Q-SYS™

QSC®

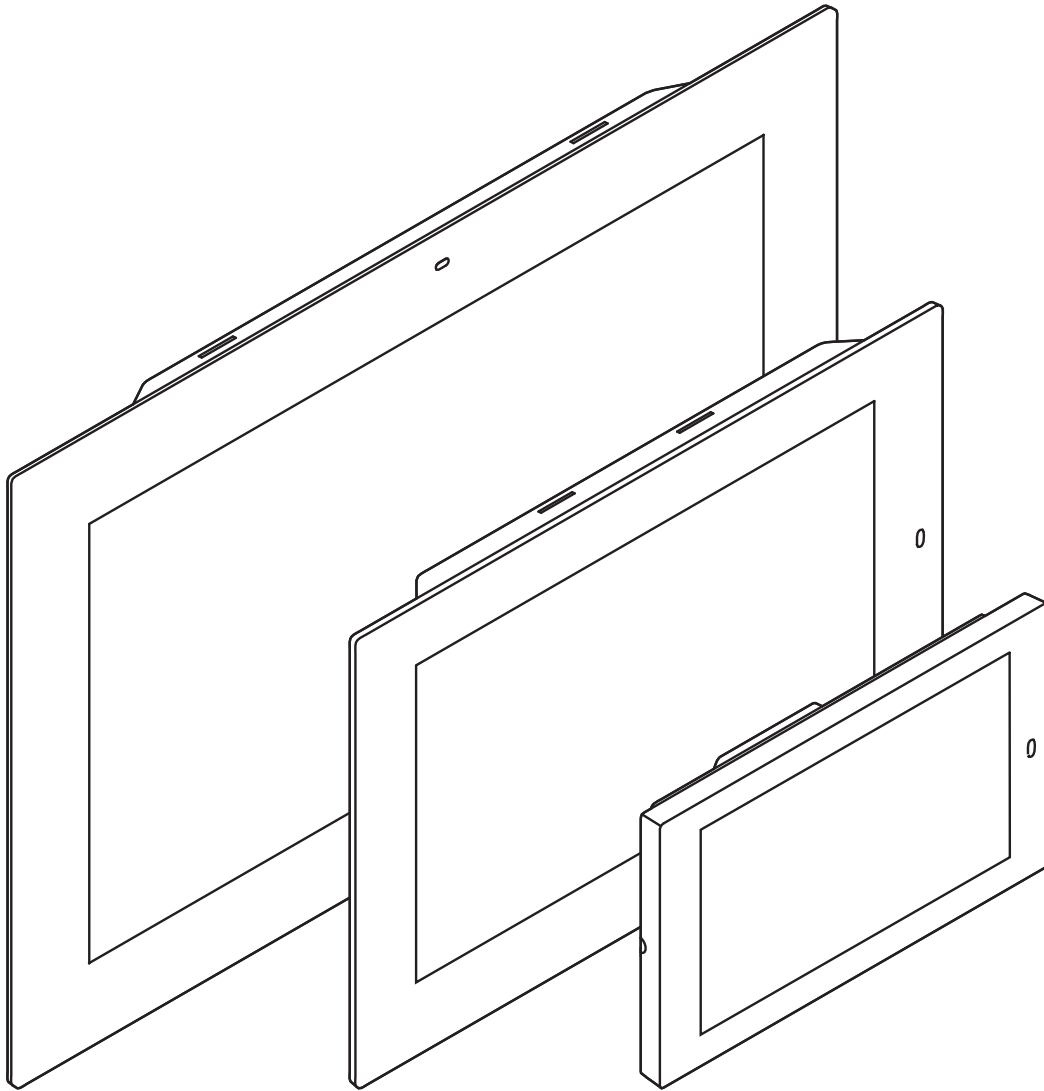## Hardware User Guide

TSC-116W-G2 Touchscreen Controller

TSC-80W-G2 Touchscreen Controller

TSC-55W-G2 Touchscreen Controller

EXPLANATION OF SYMBOLS

The term "WARNING!" indicates instructions regarding personal safety. If the instructions are not followed the result may be bodily injury or death.

The term "CAUTION!" indicates instructions regarding possible damage to physical equipment. If these instructions are not followed, it may result in damage to the equipment that may not be covered under the warranty.

The term "IMPORTANT!" indicates instructions or information that are vital to the successful completion of the procedure.

The term "NOTE" is used to indicate additional useful information.

NOTE: The intent of the lightning flash with arrowhead symbol in a triangle is to alert the user to the presence of un-insulated "dangerous" voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to humans.

NOTE: The intent of the exclamation point within an equilateral triangle is to alert the user to the presence of important safety, and operating and maintenance instructions in this manual.

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation opening. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Only use attachments/accessories specified by the manufacturer.
10. Refer all servicing to qualified service personnel.
11. Adhere to all applicable local codes.
12. Consult a licensed, professional engineer when any doubt or questions arise regarding a physical equipment installation.

FCC Statement

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

NOTE: These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.

• Increase the separation between the equipment and receiver.

• Connect the power sourcing equipment into an outlet on a circuit different from that to which the receiver is connected.

• Consult the dealer or an experienced radio/TV technician for help.

RoHS Statement

The Q-SYS TSC-G2 series products are in compliance with European Directive 2011/65/EU – Restriction of Hazardous Substances (RoHS).

