R SERIES

Installation and Operation Manual

Models

R2SUBZ, R2SUBDF

R2SUBZ

R2SUBDF

Community®

Introduction

Community's R SERIES is a high-quality, high-fidelity product line designed to be highly weather-resistant. R SERIES products perform consistently in continuous outdoor exposure while simultaneously providing superlative acoustic performance.

This manual is intended to help you install and use R SERIES loudspeakers safely and effectively. It provides useful information to help you obtain the best performance, sound quality, and reliability from your R SERIES systems. We recommend that you read this manual in its entirety, to ensure that your R SERIES installation meets the highest possible standards.

Every effort has been made to ensure that the information contained in this manual was complete and accurate at the time of printing. However, due to ongoing technical advances, changes or modifications may have occurred that are not covered in this publication. The latest version of this manual and the most recent product information published by Communtiy is always available at http://www.communitypro.com.

EU/EC Statement of Conformity

Community Professional Loudspeaker products bearing the CE label meet all the requirements in the EMC directive 2014/30/EU laid down by the Member States Council for adjustment of legal requirements, furthermore the products comply with the rules and regulations referring to the electromagnetic compatibility of devices from 16 April 2016.

The Community Professional Loudspeaker products bearing the CE label comply with:

> Low Voltage Directive 2014/35/EU
> Waste from Electrical Equipment Directive 2002/96/EC RoHS

The Declaration of Conformity statement is available upon request.

Technical specifications for products can be found at www.communitypro.com.

The responsible manufacturer is the company:

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> Chester, PA 19013 USA
> Phone: +1 610 876-3400 Fax: +1 610 874-0190

FIND THE LATEST ONLINE

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WELCOME TO COMMUNITY!

Since the founding of our company in 1968, Community has been a constant developer and innovator of loudspeaker technology. Many of our engineering achievements were undertaken to solve problems, when no prior solutions existed. Others resulted from simply seeing a better way to do things.

Over the years our technologies have been imitated, and our methods have become common practice throughout the professional sound industry. However, developments like carbon fiber diaphragm compression drivers still stand alone, and well ahead of the competition.

In line with our history of excellence and innovation, each Community product is manufactured in accordance with a complicated and exacting chain of procedures that ensure absolute quality.

With our unique designs, our sophisticated techniques, and our proprietary materials and transducers, we are committed to bringing only the finest audio products to the many thousands of professional sound engineers, performers, and end users who rely on them daily.

Community's philosophy is to build products that are uncompromised in sound quality, reliability, durability and flexibility, all at a fair price. We provide comprehensive technical support and we stand behind every product we manufacture. We pledge to do our best to insure that you are satisfied with your Community purchase!

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Introduction

The Community R2SUB is a powerful dual 12-inch subwoofer system, offering all the weather-resistant features and benefits of the acclaimed R SERIES.

The 400-watt R2SUB subwoofer includes two 12-inch drivers and can be flown or down-fired for flexible system configuration. Featuring Community's bulletproof DYNA-TECH protection circuitry, the R2SUB is engineered to provide quality low frequency reproduction in a wide variety of outdoor and indoor environments. Its weather resistant properties make it ideal for installation in amusement parks, sports arenas, cruise ships, race tracks and more, while its contemporary design makes it just as appropriate for indoor installations as well. All R SERIES loudspeakers by Community offer exceptional sound quality - the R2SUB is no exception.

The R2SUB is a true low frequency system that can deliver extreme sonic performance down to 40 Hz. For R SERIES based designs requiring greater LF extension, the R2SUB is available to complement all of Community's full-range R SERIES loudspeakers. With a smooth fiberglass enclosure in a neutral gray finish and Community's exclusive three-layer Weather-Stop™ grille, the R2SUB is protected by a five-year product warranty and fifteen-year enclosure warranty. Five ½"-13 threaded mounting/rigging points are provided.

Model **R2SUBZ** includes a weather-resistant yoke mounting bracket.
Model **R2SUBDF** includes a weather-resistant direct-firing mounting kit.

The TRC400 400-Watt 70/100/140V transformer is available as an optional accessory, sold separately.

R2SUB Installation Guidelines

These guidelines are intended to help you optimally locate and install your R2SUB subwoofer(s) in order to get maximum performance from the system.

Directivity & Positioning

Subwoofers are typically far less directional than the mid-range and high-frequency loudspeakers they will be used with. This is because low frequency wavelengths are significantly longer than mid-range and high-frequency wavelengths (a 30 Hz wave is approximately 35 feet in length and a 100 Hz wave is approximately 11.3 feet in length). The extremely long wavelengths cause them to behave quite differently from their shorter mid and high frequency counterparts.

First, long wavelengths do not 'see' small or moderate size obstructions as obstacles; they simply diffract around such barriers as if they're not there.

Second, the substantial length of low frequency waves makes it difficult to distinguish their source direction. This is why a single subwoofer can often be used successfully to augment a stereo pair of mid-high loudspeakers without unduly harming the stereo separation and image.

Third, low frequency waves tend to add together quite graciously, even if their sources are separated by considerable distances, as long as they are in phase with each other. An example of this is the typical *accentuation* in low frequency content that is often experienced in the middle of theatres and concert halls, generated by subwoofers placed far apart on the opposite sides of the stage.

Overall, the characteristics mentioned above imply that the location of a subwoofer is not particularly critical, and to a certain extent, this is true. However, there are several factors to consider before you start drilling mounting holes[1].

(1) The R2SUB subwoofer will benefit greatly in terms of power output when it's placed adjacent to one or more boundary surfaces. If located on the floor or ceiling in a corner (Eighth Space), the R2SUB will produce a full 6 dB more output than if located in the middle of a floor or ceiling. If located at the junction of two walls (Quarter Space), the R2SUB will produce 3 dB more output than if it's located in the middle of a floor. Free Power! What could be better? See **Figure 1** for additional clarification.

