any help Chuck KG6JYK

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Date: Thu, 09 May 2002 14:40:40 -0400  
From: Norman Ryan <nryan@intrex.net>  
Subject: Re: [R-390] Cabinet Screws

Mine has 10-32 x 5/8" Philips screws. Heads are wider than most-- wish I knew the exact name. There also are nylon washers underneath. Your mileage may vary. Verify the threading on yours and don't worry too much about the length. Something like 5/8" or longer will work fine-- 2" length may provoke R-390

wristitis. :-)

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Date: Thu, 09 May 2002 15:10:49 -0400  
From: rbethman@comcast.net  
Subject: Re: [R-390] Cabinet Screws

They are normal rack mount hardware screws. Any computer freak can supply them. They not only have nylon washers, but the heads look like they have welded washers on them already.

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Date: Thu, 9 May 2002 12:19:32 -0700 (PDT)  
From: Mark Donaldson <wa1qhq@yahoo.com>  
Subject: Re: [R-390] Cabinet Screws

The best place I have found for sourcing rack screws is a music store, preferably one that caters to musicians that play amplified instruments, those guys are always rack mounting their stuff, the local chain in the Boston area, Daddys Junky Music carries the Rackcess brand, I believe Rackcess has a web site.

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From: "Scott, Barry (Clyde B)" <cbsscott@ingr.com>  
Date: Tue, 2 Jul 2002 08:38:54 -0500  
Subject: [R-390] R390A cabinet

For you guys wanting a cabinet for your R390A, I just noticed the following:  
<http://www.fairradio.com/Orack28.htm>

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From: "Scott, Barry (Clyde B)" <cbsscott@ingr.com>  
Subject: RE: [R-390] R390A cabinet  
Date: Tue, 2 Jul 2002 08:44:27 -0500

After I posted this, I began to wonder if these will work for an R390A? Fair usually has some cabinets that they state isn't deep enough for an R390A, but the ad here seems to indicate it will hold one.

If it is only 14-3/8 deep, I don't think that's deep enough, but not sure. Better ask before buying...

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Date: Tue, 02 Jul 2002 06:57:04 -0700  
From: Dan Arney <hankarn@pacbell.net>  
Subject: Re: [R-390] R390A cabinet

R-390A is 14 1/2 plus room for connectors. Hank

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From: "William G Feldmann" <n6py@QNET.COM>  
Subject: Re: [R-390] R390A cabinet  
Date: Tue, 2 Jul 2002 09:51:45 -0700

It isn't the same as the military R390/R390A military cabinet but would sure work nice for a R388 or 51J type receiver. Wonder how well it matches the A line paint if



anyone has purchased one?

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Date: Tue, 02 Jul 2002 12:18:24 -0500  
From: Marshall <mmdues@hal-pc.org>  
Subject: Re: [R-390] R390A cabinet

Fair Radio's tall cabinet sure looks a lot like the cabinet that houses my Super Pro 210LX - the one with the separate power supply beneath the radio. My cabinet is the same styling and sheet metal design, and its measurements are 19 in. high x 21 in. wide x 18 in. deep. Those are the outside dimensions. The inside dimensions are 17.5 in. high x 19 in. wide x something less than 18 in. deep. This cabinet will certainly hold an R-390(A) and a sideband converter nicely.

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Date: Tue, 02 Jul 2002 19:38:12 +0200  
From: Kurt Brandstetter <kurt.brandstetter@teleweb.at>  
Subject: Re: [R-390] R390A cabinet

It would be quite nice to get a cabinet for my R-390A/URR. But as postage is so high from USA to Europe, can as soon as its clear that this cabinet from Fair Radio fits, someone post it to the list or send me some information ? I don't want to buy one and pay 100 \$ for shipment if it does not fit !

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From: "Bill Riches" <bill.riches@verizon.net>  
Subject: RE: [R-390] R390A cabinet  
Date: Tue, 2 Jul 2002 14:00:08 -0400

Looks like it is sold out as of 1750Z Tuesday

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Date: Tue, 02 Jul 2002 13:58:29 -0400  
From: Norman Ryan <nryan@intrex.net>  
Subject: Re: [R-390] R390A cabinet

The best cabinet is the CY-979 (or CY-979A) because it has proper ventilation and easy access to all the connectors behind the radio. The Bud cabinet from Fair Radio is not deep enough to accommodate the connectors. A blank panel behind the cabinet is a pest because you have to pull the radio from the cabinet each time you change connections. If you find a CY-979, you will soon forget its high cost! It is very rugged and practical. They are very nice looking with new paint. You may find one in Europe. Good luck!

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From: "William G Feldmann" <n6py@QNET.COM>  
Subject: Re: [R-390] R390A cabinet-  
Date: Tue, 2 Jul 2002 14:12:33 -0700

We still have four or five of the CY-979 cabinets left with out shock mounts after Mac shipped the last of those that were ordered. However, I think one is already spoken for so their should be at least four available. We haven't announced it yet on this reflector because we wanted to make sure all originally ordered were shipped OK. As far as I know only one is still lost in shipping but Mac and the

owner are trying to find it some where in the FEDEX Minneapolis system. If you want a genuine gray CY-979 unused cabinet with out shock mounts let me know ASAP because we would like to clean out these last four since Mac is planning to move soon.

These cabinets were ordered by the government for Desert Storm but never used. They are priced at \$290 each which includes shipping in the lower 48. The shock mounts are only needed if you plan to use your R390 or R390A in a truck or aircraft. You can easily fit a set of rubber feet, like those used on a Collins A-line or 32V3, to the bottom of the cabinet to keep it from scratching a surface you will set the radio on. I have seen feet like that in the Mouser Catalog. These are considerably more expensive than the Fair Radio ones but are the proper ones for the R390 or R390A.

However Mac had to pay a big price for these from a surplus warehouse and the price just covers his expenses. These originally cost the government close to \$1000 a cabinet, almost as bad as the P3V toilet seats, but they really look nice. They do provide good ventilation since you have to remove the top and bottom covers from the R390 chassis to fit it inside the cabinet. Also the cut outs in the back fit my R390 connectors perfectly.

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Date: Tue, 02 Jul 2002 18:26:26 -0400  
From: Norman Ryan <nryan@intrex.net>  
Subject: Re: [R-390] R390A cabinet

Yep, my CY-979A came from Mac and it is a beauty. It has shock mounts. Although the shock mounts aren't required in most amateur situations, they look really cool. I don't consider a CY-979 without its mounts to be the real thing. Just my humble opinion. I would lower the price.

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Date: Tue, 02 Jul 2002 15:36:38 -0400  
From: Jim Brannigan <jbrannig@optonline.net>  
Subject: Re: [R-390] R390A cabinet

That looks familiar..... The one here holds a 2KW amp and antenna tuner. It would hold an R-390A and CV-591 with room to spare.

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Date: Tue, 8 Oct 2002 13:31:52 -0700 (PDT)  
From: Michael Studer <Michael.Studer@Sun.COM>  
Subject: [R-390] Anyone else have R-390 case besides me?

I am new to this list. Here's my list of "stuff". I have 3 R-390a's. I have one that works great. One that works great but needs a coupling for the vfo if I plan to tune it. And one is crap. I think mine is a bit unusual since I have an actual R-390 case for it. Yes indeed, they do/did make them. It holds a single R-390 and is louvered all over the place. Maybe cause it gets HOT? hehe. It also has shock mounts on the bottom. Looks great. If there is interest I can take picture of it and post it. I have all the various original manuals for the R-390A too. It is nice to see people still out there using these fine rigs.

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Date: Wed, 09 Oct 2002 13:08:58 -0400  
From: tbigelow@pop.state.vt.us (Todd Bigelow - PS)  
Subject: Re: [R-390] Anyone else have R-390 case besides me?

I've seen a couple of these, Mike. I know of one list member here in the northeast who has one, too - complete with mounts and R-390 attached.

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From: "Bill Riches" <bill.riches@verizon.net>  
Subject: RE: [R-390] Anyone else have R-390 case besides me?  
Date: Wed, 9 Oct 2002 13:21:13 -0400

A bunch of cases were made for Desert Storm. The ones that did not make it to the desert were snapped up by Mac McCullough in Texas and he resold them for around \$300.00. New with original packing - a piece of art - well worth it and makes the radio look very impressive - mine is in the living room and no static!!

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From: "Damon Raphael" <w7md@gci-net.com>  
Subject: Re: [R-390] Anyone else have R-390 case besides me?  
Date: Wed, 9 Oct 2002 10:36:32 -0700

I have 2 of these cases from Mac McCullough, one each for my R-390 and R-390A. They are brand new and beautiful. Dave Medley just did a complete makeover on the R-390 and the results are spectacular; both cosmetically and functionally.

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Date: Wed, 09 Oct 2002 12:33:36 -0700  
From: Dan Arney <hankarn@pacbell.net>  
Subject: Re: [R-390] Anyone else have R-390 case besides me?

I have 4 of the cases. I also have new tags for them with no S/N available. Cases are not for sale.

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From: "Paul DeFayette" <pjdefayette@earthlink.net>  
Subject: Re: [R-390] Anyone else have R-390 case besides me?  
Date: Wed, 9 Oct 2002 16:07:47 -0400

I also have two of Mac's beautiful cabinets. One of them is original semi-gloss spook black. When I get the time, I'll repaint the front panel of my R-390 in its likeness. That will look sharp with nice white lettering!

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Subject: Re: [R-390] Anyone else have R-390 case besides me?  
From: Paul Bigelow <pbigelow@us.ibm.com>  
Date: Wed, 9 Oct 2002 15:46:13 -0500

I have a R-390a case and it's incurable! Been afflicted for years! :-)

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Date: Wed, 09 Oct 2002 14:50:36 -0600  
From: Jordan <jordana@nucleus.com>  
Subject: Re: [R-390] Anyone else have R-390 case besides me?

Well , I have the Government Issue Table top case... does that count..? It's a Canadian Gov't issue case BTW....

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Date: Thu, 10 Oct 2002 09:14:29 -0400  
From: tbigelow@pop.state.vt.us (Todd Bigelow - PS)  
Subject: Re: [R-390] Anyone else have R-390 case besides me?

Those were R-390A cases Rich, for the 'A' model. Mike was referring to the original R-390 case. Although very similar, the R-390 and the later cost-reduced version are different radios, hence the addition of the 'A' designation. Many users tend to refer to them generically as the R-390, some even go so far as to rename the R-390 as the "non-A", but if you check the tags and manuals, you'll never see the term 'non-A' used. Only R-390 and R-390A. I'd have to guess that the original R-390 cabinets aren't as plentiful as the later 'A' models. I have seen a few(2-3) in recent years, but not many. As Mike mentioned, unlike the cabinet for the 'A' model, the R-390 cabinets are covered with louvers to help remove the excess heat. Can't imagine what would happen if you stuck an R-390 into a cabinet designed for the 'A' and used it for any length of time. Wonder how long before tubes started to crap out or transformers heated up and shorted? (no, this isn't a request for a test!).

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Date: Thu, 10 Oct 2002 09:57:24 -0400 (EDT)  
From: "Paul H. Anderson" <pha@pdq.com>  
Subject: Re: [R-390] Anyone else have R-390 case besides me?

I'm confused... Mac was selling CY-979A cases, which are louvered (see <<http://www.pdq.com/boatanchors/cy-979a>>), have shock mounts, and are intended in part for vehicle and other mobile applications.

There is another case, a CY-917, that I thought was a lighter weight table top case for the R-390 series and SP-600. I looked in my archives, and see a note from Tom N50FF about a case he has

<<http://www.geocities.com/courir26/Ed390A.jpg>>

which he says is not a CY-917, but appears to be made for the 390. Of course there are other sources for cabinets that will hold the R-390 radios, and I have several of these as well (I think one is a Bud, another may be a Heathkit cabinet). So what case are we talking about?

A CY-979 (is there one of these?), a CY-979A, a CY-917, or something else?

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Date: Thu, 10 Oct 2002 10:23:06 -0400  
From: tbigelow@pop.state.vt.us (Todd Bigelow - PS)  
Subject: Re: [R-390] Anyone else have R-390 case besides me?

I can't quote the nomenclature off the top of my head Paul, so I'm afraid I won't be able to clarify further. The second cabinet link you listed looks like the Imperial cabinets, these are the ones I'm most familiar with for the R-390. I was sure I'd seen

others similar to the CY-979A also without louvers with the R-390A installed. Maybe I imagined it? Either way, I think the two links you posted illustrate the differences between the R-390 and the 'A' cabinets, with the 'A' being more squared off and the R-390 cabinet having the nice, rounded corners and more louvers. I'd be pleased to find one of each, but I'd settle for either one.

You're right about the 'other cabinets' part. The problem with using any old cabinet is a lot like the same conflict you get trying to use a regular Collins 75A-2 or -3 receiver cabinet for a 51J/R-388. You need a much larger rear opening to accomodate the different chassis requirements for that wonderful mechanical tuning system. I have my spook R-390A project in an old Imperial cabinet similar to the R-390 cabinet, but instead of louvers it has a mesh top. The rear panel is open to accept the the R-390 or A just fine, too.