The Q-SYS TSC-G2 series products are in compliance with "China RoHS" directives per GB/T26572. The following table is provided for product use in China and its territories:

	Q-SYS TSC-55W-G2, TSC-80W-G2, TSC-116W-G2 系列,					
部件名称 (Part Name)	有毒有害物质或元素 (Toxic or hazardous Substances and Elements)					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(vi))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
电路板组件 (PCB Assemblies)	X	O	O	O	O	O
机壳装配件 (Chassis Assemblies)	X	O	O	O	O	O

本表格依据 SJ/T 11364 的规定编制。(This table is prepared following the requirement of SJ/T 11364.)
O: 表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572 规定的限量要求以下。
O: Indicates that the concentration of the substance in all homogeneous materials of the part is below the relevant threshold specified in GB/T 26572.
X: 表示该有害物质至少在该部件的某一均质材料中的含量超出 GB/T 26572 规定的限量要求。
X: Indicates that the concentration of the substance in at least one of all homogeneous materials of the part is above the relevant threshold specified in GB/T 26572.
（目前由于技术或经济的原因暂时无法实现替代或减量化) (Replacement and reduction of content cannot be achieved currently because of the technical or economic reason.)

Warranty

For a copy of the QSC Limited Warranty, visit the QSC, LLC., website at www.qsc.com

Para una copia de la Garantía Limitada de QSC, visite el sitio web de QSC, LLC., en www.qsc.com

Pour obtenir une copie de la garantie limitée de QSC, visitez le site de QSC, LLC. à www.qsc.com

Besuchen Sie die Webseite von QSC, LLC. (www.qsc.com) um eine Kopie der beschränkten Garantie von QSC zu erhalten.
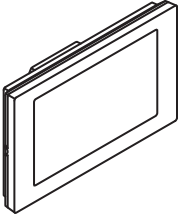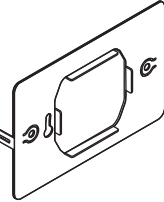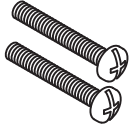
如果您想要QSC有限保修的複印本，请造访QSC音频产品的网站www.qsc.com

Для получения копии ограниченной гарантии QSC посетите веб-сайт QSC, LLC., расположенный по адресу www.qsc.com.

للحصول على نسخة من الضمان المحدود الخاص بـQSC، قم بزيارة الموقع الإلكتروني لشركة QSC للمنتجات الصوتية على www.qsc.com
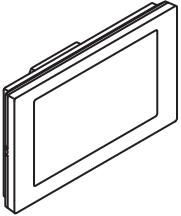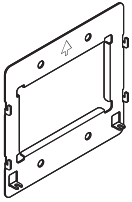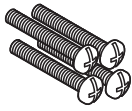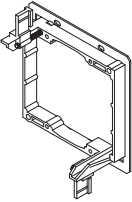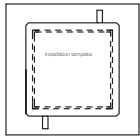
QSC限定保証の複製には、QCSのウェブサイトwww.qsc.comにアクセスしてください。

Package Contents

TSC-55W-G2

1 TSC-55W-G2 Touchscreen Controller	**1** Universal Wall-Mounting-Bracket	**2** Screws (#6-32, 25mm)
1 QSC Limited Warranty TD-000453	**1** Safety Information and Regulatory Statements TD-001510	

TSC-80W-G2 / TSC-116W-G2

|			
1 TSC-80W-G2 or TSC-116W-G2 Touchscreen Controller	**1** Wall Mounting Bracket	**4** Screws (#6-32, 25mm)	**1** Surface Mounting Ring
1 Mounting Template	**1** Safety Information and Regulatory Statements TD-001510	**1** QSC Limited Warranty TD-000453	

Description

The TSC-G2 series Touchscreen Controllers combine capacitive LCD touch technology with a high-definition resolution display, and Power over Ethernet (PoE) for simplified single-cable installation. The TSC-G2 series can operate in both portrait or landscape mode providing more design flexibility when installing in a wall, lectern or a similar flat surface. The TSC-55W-G2 is designed to be mounted into US or European electrical boxes. The TSC-80W-G2 and TSC-116W-G2 mounting bracket is designed to meet US NEMA standards. However, additional mounting hardware is provided to accommodate a variety of installation applications.

Features TSC-55W-G2

Rear Panel

Refer to Figure 1

1. Locking / mounting screws (2x)

2. Mounting clips (4x)

3. RJ45 – Q-LAN / PoE

4. USB Port (not visible) currently inactive

5. 24VDC external power connection (power supply not included, see "Specifications" on page 13)
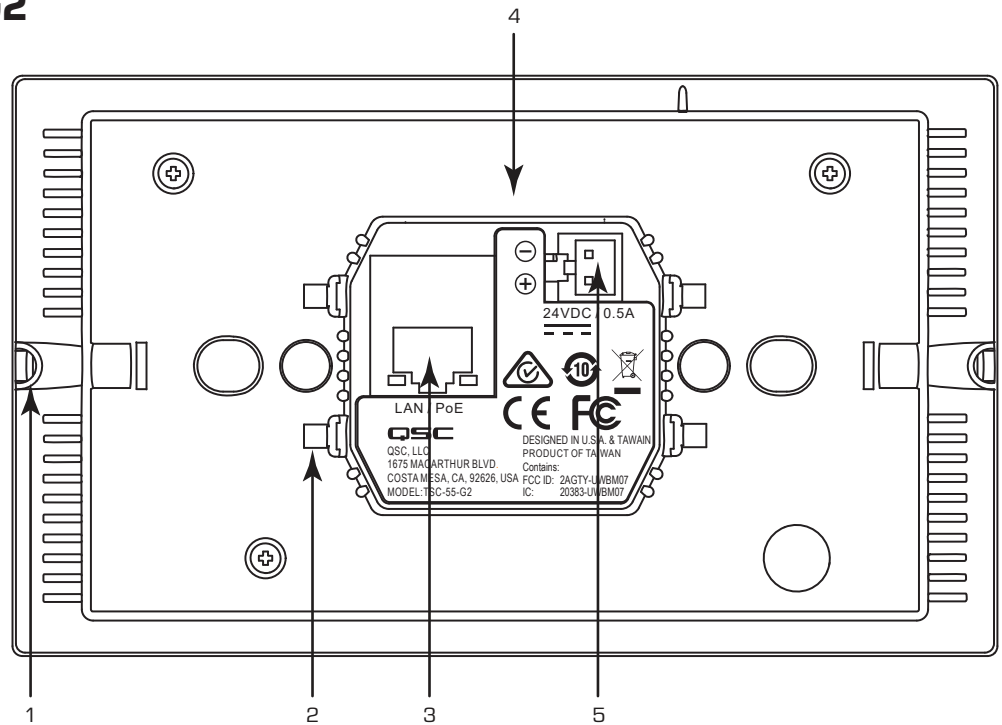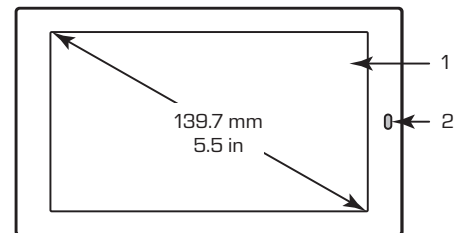
Front Panel