Model R2SUBDF includes a Direct-Firing Kit that consists of four corner brackets and two support struts. This direct firing kit allows the R2SUB to be easily attached to a floor, wall or ceiling to take advantage of the boundary surface effect.

When choosing location(s), be careful not to sacrifice sonic quality for sheer power. If the available wall or corner location results in the R2SUB being located behind or too close to one or more open microphones, early feedback is likely to occur. If the wall or corner location is too far away from the full-range loudspeaker(s), it may result in the R2SUB being drastically out of time sync with one or more of the full-range speakers. Sometimes the sound quality of a wall or corner placement is not desirable, simply due to the room's acoustical properties. Keep in mind that when wall and corner locations *are* appropriate for use, they offer a tremendous increase in power output; however, they may not always be the best choice.

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[1] A thorough understanding of how low frequency waves transmit in acoustical environments is very helpful when designing and installing sound systems. We recommend reading "Fundamentals of Sound" and "Psychoacoustics" by F. Alton Everest in the "Handbook for Sound Engineers" published by Howard Sams & Co.

It's a good idea to experiment with different locations by conducting listening tests before finalizing the installation.

Figure 1

Eighth Space
+9dB

Quarter Space
+6dB

Free Space
+0dB

Half Space
+3dB
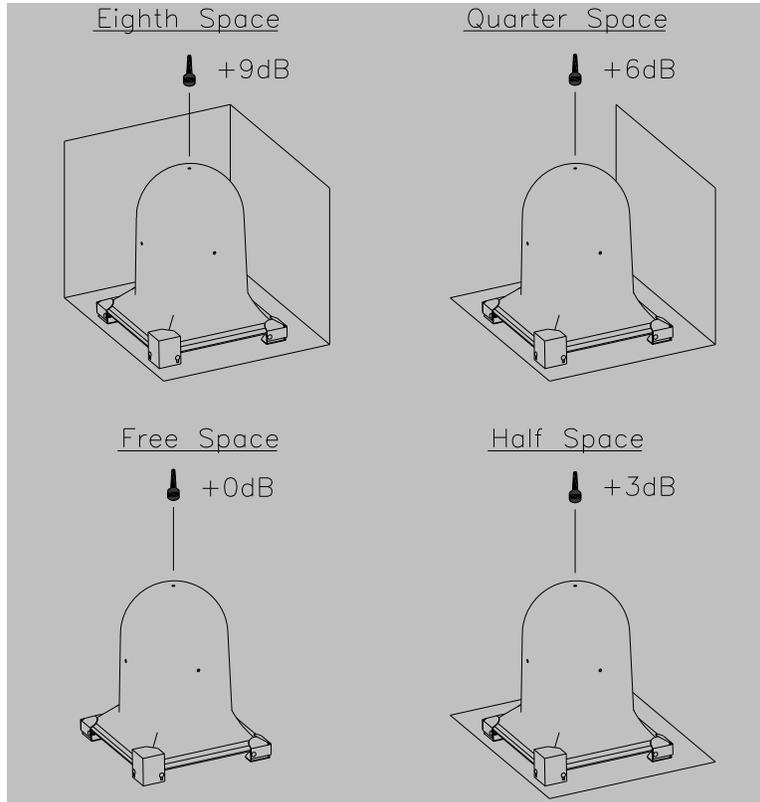
(2) Keeping the subwoofer(s) as close as possible to the mid and high loudspeaker(s) will decrease phase irregularities and *time smear*. If the subwoofer(s) is placed too far away from the mid/high loudspeaker(s), the listener will experience a disjointed character to the program material, causing the musicality of the system to suffer.

(3) Although the R2SUB is not highly directional, its acoustical output follows the inverse square law. That is, every time the distance from the R2SUB to the listener is doubled, the output level will decrease by 6dB. When covering a large space with multiple R2SUB's, it may be of benefit to space them some distance apart from one another to even out the levels throughout the space (typically, this would be done if the mid/high loudspeakers are also spaced apart from one another, such as in a distributed stadium system). Although spacing will help maintain an even level throughout the listening space, there may be some areas in between two or more subwoofers that experience a certain amount of power subtraction caused by *destructive interference*. Destructive interference occurs when waveforms meet and are partially or wholly out of phase with each other due to unequal path lengths.

Conversely, if multiple R2SUB's are located directly adjacent to one another, their power output will add together, almost seamlessly. This is known as *constructive acoustic addition*.

Polarity

The correct polarity of the R2SUB subwoofer is a function of its placement in relation to the full-range loudspeaker(s) it will be used with. This is known as the Phase Relationship of the two systems, though Absolute Phase also plays a role which will be discussed later.

Depending on the placement of the R2SUB in relation to the full-range loudspeaker(s), as well as the selected crossover point, the optimal response of the system might be obtained by reversing the phase of either the subwoofer or the full-range loudspeaker(s). The easiest way to determine the proper phase relationship is to excite the system with a test signal (such as pink noise) and to view the resultant response on an audio spectrum analyzer. If such equipment is not available, it is also possible to determine the best phase relationship by careful listening.

One polarity (either normal or reversed) should result in a discernable cancellation through the crossover region, while the opposite polarity should result in either a flat response or a peak through the crossover region.

Note: When experimenting to determine the proper polarity, reverse only the full-range loudspeaker(s) or the subwoofer, never both at the same time. If there is no discernable difference, or a very minimal difference in the measured or audible response when the polarity is reversed, it indicates one of two things:

(a) The full-range system that the subwoofer is being used with does not reproduce enough low frequency output to cause either cancellation or addition with the subwoofer, or;

(b) The placement of the subwoofer in relation to the full-range loudspeaker is not optimum. Little or no response variation will occur if the physical relationship results in an approximate ¼ wavelength of offset at the center of the crossover frequency.