Any way you look at it, R-390 or R-390A, or even R-388 cabinets aren't lying around on every street corner. The vast majority seem to have been rack-mounted, if surviving photographs are any clue. Thanks for posting the links, Paul -

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Date: Thu, 10 Oct 2002 12:13:07 -0400  
From: Norman Ryan <nryan@intrex.net>  
Subject: Re: [R-390] Anyone else have R-390 case besides me?

Notice the slightly larger size of this cabinet <<http://www.geocities.com/courir26/Ed390A.jpg>>.

It has more louvers, to be sure, but also more space inside that likely promotes faster convection.

This cabinet <<http://www.pdq.com/boatanchors/cy-979a/cy-979a.jpg>> is identical to the ones Mac sold. Its tag is marked CY-979A.

If an R-390 (non-A) in a CY-979A is operating at the normally higher than nominal 115 VAC, heat build-up likely will stress components a bit even though the radio is designed to operate at voltages 10 percent higher or lower.

My Mac CY-979A cabinet has an R-390A running at just over 110 VAC by means of a Variac. Cabinet feels cozy warm and all is well inside. Elapsed time meter shows 735 hours since I rebuilt the receiver. Would love to find one of those earlier version cabinets for an R-390 (non-A).

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Date: Thu, 10 Oct 2002 13:15:42 -0400  
From: tbigelow@pop.state.vt.us (Todd Bigelow - PS)  
Subject: Re: [R-390] Anyone else have R-390 case besides me?

That's what I was eluding to earlier, Norman. The larger size of the R-390 cabinet and additional louvers should be a big clue as to heat build up(which any R-390 owner is well-aware of). Whereas the 'A' model has less heat to start with and would be fine in the smaller, 'less-louvered' cabinet. But if you put an R-390 into a cabinet made for the 'A', you could be baking your tubes, transformers, and all components over time really. Luckily the 'A' is far more common than the original

R-390, so hopefully this situation won't arise too often. Unfortunately though, cabinets for the 'A' seem more plentiful as well, which might encourage an R-390 owner to install this radio into what might amount to an oven. Now, one must wonder about the tag numbers on these cabinets and what they relate to, if anything particular. It sure would be amusing to find that the larger cabinet was originally tagged CY-979 and fits the R-390, while the CY-979A was made for the later 'A' model. Any cabinet authorities lurking out there?

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Date: Thu, 10 Oct 2002 13:54:37 -0400  
From: Roy Morgan <roy.morgan@nist.gov>  
Subject: Re: [R-390] Anyone else have R-390 case besides me?

My CY-979 has louvers, but only TWO rows of them on top. The louvers on the side extend from the bottom to only part way up. I have a picture showing FOUR rows of louvers on a similar cabinet-the filename is: cy-979not-Ed390A.jpg It shows four rows of louvers on the top, and three rows of louvers on the side which go from bottom to top of the cabinet. I suppose someone knows the designations of the (presumably) older, four-row-louvered cabinet. I don't.

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Date: Thu, 10 Oct 2002 11:05:01 -0700 (PDT)  
From: "Tom M." <courir26@yahoo.com>  
Subject: Re: [R-390] Anyone else have R-390 case besides me?

Could your cabinet be the CY-979 (non A) ? I'd like to see a photo. The Maccabinets were made by Laboy Industries of Camden. Some of the radio makers plus Steelcase also made the CY-979A (I have a list at home and can post it later).

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From: "Philip Atchley" <k06bb@elite.net>  
Subject: Re: [R-390] Anyone else have R-390 case besides me?  
Date: Thu, 10 Oct 2002 18:10:53 -0000

Hi. First: Yes I'm back at the old email address of k06bb@elite.net (that's a "zero" not an "Oh"). Juno proved unreliable to me. With all this talk of cases, I wonder what the effect of leaving the covers on an R-390a during operation are?

Reason I ask is I have a R-390a WITH the factory covers.

I have a small 24V fan (running slower on 12VDC) "stuck onto" the side of the receiver right next to the rectifier tubes blowing across the tubes and transformer.

This really does seem to keep the overall receiver significantly cooler in operation. I presume because the heat is "blown out" the other side of the receiver across the audio module rather than rising up through the radio.

ALSO, the top cover is just sitting on top of the receiver and is removed when the radio is in operation. Other than dust settling in the radio while it is in operation, anyone else think this is worthwhile or just "overkill"? (Yes, the top cover is louvered).

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Date: Thu, 10 Oct 2002 17:40:55 -0700 (PDT)  
From: "Tom M." <courir26@yahoo.com>  
Subject: [R-390] Makers of CY-979A Cabinets

These are the makers of CY-979A cabinets which I've recorded. If anybody has one that is not listed here (Les, I do not want to hear about your Max Factor cabinet) let me know. I've also seen a contract for a Collins built CY-917 under the same order as the first 389 and 390A.

CY-979A Makers  
Stromberg-Carlson, Division of General Dynamics, Rochester, New York  
Steelcase  
Teller Industries  
Laboy J Industries, Camden (the Mac-cabinets)  
Crosley Div. of AVCO MFG. Corp.  
Andrews Inc, Philadelphia  
Taffet Electronics ( owned by W2ERJ, Milt Taffet)  
Barker and Williamson  
Daystrom

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To: "Tom M." <courir26@yahoo.com>, <r-390@mailman.qth.net>  
Subject: Re: [R-390] Makers of CY-979A Cabinets  
Date: Thu, 10 Oct 2002 21:27:36 -0400

I have a CY-979A Cabinet that my 1956 contract Motorola R390A came in. It has the CY-979A stencilled on the top toward the front between the two rows of loovers. It does not have any order number or Manufacturer any where. Suppose it was a "Depot Dog" cabinet?

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Date: Thu, 10 Oct 2002 10:48:24 -0700 (PDT)  
From: "Tom M." <courir26@yahoo.com>  
Subject: Re: [R-390] Anyone else have R-390 case besides me?

The case shown (2nd pic) is definitely made for the 390A as it has the little male fitting for the holes on the back of the 390A. It has little feet for a table top (i.e. not a vehicle case). It is made of aluminum. I've never seen nomenclature on this. It came out of the EAC plant.

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Date: Fri, 11 Oct 2002 04:20:24 -0700 (PDT)  
From: "Tom M." <courir26@yahoo.com>  
Subject: Re: [R-390] Makers of CY-979A Cabinets

No, the original drawings call for this stenciling. The Maccabinets do not have it for some reason. Yours sounds like the older originals.

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From: "Philip Atchley" <k06bb@elite.net>  
Date: Sat, 12 Oct 2002 00:01:22 -0000  
Subject: [R-390] I "Waxed" my R-390A

Hello All. Today I got really ambitious and dug out the car wax that I bought for my boatanchors quite sometime back. It's ReNew liquid that I bought at the Dollar Store and it really works well on those BA's. This bottle has waxed several R-390A's, SP-600's and various Hammarlund receivers over the past few years. (seems like I just can't use it up 8^).

But anyway, the front panel on this R-390a is quite nice and engraved. It was a little dirty when I got it with one small scratch and the usual marks around the panel mounting holes. I had previously cleaned it but the wax really made it "perk up". This panel doesn't have any of the typical "half moons" etc around the tuning controls but I did notice one thing.

After waxing and "vigoressly" (sp?) wiping the polish off I can tell around each knob area on the panel the area where fingers would have rubbed the panel in turning the knob. In other words, not the same "texture" as the rest of the panel. I'm afraid of working the wax in and rubbing it to excess as I don't wish to remove either too much paint or the engraved fillings (which look good and are original).

Think this is best "Left alone" at this point? <snip>

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Date: Tue, 15 Oct 2002 23:34:37 -0400  
From: "Ray, W2EC" <w2ec@attglobal.net>  
Subject: Re: [R-390] Need CV-591A Relay Cover Measurements

Mike, I've attached a picture of the one in my CV-591A. The overall dimensions are 2-5/8" wide by 3-11/16" deep by 2-1/2" high. As you can see from the picture, there are two "cutouts" at the bottom of the shield for the wires to enter. On the front, the cutout is the full width of the shield box (2-5/8") and the opening is 1-7/16" high. On the left side (as viewed from the front of the CV-591A) is another opening for wires. This opening is in the shape of a rectangle, also 1-7/16" high like the opening on the front and extends towards the back of the shield 1". There are threaded studs attached to the shield bottom with rivets, the studs project through the chassis so nuts can be attached under the chassis to fasten the shield down. Hope that all makes sense.

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From: "Michael Young" <myoung76@bellsouth.net>  
Date: Mon, 21 Oct 2002 00:07:27 -0400  
Subject: [R-390] Rack Mounting a R-390

How far up from the bottom of the chassis should the center line of rack slides be located to meet EIA rack standards?

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From: "Michael Young" <myoung76@bellsouth.net>  
Date: Sun, 27 Oct 2002 01:23:31 -0500  
Subject: [R-390] Rack Mounting a R390

How do you guys rack mount your R390? Do you put some angle aluminum in the sides of the rack for the edges of the R390 to sit on so you can slide it back into



place? Or do you use full extension slides? In either case, how do you locate the angles or the slides so the front panel of the R390' mounting holes line up with the rack's holes? Or do you just manhandle it with 2 or 3 people and support it entirely with front panel screws? (Kinda scary)

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Date: Sun, 27 Oct 2002 03:49:07 -0800 (PT)  
From: "KC8OPP Roger S." <kc8opp@yahoo.com>  
Subject: Re: [R-390] Rack Mounting a R390

I have two R-390s in a rack here, and I would definitely suggest using angle supports and not just the front panel. I laid the rack on its back side and set the radios in where I wanted them, aligned the front panel holes and then fabricated the supports. If you have to empty the rack to lay it down it will be worth the extra work, and I would not recommend setting the rack upright with the R-390 installed. Hope this helps,

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From: "Michael Young" <myoung76@bellsouth.net>  
Subject: Re: [R-390] Rack Mounting a R390  
Date: Sun, 27 Oct 2002 18:59:22 -0500

Thanks for the information. Looks like everyone is on the same wavelength. I had mine mounted in a console about 10 years ago....and I "think" I used 2" angle Al 1/8" thick. But I can't remember. I got rid of the console (a 3 bay unit) for some stupid reason. Wish I had it back. As far as the slides are concerned, I worked for years at Cape Canaveral and at our HF receiving site, we had gobs of these things along with CVC RTTY demods, and just about everything was slide mounted to be able to pull out and fix in place.

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Date: Sun, 27 Oct 2002 16:04:00 -0800  
From: Dan Arney <hankarn@pacbell.net>  
Subject: Re: [R-390] Rack Mounting a R390

The radios were designed to be rack mounted by using only the front panel mounting holes. Many 1,000's of them were done that way with no ill effect. Angles just make it a little easier with a lot more effort.

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Date: Sun, 27 Oct 2002 14:46:38 -0500  
From: Ron Hunsicker <ronhunsi@ptd.net>  
Subject: [R-390] Rack Mounting a R390]

I used a piece of 1" x 1" steel angle to span the back of the cabinet, thus supporting the back panel. The radio is supported on this angle and the front panel screws. How do you make it all align? Measure VERY carefully. Better to be a bit low and shim the back so as not to twist the front.

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Date: Mon, 24 Feb 2003 15:24:16 EST  
Subject: [R-390] Source for plastic washers for rack mounting?

I have seen small black conical shaped plastic washers that go under the finish

washers for rack mounting.

Does anyone know a source of same. They look almost like faucet washers!

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Date: Mon, 24 Feb 2003 12:39:55 -0800  
From: Dan Arney <hankarn@pacbell.net>  
Subject: Re: [R-390] Source for plastic washers for rack mounting?

McMaster Carr box of 100

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From: "Scott Overstreet" <scott@becklawfirm.com>  
Subject: Re: [R-390] Source for plastic washers for rack mounting?  
Date: Mon, 24 Feb 2003 13:55:16 -0800

Look in the Digi-Key catalog for hardware in the Hammond Racks and Accessories section-----lower right hand corner of page 897 in current catalog number T031. Part numbers are HM826-ND for sets of 4 screws and 4 black plastic washers----\$2.46 for the set.

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From: "Bill Smith" <billsmith@ispwest.com>  
Subject: Re: [R-390] Source for plastic washers for rack mounting?  
Date: Mon, 24 Feb 2003 15:26:35 -0800

Washers can be found in many local hardware stores which sell nuts, bolts and screws. I picked up a handful of them, they are white, think they were 0.05 each as singles. Screws should be available, oval head style, in a box for three bux or so for 100. They come in various sizes, so make sure you match the screw size with the washer, and make sure the screw fits in your rack. Some are 1/4-20, others are 10-32, yet others are 10-24. Older racks used 12-24 if I recall (12 size is very close, or identical to 1/4").

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Date: Mon, 24 Feb 2003 18:16:56 -0600  
From: Terry O'Laughlin <terryo@wort-fm.terracom.net>  
Subject: [R-390] Source for plastic washers for rack mounting

McMaster-Carr in Chicago <http://www.mcmaster.com/>

Do a search for countersunk washers. They have them in natural and black nylon. Somebody makes them in a gray that's perfect for R-390s, but I've never seen them for sale.