Refer to Figure 2

1. Viewing screen, 5.5 in, (139.7 mm) diagonal

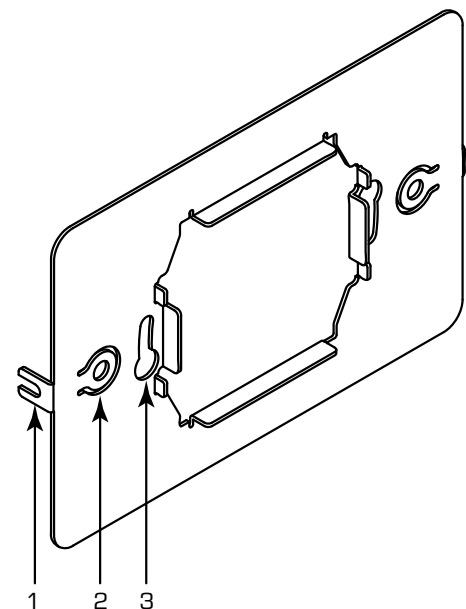2. Light / motion detector – currently inactive.

Universal Wall-Mounting-Bracket

Refer to Figure 3

1. Security lock tabs (x2)

2. Mounting holes for a US standard, single-gang, electrical box; screws provided (#6-32, 25 mm)

3. Mounting holes for a European, single-gang, electrical box; screws not provided.
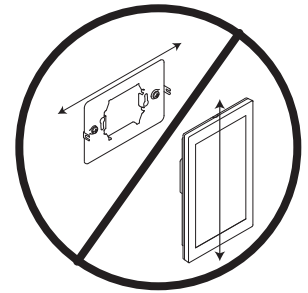

— Figure 1 —

— Figure 2 —

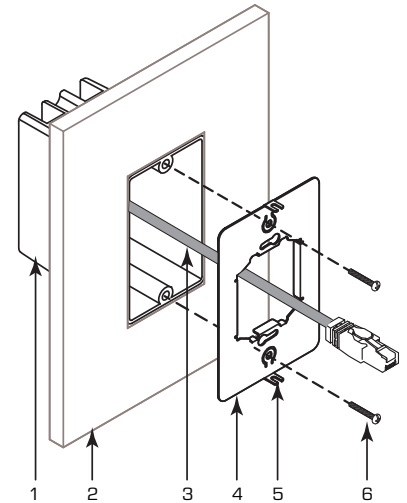— Figure 3 —

Surface-Mount Installation TSC-55W-G2

⚠️ **NOTE:** You cannot mount the TSC-55W-G2 in a landscape orientation when the junction box is in a portrait orientation, and vise-versa.

The following procedure uses pre-installed electrical boxes in a portrait orientation. The display orientation is controlled in Q-SYS Designer.

Refer to Figure 4.

1. Make sure the Q-LAN cable (3) (CAT-6 / RJ-45), is installed in the surface (2) with sufficient length to provide proper stress relief.

2. Run the cable through one of the cable openings in the electrical box (1) and through the opening in the center of the mounting bracket (4).

3. Align the mounting bracket to the electrical box with the security lock tabs (5) pointing away from the wall.

4. Use two supplied screws (6) to secure the mounting bracket to the electrical box.

⚠️ **NOTE:** If you are using a round electrical box, the screws to secure the mounting bracket to the electrical box are not supplied.
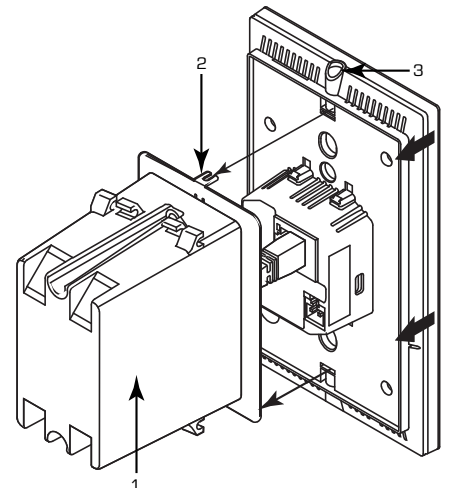
Refer to Figure 5.

5. Connect the Q-LAN cable (RJ45) (1) to the receptacle on the rear of the TSC (2).

Refer to Figure 6.

6. Use a Phillips screwdriver (#0) to loosen the locking screws (3) on both ends of the TSC.

7. Carefully feed the excess cable into the electrical box (1) and mate the TSC to the mounting bracket (2). You will hear a slight click when the unit is properly mated.

