



# RX6

## 6.5 inch Coaxial Loudspeaker

tq<sup>install</sup><sub>SERIES</sub>



### Overview

The RX6 is a high-efficiency, high-fidelity coaxial loudspeaker that provides output capability typical of a much larger loudspeaker. The transducer's high efficiency and horn-loaded HF compression driver give the RX6 a surprisingly high output-to-size ratio, and its broad 90° x 75° coverage is particularly effective in close quarters. The RX6's compact, horizontal enclosure may be mounted close to walls or ceilings, under balconies, or along a stage front with minimal effect on sight lines. Its small size also allows it to be readily concealed within a venue's architecture when the loudspeaker must be hidden from view. An assortment of M6 and VESA points facilitate installation with an optional Fulcrum UB-RX6 yoke bracket or third-party mounting solutions.

Fulcrum Acoustic's TQ™ processing is an integral part of the RX6 design. Sound, innovative acoustical design combined with state of the art digital processing leads to exceptional clarity and precise transient response, even at very high sound pressure levels. The required digital signal processing can be provided by one of many supported platforms.

The RX6 is an excellent option any time moderately high SPLs are required but limited space is available. Spoken word sounds very natural, and the coaxial design assures that this remains so even off-axis. Low frequency extension to 90 Hz enables it to integrate well with subwoofers for full range music reproduction. The RX6 is a perfect choice for delay fill, background music, and speech reproduction systems, which makes it ideal for houses of worship, theaters, restaurants, nightclubs, museum kiosks, theme parks, and more.

### Performance Specifications<sup>1</sup>

#### Operating Mode

Single-amplified w/ DSP

#### Operating Range<sup>2</sup>

90 Hz to 20 kHz

#### Nominal Beamwidth

90° x 75°

#### Transducers

HF/LF: Coaxial 1.0" diaphragm compression driver, neodymium magnet; 6.5" woofer, 2.0" voice coil, ceramic magnet

#### Power Handling @ Nominal Impedance<sup>3</sup>

53 V / 175 W @ 16 Ω

#### Nominal Sensitivity @ Input Voltage<sup>4</sup> (whole space)

95 dB @ 4.00 V

#### Nominal Maximum SPL (peak / continuous)

123 dB / 117 dB

#### Equalized Sensitivity @ Input Voltage<sup>5</sup>

90 dB @ 4.00 V

#### Equalized Maximum SPL<sup>6</sup> (peak / continuous)

118 dB / 112 dB

#### AES75 Maximum Linear Sound Levels<sup>7</sup>

103.9 dBZ / 121.1 dBZpk / 100.6 dBA  
at an RMS input level of 26.1 dBV (20.3 V)

#### Recommended Power Amplifier

175 W to 350 W @ 16 Ω

### Physical Specifications

#### Connections

(2) Neutrik NL4 Speakon  
Pin 1+/-: Full Range Pin 2+/-: NC

#### Mounting / Suspension Points

(2) M6 x 1.0 yoke points, (2) M6 x 1.0 rear points,  
(4) M4 x 0.7 VESA 75 x 75 mm points

#### Dimensions / Weight

See pages 5 & 6

#### Finish

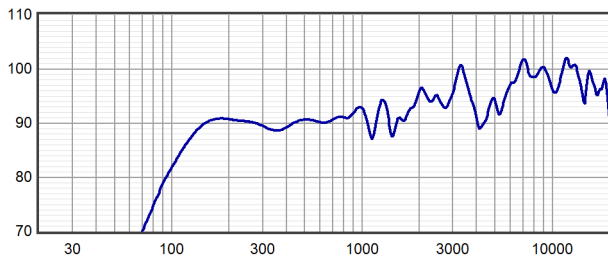
Black painted enclosure w/ matte black grille, or  
White painted enclosure w/ matte white grille