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Date: Tue, 25 Feb 2003 09:27:26 +0200  
From: "Bryce Ringwood" <BRingwoo@csir.co.za>  
Subject: Re: [R-390] Source for plastic washers for rack mounting?

I was using faucet washers! The computer network guys at work always seem to leave a few screws and washers around.

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From: R390rcvr@aol.com

Date: Wed, 26 Feb 2003 08:43:26 EST  
Subject: [R-390] Update on countersunk washers!

Thanks everyone for there responses on the countersunk washer question. Several people suggested McMaster-Carr. I looked through their offerings, and besides the plastic, conical washers that would fit under the traditional thin metal finish washers, they had flanged metal washers in stainless steel, which aren't supposed to cut into surface, and solid based finish washers in black, which are completely smooth on bottom surface, so they won't cut in either. I may order a box of each, and give them a try. Thanks again the listings are on page 3002 .

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From: AdamAnt316@aol.com  
Date: Sat, 5 Jul 2003 21:56:57 EDT  
Subject: [R-390] DIY cabinet/shielding questions

Hello everyone. I recently began work on my R-390A and, since I don't have any sort of cabinet or rack for the set to go in, I've been toying with the idea of building a wooden cabinet for it. I thought that this sort of project would be relatively straightforward, but then the issue of shielding came to mind. Are the top and/or bottom covers detrimental to the correct operation of the receiver? I have the bottom cover and the oft-mentioned "Utah plate," but am currently missing the top cover (anyone know of a source for just this one cover? Would Fair Radio be willing to sell me only the top one, since the bottom one is passable?). While looking through the overheating section of the R-390A Pearls of Wisdom archive, I found one post which said that the milspec metal cabinet one owner had used RFI screening over all the holes in the case. Would it be better to try to restore the top cover, cover the insides of the wooden case with some sort of metal screening, both, or would neither be necessary? Also, what would be the best way to bolt the R-390A into the wooden cabinet?

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From: "Barry Hauser" <barry@hausernet.com>  
Subject: Re: [R-390] DIY cabinet/shielding questions  
Date: Sun, 6 Jul 2003 07:48:27 -0400

First of all -- welcome aboard! When putting an R-390A in a cabinet or rack, an important consideration is ventilation. You don't want to suffocate the radio. The basic mil procedure when installing in a cabinet or rack was to remove top and bottom covers, which is why so many are missing. It pays to keep the Utah cover in place as there aren't many tubes under it and it helps keep dust out of the coils. Might be arguable, but the 390's are pretty well shielded while uncontained. Additional shielding is needed only in special situations. Wood has insulating properties, so you have to make sure there are plenty of vents in whatever you build.

The '390's have the "H-frame" design with modules suspended on the bottom. The convection air flow is primarily from the bottom and out the side panel holes (for the "downstairs modules"). So, the case design should have openings on the bottom AND the sides, not just one or the other. Consider simply getting a nice top cover. If Fair Radio won't break a set, check with Hank Arney. If you're going to make a full

wooden cabinet, plan on cutting a lot of vent holes. (Some kind of open frame design might be more practical.) Leave the top and bottom covers off. If you add screening, I'd suggest a fine mesh so it helps keep some dust out, but not so fine that it restricts airflow. You might be able to find a standard cabinet at a reasonable price (under \$100) that will fit -- or maybe one that's taller with room for "accessorizing".

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Date: Sun, 06 Jul 2003 08:14:37 -0400  
From: Jim Brannigan <jbrannig@optonline.net>  
Subject: Re: [R-390] DIY cabinet/shielding questions

During the last shack re-build, I incorporated a rack size box on one end of the shelving unit. It is 24 inches tall, 11 inches deep. The total length, including the "rack" is 7 feet. The entire shelf/rack box is made from 3/4 inch birch veneer plywood, trimmed with edge moulding. The shelves are reinforced with 2 inch wide "stringers". Stain and about 6 coats of polyurethane give it a nice look and a hard finish. For the vertical "face" of the rack section, I used 3/4 inch aluminum angle iron. The wood is routed so the angle is flush to the inside of the "box" then drilled and tapped as appropriate. Because of the weight, the R-390A is on the bottom and a CV-591 is mounted above it. A blank panel with a large line voltage meter is the top piece. ( the line meter is a big 'ole power station job with a brass face plate) The back of the rack is open for ventilation and ease of access. All the covers are in place. Their primary purpose is to keep dirt out of the radio. The aluminum has not stood up very well. They should be replaced with iron or steel angle, also I would mount three flush metal strips, front to back, into the base of the unit. The wood has been gouged by the weight of the receiver.

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Date: Sun, 06 Jul 2003 05:54:44 -0700  
From: hankkarn <hankkarn@pacbell.net>  
Subject: Re: [R-390] DIY cabinet/shielding questions

I have a DX-100 cabinet that has been stripped and painted, is disassembled with all hardware for \$125.00 plus UPS. Also have all of the covers. Cabinet is a light gray wrinkle I think.

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From: "Richard Biddle" <theprof@texoma.net>  
Subject: Re: [R-390] DIY cabinet/shielding questions  
Date: Sun, 6 Jul 2003 12:06:02 -0500

Hello Adam, I traded a cabinet-maker some repair work and had him build an oak veneer 3/4" plywood case that I designed for my R-390A/URR. The cabinet is just wide enough to fit a pair of rack slides on either side of the radio. The chassis does not touch the cabinet. The cabinet is deep enough to contain a 4" AC fan and filter and there are ventilation slots cut near the front edge on the top and bottom. The fan draws outside air through a filter and exhausts after flowing through the radio. There is a two piece trim molding around the edge of the front panel to hold the radio and cover the mounting holes. I used large furniture glides on the bottom so the cabinet is easy to slide. The back panel is hinged for cable access. The fan and the radio plug into a small outlet strip in the back of the cabinet. I plug the thing

into a small variac with a AC line-meter I built for this purpose. I can remove the trim strips and slide the radio out of the cabinet for minor things like zeroing the carrier level meter and setting the IF gain. The cabinet weighs in at about 20 pounds. I do not have the top and bottom covers on the radio. Originally I was thinking of using copper sheeting or the copper paint used on the inside of plastic computer monitor housings, but I don't seem to have any issues at all with emitted or received EMI using an outside long-wire antenna. As far a heat, I use IERC tube shields and there is a good bit of airflow though the cabinet. I measured temperatures at various points in the chassis and was quite pleased with the results.

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Date: Sun, 06 Jul 2003 16:04:46 -0400

From: Gene Beckwith <jtone@sssnet.com>

Subject: Re: [R-390] DIY cabinet/shielding questions

Gents, Interesting questions re cabinets for the R-390X's ... Several approaches here...but some are;

1. Use DX-100 cabinet per Hank posting...they show up from time to time, but must do some custom hole cutting on rear panel if you use it...the depth clearance is ok, but no room for errors...plus in my case the standard 19" hole patterns were not what my DX-100 cabinets presented...drilled and tapped them... not a big deal...but had to do it...

2. Main station op position here at W8KXR is constructed floor to ceiling with eight bays of racks that allow movable shelving...veticle shelving supports, when needed are 'shimmed out' with addition of right angle aluminum stock to fill gaps and provide for rack mounting...main weight is on shelving. This is an extremely flexible system and allows for lots of station changes as up grading and mix an match combos are tried...Currently have two R390x's mounted this way...very neat . . .

3. Open frame racks also used, but no R-390x should be mounted suspended on panel alone...this is old info discussed on this list several years ago...it is also the way military racks were designed, in some cases, with essentially 'micrometer' shelf adjustments that came up under the rigs...to minimize panel loading and main frame/gear train alignment.

4. Bud has made custom runs of cabinets from time to time that are deep enough for the R390x's and SP-600's . . . had to get 'em quick because they were sold out within hours of posting...

5. Have found cabinets at the Hamfests, that appeared to be for commercial test gear wo mfg. id...but were deep enough to handle the '390's . . . gotta keep looking and be a bit innovative in these cases...

6. Have been able to scrounge (rescue) four computer cabinets from work that were dumpster fodder...they are commercial grade, deep enough, mostly with five to six feet of usable vertical mounting space....

7. Also intercepted a two double 19" rack from scrapped security system that was being up graded...works great...easy to add support shelving either custom fit per me, or scrounged shelving used for Video monitors in this case...

So, if you are persistent, these are some ideas...for avoiding a custom build...really dressing up ur stuff, and avoiding valuable waste of time needed for more building and scrounging...take your pick from really big for lots of stuff, or one at a time stuff...

Good luck and good hunting...

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From: AdamAnt316@aol.com  
Date: Sun, 6 Jul 2003 16:17:11 EDT  
Subject: [R-390] Re: DIY cabinet/shielding questions

Thanks for all the comments so far. The case I build will most likely be about the same size as the faceplate (height/width wise) with an open back, although I may make it a bit taller on top to accommodate a 240V fan and an outlet strip. What sort of ventilation holes should I put on the four sides? I'm hoping for something relatively discrete, if at all possible. As far as alternative cabinets go, I'll keep an eye out for one (haven't been too successful so far), but will still build this wooden one so that I have something nice (and with the potential of fitting in with existing furniture) to put my set in. As for the 390A itself, owning it has been quite an adventure, especially since I've never worked on something this complex before. I recently finished restuffing the can capacitors, and currently have the IF deck sitting on the bench for replacement of the problem caps (details of the restoration so far can be found at

<href="http://www.angelfire.com/ma2/AdamVon/r390a.html">

<http://www.angelfire.com/ma2/AdamVon/r390a.html></a>).

Once I get done with this, I will hook the set up to a Variac to bring power up to it slowly, and hopefully it will work (when I acquired this set, it was said to be nonworking, but I discovered that the 3TF7 had gone open, and have since replaced it). -Adam

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Date: Sun, 6 Jul 2003 17:29:29 -0700 (PDT)  
From: Joe Foley <redmenaced@yahoo.com>  
Subject: Re: [R-390] DIY cabinet/shielding questions

I would build the cabinet with sufficient space to allow air circulation and put solid wooden slide blocks on the bottom to carry the weight and allow proper alignment of the radio in the cabinet, down each side of the front I'd screw 2" wide by 1/8" thick flat steel to the inside front of the cabinet to align with the mounting holes of the front panel. That should secure it well enough for table-top use. But what I'm wondering is which would look more appropriate, raised panel sides, art deco styling, or maybe, an overhanging top panel with LED lighting aimed at the meters and counter. What wood finish would look "right" with a grey radio? I'd almost be tempted to make it out of maple and paint it grey to match the radio! That WOULD

be correct for early 40's cabinets.

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From: "Phil Atchley" <k06bb@elite.net>  
Date: Wed, 9 Jul 2003 15:24:05 -0000  
Subject: [R-390] What size screws??

What size/thread screws do I want to use on the CV-979 cabinet for the R-390A? I presume they're standard "rack" screws but I don't recall the size. I need to go down to Ace hardware and see if I can get some for this one.

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From: "Scott, Barry (Clyde B)" <cbscott@ingr.com>  
Subject: RE: [R-390] What size screws??  
Date: Wed, 9 Jul 2003 10:27:24 -0500

IIRC, they are 10-32.

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From: Llgpt1@aol.com  
Date: Wed, 9 Jul 2003 11:36:09 EDT  
Subject: Re: [R-390] What size screws??

10-32. I prefer the 5/8" length YMMV.

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Date: Wed, 9 Jul 2003 10:59:13 -0500  
From: mikea <mikea@mikea.ath.cx>  
Subject: Re: [R-390] What size screws??

Although I've seen 10-24 racks a couple of times. I agree that 10-32 is much more common. 5/8" is good, and if you can find them, there are some wider-and-flatter-than-pan-head screws that work especially well in racks.

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From: "Bill Riches" <bill.riches@verizon.net>  
Subject: Re: [R-390] What size screws??  
Date: Wed, 9 Jul 2003 12:32:00 -0400

10/32 x 3/4" Pan head. You might try a sound system installer or music store for rack screws and trim washers. They would probably look better than normal hardware store stuff.

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Date: Wed, 09 Jul 2003 11:57:34 -0500  
From: "Michael Melland, W9WIS" <w9wis@charter.net>  
Subject: [R-390] Alternative to Rack Screws...

I found utilizing regular rack screws in my CY-979 cabinet was sort of a pain. A better solution for me was a cool rack mounting knob system by a small company called **Rack Release Systems**. The rack screw kits come with a black oxide 10-32 "stud" that screws into the cabinet. It makes lining things up very easy if you take the rig in/out of the cabinet... especially if your holes don't line up perfectly. The kit also contains a black plastic/nylon washer and the nice knurled knob. They are available in hex or knurled round and standard or extra length. I have both and the

extra length works best for CY-979 cabinets.  
Here is their web page: <http://www.rackrelease.com/QuickReleaseRackScrewsExtendedRoundCap.asp>

The link to my R-390A pics on my web page show how they look with the cabinet:  
<http://webpages.charter.net/w9wis>

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Date: Wed, 09 Jul 2003 15:37:51 -0400  
From: Gene Beckwith <jtone@sssnet.com>  
Subject: Re: [R-390] What size screws??