8. Use a Phillips screwdriver (#0) to tighten the locking screws (3) on both ends of the TSC.
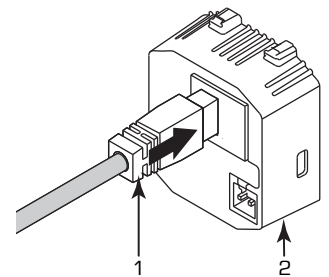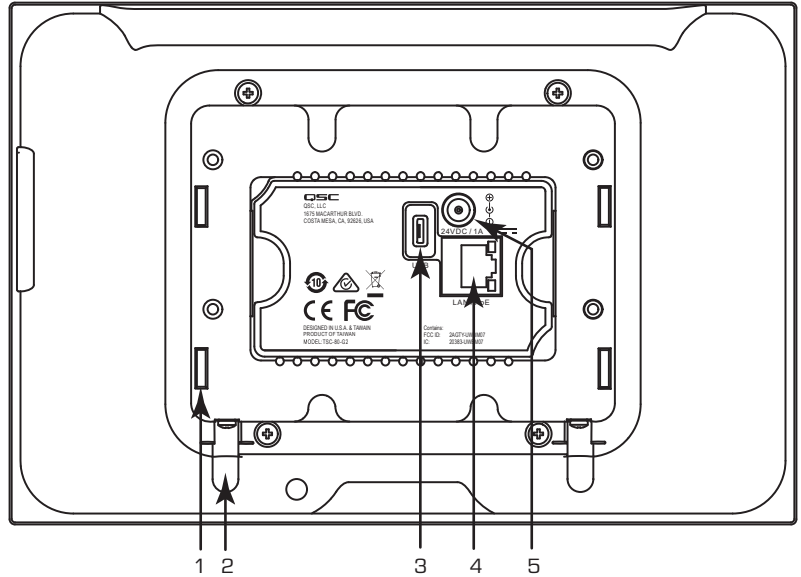

— Figure 4 —

— Figure 5 —

— Figure 6 —

Features TSC-80W-G2 / TSC-116W-G2

Rear Panel

Refer to Figure 7

1. Bracket-hook slots (x4)
2. Locking / mounting screws (2x).
3. USB connection – not used at this time
4. RJ45 – Q-LAN / PoE
5. 24VDC external power connection (power supply not included, see "Specifications" on page 13.)

Front Panel

Refer to Figure 8 and Figure 9

1. Viewing screen, (8.0 in 203.4 mm) / (11.6 in 294.6 mm)
2. Light / motion detector – not currently active.

Wall-Mounting-Bracket

Refer to Figure 10

1. Bracket hooks (4x)
2. Security lock tabs (x2)
3. Mounting holes (4x) for a US standard, double-gang, electrical box, surface mounting ring, or appropriate NEMA box. Screws provided (#6-32, 25 mm)
4. Up indicator arrow
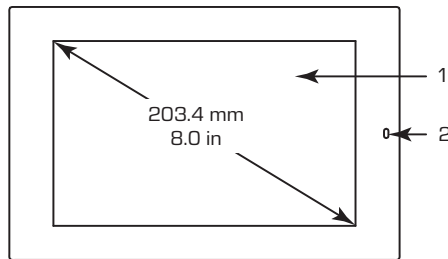
— Figure 7 —

— Figure 8 — TSC-80W-G2

— Figure 9 — TSC-116W-G2

— Figure 10 —

Surface Mount Installation TSC-80W-G2 / TSC-116W-G2
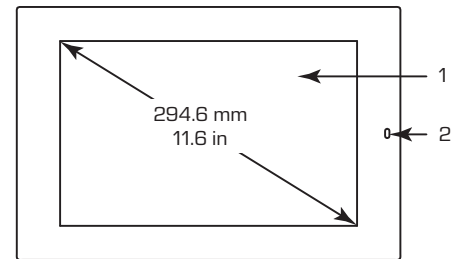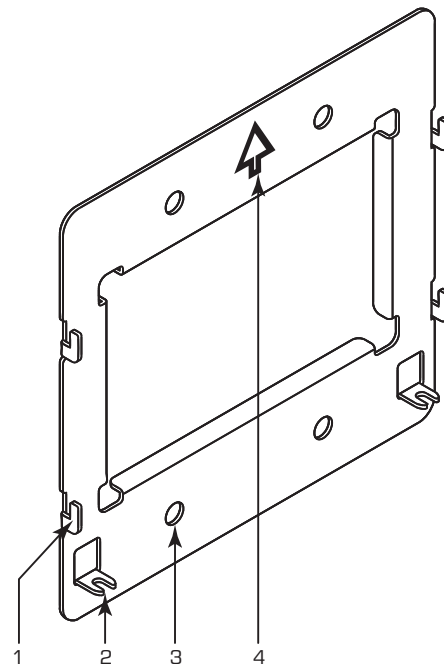
A wall-mounting-bracket is included for mounting to standard US double-gang junction box in portrait or landscape in existing installations. In addition, a surface mounting ring and template are provided for mounting in a surface without an existing junction box.

The following procedure uses the surface mounting ring (included) with the TSC installed in a landscape orientation. The display orientation is controlled in Q-SYS Designer.
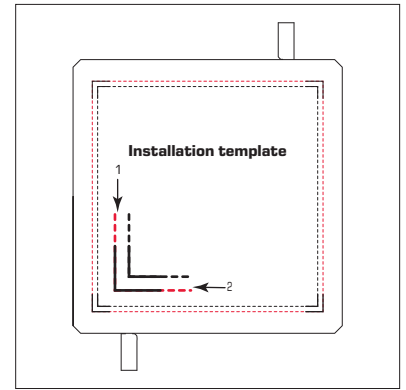

— Figure 11 —

## Install the Surface Mounting Ring

Refer to Figure 11 and Figure 12.

1. Use a stud finder or probe to locate a suitable mounting position. On the outside of the wall, make sure the body of the TSC does not project into a doorway, hall, window, etc. Use the following for positioning:

   • Landscape – Make sure there is a minimum of 1.5 in (38.1 mm) for the TSC-80W-G2, and 3.5 in (88.9 mm) for the TSC-116W-G2 clearance on each side of the template.

   • Portrait – Make sure there is a minimum of 1.5 in (38.1 mm) for the TSC-80W-G2, and 3.5 in (88.9 mm) for the TSC-116W-G2 clearance above and below the template.

2. If the text on the template is upright as shown in Figure 11, the template is in landscape orientation. Tape the template onto the wall in the orientation you want.