#### Options

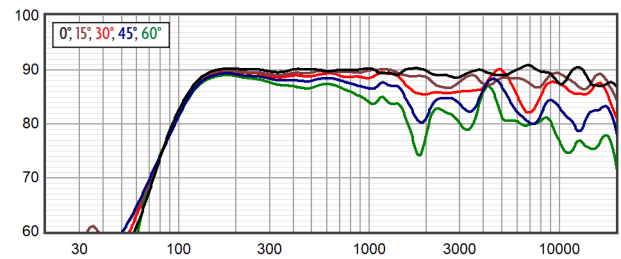
UB-RX6 yoke bracket, Phoenix block input, Custom color finish,  
IP55 Weather-resistant (WR) enclosure & hardware,  
70 V multi-tap transformer (RX6-MT60)



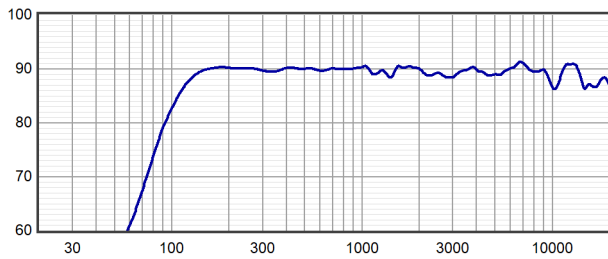
Axial Sensitivity (dB SPL, 4.00 V @ 1 m)<sup>8,9</sup>



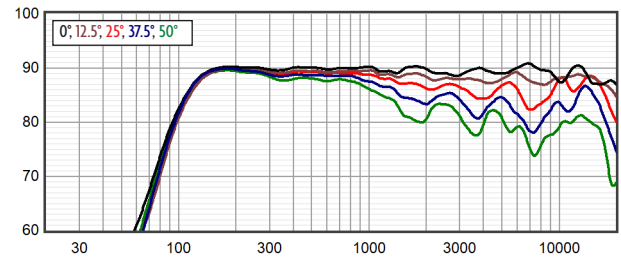
Horizontal Off Axis Response<sup>8,12</sup>



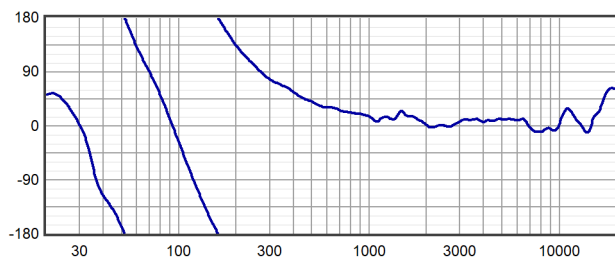
Axial Processed Response (dB)<sup>8,10</sup>



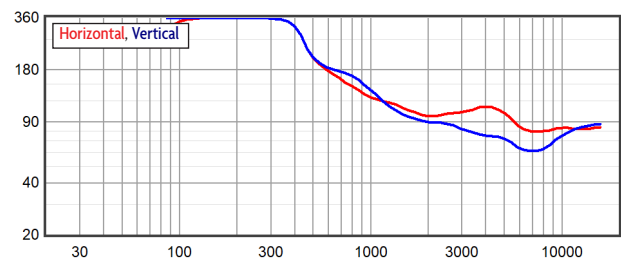
Vertical Off Axis Response<sup>8,12</sup>



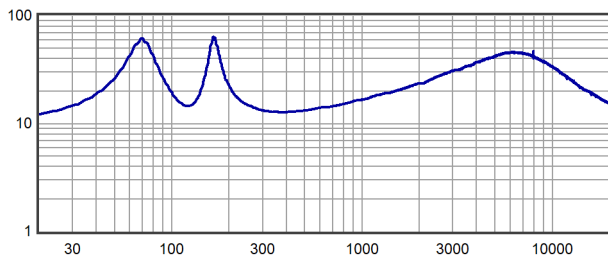
Axial Processed Phase Response (degrees)<sup>8,11</sup>



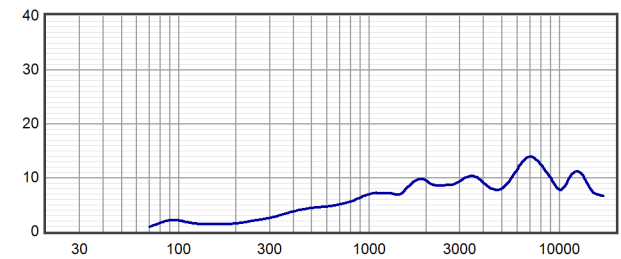
Beamwidth<sup>8,13</sup>



Impedance (ohms)