Gents, Regarding rack screws - bolts -and mounting heavy gear - - - System now being used here at W8KXR when a piece of heavy gear is often in and out of a rack...especially when it's heavy...(use ur imagination here 'cause u gotta know ur limitations...). I use 1/4 inch stainless steel machine bolts inserted from the back side of the rack rails and held with a nut on the front side.. Yep...the panels do not fit flush against the rails, but other than cosmetics, there is no advantage to having it flush...(or perhaps egos...)... Once mounted it is a piece of cake, to mount up a heavy piece of gear on the already positioned mounting bolts I've learned to do it routinely...and have mostly forgotten about the pain of alignment and holding the rig, or waiting for help... Finally, stainless washers, are added, and wing nuts spun on . . . use anti-scratch washers as prudent... Can mount a '390, once system is set up in about five minutes, complete with stainless hardware as above...and routinely mount them shoulder height by myself with this method... Hope this helps...for show piece rigs...the cosmetics are sometime nice...but for a working station where lots of gear is moving around for upgrades, modification, and service, the above allows lots of work on an otherwise nasty phase of service and improvement...

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From: "Barry Hauser" <barry@hausernet.com>  
Subject: Re: [R-390] What size screws??  
Date: Wed, 9 Jul 2003 15:50:03 -0400

Hi Gene & list ... Sounds like a good idea to me. If you want more "flushness", you can use the thin nuts made for controls -- providing you can match up threads. To provide a more finished look -- maybe matching cap nuts (AKA acorn nuts) or uh .. thumb-nuts? -- similar to those used for battery terminals.

The inner nuts are just used for keeping the bolts in position so don't need to be that strong. Outer ones don't need to be torqued to 87 foot pounds either. I suppose though that the receiver ought to be resting on supports, not hanging on the front bolts.

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Date: Wed, 09 Jul 2003 16:09:30 -0400  
From: Gene Beckwith <jtone@sssnet.com>  
Subject: Re: [R-390] What size screws??

Barry, Good to hear from u...and ur are correct on all counts... I use the wing nuts for quick and dirty changing and ease of handling when wrestling with the big gear...



Once in place and all secured ... would be easy to go back and add the finish nuts if needed for cosmetics... I've found I get into a lot of stuff now that was previously delayed because I didn't want to do the lifting - bolting job...and often wait for a friend to help do the alignment of 'machine treads' in the rails...

I found too that it minimizes the chance for getting hurt, pinching, dropping and generally developing a bad attitude, which I generally start with, embellished with an array of Marine Language... All in all, I hope the ideas help those just getting into the Big Iron

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Date: Wed, 9 Jul 2003 15:10:13 -0500  
From: mikea <mikea@mikea.ath.cx>  
Subject: Re: [R-390] What size screws??

Sounds good. Sounds really good, in fact, but I hope you're not hanging an R-390 or R-390A from the front panel alone, with no other support.

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Date: Wed, 09 Jul 2003 18:15:17 -0400  
From: Jim Brannigan <jbrannig@optonline.net>  
Subject: Re: [R-390] Alternative to Rack Screws...

While we are on the subject of racks, parts, etc. This is an interesting site. They custom fabricate racks for your non-rack mount radios. I'm thinking about one for my Heath SB-220 (non-SB-230) amp. Jim

<http://www.middleatlantic.com/rsh/rshcus2.htm>

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Date: Thu, 10 Jul 2003 16:54:08 -0700 (PDT)  
Subject: [R-390] Rack Mount, and GREAT POSTINGS..

I have an old AF rack..holds 4(.5) radios that are the size of a 390 or 600..I have screws that were in it orig. so I don't know how they are meas.,. but they are the orig. it appears to me, that came in the rack..they do match very well..Wonder if any knows the correct nomen. for those screws?? The rack is on heavy casters..It also has removable panels/ top and sides, I assume for access etc.. I have 390 on top, SP 600 next, and Teleregister amp on bottom..Works well as I usually run the 390 alone, 'till I warm up the 600. (Am stopping that now.) listening to 390 thru headset...Since I am almost always on the 390 'till I get lazy, and start sloppy band cruising, heat doesn't build up while the 390 is on.. Tried to get some info on racks before, but no one seemed interested..

Mine Is: Rack Mount 452/AF      Kane Mfg. Co.  
Order #32174                      Phila - 55

The D- thing weighs more than the 390 and teleregister together...(Has extra panels to fill in..and they are thick as a 390 ft. panel, and heavy..) Never saw this kind of mount in army units that I was in...but saw something sim. on my one visit to Monmouth early '61.. Also saw several taller than a man, and one that went to ceiling, (at Drum on an encampment in summer of (maybe "63?)). Wonder about

shipboard methods..?? Any one want to mention racks they have or have seen? I would be interested in knowing...but don't worry if you are not interested... Also want to mention how I have enjoyed the material all of you put in postings...They are generally very good..!! My thanks as a novice person for the interesting and useful info!

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From: "Phil Atchley" <k06bb@elite.net>  
Date: Sat, 12 Jul 2003 15:56:49 -0000  
Subject: [R-390] Found some nice Rack Screws locally

Hi. The other day I posted an inquiry as to what is the right sized screw for the CV-979 cabinets, turned out to be 10-32, 5/8" long. A trip to my local Ace hardware store turned up some very nice stainless steel countersunk screws with a slightly concave or oval head, that is they bow out rather than being totally flat like the screws that are in the front panel of the R-390 (they also have those for folks needing them). They also had the matching countersunk Washers for them that make for a very nice combination. I 'think' they call those "trim washers" or something to that affect. No nylon inserts for the trim washers however (Like we used to 'sometimes' see in military racks). The above combination would look very nice in any rack and would also cover up any "screw head scratches" in your front panels.

My local Ace hardware (Parker's) store has probably been here since Noah's ark. It is pretty small but has an AMAZING array of what they call "builders hardware", screws, washers, and other items I've found useful in various restorations. No long, large rows of pegboard displays like the "big boys", but rather small drawers containing compartments of screws and hardware in all sizes and they sell in single unit quantities too! No need to buy a gazillion screws when you need one.

One last note. IF you have one of the fancy R-390A's with a repainted front panel you may want to try to find trim washers with nylon inserts. Alternately you may be able to "fill" these trim washers with a silicon rubber or similar to prevent scratching your panels.

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Date: Tue, 15 Jun 2004 22:05:01 -0500  
From: "Robert Nickels" <w9ran@oneradio.net>  
Subject: [R-390] Rack Release

If you're a rack man, this product may be of interest: <http://www.rackrelease.com/>

These rack fasteners are a stud that's threaded on each end, one fits the standard 10-32 rack threads and the other fits a knurled black anodized cap. You first insert the studs, then remove the caps and guide the unit into position and secure it with the caps. Neat, safe solution. Same source also sells conventional rack fasteners.

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Date: Wed, 16 Jun 2004 10:07:53 -0500  
From: Dave Merrill <r390a@rcn.com>  
Subject: Re: [R-390] Rack Release

They have also been running these on eBay at BIN prices below their webpage 'online' price - query seller "rackrelease"

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Date: Thu, 17 Jun 2004 06:20:37 -0500  
From: "Bill Breeden" <wbreeden@tconl.com>  
Subject: [R-390] Re: Rack Release

These work and look great on my R-390A and CY-979. The long stud version works best with the thick panel on the 390A.

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Date: Tue, 3 Aug 2004 18:18:33 -0400  
From: "Christopher J Galbraith" <cgalbrai@umich.edu>  
Subject: [R-390] CY-979 and CY-979A differences + shock mount question

Are there any differences between the CY-979 and the CY-979A cabinets? I am guessing the non-"A" was made during R-390 production and the "A" during R-390A production. All photos I've seen show the two models as otherwise identical.

Also, anyone have, or know of a source, for shock mounts for these guys? I have a CY-979 to use with my R-390A, and would like to find the shock mounts. I'd also be interested in trading for a CY-979A if someone needs a CY-979 to be more "correct" for an R-390.

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Date: Tue, 3 Aug 2004 17:03:04 -0700  
From: "Glen Galati" <eldim@worldnet.att.net>  
Subject: Re: [R-390] CY-979 and CY-979A differences + shock mount question + T-368 WTB

Does anyone have the LORD Part Number, or Federal Stock Number for the individual shocks for the R-390 Cabinets? I have a bin loaded with different shocks, and would be happy to search or research them if I have some info to go on. Some look identical in physical shape and size but have different load ratings. I don't have time to research my R-390 manuals as I'm way behind the power curve.

Also, you lucky folks who own one may be able to take a peek at your mounts and let us know the part number or what info is on them. They may also be listed in the T-368 Transmitter Manual. On the subject of T-368's. Does anyone have a empty or partial transmitter Cabinet FOR SALE or TRADE. Was there a manual ever published on the Cabinets themselves?

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Date: Tue, 03 Aug 2004 17:41:34 -0700  
From: Dan Arney <hankarn@pacbell.net>  
Subject: Re: [R-390] CY-979 and CY-979A differences + shock mount question + T-368 WTB

Glenn, The Barry P/N is 7230 AR

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Date: Tue, 3 Aug 2004 19:48:31 -0500  
From: Tom Norris <r390a@bellsouth.net>  
Subject: [R-390] Re: CY-979 + shock mount answer

The Lord p/n on the one I have on the shocks on my cabinet is HT2-35.  
These are Lord BTR series mounts. Data for that type of mount is here --  
literature.lord.com/root/other/btr\_mounts.pdf <snip>

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Date: Tue, 3 Aug 2004 18:22:10 -0700 (PDT)  
From: Joe Foley <redmenaced@yahoo.com>  
Subject: Re: [R-390] CY-979 and CY-979A differences + shock mount question +  
T-368 WTB

The T-368 Cabinets were covered in the manuals for each version of the series  
because there were some small differences in the cabinets, mostly the antenna  
relay used different voltages, some were 120 VAC some were 24 VDC. There  
were also differences in the wiring harnesses which have to be accounted for if you  
ever have to mix and match modules.

[http://groups.yahoo.com/group/T-368\\_BC-610/](http://groups.yahoo.com/group/T-368_BC-610/)

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Date: Tue, 26 Jul 2005 05:22:23 -0700 (PDT)  
From: "Tom M." <courir26@yahoo.com>  
Subject: [R-390] CY-979A Makers

These are the notes I've kept on the CY-979. Some of these may have been  
subbed out to metal shops, not sure . . . Tag info: includes contract if known, and  
high s.n. seen if any.

	CY-979A Cabinets		
Stromberg-Carlson,	39692-PP-58	42	
Division of General Dynamics,			
Rochester, New York			
Stromberg-Carlson	?	822	
Steelcase	?	?	
Teller Industries	?	?	
Laboy J Industries, Camden	SCDL135814C	2058	
Crosley Div. of AVCO MFG. Corp.	21316-PH-56	12	
Andrews Inc, Philadelphia	?	?	
Taffet Electronics, owned by W2ERJ, Milt Taffet	?	?	
Barker and Williamson	?	?	
Daystrom			

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Date: Mon, 25 Jul 2005 19:16:38 -0400  
From: "Tom Chirhart" <sparks@codepoets.com>  
Subject: [R-390] CY-979A question

I recently located and obtained an early Collins R-390 (non-A) SN 7XX, first run  
1951. It came with a Stromberg Carlson a division of General Dynamics CY-979A/  
URR. Government contract dated is 1958 on the nomenclature tag. Question is:

Did Collins also manufacture the CY-979A? How many others made these aluminum cabinets if others made them? Thanks in advance.

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Date: Wed, 2 Nov 2005 20:06:49 EST  
From: Flowertime01@wmconnect.com  
Subject: Re: [R-390] R-390A /CV-157 /CV-591.

You ask if anyone here suggest a way to find a CV-157 , or a CV-591 cabinet. The R390 and R390A mostly did not come in a table top cabinet like the ones you refer to. Mostly we were mounting them two or more in upright racks or side by side in a sloped front double wide cabinet. The receiver has a standard 10 1/2 inch 6U high front panel. A "U" being 1 3/4 inches. I have no idea who standardized the U at 1.75 inches. and decided things should be in multiples of that unit. Blank panels come in 1.75 high increments. And they are all 19" wide. 24" is also another standard width.

Finding a table top cabinet that is deep enough can be a problem.

HP put some signal generators in some standard cabinets with RETMA mountings. RETMA being the standard hole pattern that goes with the U panel heights. Once you understand there is a method and pattern behind the madness you see the logic in the hole patterns along the sides of most military and heavy duty test equipment. Lots of it comes out of the little cabinets and get mounted in big racks in the shops and labs where it lives forever.

You can find short "table top" cabinets around. Watch your local swap meets. If you live near a big military contractor, watch for their surplus sales. These guy will some time put stuff out for sale. Hughes use to do employee preference sales on the first Saturday of the month in Fullerton California. Boeing did sales in Washington. Rockwell did sales in Los Angles. Anyway there are commercial cabinets available as used equipment. If you find one a bit more than 6 U high, you can put the receiver in it and fill in the extra space with a blank panel of 1, 2, 3 or more U high.