3. Use a sharp utility knife to cut along the outside edges of the slots on the template. See Figure 11 (1) and (2).

4. Remove the template and finish cutting out the opening. The opening should be no more than 4 in x 4 in (101.6 mm x 101.6 mm).

— Figure 12 —

5. Use the curved lines (red highlight in Figure 12) as a reference to properly orient the surface mounting ring.

   • Landscape mode – reference points are vertical.

   • Portrait mode – reference points are horizontal.

Refer to Figure 13

6. Make sure the Q-LAN cable (4), is installed in the wall or podium, etc. with sufficient length to provide proper stress relief.

7. Run the cable out of the wall, and through the surface mounting ring (1).

8. Make sure both dog ears, (2) and (3), are folded in so they do not interfere with the wall when the ring is inserted.

9. Align the surface mounting ring with the hole cut in the wall, and slide it into the opening.

10. Use a Phillips screwdriver to tighten the dog ears against the inside of the wall. As you tighten the screw, the dog ear turns vertical to the clamped position (5). The bottom dog ear is shown not tightened (6).
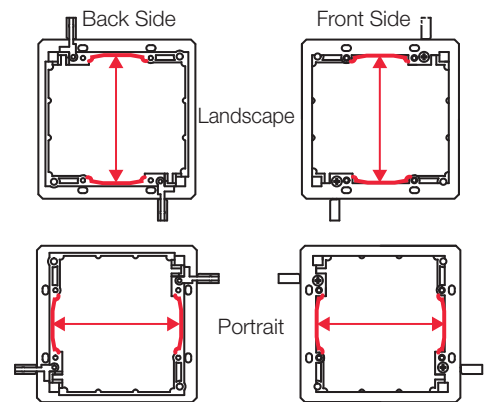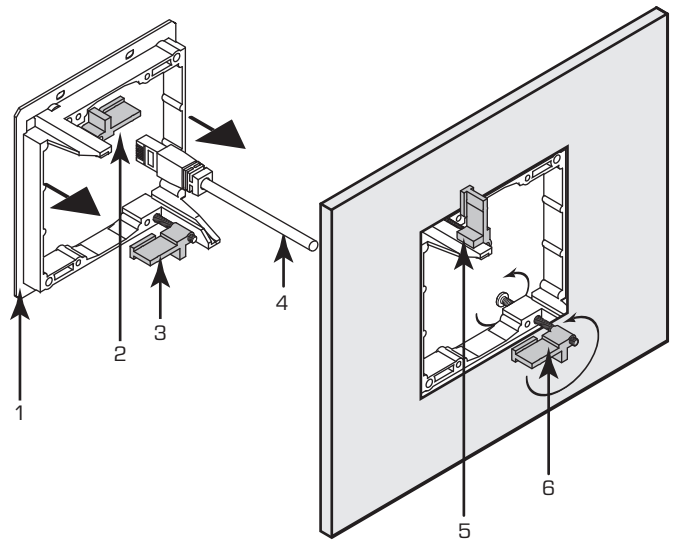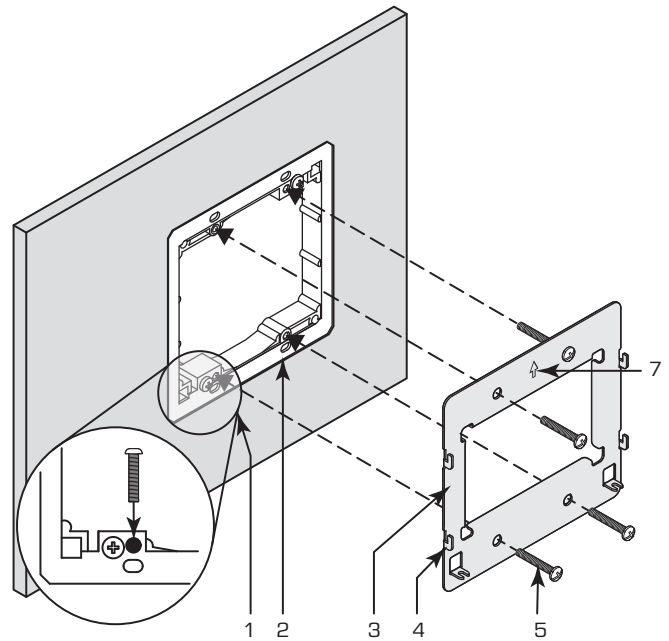

— Figure 13 —

Install the TSC-80W-G2 / TSC-116W-G2 Mounting Bracket

Refer to Figure 14

1. Make sure the bracket hooks (4) are pointing away from the wall as shown. The up indicator arrow (7) should be clearly visible and pointing up.

2. Feed the network cable (CAT-6 / RJ45) (not shown) through the opening in the mounting bracket.

3. Seat the mounting bracket (3) onto the surface mounting ring (2). When the bracket is properly aligned, the four holes in the bracket are aligned with the holes in the surface mounting ring. The mounting bracket should not move if you try to slide it right/left, up/down.

4. Secure the mounting bracket (3) to the surface mounting ring (2) using a Phillips screwdriver and four screws (5) (included). See magnified area (1) for details. Tighten until the mounting bracket is flush against the surface mounting ring. Do not overtighten.
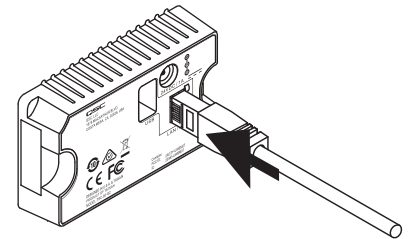
Connect and Install the TSC.

Refer to Figure 15 and Figure 16.