The solution to (a) is for both systems to remain in positive polarity. No harm will occur if the full-range system simply does not reproduce enough low frequency energy to compete (either positively or negatively) with the subwoofer's output.

The solution to (b) is to either change the physical relationship of the two systems, or to delay one of the two systems (whichever one is positioned closer to the listeners) with a digital delay. A good quality measurement system that can read and depict phase response or impulse response would be very useful in this situation. However, without such a system, you can determine an effective delay time by trial and error. Simply increment the delay time in small steps (1 ms) until the action of reversing the polarity produces maximum cancellation in one orientation and maximum addition in the opposite. By using a digital delay you will have preserved optimum impulse response and phase response, and you can now filter out any objectionable mid-bass overlap with an equalizer.

If a delay is not available, it is recommended that either the subwoofer or the full-range loudspeaker be re-located so that they are closer together and that reversing the polarity of either the subwoofer or the full-range loudspeaker (but not both at once) will result in a distinct dip at crossover, as discussed above.

If this is impossible due to physical restrictions, the subwoofer and the full-range loudspeaker should be moved further apart, again until there is a distinct dip at the crossover frequency in one position of polarity. It may take some trial and error to determine the optimal physical relationship.

Note that in some acoustical situations, the system may sound better when the phase relationship is non-optimum (resulting in a dip at crossover), than when the crossover region is *accentuated* by the overlap of the subwoofer and the full-range speaker(s). However, this is not the best way to achieve a good sounding system. The proper remedy is to equalize (EQ) the peak at crossover with a parametric equalizer until the response is flat (or until you've achieved the tonal response you desire). Another valid approach is to high-pass the full-range system (typically at 80 – 100 Hz) so that the overlap with the subwoofer is reduced in magnitude. A third way is to increase the slope of the crossover to 24 dB per octave or 48 dB per octave (if the crossover has such capability), thereby reducing the bandwidth of the spectrum in which the two sources overlap.

There is an important reason for this: if the response dip at crossover is due to phase cancellation, the drivers and amplifiers will be working harder than they should to produce less sound pressure level than they are capable of, because of the cancellation taking place. All that cancelled energy uses power unnecessarily!

Conversely, if you attenuate the peak at crossover with equalization[2], you are *reducing* the power that's required to obtain a given sound pressure level. The result is more available power, more headroom, and far less stress on the drivers.

Once you have either delayed or re-positioned the speakers, you can permanently wire the system in the phase relationship that produces maximum acoustical addition at crossover, but first read the section below on "Absolute Phase."

Absolute Phase

Quite a bit has been written about absolute phase, particularly in regard to studio recording and hi-fi sound reproduction. The subject is, however, often ignored in the field of sound reinforcement. Essentially, positive absolute phase refers to configuring the system so that the driver(s) moves forward *toward* the listener, thereby producing a positive wavefront upon the first cycle of excitation by the source material. For example, at the instant of impact, when the head of the kick drum moves outward towards the microphone, the speaker cones also move outward.

Obviously, the phase integrity of the entire signal processing chain must be maintained for this to occur. Is absolute phase audible? Should you be concerned? Yes, it is audible and though subtle, it makes a big enough difference to warrant taking the time needed to insure that the signal chain is phase-positive throughout. You'll hear an improvement in sonic impact, especially in the lower frequencies.

We recommend that absolute phase be kept positive in all low-frequency devices whenever possible. This can be checked with a small handheld style phase response test unit, available from numerous manufacturers.

Although it's easy to simply reverse the phase of the subwoofer to determine its best phase relationship to the full-range speaker system, if the best position turns out to be reversed we recommend that you instead reverse the full-range system(s) so that the subwoofer(s) can remain in a state of positive absolute phase.

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[2] The three corrective methods referred to in the text (equalizing, high-passing, and increasing the slope of the crossover) are all various implementations of equalization.

R2SUBDF Assembly

The **R2SUBDF** includes a **Direct Firing Mounting Kit** that is designed to attach a weather-resistant R2SUB subwoofer system to the floor, walls, or ceiling in order to take advantage of the surface as an acoustical boundary. Typical applications include theme parks, sports venues, race tracks, shopping centers, cruise ships, skating rinks, and nightclubs.

Directly firing the R2SUB into an acoustical boundary provides a substantial increase in output level, when compared to installing the subwoofer in free space.

The kit consists of four stainless steel Mounting Brackets that clamp to each of the four corners of the R2SUB, two stainless steel Support Struts that provide additional structural integrity when the R2SUB is mounted on a wall or ceiling surface, and one stainless steel Cable Cover to protect the R2SUB's attached input cable.

Each of the four Mounting Brackets consists of two parts; the Surface Bracket is first fastened to the mounting surface, then the Clamp Bracket is attached to the Surface Bracket, thereby securely clamping the R2SUB between the two parts of each bracket. The Support Struts provide additional support to the R2SUB when it's mounted on a wall or ceiling. **Installation of the R2SUB on a wall or ceiling should NOT be attempted without the use of the Support Struts.**

The following parts are included with the Direct Firing Kit:

Surface Bracket (4)	3/8" Flat Washer (8)
Clamp Bracket (4)	3/8" Lock Washer (8)
Cable Cover (1)	3/8" Hex Nut (8)
Support Struts (2)	Gasket (4)
3/8-16 x 1" Carriage Bolt (8)	Layout Template (1)

Rubber washers, flat washers, lock washers and hex bolts are included on the mounting points of the R2SUB enclosure, and should be utilized with the Support Struts as needed. No other hardware is provided to install the R2SUB loudspeaker using the Direct Firing Kit.   Such hardware must be supplied by the installer, and should be rated to safely handle the weight load of the enclosures. The installer is solely responsible for determining if all components that are used to install or suspend the enclosures are adequately sized and rated, and if the structure they are suspended from is capable of safely supporting the aggregate weight load.

