



## OWNER'S MANUAL

### **RS-AK12 D4**

12" SUBWOOFER

4+4  $\Omega$

### **RS-AK12 S4**

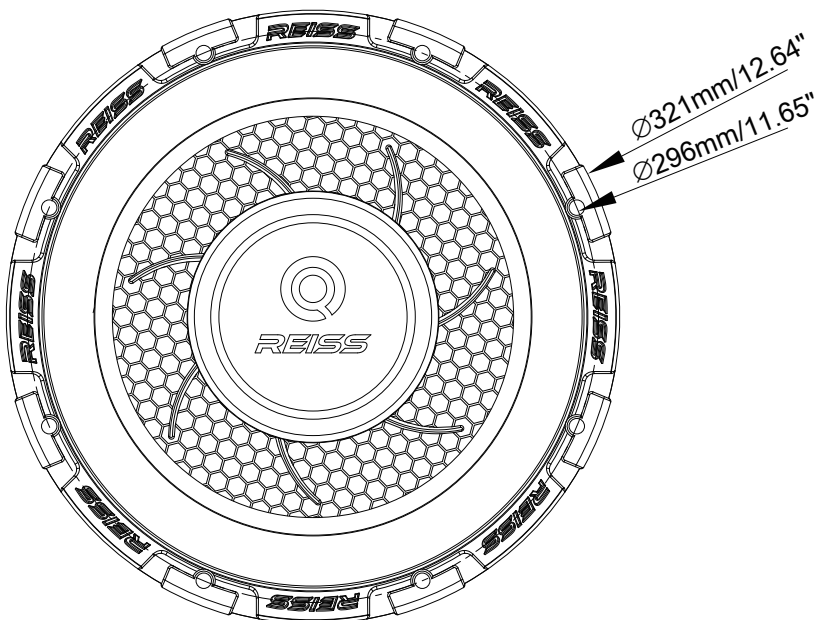
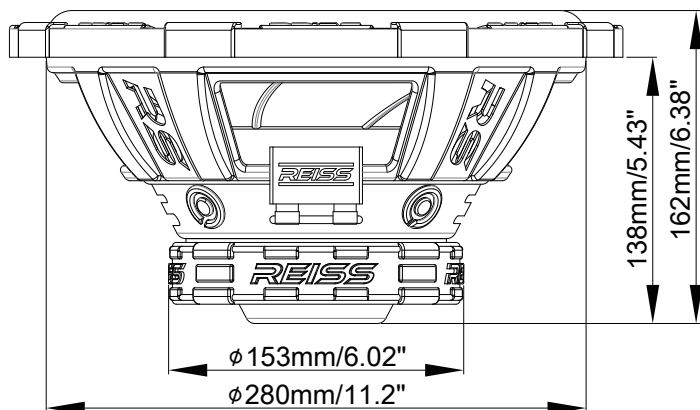
12" SUBWOOFER

4  $\Omega$



Turkish Engineering Since 1985

# RS-AK12 D4





## SPECIFICATIONS

|                                    |               |
|------------------------------------|---------------|
| Nominal Diameter .....             | 12" / 321mm   |
| Nominal Impedance .....            | 4+4 OHMS      |
| RMS Power Handling .....           | 350 Watts     |
| MAX Power Handling .....           | 1200 Watts    |
| Sensitivity(1w/1m) .....           | 90 dB         |
| Frequency Response .....           | 35Hz - 1000Hz |
| Recommended Lo Pass Crossover..... | 150Hz         |

## MOTOR

|                                  |                 |
|----------------------------------|-----------------|
| Voice Coil Diameter .....        | 50.95mm / 2"    |
| Voice Coil Former Material ..... | Black Aluminium |
| Winding Material .....           | Copper          |
| Cone Material .....              | Paper           |
| Dustcap Material .....           | PP              |
| Surround Material .....          | Foam            |
| Basket Material .....            | Steel           |
| Basket Color .....               | Black           |
| Magnet Material .....            | Ferrite         |
| Magnet Weight .....              | 47oz            |
| Displacement Volume .....        | 2.33L/0.12ft3   |