1. Connect the Q-LAN cable (RJ45) to the receptacle on the rear of the TSC.

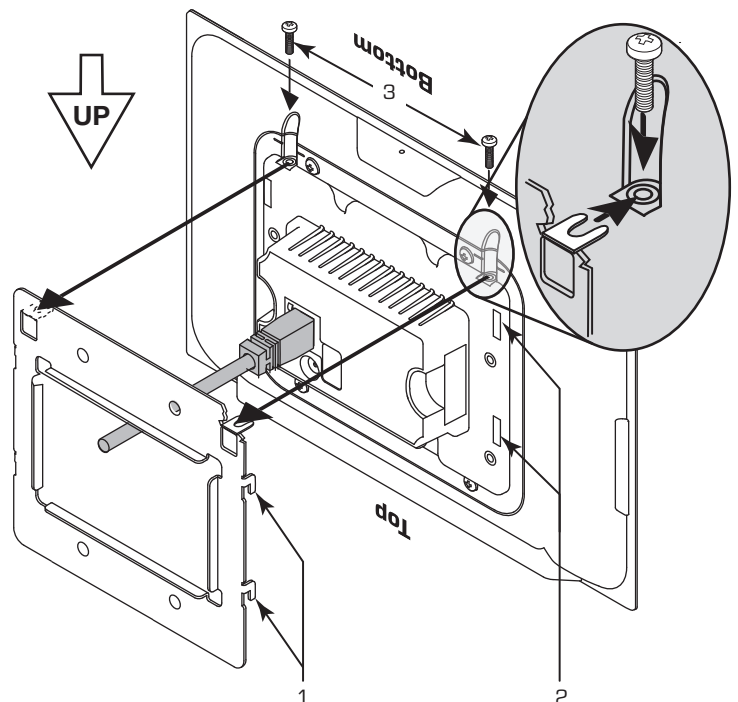2. Carefully feed the excess cable back into the wall.

⚠️ **NOTE:** The TSC, in Figure 16, is shown **upside-down** to better illustrate the security screw installation.

3. Use a Phillips screwdriver (#0) to loosen the locking screws (3) on both ends of the TSC.

4. Align the four bracket hooks (1) with the four slots (2) on the back of the TSC. Carefully mate the TSC slots with the bracket hooks, and move the TSC downward to engage the hooks and slots. The TSC should be flush against the wall on all sides.

5. Use a Phillips screwdriver (#0) to tighten the locking screws (3) on both ends of the TSC.

— Figure 14 —

— Figure 15 —

— Figure 16 —

Dimensions

TSC-55W-G2

20.6 mm
0.81 in

34.6 mm
1.36 in

87.5 mm
3.44 in

139.7 mm
5.5 in

148.5 mm
5.85 in

— Figure 17 —

TSC-80W-G2 .