R2SUBDF Mounting Instructions

1. First plan the optimum location(s) of the R2SUB(s).

2. Once you have determined the subwoofer location(s), lay out a square pattern of four holes on 22 1/32" centers (55.9 cm). See the diagram below. To simplify this operation, a full-size layout template has been provided in the kit.
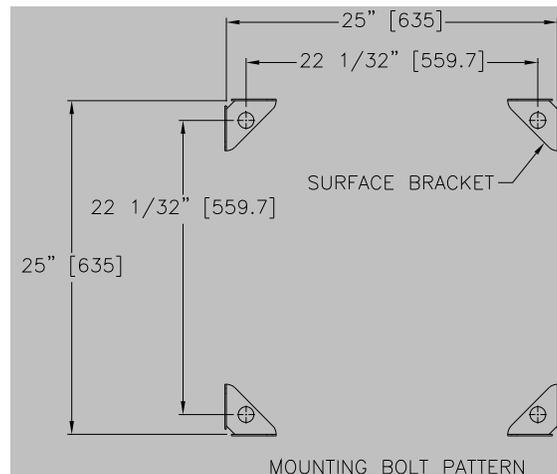
3. Fasten the Surface Bracket part of each of the four brackets to the mounting surface using a suitable fastener. Suggested fastener types and minimum sizes are as follows:

   Wood: Lag bolts of three-eighths inch diameter (3/8") or larger, by two-inches (2") in length (or longer). Metric equivalent is 10mm x 50mm. Make sure to drill a pilot hole to avoid breaking the lag bolt when tightening.

   Steel Panel: 3/6-16 machine bolts (or larger) secured with flat washers, lock washer, and hex nuts. Length as required. Metric equivalent is 10mm.

   Concrete: 3/8" x 3" (or larger) expansion anchors such as HILTI Kwik-Bolt. Metric equivalent is M10 x 75mm. Note: drilling a hole in concrete typically requires the use of a hammer drill.

⚠️ **IMPORTANT:** Fastening the R2SUB to sheetrock, drywall, or plaster surfaces using the Direct Firing Kit is not recommended!

4. Place the R2SUB on the four Surface Brackets. Check to make sure that the R2SUB is oriented so that its speaker input cord is in the most convenient position.

5. Assemble the Clamp Brackets to the Surface Brackets using the 3/8-16 carriage bolts, flat washers, lockwashers, and nuts provided. The carriage bolts should be inserted from the outside so that their rounded heads are visible (see illustrations). Install a flat washer on the threaded end of each of the carriage bolts inside the Surface Bracket, followed by a lockwasher and a nut. Tighten the nut with your fingers until you cannot turn it any further. Finish by firmly tightening each nut with a socket and ratchet until the lockwasher is fully compressed (approximately 12 to 15 foot-lbs).
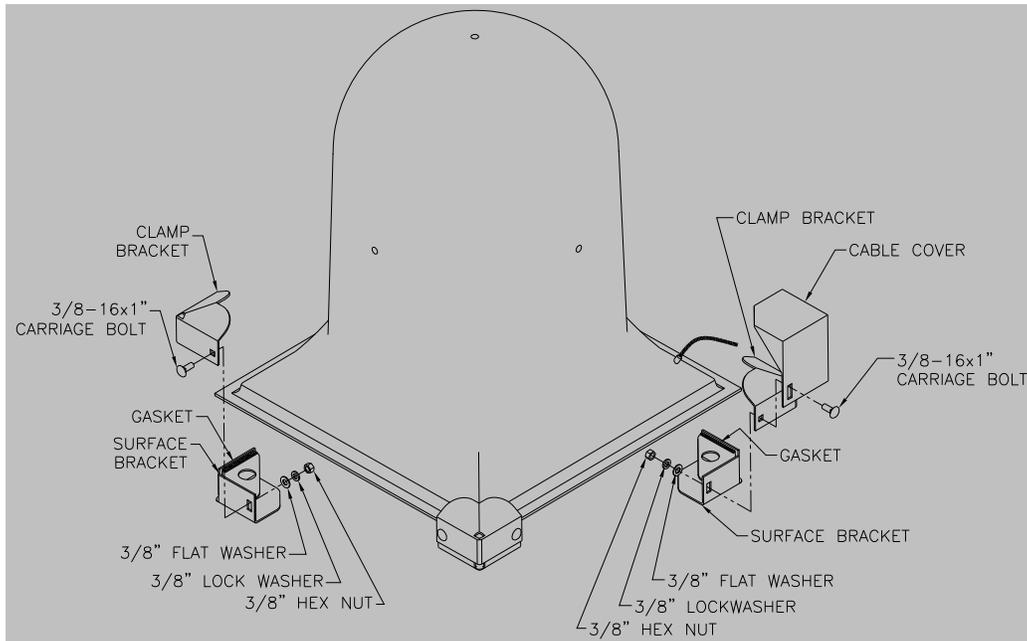
⚠️ **IMPORTANT:** On the corner where the speaker input cable in located, assemble the Cable Cover to the Clamp Bracket, then the Clamp Bracket to the Surface Bracket, *before* inserting the carriage bolts. Route the speaker cable through the bracket as shown in the illustration below. The Cable Cover is designed to protect the cable from abrasion, as well as to provide a neat looking installation.
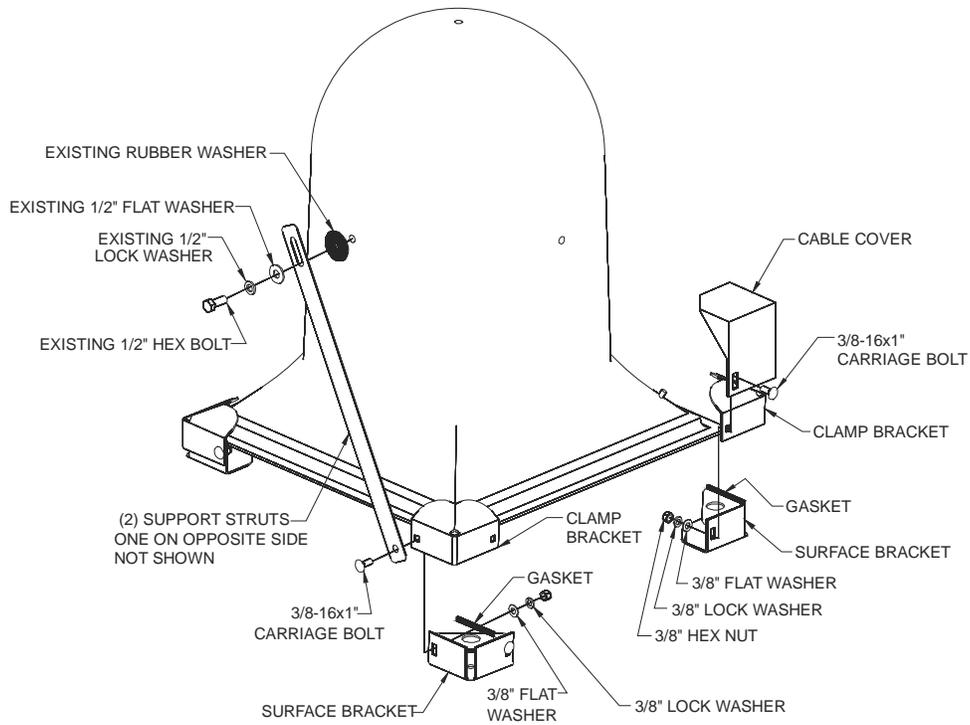