Cabinets are listed new in catalogs but the price exceeds the price you pay for the radio. Shop around until you hit the \$40.00 range for a good looking used short rack. Full "6 - 8 foot cabinets closed on sides with a back door can be had for \$80 - \$100 dollars. You can also find short 4 foot floor racks. some on casters. Lots of these were old computer cabinets and are floating around. The rail pattern is a standard pattern in all these cabinets. Any of them with a rail set 19" wide will work. Some have threaded rails for 10 x 32 bolts. Some have holes and use a tinner nut (cheep "yea cheep" not the cheap) nuts or a good nut with a retainer clip that go with the rails. There are also "nut bars" which are strips of metal with 2 or 4 tapped holes that fit the RETMA rail pattern. Any of this hardware will work.

Try not to hang your R390 by the front panel. The receiver weight is to much for the front panel to support. The panel bends and will not look so good. Just because you can do it does not imply you should do it. The cabinet should have some blocks put in the bottom to support the receiver. Some table top cabinets will have internal rails to support the receiver. Floor racks typically have a set of rail holes inside to mount rails on that support stuff bolted to the front panel. These side holes

and rails are also a standard type item. The rails are usually a 2 inch by 2 inch chunk of angle iron. In floor racks the back rail set is adjustable to fit slides and mounting rails. For being a standard item the stuff I have seen inside floor cabinet has ranged all over the spectrum. But it will all bolt up a lot like an erector set.

I hope this opens up your search window and you find a nice cabinet for your receiver. You would like to have your receiver in a cabinet. If you wind up with a floor cabinet someday, remember you want to keep it enclosed and grounded. The whole idea of using a steel cabinet with an R390 on a table top is to shield it. Shield also implies ground. The R390's (and A's) will pick up a lot of local signal that mixes to noise in the audio output. Placing your receiver in a cabinet helps. Consider that at 30 Mhz a 1/4 wave is still several feet long. So small slots are still effective shields. In the AM band 1/4 wave is very long, so an open cabinet side is not a shield. There is some rational between slots and screens being OK in shields and real big openings being not so good. Roger KC6TRU

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Date: Thu, 3 Nov 2005 12:44:58 -0500 (EST)  
From: "William A Kulze" <wak9@cornell.edu>  
Subject: [R-390] Re: rack full of gear

I worked for a surplus store for a couple of years awhile back and managed to accumulate quite a bit of components and gear. Add to that the fact that (I think for the same usual reason) a local radio guy at the time was clearing out some of his gear and I gladly took what he would give me. Now I'm settled down with a lovely young thing who very matter-of-factly tells me that I'm hoarding way too much stuff and I need to have a yard sale. I'm not sure I understand what her problem is. She also would like to move me from the one room in the house I have set up as my shop (which doubles as the upstairs bathroom) out to the garage or up to the unfinished, non-insulated attic. I think there's something in the genetic makeup of the fairer sex that predisposes them to an inability to relate to what the rest of us take for granted. Go figure. Just another poor guy who likes those glow-in-the-dark contraptions.

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Date: Thu, 3 Nov 2005 09:46:22 -0800  
From: Fernando Quinones N2FQ <n2fq@sbcglobal.net>  
Subject: Re: [R-390] R-390A /CV-157 /CV-591.

Thanks to all who wrote, I didn't expect it. I'll answer some questions here if I can. I've had these radios now about four years. They where on the side of the garage waiting for my TLC. You see, I've been on the list for a bit but I'm a slow reader and learner. I bartered for the radios, drove over 1200 miles to pick them up, then purchased the SSB unit. As time marched on I was able to acquired the signal generator URD25 and a tube tester. The reason they were in the garage ( shame isn't it), they are too dirty to bring into the house. I don't have the support require in the house to put them on neither. However, (big plus here) the wife has always been supportive of the hobby. She loves the radios too. They look cool to her, yes!! The rack was found during a conversation I had at Pacificon with another member on this list. The shelves are 1" aluminum angle stock. The whole thing is on casters but they don't have the brakes so I need to be careful that it doesn't creep

over to the cars.

The radios:

The top two are EAC and have the etched panel.

The bottom two are Collins, one has the etched panel and the bottom one has decals.

The top three work on the AM bands. I didn't try any other bands.

The bottom one blows the fuse.

As one person mentioned to me, that this is a lot of radio , and I agree. I plan to keep just two along with the speaker and ssb unit. So for now they'll be in the garage as I work on them, the weight alone is prohibitive to bring into the house ( 4 X 70lbs = 280 + 50lb rack + 40lb ssb = 370lb more or less) I admire that Japanese ham who rebuild his on what looks like a kitchen table. Bravo!! Finally, please don't take this as a guy showing off, I've had them awhile, been here the same amount of time and just love them, but was too overcome with relief after reading about the different hole patterns on the racks that I to express my gratitude to the list member. Finagling these heavy monsters up and down the rack was strenuous, to say the least. Well, I would trade my first born for a TMC Rack I once saw at ARRL Headquarters, what a beautiful thing of knobs, meters, nice bright toggle switches..etc. Anyone here visited the ARRL back around the late 70's and see that thing? Take care all and forgive the wordiness.

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Date: Sat, 04 Feb 2006 18:53:30 -0700  
From: DW Holtman <future212@comcast.net>  
Subject: [R-390] Rack Mounted R-390A

This week I aquired a 19 inch rack on ebay. It is a very heavy duty (will hold up to 3000 lbs) unit, it will have no problem holding a few hundred pounds of radios. My question is about mounting R-390A's in a rack. I have heavy duty sliders, but there is no built in holes for standard sliders in R-390A's. I'm thinking about making a side plate to secure the radio to the sliders. I know that I can secure an R-390 using the front rails, but would really like to be able to slide them out to work on or remove them. What is the best way to mount them? Thank you in advance for any information.

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Date: Sat, 4 Feb 2006 22:04:50 EST  
From: ToddRoberts2001@aol.com  
Subject: Re: [R-390] Rack Mounted R-390A

Always use extreme care when mounting a heavy radio like an R-390A in a rack using sliders. I have heard stories where the radio slid out too fast and shifted the center of gravity so far that the whole rack toppled over onto the person causing severe injury. A heavy radio mounted high in a rack can do this more easily than you think. Just use common sense and caution and there should be no problems.

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Date: Sat, 4 Feb 2006 19:13:26 -0800  
From: "dr7zyq" <dr7zyq@imbris.net>  
Subject: Re: [R-390] Rack Mounted R-390A

Also, your message seems to suggest that you can bolt a '390/A into a rack cabinet using the front mounting holes and let it hang in the rack. They are well built, but not intended for that. I once sold a radio to a fellow ham who passed away a year later. I bought the radio back from his estate and then found that he had hung it in the rack by the front -- it no longer tuned smoothly, but would hang up and it took some work to get it back to tuning correctly. A piece of aluminum angle mounted in the back of the rack to support the rear of the receiver is cheap and very easy to do. If I misunderstood your comment, then never mind. David, WA7ZYQ

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Date: Sun, 05 Feb 2006 11:13:51 -0500  
From: shoppa\_r390a@trailing-edge.com (Tim Shoppa)  
Subject: Re: [R-390] Rack Mounted R-390A

My yellow striper from Fair Radio had "extra" holes in the sides which had obviously been used for mounting rails in its previous life. They were simply drilled and tapped into the aluminum sides, and not done awfully professionally either. That said, what I do: Put angle-iron on the inside of the racks. Align so that bottom sides of the R-390A sit on the angle-iron and you can secure it in with the front panel screws. Note that the front panel screws do not really support the unit, that's reserved for the angles that the radio sits on. The screws are just there to stop it from sliding out. Allow a lot of space on the top and bottom to remove modules etc. I would say at least ten inches on top and bottom at the very minimum. If you can make it twenty inches.

It is very difficult for me (and I'm not a small guy) to lift a R-390A overhead myself. I would never recommend that anyone try it. Realistically you probably don't want to mount it much over waist-height. Put speakers and lightweight stuff up top. Putting it in over waist height is possible if you lay the rack down, bolt the radio in, and then tip it up. This can be done by one guy with a six-foot medium-weight rack. For your heavy duty racks it may not be feasible. This is also much more reasonable if you take the modules out (especially the power supply!) and then put them back in after the mainframe is secure and at the desired height. Replace angle-iron with aluminum angle if you wish etc.

For ultimate deluxe arrangement, put delrin strips on top of the angle pieces to make it easier to slide in and out. But in case you didn't get the hints, always make sure you can get in to align and swap around modules without having to take it out of the rack. With a little luck you'll be able to put the mainframe into the rack and not remove it for years. And I fully agree with the others: do not slide anything heavy out of a rack on rails! Many racks originally had anti-tip features such as lead weights on the bottom or legs that came out the front and helped against tipover. This is not a hypothetical risk!

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Date: Sun, 5 Feb 2006 12:05:22 -0600  
From: mikea <mikea@mikea.ath.cx>  
Subject: Re: [R-390] Rack Mounted R-390A



What He Said, in spades. Best bet is to lag-bolt the base of the rack to the floor if possible, and to tie the back of the rack to a stud in the wall behind the rack. This is especially important for open racks with only one set of vertical supports, and only a bit less so for racks with two sets. We had to do this where I was stationed in Japan, because the racked gear, when extended, wanted to pull the racks over, breaking the conduits leading power and signal in/out, and because the frequent small quakes and less-frequent (but pretty hairy) bigger quakes really came close to knocking over the racks even when all the gear was stowed.

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Date: Sun, 5 Feb 2006 12:23:59 -0600  
From: Tom Norris <r390a@bellsouth.net>  
Subject: [R-390] Rack mounted R-390\*, my solution

My solution to the weight problem when mounting heavy things in a rack is to use angle stock bolted to the sides of the rack cabinet. Here's a pic - [http://www.fernblatt.net/A/rack\\_anglestock.jpg](http://www.fernblatt.net/A/rack_anglestock.jpg)

That rail "shelf" bears the weight and the front screws simply hold the radio in place. The aluminum rails give quite a bit of friction, so the front bolts aren't \*really\* needed, but I feel better with them there. Another thing that helps in my case is assorted heavy "crap" in the bottom and an extra deep rack. Outriggers on the front are A VERY GOOD IDEA if you use slides though, regardless.

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Date: Sun, 05 Feb 2006 11:53:17 -0700  
From: DW Holtman <future212@comcast.net>  
Subject: [R-390] Rack mounted R-390

Thanks for all of the great suggestions. The idea of using aluminum angle iron is the overwhelming choice among the experts on this forum. It is what I will go with, tomorrow I will go to my local home center and get some heavy 1/8 inch angle.. I am planning to anchors it against some studs in the wall as well as put some anchors in the concrete floor to secure the cabinet when I decide exactly where I will go. I have to be careful because once it is mounted it will be a chore to move it around. Thanks to Tom Norris for sending the link to the picture. Looking forward to filling up this 7 1/2 foot tall rack with quality Heavy Metal Gear.

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Date: Sun, 05 Feb 2006 04:15:04 -0800  
From: Dan Arney <hankarn@pacbell.net>  
Subject: Re: [R-390] Rack Mounted R-390A

1000's of them have been mounted by the front panel only with no problems.

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Date: Sun, 05 Feb 2006 10:57:00 -0600  
From: Robert Nickels <w9ran@oneradio.net>  
Subject: Re: [R-390] Rack Mounted R-390A

Actually they are, as long as you aren't contemplating mobile operation. From page 6 of TM-11-856A 'Radio Receiver R-390A/URR' - "Two cases and two rack-type cabinets (not supplied) are available for use with the receiver. In addition, the

receiver may be mounted in any standard 19-inch rack, if adequate ventilation is furnished. In mobile installations, the weight of the receiver must be supported at the rear of the main frame rather than by the front panel alone".

The two cabinets are the light weight tabletop cabinet CY-917/URR and the more rugged CY-979/URR. The manual later states that the "recommended cabinets have dowel pins that engage holes in at both rear lower corners of the receiver and provide the required support".

If hams were to install their R-390As per the procedures described in the TM, for Fixed Installations we would allow at least 1 3/4" (1 U) open rack space between receivers, and remove both top and bottom dust covers all tube shields except those on V201 through V206, V505 and V701. The manual states that removal of these tube shields will lower bulb temperature of the tubes and prolong tube life, and that dust covers should only be left in place when extremely dirty or sandy conditions exist. I suppose some hamshacks might qualify!

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Date: Sun, 05 Feb 2006 12:10:26 -0800  
From: Buzz <muttman@charter.net>  
Subject: Re: [R-390] Rack mounted R-390

A great source for angle iron is from discarded bed frames. I've found them behind furniture stores and at flea markets or garage sales for a few dollars.

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Date: Sun, 5 Feb 2006 17:02:20 -0600  
From: Tom Norris <r390a@bellsouth.net>  
Subject: Re: [R-390] Rack Mounted R-390A

Hank is correct, but it makes a whole heck of a lot easier to get in and out of the rack if you put in those angle bits. HP supplied those sort of angle "shelves" in some of their larger equipment system racks for just that reason. (I think it was HP...)

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Date: Mon, 6 Feb 2006 11:54:49 -0600  
From: Tom Norris <r390a@bellsouth.net>  
Subject: Re: [R-390] Rack Mounted R-390A

The reference is on page 5 of TM 11-5820-357-20 manual in the installation section, it says -- "Caution: When the receiver is installed in any cabinet other than described above, adequate ventilation must be provided. For mobile applications of the receiver in cabinets other than Cabinets, Electrical Equipment CY-979/URR and CY-1216/U, support must be provided at the rear of the receiver, so that the front panel does not carry the entire weight of the receiver."