21.0 mm
0.82 in

36.8 mm
1.45 in

148.4 mm
5.84 in

203.4 mm
8.0 in

0

223.5 mm
8.80 in

— Figure 18 —

11

TSC-116W-G2

21.0 mm
0.82 in

40.4 mm
1.59 in

201.5 mm
7.93 in

294.6 mm
11.6 in

313.6 mm
12.35 in
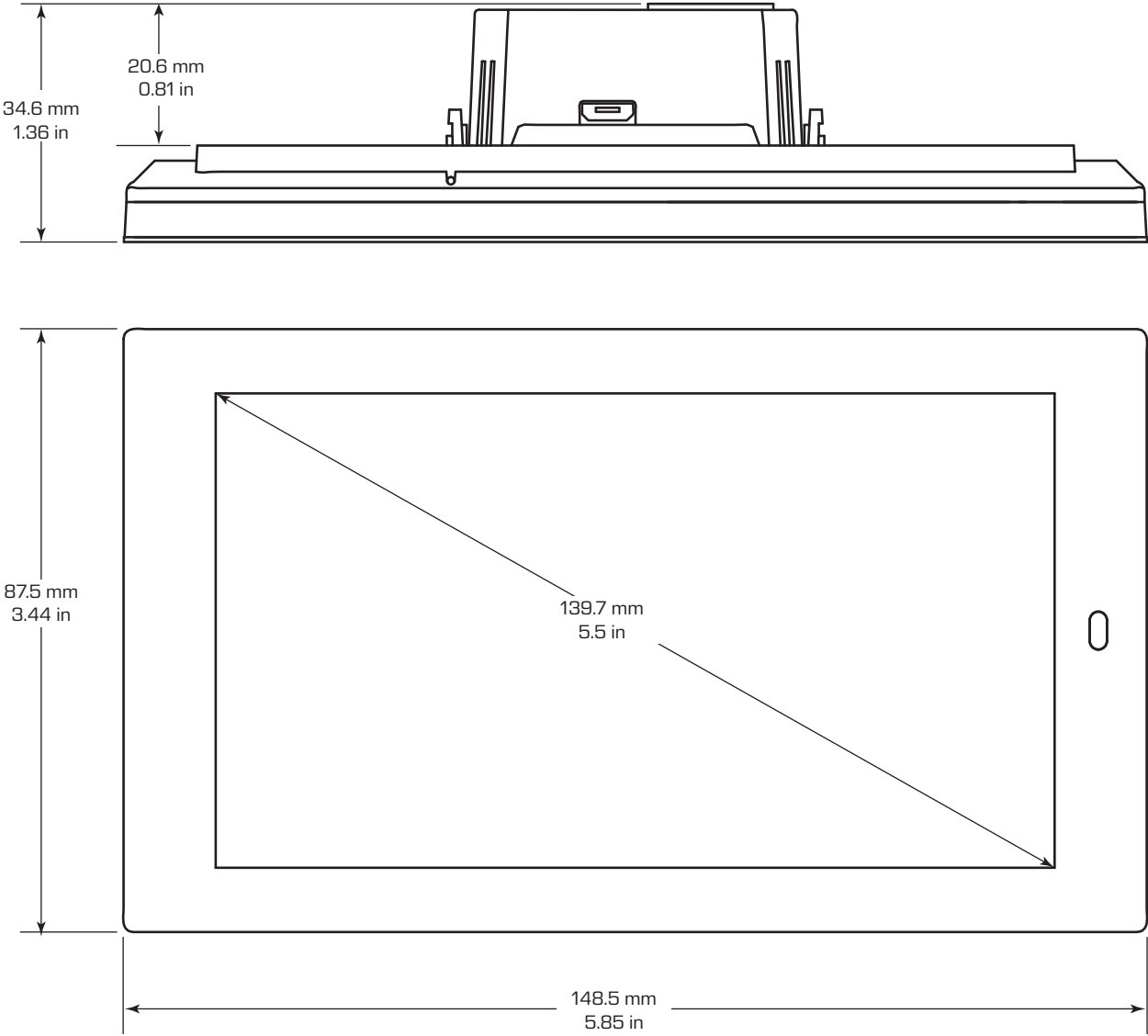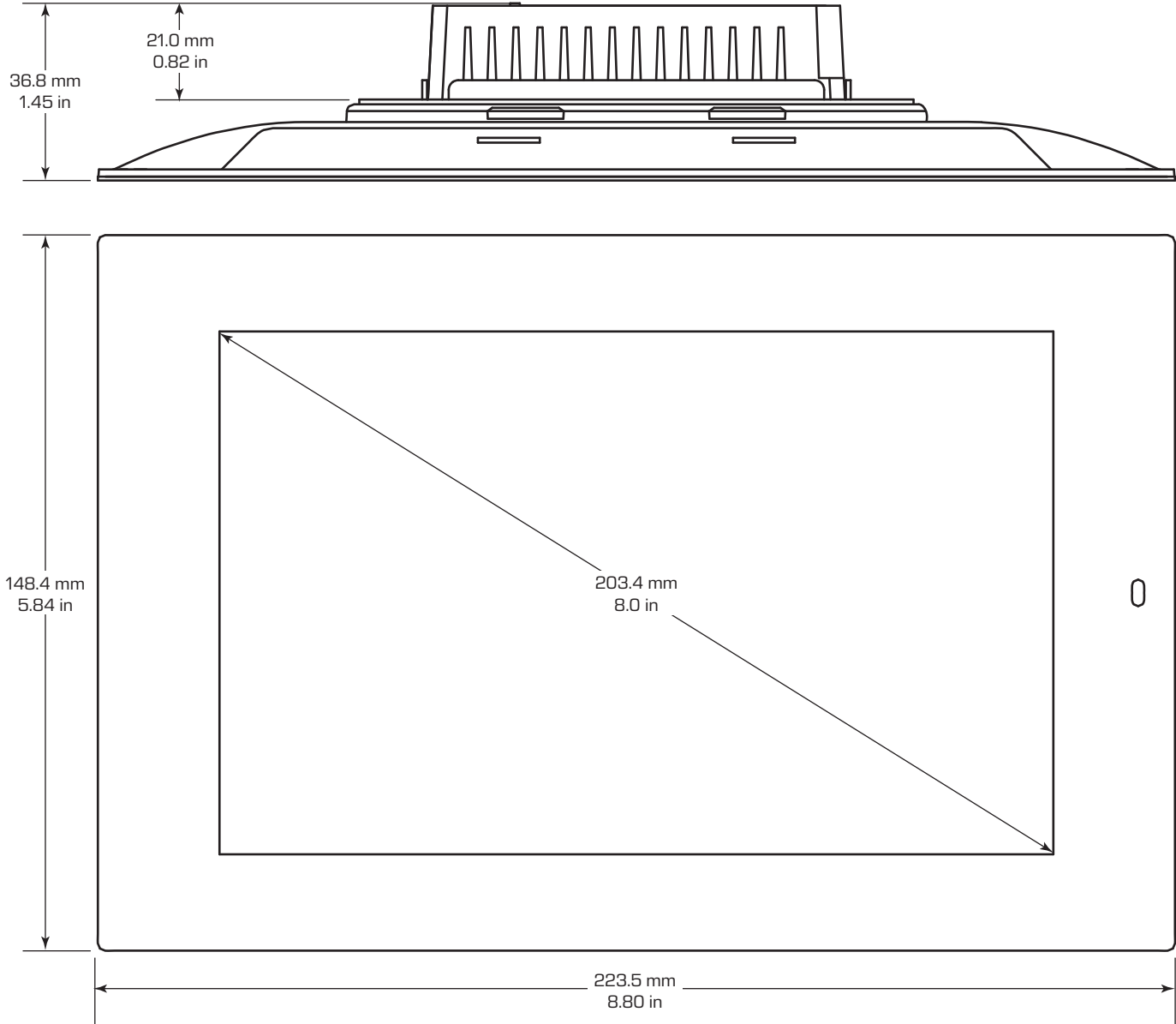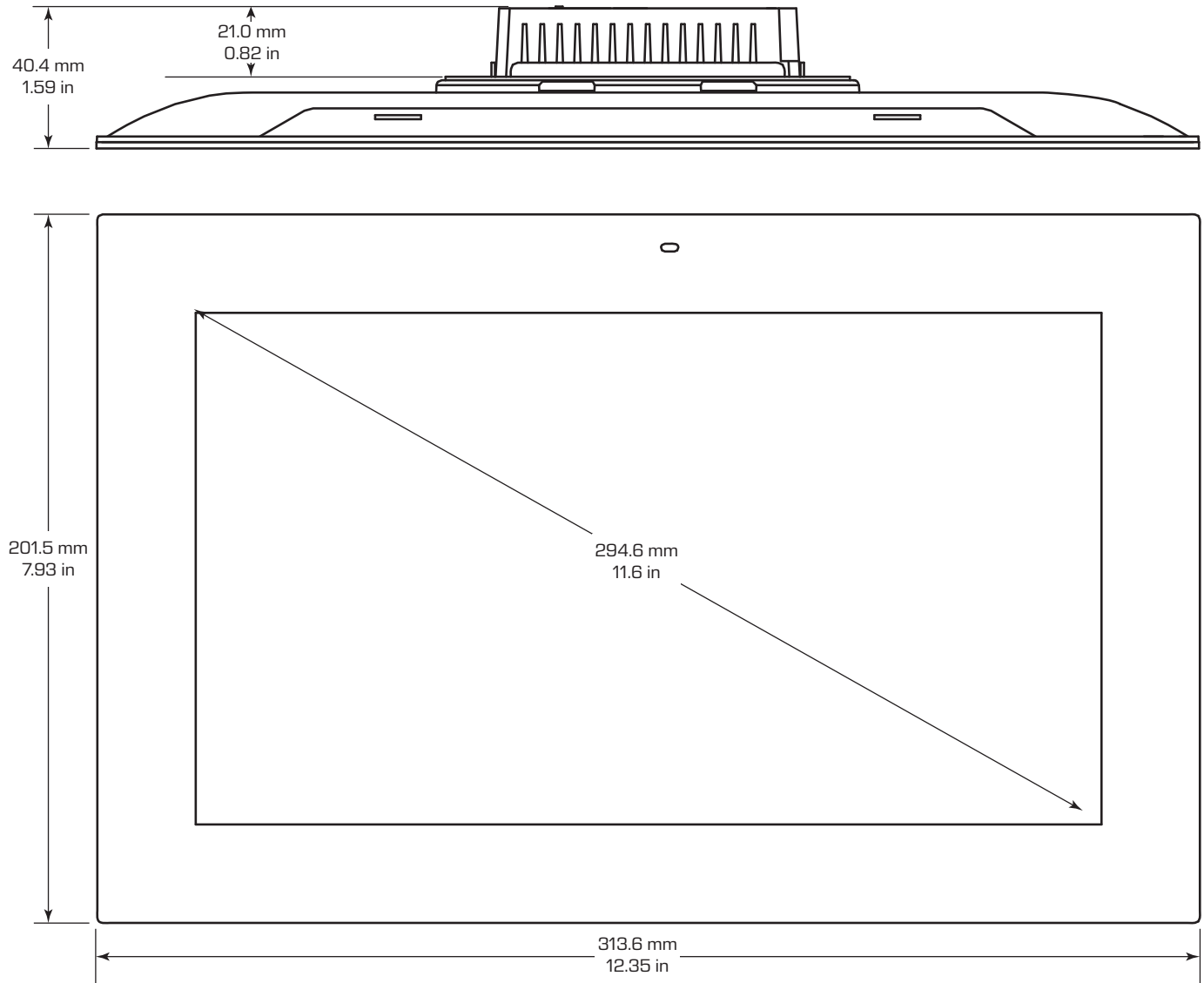
— Figure 19 —