CABLE PATH THROUGH BRACKETS
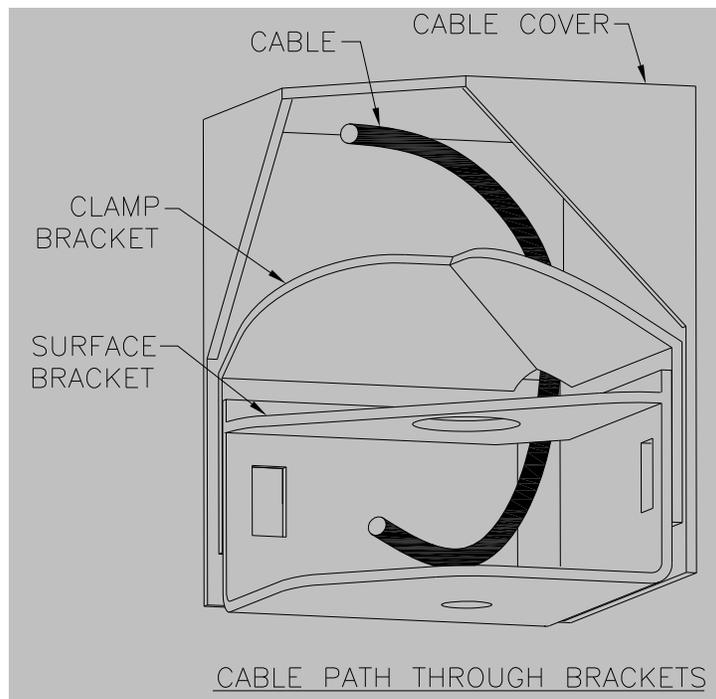
6. **Installation on Walls or Ceilings**

If the R2SUB is to be installed on a wall or ceiling, the two stainless steel Support Struts must be utilized to insure structural integrity.

The two Support Struts should be positioned on two opposite sides of the R2SUB. First, attach the end of a strut with the hole in it to the Mounting Bracket using the same carriage bolt that holds the two parts of the Mounting Bracket together. Next, attach the slotted end of the strut to the 1/2–13 threaded insert on the side of the R2SUB using a 1/2–13 hex head bolt. Repeat the process on the opposite side of the R2SUB with the second Support Strut. Tighten all fasteners securely (approximately 12 to 15 foot-lbs.).