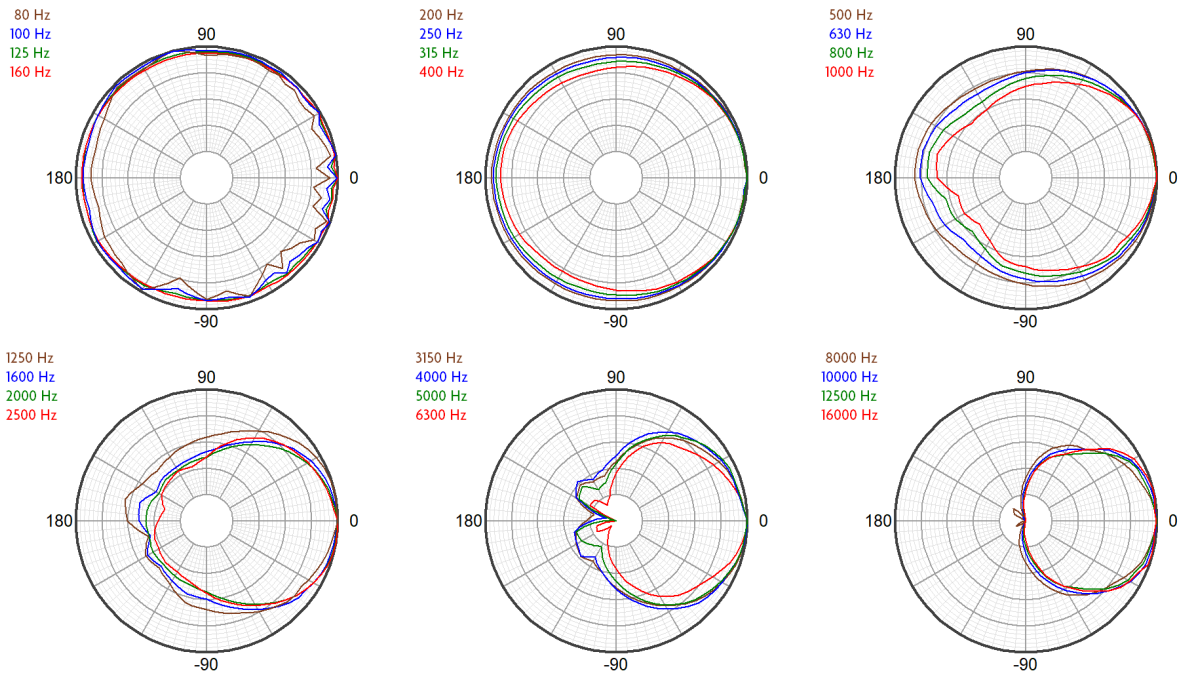


Directivity Index (dB)<sup>14</sup>

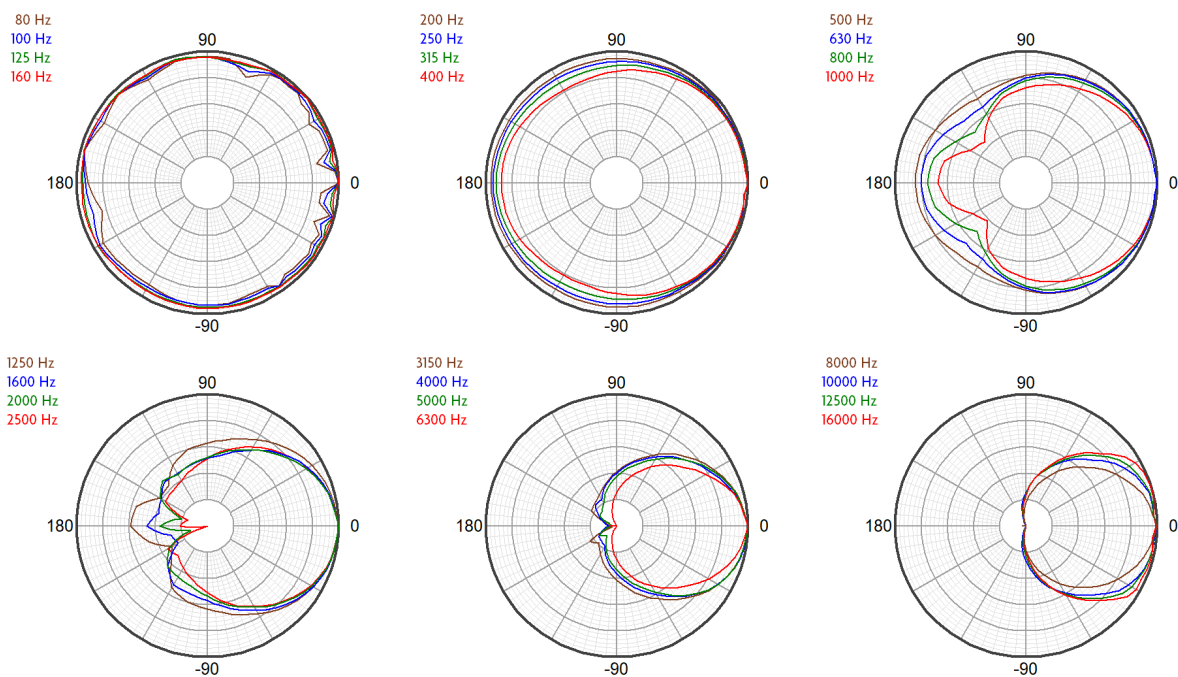




Horizontal Polar Response (30 dB Scale, 6 dB per Major Division)



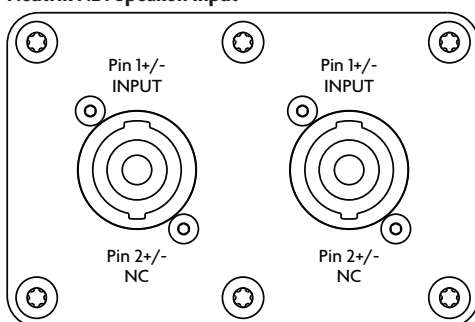
Vertical Polar Response (30 dB Scale, 6 dB per Major Division)



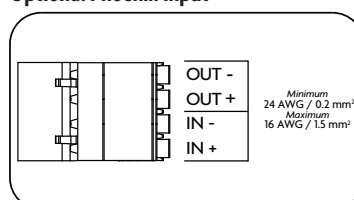


## Connections

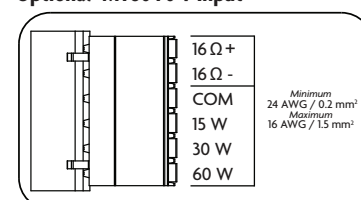
### Neutrik NL4 Speakon Input



### Optional Phoenix Input



### Optional -MT60 70 V Input



Note: Phoenix blocks accept minimum 24 AWG / 0.2 mm<sup>2</sup>, maximum 16 AWG / 1.5 mm<sup>2</sup> cable

## Mechanical Specification Drawings

2D and 3D DWG dimensional drawings are available for download at [www.fulcrum-acoustic.com/support](http://www.fulcrum-acoustic.com/support).

## Notes

<sup>1</sup> **Performance Specifications** All acoustic specifications rounded to nearest whole number.

External DSP with Fulcrum Acoustic-provided settings is required to achieve the specified performance.

<sup>2</sup> **Operating Range** The frequency range within which the processed response is within 10 dB of the average.

<sup>3</sup> **Power Handling** Based on the AES power handling of the transducers.

<sup>4</sup> **Nominal Sensitivity** The 1-meter-referenced SPL produced by a 1 watt band limited pink noise signal, with no processing applied.

<sup>5</sup> **Equalized Sensitivity** The 1-meter-referenced SPL produced when an EIA-426-B signal is applied to an equalized loudspeaker system, at a level which produces a total power of 1 watt, in sum, to the loudspeaker subsections.

<sup>6</sup> **Equalized Maximum SPL** The 1-meter-referenced SPL produced when an EIA-426-B signal is applied to an equalized loudspeaker system, at a level which drives at least one subsection to its rated power.