**THIELE & SMALL PARAMETERS**

|                                    |           |                 |
|------------------------------------|-----------|-----------------|
| Equivalent Volume .....            | Vas ..... | 61.56L /2.17ft3 |
| Free Air Resonance .....           | Fs .....  | 38.26Hz         |
| Mechanical Factor .....            | Qms ..... | 3.881           |
| Electrical Factor .....            | Qes ..... | 0.575           |
| Total Factor .....                 | Qts ..... | 0.501           |
| Moving Mass .....                  | Mms ..... | 102.355g        |
| Compliance .....                   | Cms ..... | 0.169 mm/N      |
| BL Factor .....                    | BL .....  | 8.272Tm         |
| Voice Coil Inductance .....        | Le .....  | 1.0 mH          |
| Diaphragm Area .....               | Sd .....  | 506.5 CM2       |
| DC Resistance .....                | Re .....  | 3.2+3.2 OHM     |
| Efficiency Bandwidth Product ..... | EBP.....  | 66.54           |

**MEASUREMENT**

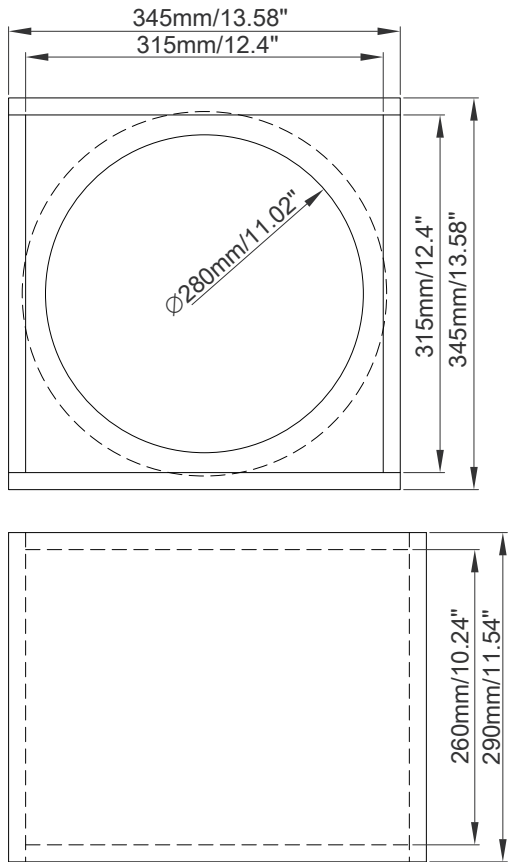
|                                 |                 |
|---------------------------------|-----------------|
| Overall Diameter .....          | 321mm / 12.64"  |
| Overall Depth .....             | 162mm / 5.72"   |
| Front Mount Baffle Cutout ..... | 280mm / 1 1.02" |
| Mounting Depth .....            | 138mm / 5.43"   |
| Motor Diameter .....            | 153mm / 6.02"   |

**RECOMMENDED ENCLOSURES**

|                                  |                      |
|----------------------------------|----------------------|
| Sealed Internal Volume .....     | 23.9L /0.84ft3       |
| Sealed Box Output Response ..... | 72Hz                 |
| Ported Internal Volume .....     | 42.2L / 1.49ft3      |
| Port Size Square (WxHxL) .....   | 25mm x 315mm x 234mm |
|                                  | 0.98" x12.4" x 9.21" |
| Port Tuning Frequency .....      | 45Hz                 |
| Ported Box Output Response ..... | 43Hz                 |

RECOMMENDED BOX DIMENSION

SINGLE SUBWOOFER SEALED BOX



PARAMETERS

Box External Dimensions:  
(WxHxD): 345mm x 345mm x 290mm  
/ 13.58"x 13.58"x 11.42"

Material Thickness: 15mm / 0.59"

Net Internal Volume: 23.9L / 0.84ft3

WOOD CUTS

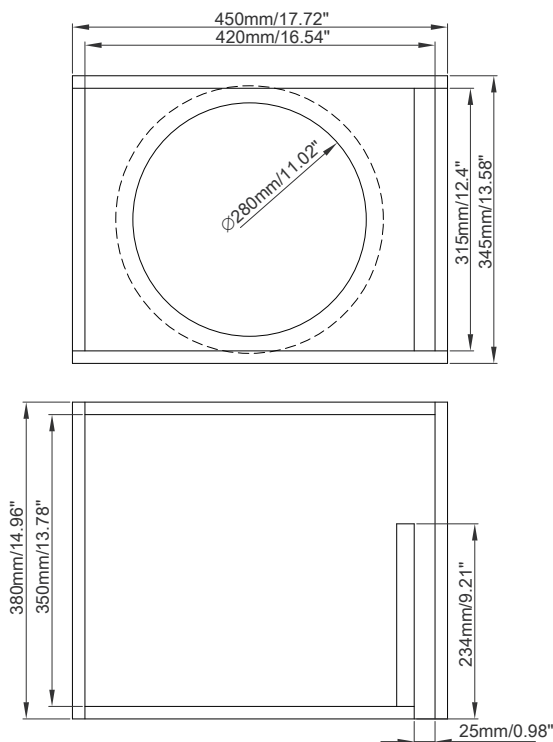
Top - Bottom  
(WxH): 290mm x 345mm / 11.42" x 13.58" 2