R2SUB-DF Assembly Using Support Struts

EXISTING RUBBER WASHER

EXISTING 1/2" FLAT WASHER

EXISTING 1/2" LOCK WASHER

EXISTING 1/2" HEX BOLT

CABLE COVER

3/8-16x1" CARRIAGE BOLT

CLAMP BRACKET

(2) SUPPORT STRUTS ONE ON OPPOSITE SIDE NOT SHOWN

CLAMP BRACKET

GASKET

SURFACE BRACKET

3/8" FLAT WASHER

3/8" LOCK WASHER

3/8" HEX NUT

3/8-16x1" CARRIAGE BOLT

GASKET

SURFACE BRACKET

3/8" FLAT WASHER

3/8" LOCK WASHER

R2SUBZ Assembly

The R2SUBZ includes a weather-resistant U-shaped mounting yoke for mounting R2 systems. When properly utilized, the mounting yoke allows your R2SUB loudspeaker to be properly aimed in virtually any direction.
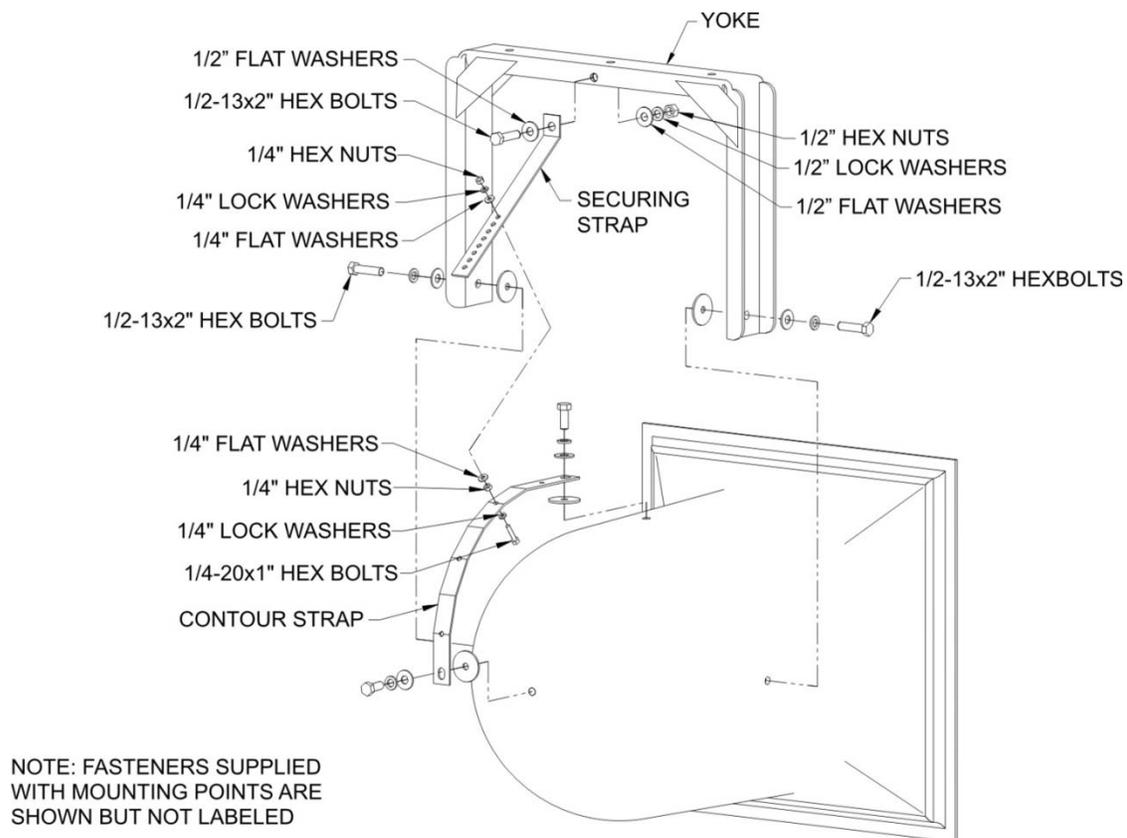
⚠ *CAUTION:* The R2 Mounting Yoke is specifically designed to provide a high degree of safety in R2 installations. It is highly recommended for mounting an R2. Other mounting methods should be carefully considered so that undue strain and possible failure of the mounting points does not occur.

⚠ *CAUTION:* In order to maintain the weather-resistant integrity of an R2, all five rubber washers supplied with the R2 mounting point hardware must be used and be flush against the enclosure when the R2 is mounted.

The yoke bracket is provided with the hardware required to attach it to the R2SUB enclosure. No additional hardware is provided to attach the yoke bracket to the mounting surface. Such hardware must be supplied by the installer and should be sized and rated for the weight load of the loudspeaker

The yoke has three 17/32" (13.5 mm) holes in the crossbar. These holes are intended for attachment of the yoke to the structure to which the R2SUB is to be mounted. The hardware used for the attachment must be load-rated for the intended purpose. Also ensure that the structure you are attaching to is capable of supporting the loudspeaker and yoke assembly. This must include any torque load that may be applied to the structure as a result of the loudspeaker/yoke position and aiming angle. For outdoor installations wind loading must also be taken into account. It is recommended that a qualified and licensed structural engineer approve the mounting design.

YOKE
1/2" FLAT WASHERS
1/2-13x2" HEX BOLTS
1/4" HEX NUTS
1/4" LOCK WASHERS
1/4" FLAT WASHERS
1/2-13x2" HEX BOLTS
SECURING STRAP
1/2" HEX NUTS
1/2" LOCK WASHERS
1/2" FLAT WASHERS
1/2-13x2" HEXBOLTS
1/4" FLAT WASHERS
1/4" HEX NUTS
1/4" LOCK WASHERS
1/4-20x1" HEX BOLTS
CONTOUR STRAP

NOTE: FASTENERS SUPPLIED WITH MOUNTING POINTS ARE SHOWN BUT NOT LABELED

R2 YOKE ASSEMBLY: EXPLODED VIEW

R2SUB with R2 Yoke Mounting Instructions

Normally the yoke should first be attached to the R2SUB then the entire assembly mounted to a structure. However in the some unusual cases it may be desirable to mount the yoke and secure it in place before mounting the R2SUB to the yoke. Depending on the situation the sequence of the following mounting procedure may have to be modified to facilitate the work. Nonetheless the instructions and precautions about use of the hardware should still be followed.

1. To attach the yoke to the R2SUB, first determine whether the yoke will be attached to the sides or top/bottom of the loudspeaker. This will depend on what the yoke is to be mounted to and how the R2SUB must be oriented when positioned for proper coverage.

2. Once the position of the yoke is determined, remove two supplied ½-13 stainless steel mounting bolts, with the lock, flat, and rubber washers from the mounting points where the yoke is to be attached.

3. Position the loudspeaker within the yoke making sure that the large rubber washers sit between the yoke and the enclosure. Be aware this is intentionally made to be a tight fit. Screw the ½-13 x 2-½" (64 mm) bolts into the mounting holes using the rubber washers, flat washers, and lock washers removed in step 2. Tighten only enough so as to allow the yoke to move as needed for the rest of the procedure. The rubber washer has a 7/16" (11 mm) hole so it fits quite snugly around the mounting bolts to form the weather seal for the R2SUB mounting hole. It also provides some friction to help hold the yoke in position until completely secured.

