

Cup Horn

A Cup Horn offers indirect sonication and functions as a high intensity ultrasonic water bath. Multiple samples can be processed in sealed tubes eliminating cross contamination or aerosol issues.

The horn is mounted within an acrylic cup and the cup is filled with water. Sample tubes are placed in a rack at a fixed distance above the ultrasonic horn. Cavitation is produced in the water, processing the samples within the tubes. The #440 tube rack is included with the Cup Horn. This rack is made for 1.5ml polystyrene tubes which are proven to process samples more efficiently than 1.5ml polypropylene tubes.

Sonication generates heat so ports for cooling are located on each side of the cup. The #4900 Chiller is recommended for maintaining both the water temperature and water level within the Cup Horn. Maintaining a fixed water level is extremely important and only the Qsonica chiller can accurately control this variable.

The Sound Enclosure is highly recommended for all Cup Horn users. In addition to reducing sonication noise to safe levels, it securely holds the Cup Horn in place. The Sound Enclosure features ports on either side to allow coolant tubing to pass from the Cup Horn to the Chiller.

Note: Selecting the appropriate size and type of sample tube will greatly improve results. Contact Qsonica for application assistance.



Part # 431C2
Inner Diameter of Cup: 5.5"
Diameter of Horn: 2.5"
Tube Rack #440 (8 tubes) is Included

Optional Tube Racks



Part #440



Part #451



Part #445



Part #449

Part #	Description
Tube Holder # 440	8 Tube Holder (1.5ml Polystyrene tubes)
Tube Holder # 451	8 Tube Holder (1.5ml Polypropylene tubes)
Tube Holder # 449	12 Tube Holder (600ul PCR tubes)
Tube Holder # 445	24 Tube Holder (300ul PCR tubes)

Microplate Horn

(Only for use with Q700)

Similar to a Cup Horn, but larger, the Microplate Horn is an indirect sonication device capable of processing an entire 96 well microtiter plate or many microtubes at one time.

Simply place your samples within the water-filled reservoir and the sonic energy is transferred into each individual well or tube.



The Horn is equipped with a clear acrylic collar to contain the liquid media within the reservoir. This allows the user to process deep well microplates or other tall vessels. Standard microtiter plates or PCR tubes require a smaller volume of liquid for sonication. For these applications, the clear acrylic collar may be removed and the lower, gray collar will allow for easier access to the samples.



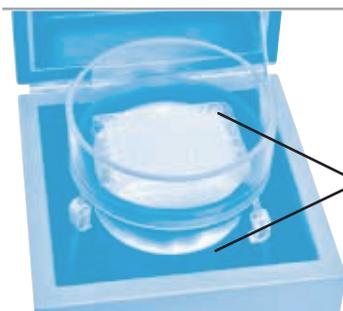
#431MPX



#431MPXH

Part #	Description
Q700MPX	Q700 (Without Standard Probe), and the 431MPX
431MPX	Microplate Horn, Pinch Clamps, Tubing and Sound Enclosure
431MPXH	Microplate Horn Only
432MP	Sound Enclosure for Microplate Horn
444	300µl Microcentrifuge Tube Holder/Cover

Exterior dimensions of the Sound Enclosure are (W x D x H):
10 x 10 x 17 in. (254 x 245 x 432 mm).



#444

The Microplate Horn is commonly used in PMCA research. A microcentrifuge tube holder and cover (#444) are available and often used for this application.

Recirculating Chillers

Sonication generates heat which may be detrimental to some applications. Attempting to control temperature with ice and/or repeatedly changing out water is tedious and no longer necessary. Qsonica now offers 2 chiller options for automating the sample cooling process.

Quick-connect tubing and fittings (ordered separately) attach the chiller to the ports on the cup horn or microplate horn. When used in conjunction with the pulsed sonication mode, your desired water temperature will be maintained. Older model cup horns may require special fittings so please contact us for ordering assistance.



#4900

#4905

Part #	Description
4900	Compact Recirculating Chiller
4910	Tubing and Connector Set for Cup Horn for #4900
4915	Tubing and Connector Set for Microplate Horn for #4900
4905	High-Capacity Recirculating Chiller
4911	Tubing/Connector Set for Cup Horn for #4905
4916	Tubing/Connector Set for Microplate Horn for #4905



Chiller shown with Sonicator, tubing set, cup horn and sound enclosure (sold separately).

TECHNICAL SPECIFICATIONS:	Part No. 4900	Part No. 4905
Cooling Capacity:	200 watts	400 watts
Temperature Range:	2-45° C	2-45° C
Dimensions:	7.5 x 5 x 7 in. (19 x 13 x 18 cm)	13 x 11 x 13 in. (32 x 28 x 32 cm)
Weight:	8 lbs. (3.6kg.)	28 lbs. (12.7kg.)
Voltage:	115-230 VAC, 50/60 Hz	115-230 VAC, 50/60 Hz