Front - Rear  
(WxH): 315mm x 315mm / 12.4" x 12.4" 2

Left - Right  
(WxH) : 315mm x 290mm / 12.4" x 11.42" 2

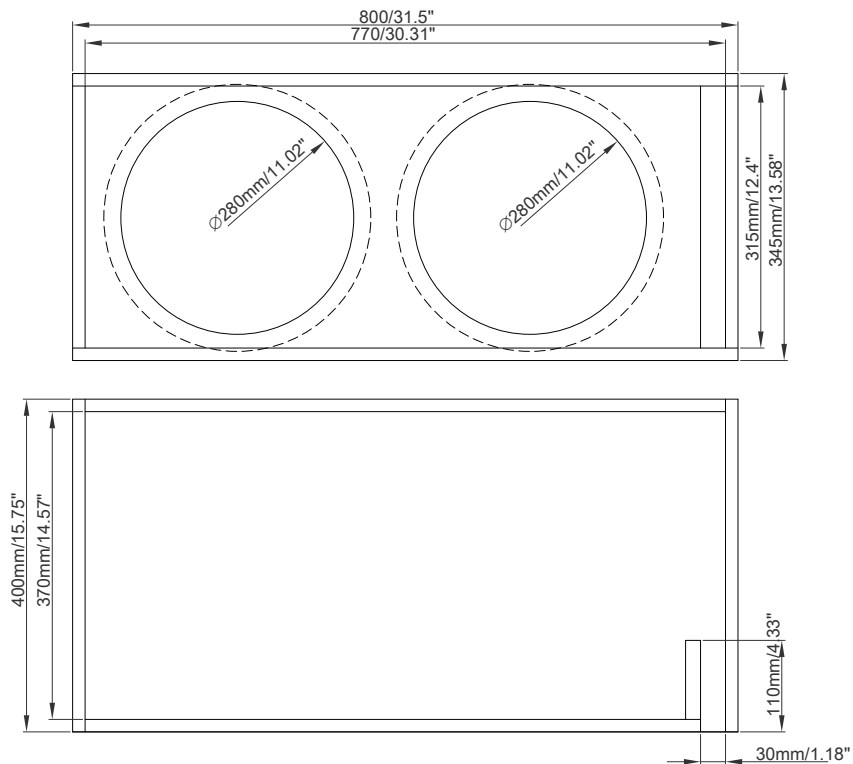
QTY

SINGLE SUBWOOFER PORTED BOX



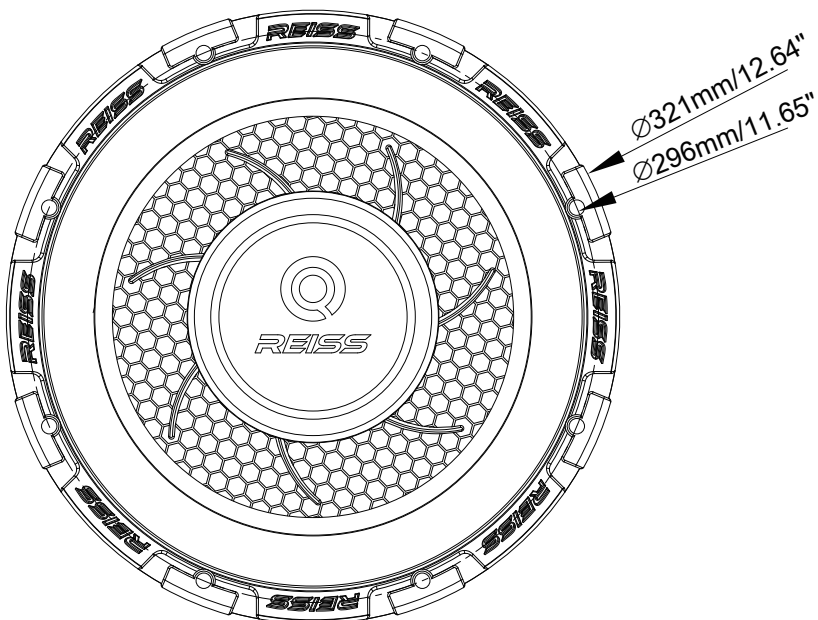
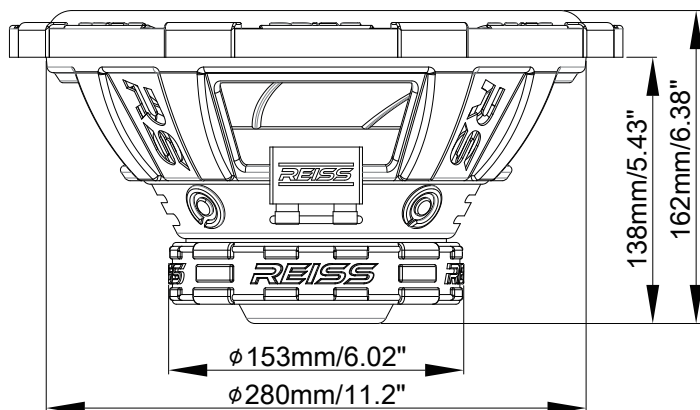
| PARAMETERS                                                                         | WOOD CUTS                                      | QTY |
|------------------------------------------------------------------------------------|------------------------------------------------|-----|
| Box External Dimensions:<br>(WxHxD): 450 x 345 x 380 mm /<br>17.72" x 13.58" x 15" | Top - Bottom<br>450 x 380 mm / 17.72" x 14.96" | 2   |
|                                                                                    | Front: 395 x 315mm / 15.55" x 12.4"            | 1   |
| Material Thickness: 15mm / 0.59"                                                   | Rear: 420 x 315mm / 16.54" x 12.4"             | 1   |
| Net Internal Volume: 42.2L / 1.49ft3                                               | Left: 380 x 315mm / 14.96" x 12.4"             | 1   |
| Tuning Frequency: 45 Hz                                                            | Right: 380 x 315mm / 14.96" x 12.4"            | 1   |
| Port Area: 78.25cm2 / 12.21 inch2                                                  | Port: 219 x 315mm / 8.62" x 12.4"              | 1   |
| Port Intel: 25 x 315 mm / 0.98" x 12.4"                                            |                                                |     |