4. Attach the short flat end of the Contour Strap to the mounting point located at the back/center of the enclosure bell using the bolt, rubber washer, flat washer, and lock washer supplied in the mounting point. Make sure that the rubber washer is between the Contour Strap and the enclosure. Leave the other end (the long flat end) of the Contour Strap temporarily unattached. Eventually this will be attached to one of the side mounting points. This point must be on the side where the crossbar of the yoke will be positioned when the loudspeaker is in its final mounting location and aimed properly.

5. Mount the R2SUB and its attached yoke to the structure that will support it. If the center hole on the yoke crossbar is used as one of the yoke mounting points you need to attach the Securing Strap to this hole at the same time you mount the yoke to the structure that will hold the R2SUB assembly. In addition to attaching the Securing Strap to the yoke, the supplied stainless steel ½-13 x 2-½" bolt, ½" flat washers, ½" lock washer and ½-13 hex nut can be used as a yoke mounting bolt. In any case, the Securing Strap attaches to the yoke using the end of the Securing Strap with the short bent tab and the 9/16" (14 mm) hole in it. The Securing Strap tab is positioned on the underside of the yoke crossbar with the long end bent towards the enclosure and positioned over the Contour Strap.

6. After properly securing the yoke to the structure, adjust the aiming angle of the R2SUB. Once the aiming angle is set, bend the Securing Strap against the Contour Strap. The series of holes in the Securing Strap should line up with one of the three 5/16" (8 mm) holes in the Contour Strap. This determines where to locate the bolt in the Contour Strap to attach the Securing Strap. Lift the Contour Strap away from the R2SUB enclosure and put the ¼-20 x 1" (25 mm) stainless steel bolt in this hole with the bolt head between the Contour Strap and the enclosure. Secure the bolt to the Contour Strap with one of the supplied ¼" lock washers and ¼-20 hex nuts.

7. Attach the free end of the Contour Strap to the mounting point on the side of the R2SUB enclosure using the ½" – 13 bolt, rubber washer, flat washer and lock washer supplied with the R2SUB mounting point. Make sure that the rubber washer is located between the Contour Strap and the enclosure.

8. Attach the Securing Strap to the ¼-20 bolt installed on the Contour Strap in step 8. Use the hole in the Securing Strap nearest to the bolt when the R2SUB is at the proper aiming angle. You will have to bend the Securing Strap towards the enclosure to put it on the bolt which is normal. First place one of the ¼" flat washers on the bolt, then the Securing Strap on the bolt. Finish with the remaining ¼" flat washer, ¼" lock washer then ¼-20 nut.

9. Firmly tighten the bolts holding the yoke to the R2SUB enough so seat the lock washer. Be careful not to over-tighten as, given the size wrench that typically will be used, it is possible to apply excessive torque.

10. Lastly ensure that all the attachment bolts for the Contour and Securing Straps are securely tightened.

 Caution: Any of the mounting bolts supplied with the R2SUB that are not used for mounting must be left in place with their rubber washers and firmly tightened to maintain the integrity of the weatherproofing.
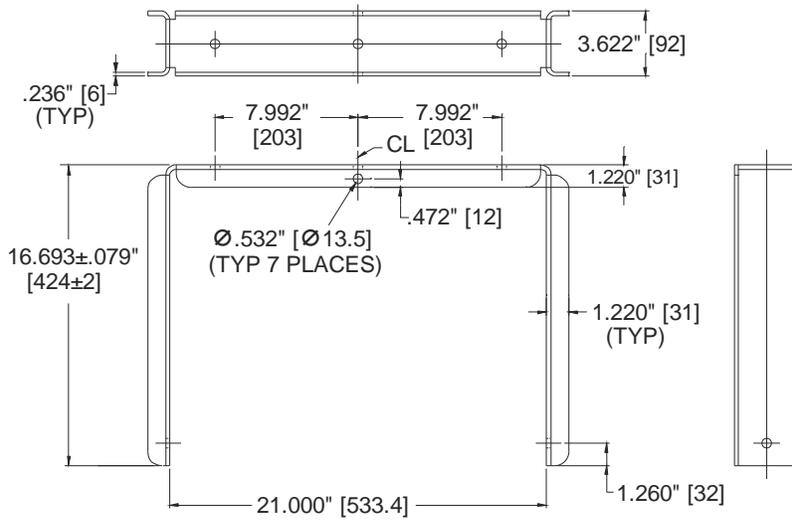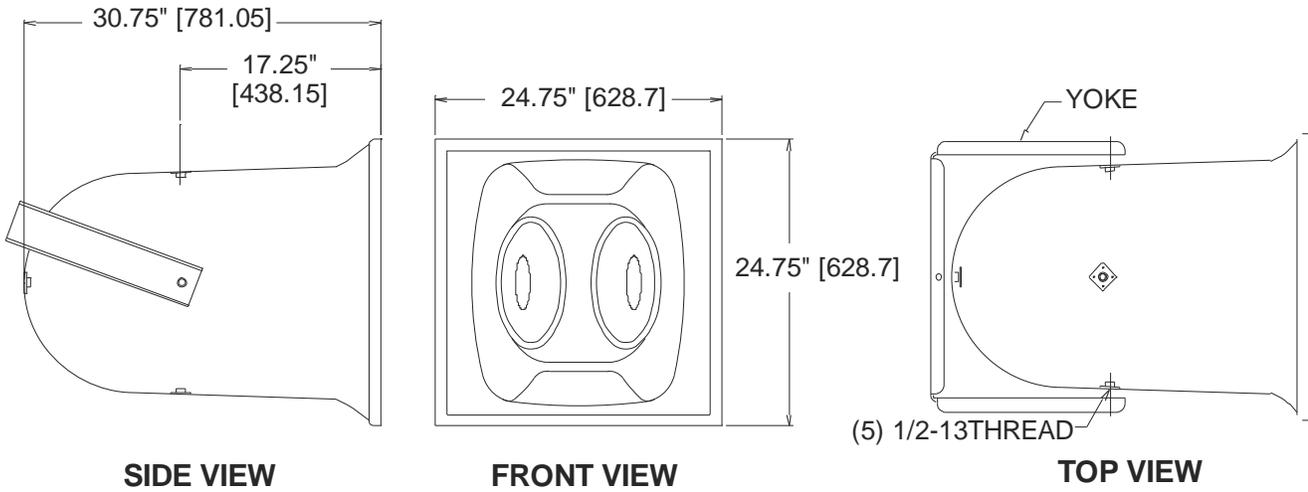
Maintaining Weather-Resistance

There are several things that must be observed when installing an R2SUB in order to maintain its weather-resistant integrity for outdoor use.