Similar info for the 390A is found in paragraph 6 section 6 of AFTO 31R1-2URR-422/TM 11-5820-358-20 (page 10 of feb '61 printing) But since folks argue with the manuals about things like solid state rectifiers being wrong, I guess they won't agree with this either. If the shafts bind, it may be as simple as adjusting the front panel bushings.

I'd rather use the angles that try to wrestle with an 85 pound radio at shoulder height with one hand while removing screws with another and keeping it from destroying what's below it in the rack with a third hand. I've not sprouted that third hand though, no matter how many vitamins I take, so I use the anglestock. Slide it in, secure the front. No trying to support it while fastening it to the rack.

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Date: Sun, 5 Feb 2006 14:46:25 -0500 (EST)  
From: John Lawson <jpl15@panix.com>  
Subject: Re: [R-390] Rack mounted R-390

>..... I will go to my local home center and get some heavy 1/8 inch angle.....

Been using alum. angle for years in racks to support Large Heavy Things, so that the panel screws just hold the unit in place. For something on the order of weight (and value!) or a 390 - I would probably go for more like 1/2 or even 3/4 angle. For devices over 100 pounds, I use 1" and make sure that the rack has rear-mounting facilities. A lot of racks have a pair of drilled uprights on each side for this purpose. But, even though it's been done by many, including Moi, I think in my newest intallation I'll support my -390s, etc., like this, and give the old panels a rest. Just my 200 millidollar....

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Date: Mon, 06 Feb 2006 21:03:51 -0500  
From: Barry Hauser <barry@hausernet.com>  
Subject: Re: [R-390] Rack Mounted R-390A

Hmmmmm.... a difference of opinion.... Some alternative solutions....

1. Mount rails to the ceiling with movable hoist. Recommend cutting through the sheetrock or whatever to secure with 3/4" U-bolts around the rafters. Attach chains with padded hooks to front handles, move receiver out of rack halfway and attach rear chains, etc. Use suitable manual or electric winch.

2. A skyhook.

3. Difficulty wrestling with R-390's? Keep two extras -- unrestored blue stripers -- for use in workouts. When you build yourself up to the point where you can hold two of 'em out straigh-arm for 10 minutes, you're ready to rumble. (Whatever you do, do not read the fine print warnings on your blood pressure meds. Heck, those final words on the commercials give me palpatations.)

4. Remove all equipment from rack cabinet. Place horizontal bar approx 9 inches down from top crossways. Use it to hang your coat. Put '390's on benches, desks, etc.

5. Rackless rackmount -- Cut 6.5 foot X 18.5 inch hole in interior wall. Will be necessary to either (a) move 1 stud out 2.5 inches if 16" spacing or (b) install additional stud if 24" spacing. Stack up radios thru-wall. May be flush mounted to save floorspace. Make power & antenna connections in adjoining room. (Ignore complaints.)

6. Report to kitchen. Remove and dispose of microwave as per manual instructions regarding prevention of enemy use (or put it in the living room so you can save steps when warming up your pizza -- put it on top of a small fridge for handy brewskies.) Not efficient where it is anyway. Place R-390(A) in place of microwave. Or, leave the microwave where it is and put the R-390 on top of the fridge. If anyone asks, the decor is "eclectic". Depending on your kitchen "motif", you may have to refinish the front panel in natural brushed aluminum (to match the latest greatest stainless steel look), gleaming white, or whatever. Probably not much concern about matching to avocado these days. I could go on ... or y'know what, just get the angle iron or angle brackets, but I'll tell you this .. nobody has smashed a radio or gotten smashed (well except for the brewskies), with my methods. heh heh.

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Date: Mon, 06 Feb 2006 21:17:58 -0800 (PST)  
From: Ed Zeranski <ezeran@ezeran.cnc.net>  
Subject: Re: [R-390] Rack Mounted R-390A

At work we use 2"X2" angle drilled for the EIA 10,32 rack rails. Several rack manufacturers make them and they turn up at surplus /junk places.

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Date: Tue, 7 Feb 2006 10:15:11 -0600  
From: "Cecil Acuff" <chacuff@cableone.net>  
Subject: Re: [R-390] Rack Mounted R-390A

I've considered designing a small roll around self contained hydraulic lift to assist in getting them from the floor to the bench....or maybe pneumatic... Would be a great help as one gets older and these radio's get heavier....

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Date: Tue, 7 Feb 2006 11:31:50 -0500 (EST)  
From: John Lawson <jpl15@panix.com>  
Subject: Re: [R-390] Rack Mounted R-390A

Actually these are 'items of commerce' and available from most all big industrial supply houses. When I was heavily (yes it's a pun!) into collecting vintage minicomputers, I had a mechanical version - used a winch and cable. The maller, simpler ones look like a 'refrigerator dolly' with a small platform or short forks that are used to lift the Item Of Interest. They're kinda pricey - though they come up for auction from time to time. Just the thing for putting 100+ pound Things in racks, though. And yes, I've installed an R-390 at shoulder-height in a rack, myself, un-aided. Of course that was damn near 30 years ago - youth is certainly wasted on the Young.... and the occasionally stupid.... ;}

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Date: Tue, 7 Feb 2006 10:38:41 -0600  
From: "Barry" <n4buq@aol.com>  
Subject: Re: [R-390] Rack Mounted R-390A

A set of scissor jacks from the Acme Company (you know, the place where Wile E. Coyote always buys his stuff) on rollers would work nicely... :) I like the nylon rails I

made for my first R390A. I machined them such that they raise the side panels just enough to be even with the bottom edge of the front panel. Using the flat-head screws into the threaded holes where the bottom cover mounts, it allows the radio to sit on a flat surface and the nylon makes for a slick enough surface that I can slide it around pretty easily. My cabinet has a floor even with the 10.5" opening, so the radio slides right into place (no skyhooks necessary).

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Date: Tue, 7 Feb 2006 10:58:02 -0600  
From: "Barry" <n4buq@aol.com>  
Subject: Re: [R-390] Rack Mounted R-390A

Let's see...  $v^2 = u^2 + 2as$  Given  $s =$  approximately 1.5 (meters) at shoulder height,  $v$  is approximately 5.44 m/s when the radio hits the floor.  
Kinetic energy =  $(m * v^2)/2$

An R390A's mass is approximately 36 kg so  $k = (36 * 5.44^2) / 2 = 532.6848$  Joules  
How big is the hole in the concrete?

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Date: Tue, 07 Feb 2006 10:34:23 -0700 (MST)  
From: Richard Loken <richardlo@admin.athabascau.ca>  
Subject: Re: [R-390] Rack Mounted R-390A

Surprisingly, I never think about Joules when I have just watched a \$600.00 device with a weight of 36Kg destroy itself on a concrete floor. That only comes after weeks of sulking (possibly including hospital time).

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Date: Tue, 7 Feb 2006 06:23:23 -0500 (EST)  
From: <w9ya@arrl.net>  
Subject: Re: [R-390] Rack Mounted R-390A

Hey Tom and the gang; I agree.... It is common practice to add support for heavy items placed in racks. I see this in the racks at work for equipment weighting in at less than the R390 series. We have over 100 racks worth of equipment there. I have seen this additional support used at other places I have worked at or been associated with. You can buy these rear and side angles from the rack manufacturers directly or several other places if you would rather not make these yourself. I also regularly see bent equipment that does not have additional support. I repair the electronics that sit in these racks as my primary function at work. I have been doing this repair work for over 35 years. I do not see bent equipment that has had additional support added.

Sometimes we add support that the manufacturers did not otherwise recommend. It does not hurt to do so. The equipment seems to be easier to move around and stays square when we use additional support for heavy equipment we mount into these racks.. This is NOT rocket science, (although we do some similar things at work,) but rather a matter of common sense.

SO.....IMHO, if we would like our older equipment to last a bit longer and be easier to move into and out of the racks; perhaps we should consider doing some things

hinted at in the manuals and from our direct experience that will keep them cool and square Vy 73; Bob w9ya

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Date: Mon, 6 Feb 2006 21:28:16 -0500 (EST)  
From: "Paul H. Anderson" <paul@pdq.com>  
Subject: Re: [R-390] Rack Mounted R-390A

The FRR-33 dual diversity RTTY system installation manual shows angle iron rails to rest the receivers on (2 R-391's and other components). This is for fixed, not mobile operation. The R-391's might be a little heavier than the R-390A, though. I'd still vote for using the supports. <snip>

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Date: Sun, 11 Jun 2006 00:59:14 -0400 (EDT)  
From: John Lawson <jpl15@panix.com>  
Subject: Re: [R-390] Installing a R390

<snip> Seriously, though - not bad, if you can then get the rack in/out of the shack easily after the radios (and the spectrum analyzer) are mounted. Some folks advocate the use of side-bars made of aluminum or iron angle - or using a rack with rear rails to keep the entire weight of the 390 from hanging on the front panel - although I have no direct evidence that this is an acute problem - and my previous 390s lived in a rack with only 4 screws in each one - they were (apparently) happy for years. My two rigs (390 and 390A) currently sit on the desk, but they, and the rest of my gear, are destined for racking - so I'll soon face this exact scenario - twice, plus the R-388, the WWV receiver, the smaller transmitters, the Mdo Monitor, the AM scope, and a stack of RTTY Apparatus.

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Date: Sun, 11 Jun 2006 07:47:14 -0400  
From: "David C. Hallam" <dhallam@rapidsys.com>  
Subject: RE: [R-390] Installing a R390

BUD the chassis and cabinet people used to make rails that bolted to the sides of a rack cabinet and carried the weight of a heavy unit like a R-390. I have several pairs in my cabinet. Sadly, they no longer make them. I guess they assumed radios were no longer heavy,

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Date: Sun, 11 Jun 2006 12:08:34 -0400  
From: Glenn Little WB4UIV <glennmaillist@bellsouth.net>  
Subject: RE: [R-390] Installing a R390

Rack rails are still in use by the broadcast industry and others. A Google search for rack rail turns up a number of rails. They are a little expensive, but available. The broadcast industry uses these rail to hold professional monitors in a rack as well as recording decks and other things. The R-390A is light compared to some of this.

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Date: Sun, 11 Jun 2006 12:33:49 -0400 (EDT)  
From: John Lawson <jpl15@panix.com>  
Subject: [R-390] Rack rails and mounting

I've gotten a couple of very helpful mails from folks on the subject of side-rails to support heavier gear in racks - Considering first of all that you have the kind of rack with front and back rails, and rails or flanges on the sides to bolt stuff to - I buy 1" or 1 1/2" aluminum angle from McMaster Carr, long enough to go from the front rail to the back rail in the rack I'm using.

Then drill holes in it to match the rails in the rack. If needed I'll use counter-sunk bolts to provide side clearance. The angles are mounted front-to-back, the 'flat' part of the angle can either be the top-most surface, in which case the Gear sits on the top of the angle with the other edge facing down ( the edge with the bolts) or the bolted edge can be upward alongside the gear, with the other edge protruding into the space.

How it's done is a matter of side clearance and possible interference with other items in the rack. Now - this won't work with the cheaper "Bud" type racks, and of course not at all with 'relay racks' that only have front rails.

With fully enclosed Bud-type racks, one could drill and mount side brackets to carry the rails - but that's a lot of work, and surplus racks are still available, especially as ISPs and companies migrate 'server farms' to ever-smaller packages.

A lot of times you can find firms that would be happy if you came with a truck and hauled off a rack or two. Or twenty....

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Date: Sun, 11 Jun 2006 12:42:32 -0400  
From: sdaitch@ibb.gov  
Subject: Re: RE: [R-390] Installing a R390

see: <http://www.generaldevices.com/>

I've never had equipment slides made by Bud, so I can't make a comparison with the General Devices product line.

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Date: Sun, 11 Jun 2006 18:12:04 -0700 (PDT)  
From: Joe Foley <redmenaced@yahoo.com>  
Subject: Re: [R-390] Installing a R390

No, no, proper etiquette dictates that that method is only acceptable for the R-390A/URR, the R-390/URR, being the MAN'S radio, shall be only loaded by hand, if loading TWO radios, however, it is acceptable to set ONE down to load the other but ONLY if the operator/technician is not familiar with the proper way to hoist the High Voltage Insulative Steatite Ceramic 'Shine Jug. Where's Nolan,.....

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Date: Mon, 12 Jun 2006 12:09:35 -0400  
From: Roy Morgan <roy.morgan@nist.gov>  
Subject: Re: [R-390] Installing a R390

You should know about nice rack mounting hardware that makes the job easy. See the link below for info"

<http://www.rackrelease.com/QuickReleaseRackScrewsExtendedRoundCap.asp>

Quite some time ago I ordered a few sets of these fasteners from a fellow who offered them on some mailing list I got, possibly this one. The little gadgets work great. If you can manage to hold your radio more or less in position with one hand, the knurled screw goes onto the stud easily with the other hand.