| Port Length: 234 mm / 9.21"                                                        |                                                |     |

DOUBLE SUBWOOFER PORTED BOX



| PARAMETERS                                                                          | WOOD CUTS                                     | QTY |
|-------------------------------------------------------------------------------------|-----------------------------------------------|-----|
| Box External Dimensions:<br>(WxHxD): 800 x 345 x 400mm /<br>31.5" x 13.58" x 15.75" | Top - Bottom<br>800 x 400 mm / 31.5" x 15.75" | 2   |
| Material Thickness: 15mm / 0.59"                                                    | Front: 740 x 315 mm / 29.13" x 12.4"          | 1   |
| Net Internal Volume: 84.83L / 3 ft3                                                 | Rear: 770 x 315 mm / 30.31" x 12.4"           | 1   |
| Tuning Frequency: 45 Hz                                                             | Left: 400 x 315 mm / 15.57" x 12.4"           | 1   |
| Port Area: 94.5 CM2 / 14.65 inch2                                                   | Right: 400 x 315 mm / 15.57" x 12.4"          | 1   |
| Port Intel: 30 x 315 mm / 1.18" x 12.4"                                             | Port: 95 x 315 mm / 3.74" x 12.4"             | 1   |
| Port Length: 110mm / 4.33 inch2                                                     |                                               |     |