<sup>7</sup> **AES75 Maximum Linear Sound Levels** Per AES75-2023: "AES standard for acoustics – Measuring loudspeaker maximum linear sound levels using noise".

<sup>8</sup> **Resolution** All response graphs are subjected to 1/6 octave cepstral smoothing with a gaussian weighting function.

<sup>9</sup> **Axial Sensitivity** The SPL plotted against frequency for a 1 watt swept sine wave, referenced to 1 m with no signal processing.

<sup>10</sup> **Axial Processed Response** The axial magnitude response with recommended signal processing applied.

<sup>11</sup> **Axial Processed Phase Response** The axial phase response with recommended signal processing applied, and latency removed.

<sup>12</sup> **Horizontal / Vertical Off Axis Responses** The magnitude response at various angles off axis, with recommended signal processing applied.

<sup>13</sup> **Beamwidth** The angle between the -6 dB points in a loudspeaker's polar response.

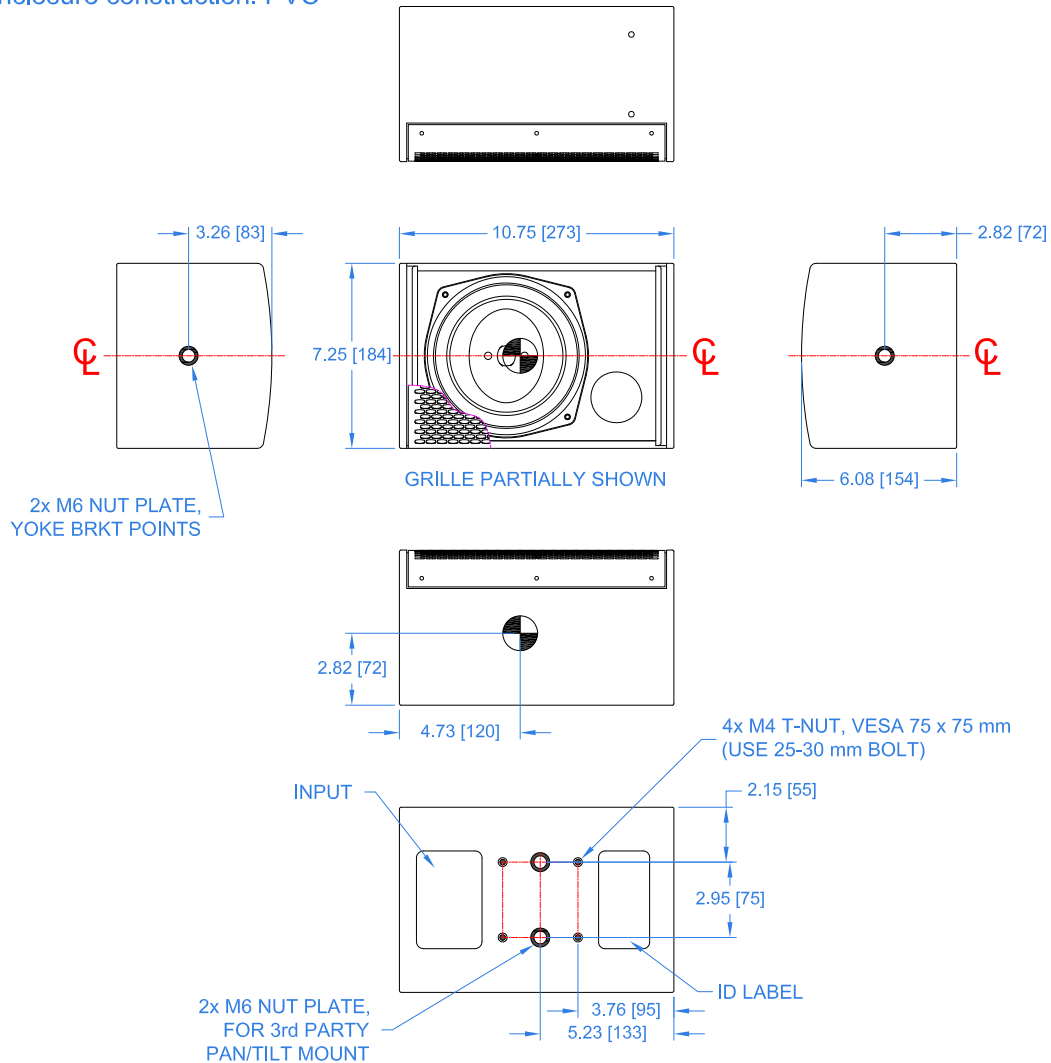
<sup>14</sup> **Directivity Index (Di)** The ratio of the on-axis sound pressure squared to the spherical average of the sound pressure squared at a particular frequency expressed in dB. To convert the directivity index to directivity factor (Q) use the formula  $10^{Di/10}$ .