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Date: Sun, 25 Jun 2006 21:12:44 -0500  
From: Patrick Jankowiak <recycler@swbell.net>  
Subject: [R-390] RE: Installing a R390

Been off the list a while, please excuse the late post. I wished to comment on rackmounting 'things', having spent alot of my free time doing so. I've used rackmount shelves with good success. If the radio chassis is such that ventiation underneath is necessary, a perforated shelf can be used.

In mounting the radio, the rear of the chassis will sometimes be (or want to be) some small fraction of an inch above the shelf. To work with this, a small strip of aluminum stock can be placed partway under each rear corner of the radio. The part of the stock that is clear of the radio can be screwed to the shelf, or just glued with silicon glue, whatever you prefer. Either way, the radio is not going anywhere and will be supported at the rear.

For mounting the R-390 in a BUD rack or similar unit with no rear rails and in a case where I did not want to try with aluminum angle because i could not precision-measure, I have drilled holes in the sides of the rack and put sections of 2x2 in as rails on which the radio is supported on or slides in on. The easiset way to do this is to lie the rack down, put the radio in the rack where you want it and fasten the screws (and it now hangs down straight). Then fit the wood up against the bottom edge of the radio and the inside of the rack. Now you can easily see whereabouts to drill perhaps three 1/4" holes from front to rear of the rack side suitable for lag bolts. remove the wood, drill the holes, and then replace the wood. Drill pilot holes for the lag bolts through the holes you just made in the rack. Screw the lag bolts in. If you want, you can put a small shim of 1/32" aluminum plate towards the rear of each wood rail. (don't use pressure treated wood because it has chemicals in it. Use nice dry wood) A 2x2 is about 1.5" across, so this assumes you want one RU (1.75") of space between your radios. Done! If there is a need to mount non-rackmounted gear in a rack and you have a shelf, I've found a little trick for that as well. It's outlined at [www.bunkerofdoom.com/rackmount1/](http://www.bunkerofdoom.com/rackmount1/)

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Date: Mon, 26 Jun 2006 11:26:17 -0400  
From: Roy Morgan <roy.morgan@nist.gov>  
Subject: Re: [R-390] Re: New 'coffee' table

This story reminds me that I have a DEC Disk Rack here. It's a convenient 4 feet tall, 19 inch rack size, and is equipped with nice big casters. Only one problem: the side rails have un-tapped holes in them meant for tinnerman nuts to hold the equipment in place, but no nuts! These need to be very thick to slide over the very



substantial rails. I've searched for such nuts, but to no avail. Anyone have some?

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Date: Mon, 26 Jun 2006 11:20:18 -0500  
From: mikea <mikea@mikea.ath.cx>  
Subject: Re: [R-390] Re: New 'coffee' table

I've seen such nuts in parts kits that came along with some racks, and you might be able to get them from one or more rack manufacturer. You don't say whether you tried that route; if you have, then trash this -- after letting us know, so that we don't follow that blind alley.

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Date: Mon, 26 Jun 2006 23:38:36 -0500  
From: Patrick Jankowiak <recycler@swbell.net>  
Subject: Re: [R-390] Re: New 'coffee' table

Are not the Tinnerman nuts the same as the ones used for racks with large holes that are not tapped? I use cage nuts for those. I had to order about 300 of them to meet minimum order So far have used most of them too! My stereo is in a 6.5' pdp11 rack. Try here for Tinnermans:  
<http://boltproducts.ecreativeworks.com/tinnerman/nut-bolt-retainers.html>

You might be looking for a cage nut though:

[http://www.rackmountsolutions.net/Rackmount\\_Screws\\_Hardware.asp](http://www.rackmountsolutions.net/Rackmount_Screws_Hardware.asp)

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Date: Tue, 27 Jun 2006 08:11:47 -0400 (EDT)  
From: Phil <tubesareking@yahoo.ca>  
Subject: [R-390] Charles' dilemma

Sounds to me like you need a helper - somebody good and strong to lift the R-390A. During WWII, there was the lend-lease program - a good idea which helped ABC win the war. [America, Britain, Canada] And yes, Australia helped, as did the Free French, Poles etc. Maybe what you need is the "lift and learn program" - someone strong and interested in working on vintage gear. They would learn by watching you. Family member, neighbour, good high school kid recommended by school, community college, good kid at church etc. Someone who would appreciate the opportunity to help and learn. They might not be interested in boatanchors, but they might be interested in tube guitar amps and they could learn a lot of stuff from you. If they were nice enough and wanted to hang around, great. If they were nice, but bored, they could just haul as needed - desk to floor, floor to desk, garage to bench, that type of thing. They might be delighted to have that crunchy pot on their guitar amp sprayed, or their EL34s tested or whatever.

Alternatives would include assistance from a local youngish ham, waiting for your muscle tone to improve, waiting for someone in the R-390(A) fraternity to be in the area etc.

None of us are getting any younger, and all of us can have sore backs etc. so the idea of a lifting buddy should be pretty relevant for all of us.

When it comes to dropping the front panel, I use the floor, as my DX desk really isn't quite deep enough and I don't have a workbench - wish I did, but I don't have the room. Floors tend to be strong, and its hard for a 75 pound object to fall off the floor. I use a couple 2 x 4 s to prop the mainframe a couple inches off the floor and then go at it. I take the module out, ducttape some scrap laminate flooring to my DX desk, then work on the module at desk height in comfort. If I can't separate things - such as when I recently replaced the local gain and RF gain pots with nice new clarostat pots - 2.5K, 2 watt, linear taper, I work on the floor in discomfort, grumbling that I wish I had room for a workbench.

Diningroom tables are a no-no.

But if you must use a dining room table :) make a top out of a piece of plywood with edges made so it drops down over part of the table, say an end [pull out the table a bit if it has a centre leaf] - and can't slide off - 1 x 2 ought to work. Put pieces of felt on the inside so the plywood or 1 x 2 never touches/scratches the surface. Or line it with anything soft - making sure you don't use staples etc.

When it comes to R-390(A) service, one area I like the idea of is module repair/restoration/reconditioning. The only module that spooks me is the RF module. I have no problem with the electronics, its the gears that scare me. Others may cringe at recapping the IF module. Others may cringe at the idea of restuffing the filter caps. OK, I would cringe at that too - yucky stuff and inquisitive small kids don't mix. You can probably find a "niche" for service that is a win-win for all. When you live outside the lower 48, service of the whole R-390(A) is not very practical, but sending a well packed module 2000 miles, well, that's different. Someday, I'll probably send my RF deck away for mechanical service if the right person is out there. In the meanwhile, I'm enjoying using my 1955 Collins R-390A that I pored a 100 or so hours into!

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Date: Tue, 27 Jun 2006 08:31:20 -0400  
From: Sheldon Daitch <sdaitch@ibb.gov>  
Subject: Re: [R-390] Re: New 'coffee' table

We've used both types of cage nuts pictured on the left in Rackmount solutions web page. The left hand version, very dark photo unfortunately, requires a square cutout for the nut to lock into on the rack rail. The cage nut just slips over the rail and only requires a hole in the right place.

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Date: Tue, 27 Jun 2006 16:13:59 -0700 (PDT)  
From: Perry Sandeen <sandeenpa@yahoo.com>  
Subject: [R-390] Tinnerman nuts

Tinnerman nuts cas be purchased at NAPA, Lowe's, Home Depot and Ace Hardware. Ace usually has the bes selection but the highest prices. To me, the variety is worth it.

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Date: Tue, 27 Jun 2006 20:35:09 -0700 (PDT)

From: Perry Sandeen <sandeenpa@yahoo.com>  
Subject: [R-390] Tinnerman nuts II

Wrote: Only one problem: the side rails have un-tapped holes in them meant for tinnerman nuts to hold the equipment in place, but no nuts! These need to be very thick to slide over the very substantial rails. Roy,

If the weight is substantial tinnerman nuts are not the way to go. Even captive nuts are not really great. Perhaps you might want to go to HD or other similar store and get a large tap. I suspect that your non-tapped holes are probably 1/4 inch. If tapped out to 5/16 or 3/8 and you use even the lowest grade steel bolt it should be all you need for BA's.

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Date: Wed, 28 Jun 2006 00:22:07 -0400  
From: Glenn Little WB4UIV <glennmaillist@bellsouth.net>  
Subject: Re: [R-390] Tinnerman nuts II

Here is what is needed <<http://www.markertek.com/SearchProduct.asp?off=0&sort=prod>>

We use them all the time in the broadcast industry. They hold as well as tapped holes in the rails. They cost about \$.50 each.

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Date: Tue, 27 Jun 2006 23:24:16 -0500  
From: Fred Olsen <fwolsen@wi.rr.com>  
Subject: Re: [R-390] Tinnerman nuts II

Except that the standard panel hole or notch height is 0.278 inches. Anything more than 1/4" hardware would require drilling out the panel. Something like Tinnerman Multi-Thread U-Nuts is what is customarily used in unthreaded rack supports, with a 10-32 thread.

[http://www.tinnerman.com/DS.asp?V=1&C=78&C1=121&S=1&SC=Multi-ThreadUnuts-LUGS\\_sch.jpg#](http://www.tinnerman.com/DS.asp?V=1&C=78&C1=121&S=1&SC=Multi-ThreadUnuts-LUGS_sch.jpg#)

A deep heavy chassis, such as a 390, is NOT intended to be mounted by the panel alone and doing so can easily cause damage. L rails must be used between the front and rear support columns, or at least brackets of some sort from the rear of the chassis to the rear of the cabinet. It is of course much easier and more secure to slide the unit in and out on support rails.

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Date: Tue, 22 Aug 2006 17:23:32 -0400  
From: Rbethman <rbethman@comcast.net>  
Subject: [R-390] R-390A front mounting panel hardware source?

Now that Dave Medley (sp?) is out of the "biz, whom is a current supplier of the stainless screws and "cone" washers? I've been working off (mostly!) and on for three or four years on a St. J's massacre Collins built R-390A. It does have a Cosmos PTO though. I have an engraved panel that I'm painstakingly hand

painting the engraving on. Just about time to start re-assembly. FINALLY!

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Date: Wed, 23 Aug 2006 07:32:28 -0500  
From: "Craig Anderson Ext 1365" <Craig.Anderson@saintpaul.edu>  
Subject: [R-390] Source for SS Cone Washers & Machine Screws

McMaster Carr is the place to go for the cone washers and countersunk SS machine screws <http://www.mcmaster.com/>

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Date: Wed, 23 Aug 2006 08:19:26 -0500  
From: "Cecil Acuff" <chacuff@cableone.net>  
Subject: Re: [R-390] R-390A front mounting panel hardware source?

Walter Wilson has been a source in the past as well. Not sure of his current status as a supplier of these things right now...he also has the capacitor kits which are nice. I need to place an order for both if he is still doing it. What say Walter?

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Date: Tue, 31 Jul 2007 08:38:12 -0400  
From: "Tim Shoppa" <tshoppa@wmata.com>  
Subject: Re: [R-390] Suitable equipment racks for R-390A's

> I'm looking for a 19" equipment rack .....

New or used? Desktop or standalone? If you hang around the used minicomputer areas, DEC H960's (6 feet tall) and H9642's (4 feet tall) are completely capable of supporting R390A's as densely as you want. These sorts of racks shouldn't cost you more than \$50-\$100 (I got all of mine for free).

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Date: Tue, 31 Jul 2007 08:50:21 -0400  
From: Roy Morgan <roy.morgan@nist.gov>  
Subject: Re: [R-390] Suitable equipment racks for R-390A's

Colin seemed to be asking about suppliers of new racks. My guess is that as soon as he finds out the prices, he'll be looking for "surplus" racks of some sort. I have a four foot tall roll-around DEC cabinet that I think had a big disk drive in it in the ancient past. It will hold hundreds of pounds of stuff. It may even hold three or four R-390's in the front and three more in the back, radios mounted back to back. The wheels would let me tune the front ones then tune the back ones. Now where did I stash those chassis slides I lugged back from fests at great trouble!? Any way, big or even medium rack cabinets are not all that likely to be lugged to hamfests. Ads in radio club magazines, mailing lists and even Graig's List for your area may well turn up someone who's "downsizing" would be happy to have you come get his rack cabinets. (Any one in the DC/Virginia area have some for relocation?)

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Date: Tue, 31 Jul 2007 09:12:20 -0400  
From: Roger Gibboni <rgibboni@lmdulye.com>  
Subject: RE: [R-390] Suitable equipment racks for R-390A's

I bought one of those cabinets from Fair Radio. Works great for the 390-

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Date: Tue, 31 Jul 2007 09:33:26 -0500  
From: Robert Nickels <W9RAN@oneradio.net>  
Subject: Re: [R-390] Suitable equipment racks for R-390A's

Most any rack will work, and the best local source will probably be someone who is upgrading an IT department, as they often replace racks and all.

Let me suggest that you make life easier (and safer!) by adding supports along each side of the rack to support the weight of your receiver. Modern rack rails are often "L-shaped" making this easy to do using angle stock from the hardware store. This makes it infinitely easier to mount and remove the radio from the rack, and eliminates any stress from the front panel and chassis.