# RS-AK12 S4

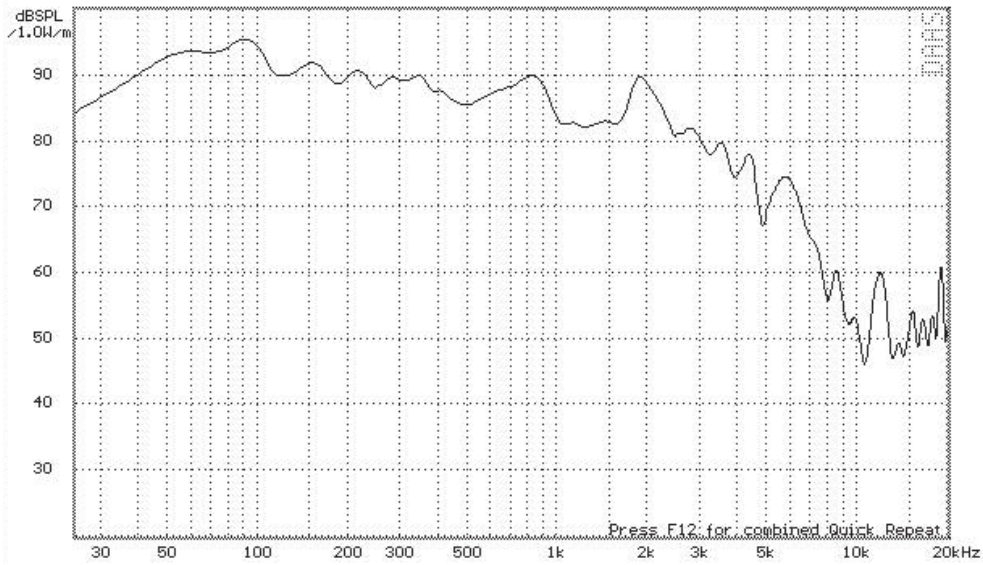


## RS-AK12 S4

12" SUBWOOFER







SPECIFICATIONS

|                               |               |
|-------------------------------|---------------|
| Nominal Diameter              | 12" / 321mm   |
| Nominal Impedance             | 4 OHMS        |
| RMS Power Handling            | 350 Watts     |
| MAX Power Handling            | 1200 Watts    |
| Sensitivity(1w/1m)            | 90 dB         |
| Frequency Response            | 35Hz - 1000Hz |
| Recommended Lo Pass Crossover | 150Hz         |

MOTOR

|                            |                 |
|----------------------------|-----------------|
| Voice Coil Diameter        | 50.95mm / 2"    |
| Voice Coil Former Material | Black Aluminium |
| Winding Material           | Copper          |
| Cone Material              | Paper           |
| Dustcap Material           | PP              |
| Surround Material          | Foam            |
| Basket Material            | Steel           |
| Basket Color               | Black           |
| Magnet Material            | Ferrite         |
| Magnet Weight              | 47oz            |
| Displacement Volume        | 2.33L/0.12ft3   |

**THIELE & SMALL PARAMETERS**

|                                    |           |                 |
|------------------------------------|-----------|-----------------|
| Equivalent Volume .....            | Vas ..... | 62.84L /2.22ft3 |
| Free Air Resonance .....           | Fs .....  | 37.49Hz         |
| Mechanical Factor .....            | Qms ..... | 4.483           |
| Electrical Factor .....            | Qes ..... | 0.523           |
| Total Factor .....                 | Qts ..... | 0.468           |
| Moving Mass .....                  | Mms ..... | 104.44g         |
| Compliance .....                   | Cms ..... | 0.173 mm/N      |
| BL Factor .....                    | BL .....  | 12.27Tm         |
| Voice Coil Inductance .....        | Le .....  | 2.724 mH        |
| Diaphragm Area .....               | Sd .....  | 506.5 CM2       |
| DC Resistance .....                | Re .....  | 3.2 OHM         |
| Efficiency Bandwidth Product ..... | EBP.....  | 71.68           |

**MEASUREMENT**

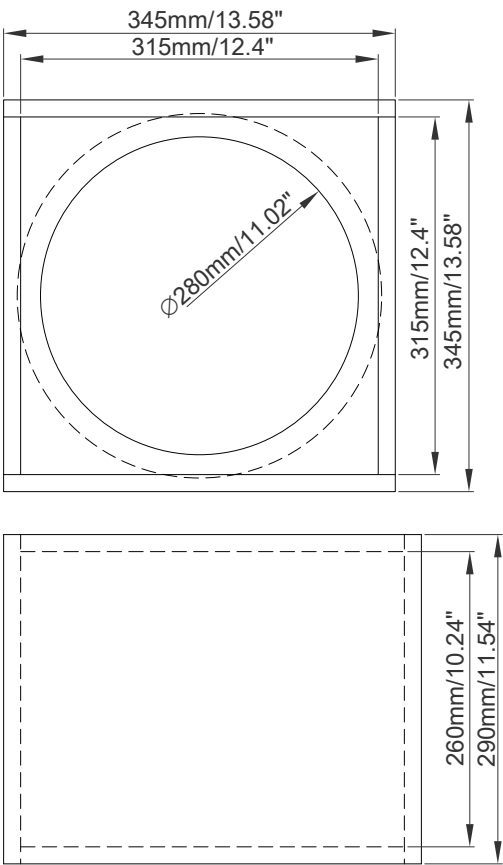
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| Mounting Depth .....            | 138mm / 5.43"   |
| Motor Diameter .....            | 153mm / 6.02"   |