1. Always orient the loudspeaker so the mouth of the horn is, at a minimum, pointing slightly downward. Failure to do this will result in water collecting inside the bell of the horn.

2. When handling an R2SUB be careful not to scratch or scrape the powder coat finish on the perforated metal grille. This finish on the grille protects the steel from corrosion. If the finish is scratched or otherwise cut into in any way, the underlying steel will corrode at the point where the integrity of the finish has been violated.

3. All five mounting holes must be sealed off with the stainless steel bolts, washers, and rubber washers supplied. If, for any reason, these bolts must be removed, seal off the hole with silicone caulking or some other suitable weather-tight sealant.

4. The rubber washers supplied with the mounting bolts must always seat against the enclosure.

5. The gland-nut securing the loudspeaker cable to the enclosure is sealed at the factory. Do not attempt to remove this nut or the weather-tight seal will be broken. If it is desired to replace the gland-nut with a jack, the jack must be a weatherproof design. It must be suitably sealed to the enclosure with silicone caulk or some other suitable weather-tight sealant.

6. The grille assembly is designed to prevent normal and wind-driven rain from directly entering the mouth of the loudspeaker. The grille is not designed to withstand such things as being directly sprayed from a hose; therefore this should be avoided.

7. If you use any hardware in place of the stainless steel screws, bolts, nuts and washers supplied, it should also be made of stainless steel.
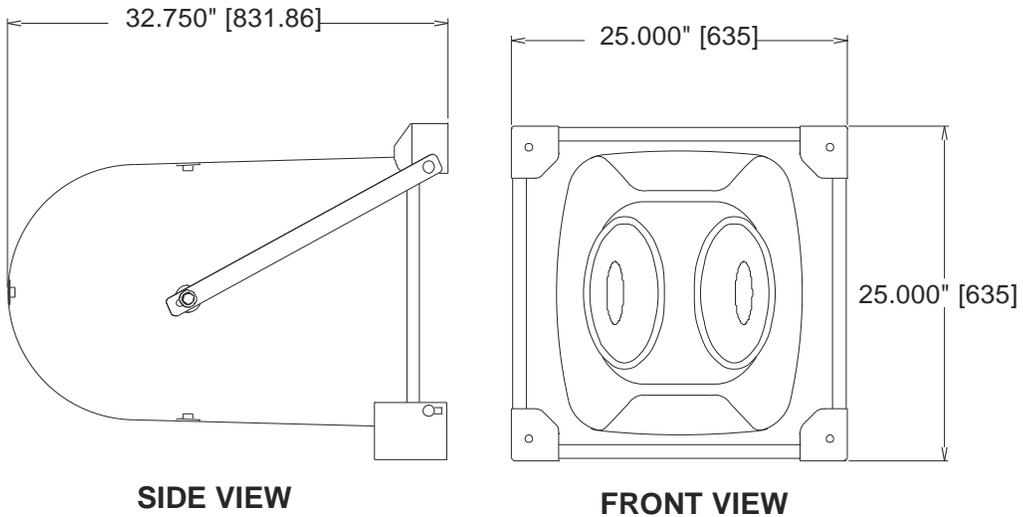
Caution: If the above instructions are not observed, the weather-resistant integrity of an R2SUB can be compromised. This can result in damage to or failure of the hardware or internal components.

R2SUBZ Dimensions

30.75" [781.05]

17.25" [438.15]

24.75" [628.7]

24.75" [628.7]

YOKE

(5) 1/2-13THREAD

SIDE VIEW

FRONT VIEW

TOP VIEW

3.622" [92]

.236" [6] (TYP)

7.992" [203]

7.992" [203]

CL

1.220" [31]

.472" [12]

16.693±.079" [424±2]

Ø.532" [Ø13.5] (TYP 7 PLACES)

1.220" [31] (TYP)

21.000" [533.4]

1.260" [32]

R2 YOKE

R2SUBDF Dimensions

32.750" [831.86]

25.000" [635]

25.000" [635]

SIDE VIEW

FRONT VIEW

Notes

Warranty Information and Service

FIELD SERVICE

Any driver or crossover service required is done from the front of the enclosure by removing the screws around the edge of the grille. For warranty repair, contact Community directly or ask us for the location of your nearest Authorized Service Center.

WARRANTY INFORMATION

TRANSFERABLE WARRANTY "(LIMITED)" VALID IN THE USA ONLY

The R SERIES loudspeakers are designed and backed by Community Professional Loudspeakers. For complete warranty statement information within the USA please refer to www.communitypro.com/warranty. Please call 610-876-3400 or visit the website to locate your nearest Authorized Field Service Station. For Factory Service call 610-876-3400. You must obtain a Return Authorization (R/A) number prior to the return of your product for factory service.

Upon receipt, the service center will determine if the problem is covered under warranty. If covered under this warranty, the product will be repaired or replaced, at Community's option, and returned to the owner freight prepaid. If the problem is not covered under this warranty, the owner will be notified of the problem with an estimate of the repair costs.

WARRANTY INFORMATION AND SERVICE FOR COUNTRIES OUTSIDE THE USA

To obtain specific warranty information and available service locations for countries other than the United States of America, contact the authorized Community Distributor for your specific country or region.

06OCT2016