Notes:

1. Net Weight = Approx. 11.0 lb / 4.9 kg
2. Ship Weight = Approx. 13.0 lb / 5.9 kg
3. Symbol = M6 x 1.0 nut plate
4. Symbol = M4 x 0.7 T-nut
5. Symbol = CoG
6. Enclosure construction: PVC

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		<p>DWG. NO. 820-100-172</p>	<p>REV 1</p>	

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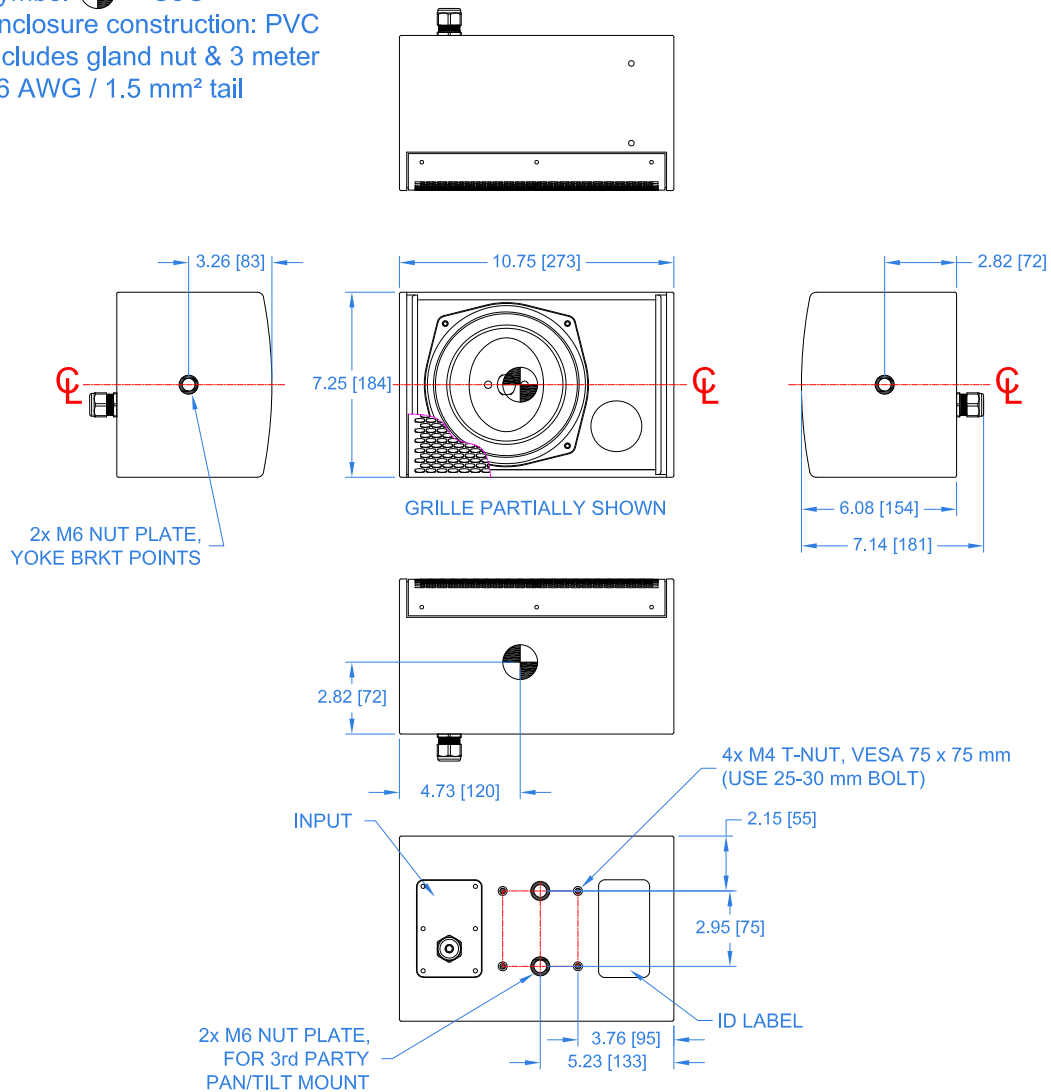