**RECOMMENDED ENCLOSURES**

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|----------------------------------|----------------------|
| Sealed Internal Volume .....     | 23.9L /0.84ft3       |
| Sealed Box Output Response ..... | 72Hz                 |
| Ported Internal Volume .....     | 42.2L / 1.49ft3      |
| Port Size Square (WxHxL) .....   | 25mm x 315mm x 234mm |
|                                  | 0.98" x12.4" x 9.21" |
| Port Tuning Frequency .....      | 45Hz                 |
| Ported Box Output Response ..... | 43Hz                 |

RECOMMENDED BOX DIMENSION

SINGLE SUBWOOFER SEALED BOX



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Box External Dimensions:  
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WOOD CUTS

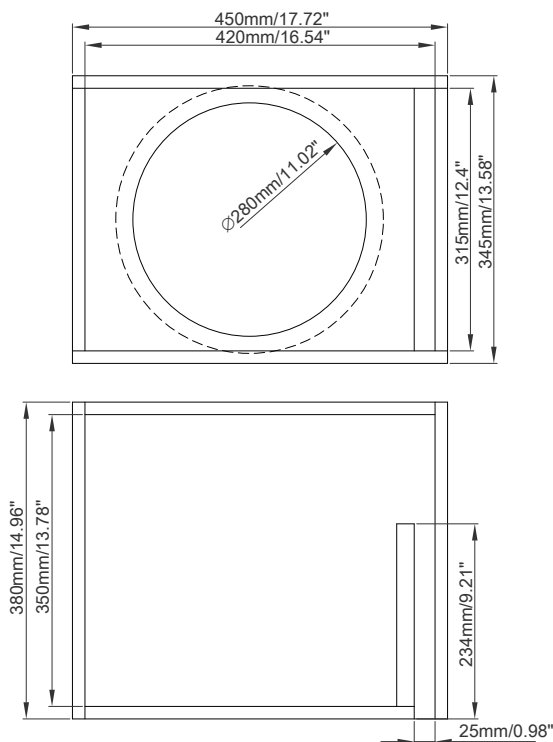
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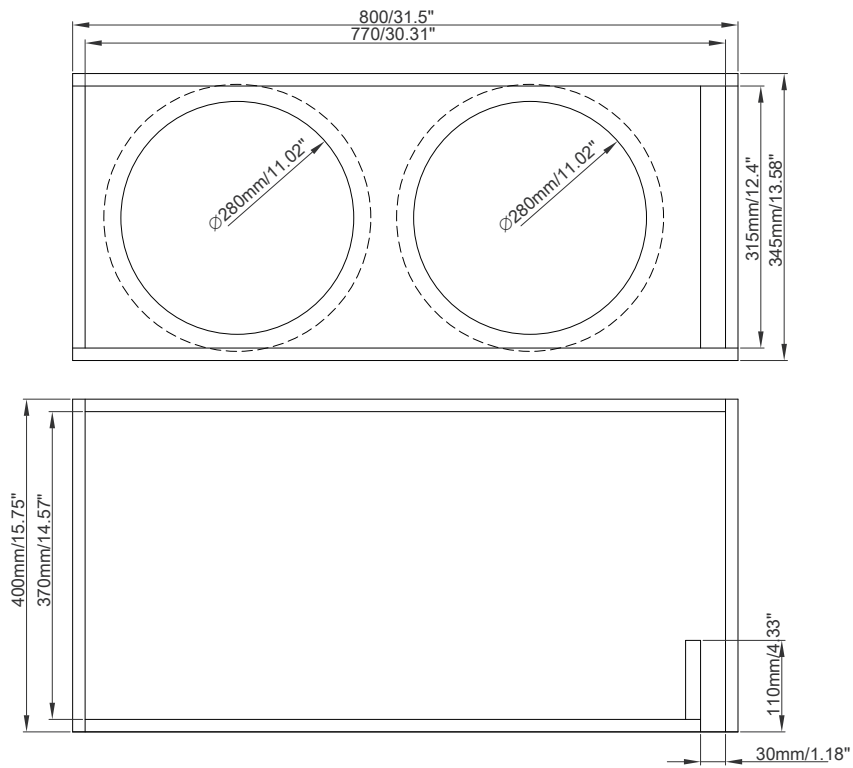
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SINGLE SUBWOOFER PORTED BOX



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**FOR MORE INFORMATION  
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