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Date: Tue, 31 Jul 2007 09:42:03 -0500  
From: mikea <mikea@mikea.ath.cx>  
Subject: Re: [R-390] Suitable equipment racks for R-390A's

I totally agree with what Robert wrote above. An additional point to keep in mind is that, if I understand aright, the R-390 and R-390A were not designed to be just bolted into a rack without some form of support for the (heavy) remainder of the radio, but that they need support at the back or along both sides. Failure to provide this support may cause the gears behind the front panel to bind and/or to wear prematurely.

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Date: Tue, 31 Jul 2007 19:26:19 -0600  
From: "Colin Irwin" <colin.a.irwin@gmail.com>  
Subject: Re: [R-390] Suitable equipment racks for R-390A's

Thanks for the advice. I'll definitely look to add supports along the side of the rack

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Date: Sun, 27 Jan 2008 17:48:03 -0500  
From: Steve Hobensack <stevehobensack@hotmail.com>  
Subject: [R-390] Cabinet bolts question

I have an R-390a with its CY-979 cabinet. The receiver is held in place with eight slotted head bolts. The nuts are press fitted rivet style into the cabinet. I also have an SP-600 with its cabinet. The cabinets are similar. There are eight holes like the r-390 cabinet but without nuts. My dilemma is there is no way to fasten the SP-600 receiver to the cabinet because any nut to be installed is inaccessible after the receiver is in place. Are special nuts available somewhere? Thanks

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Date: Sun, 27 Jan 2008 18:03:51 -0500  
From: Glenn Little WB4UIV <glennmaillist@bellsouth.net>  
Subject: Re: [R-390] Cabinet bolts question

If what you are describing is a vertical rack rail in the cabinet where the holes would very easily clear a 10-32 rack screw, the solution is very easy. We use them all the time in the TV industry. Go to

<<http://www.markertek.com/SearchProduct.asp?item=CORN&off=5&sort=prod&skuonly=0&search=rack+hardware&pagesize=20>>

This is where we get ours from. There are probably more places to get them from, and cheaper, but, this is a place that carries most of the small stuff that we need. They are called clip on rack nuts. These cost about \$0.50 each and their minimum quantity is 25. You might check your local electronic parts distributor or a well stocked hardware store.

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Date: Sun, 27 Jan 2008 18:17:13 EST  
From: JRFKE5RI@aol.com  
Subject: [R-390] Retained nuts

Steve, go to this URL (Aircraft Spruce).  
<http://www.aircraftspruce.com/catalog/hapages/clipnut.php>  
I think this should do the job for yours.

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Date: Sun, 27 Jan 2008 20:34:40 -0800  
From: "Chris Kepus" <ckepus@comcast.net>  
Subject: RE: [R-390] Cabinet bolts question

I think this is what you need. I use these in the rack system I have. Although I have paid a great deal more for these Tinnerman nuts from other sources, I just ordered these from Alltronics (10 for .99) and they are very satisfactory. I can't tell the difference between these and the ones that are .50 each.

[<http://www.alltronics.com/cgi-bin/category.cgi?item=04Z046&type=store>]

Usual disclaimers apply...just a satisfied customer.

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Date: Sun, 17 Feb 2008 12:42:58 -0600  
From: Tom Norris <nu4g.radio@gmail.com>  
Subject: Re: [R-390] expensive chassis or what???

Mac's cabinets were NOS IIRC... I have one that I got back then and just put together last year, and it was the real thing.

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Date: Sun, 17 Feb 2008 13:17:56 -0800 (PST)  
From: Michael OBrien <mikobrien@yahoo.com>  
Subject: Re: [R-390] expensive chassis or what???

I also have one of mac's cabinets from a few years ago I always thought they were NOS not repro's Mine is brand new has not used because I have not found the time to finish restoring my R-390A I think I had paid about \$300 also

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Date: Sun, 17 Feb 2008 16:54:07 -0500  
From: "bill riches" <bill.riches@verizon.net>  
Subject: RE: [R-390] expensive chassis or what???

They were NOS - units that did not make it to Desert Storm. They are a work of art. I am lucky that my wife let me put my R-725 and Mac's cabinet in the living room!!! She thinks its cool!!

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Date: Sat, 23 Aug 2008 20:16:00 -0500  
From: "Barry" <n4buq@knology.net>  
Subject: [R-390] CY-979A/URR Question

Can someone tell me if the cutouts shown in the following picture are original? They do look like they're original because of the paint, finishing, etc., but was curious. They're only on one side. <http://www.knology.net/~thelanding/CY979Back.JPG>

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Date: Sun, 24 Aug 2008 02:03:28 +0000 (GMT)  
From: triodes@optonline.net  
Subject: Re: [R-390] CY-979A/URR Question

Yes, they are correct and original. When my R-390 (non-A) is installed in the CY-979A/URR, these cut-outs allow the terminal/barrier strips to clear the cabinet.

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Date: Sat, 23 Aug 2008 22:11:25 -0400  
From: "Don Heywood" <wc4g@knology.net>  
Subject: Re: [R-390] CY-979A/URR Question

Yes Barry, I just felt behind my R-391 and the small top cutout provides clearance for the pin straightener, and the bottom cutout clears the spare fuse cover. I also felt behind an R-390A, the cutouts were there but did not seem to do much. I wish I could have seen behind these two receivers for you, but the cutouts are there.

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Date: Sat, 23 Aug 2008 21:16:12 -0500  
From: "Barry" <n4buq@knology.net>  
Subject: Re: [R-390] CY-979A/URR Question

Okay. I thought that might be what they're for. Apparently the upper, smaller cutout is only needed for the R390 as my R390A frame doesn't appear to need that. Thanks!

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Date: Sun, 24 Aug 2008 03:11:21 +0000  
From: odyslim@comcast.net  
Subject: [R-390] Another CY-979A question

I have a brand new CY-979. It has a NSA serial number. Any how, I need the skids that mount inside. Anyone have some? Scott, w3CV

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Date: Sun, 24 Aug 2008 03:13:42 +0000  
From: odyslim@comcast.net  
Subject: Re: [R-390] Another CY-979A question

Let me change the question. Does the CY979 use the skids??

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Date: Sat, 23 Aug 2008 22:37:27 -0500  
From: "Barry" <n4buq@knology.net>  
Subject: Re: [R-390] Another CY-979A question

> Let me change the question. Does the CY979 use the skids??

I wondered about that. Someone mentioned some "skids" that were nickel (?) plated and they should not be painted. Perhaps some had them and some didn't? Mine clearly does not. The large skids (underneath the vibration mounts) is another thing, though. The ones on my cabinet are beginning to rust in spots. I sanded on them for a while today, but they still don't look ready to paint. Since they're steel, I'm thinking of having them sandblasted before painting. I'm also wondering for durability's sake, if these might not fare better powdercoated. The colors aren't likely to match, but they didn't originally so I wouldn't lose much there.

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Date: Sun, 24 Aug 2008 14:17:06 +0000 (GMT)  
From: triodes@optonline.net  
Subject: Re: [R-390] Another CY-979A question

The nickel plated "rails" that I was referring to in the CY979A/URR are the rails that the receiver actually slides on during insertion into the cabinet, and it rests on these rails. They support the load of the receiver within the cabinet.

The rails or skids that are affixed to the shock mounts are not nickel plated, and are painted in the same finish as the cabinet itself.

I hope that this clarifies this matter for you!

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Date: Wed, 3 Sep 2008 02:44:08 -0400  
From: "Dana Cobb" <objoyful@tampabay.rr.com>  
Subject: [R-390] R 390, R 390A, SP600 enclosure's

I noticed on the E place that there is a vendor in Ohio advertising cabinets/ enclosure's that will accommodate many of the radio's discussed here, manufactured NEW by Hammond Mfg. The E place item number is: 170255626773 ,which has pictures, specs and description. I checked with another vendor in Victor, NY. Tel # Telephone: (585) 742-2020, who I knew carried Hammond products. I have done business with them in the past. They did not list this produce in their on-line catalog. I sent them an Email about it and they responded today with the Hammond Model number of HR-CBS1901017BK1 , which was not listed on the E place add. I was told they can get this item anytime someone wants one..or more. May need a paint job for the "purists", but comes with rubber feet and may look pretty good to the XYL in the living room next to your favorite over stuffed chair. (grin) Usual disclaimer's. Have no financial interest or know anyone in either vendors businesses.

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Date: Sat, 23 May 2015 21:29:15 +0000 (UTC)



From: JAMES GREEN <jagreen3@sbcglobal.net>  
Subject: [R-390] How I plugged a hole in my R-390A faceplate

I just finished a successful plug of an extra hole in my R-390A and I thought I would share it with the group. The offending hole was a 1/4 inch hole that was drilled in the lower left-hand corner and was placed there to accommodate a miniature switch. First I chamfered the hole on both sides of the plate with a counter sink bit. Second I cut 3/8 inch long piece off the end of a piece of 1/4 inch round aluminum. Third I placed the 3/8" by 1/4" dowel into the offending hole. I placed a 1/16" thick 1/4 inch washer on the back side and rested the back side on an anvil. Actually I don't have an anvil so I clamped a hammer in my woodworking vice and used that as an anvil. Fourth I used a ball peen hammer to rivet the top side end of the dowel into the countersink in the hole. I then flipped it over, removed the washer and did the same thing with the back side. At this point I had a slightly rounded rivet in the hole. Following is how I cleaned up the riveted heads.

I put an 3/4" end cutting straight flute carbide tipped router bit in my plunge router. I placed the router on a flat surface and put a piece of paper under the router bit. I lowered the plunge router until the router bit rested in the paper. This set the end of the router bit about .001" above the flat surface. I then locked the plunge router in this position. Lastly I fired up the router and milled the riveted ends off the dowel on the back side (first) then the front side. The remainder is easily wet sanded flush. The hole is now invisible. I see no reason this approach could not be used on larger holes. All you need is enough thickness to add the chamfers. I hope this is useful to others.

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Date: Sat, 23 May 2015 20:07:32 -0500  
From: Bill Guyger via R-390 <r-390@mailman.qth.net>  
Subject: Re: [R-390] How I plugged a hole in my R-390A faceplate

Very creative. Thanks for sharing!

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Date: Wed, 22 May 2019 20:46:54 -0500  
From: "Joe Koester" <jwkoest@charter.net>  
Subject: [R-390] screws and washers

Hey guys, I am looking to get my R390A and my R725 into cabinets. Back in the day these things were help in place with I think a 10-32 screw with an oval head and a finishing washer. Also as far as I remember the recorders and othe stuff was rack mounted the same way. I am trying to locate the right screws, which I think were ? or 1 inch and may have been ? pan head, as well as the washers. I want this to look nice and original. Anyone know where I can get what I am looking for, even used would be great if anyone has a stash? I need 16.

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Date: Wed, 22 May 2019 22:12:05 -0400  
From: John Gedde <jgedde@optonline.net>  
Subject: Re: [R-390] screws and washers

If McMaster-Carr doesn't have exactly what you're looking for I'd be hard pressed to tell you who does... the screws are indeed 10-32.

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Date: Wed, 22 May 2019 22:43:09 -0400  
From: W2xj <W2xj@w2xj.net>  
Subject: Re: [R-390] screws and washers

Are you sure? The R390 is of a vintage when 10-24 screws were common. This depends of the rack rails and not the radio. Racks can still be ordered with either thread but for authenticity, it is really the screw head that is important. I honestly forget what we used back in the day. I suspect that since the R390 was used in so many services under so many different field conditions that there was no one "authentic" mounting method. This is especially true at remote sites where many "rules" were more like suggestions.

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Date: Thu, 23 May 2019 05:58:30 +0000 (UTC)  
From: Perry Sandeen <sandeenpa@yahoo.com>  
Subject: Re: [R-390] misc posts

The mounting screws are 10-32 for the R39X and SP 600 Others are either 8-32 or 6-32. IIRC the tube socket screws are 4-40 are are those in the SP 600. I buy them in SS from McMaster-Carr by boxes of 100. They have every type of screw head one wants. SS is very little more than plated steel. They look great and won't every fade or rust. <clip>

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Date: Thu, 23 May 2019 17:53:34 +0000 (UTC)  
From: Perry Sandeen <sandeenpa@yahoo.com>  
Subject: Re: [R-390] misc posts

My error in my choice of words. What I meant to say was that the cost of SS screws in bulk was just a modest amount more than the ordinarily used nickle or cadmium plated screws. For me personally, I feel that it is good value to replace all the B/A screws, lock washers, and nuts with SS. The last time I counted the cost for doing so for a SP 600 it was around \$15-\$20. Another advantage I found by buying SS screws from McMaster-Carr is that instead of using the OEM style slotted flat head style one can get the equivalent screw with a Phillips head. I find thees much easier to use in many tight locations. This allows me to make a tighter connection without slipping off the screw head and scratching the chassis. Sorry for the confusion.

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Date: Thu, 23 May 2019 13:58:23 -0500  
From: "Ron.K3PID" <ron.k3pid@sbcglobal.net>  
Subject: Re: [R-390] screws and washers

I am quite fortunate in that I have an excellent ACE hardware in the near by town and he has about any fastener you can think of and if he doesn't he will get it for you. AND if that fails ( only once when I needed a shoulder bolt with

a non-standard shaft length) I also have a Fastenal store not too far away. If they don't have it, it probably doesn't exist however they usually want to sell you a box of them...

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