product specification, weather-resistant (WR) version

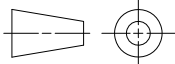
Notes:

1. Net Weight = Approx. 12.0 lb / 5.4 kg
2. Ship Weight = Approx. 15.0 lb / 6.8 kg
3. Symbol = M6 x 1.0 nut plate
4. Symbol = M4 x 0.7 T-nut
5. Symbol = CoG
6. Enclosure construction: PVC
7. Includes gland nut & 3 meter 16 AWG / 1.5 mm² tail

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FRACTIONS ±1/32  
ANGLES ±1/2°

(X.XX) = REF DIMS NO TOLERANCE IMPLIED

TSC = THEORETICAL SHARP CORNER

DIMENSIONS ACROSS CENTERLINES TO BE SYMMETRICAL

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MFG ENG:



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TITLE: Mechanical Spec, RX6-WR

A SHEET 1 OF 1 SCALE: 1:6

DWG. NO. 820-100-176 REV 1

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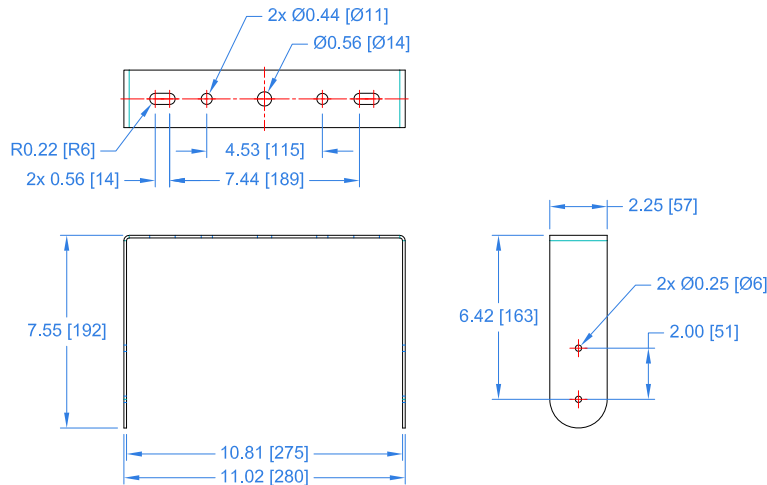


optional accessory

Notes:

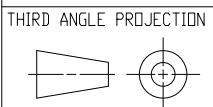
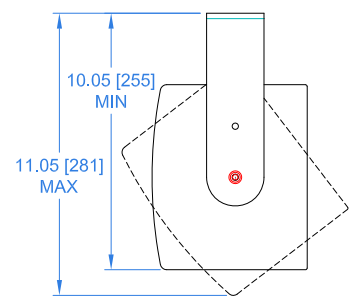
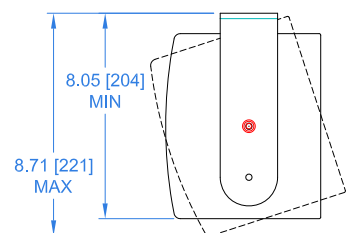
1. Net Weight = Approx. 1.0 lb / 0.5 kg
2. Material: 12 GA (0.104") CRS, weather-resistant coating
3. Includes 2x each M6 socket head cap screws, split washers, flat washers

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MOUNTING POSTION 1

MOUNTING POSTION 2



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TITLE: Mechanical Spec, UB-RX6 Yoke Bracket

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Drawing is reduced. Do not scale.