Specifications

	TSC-55W-G2	TSC-80W-G2	TSC-116W-G2
Description	Capacitive Touch Surface, In-Plane Switching (IPS) technology, 16.7M colors.		
Display (Front Panel)			
Dimensions (HWD)			
inches	5.85 x 3.44 x 1.36	8.8 x 5.8 x 1.4	12.35 x 7.93 x 1.59
millimeters	148.5 x 87.5 x 34.6	223.5 x 148.4 x 36.3	313.6 x 201.5 x 40.4
User Interface (diagonal viewing area)	5.5" (127 mm)	8.0" (203 mm)	11.6" (295 mm)
Resolution	1280 x 720	1280 x 800	1920 x 1080
Brightness	450 Nits	400 Nits	350 Nits
Panel Orientation	Landscape / Portrait		
Rear Panel			
RJ-45	LAN, 1000 Mbps, LEDs for network status and activity		
Auxiliary Power Receptacle	TSC-55W-G2 only. 2-position latching Plug (not supplied) Manufacturer: JST Housing: VHR-2N Crimp terminals: SVH-21T-P1.1	Barrel connector: Negative contact – 5.5mm +/- 0.2mm Positive contact – 2.5mm +/- 0.2mm Length – 9.5mm +/- 0.3mm	
Power			
Power Over Ethernet	IEEE 802.3af class 3 PD (PoE). Receives power via LAN port		
Auxiliary	DC power supply (not included) +24VDC @ 0.5A minimum	DC power supply (not included) +24VDC @ 1.0A minimum	
Enclosure			
Wall Mount	Yes	Yes	Yes
Table Top	No	Optional table top stand accessory	Optional table top stand accessory
Weight			
Product Weight (net)	6.31 oz (179 g)	17.64 oz (500 g)	32.1 oz (910 g)
Shipping Weight (gross)	12.8 oz. (363g)	29.6 oz. (839g)	56.0 oz. (1588g)
Environment			
Operating Temperature	32°-122° F (0°-50° C)		
BTUs	17 typical	23 typical	30 typical
Humidity	5 to 85% RH, non-condensing		
Vibration	16 Grms		
Agency	IEEE 802.3af, IEEE 802.3ab, FCC 47 CFR Part 15 Class B, IC ICES-003, EN55032, EN55022, EN55024, EU ROHS DIR, CHINA ROHS DIR, WEEE, RCM, EFUP 10YR		

NOTE: Specifications subject to change without notice.

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Q-SYS™ Customer Support

Application Engineering and Technical Services

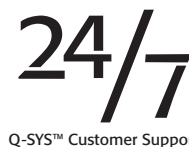Monday - Friday 7 AM to 5 PM PST (Excludes Holidays)

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Q-SYS 24/7 Emergency Support*

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+1.949.791.7722 (non U.S.)

*Q-SYS 24/7 Support is for Emergency assistance with Q-SYS systems only. 24/7 support guarantees a call back within 30 min after a message is left. Please include, Name, Company, Call Back Number and description of the Q-SYS emergency for prompt call back. If calling during business hours please use the standard support numbers above.

Q-SYS Support E-mail

qsyssupport@qsc.com

(Immediate e-mail response times not guaranteed)

QSC Technical Services

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Costa Mesa, CA 92626 U.S.

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TD-001553-01-A1