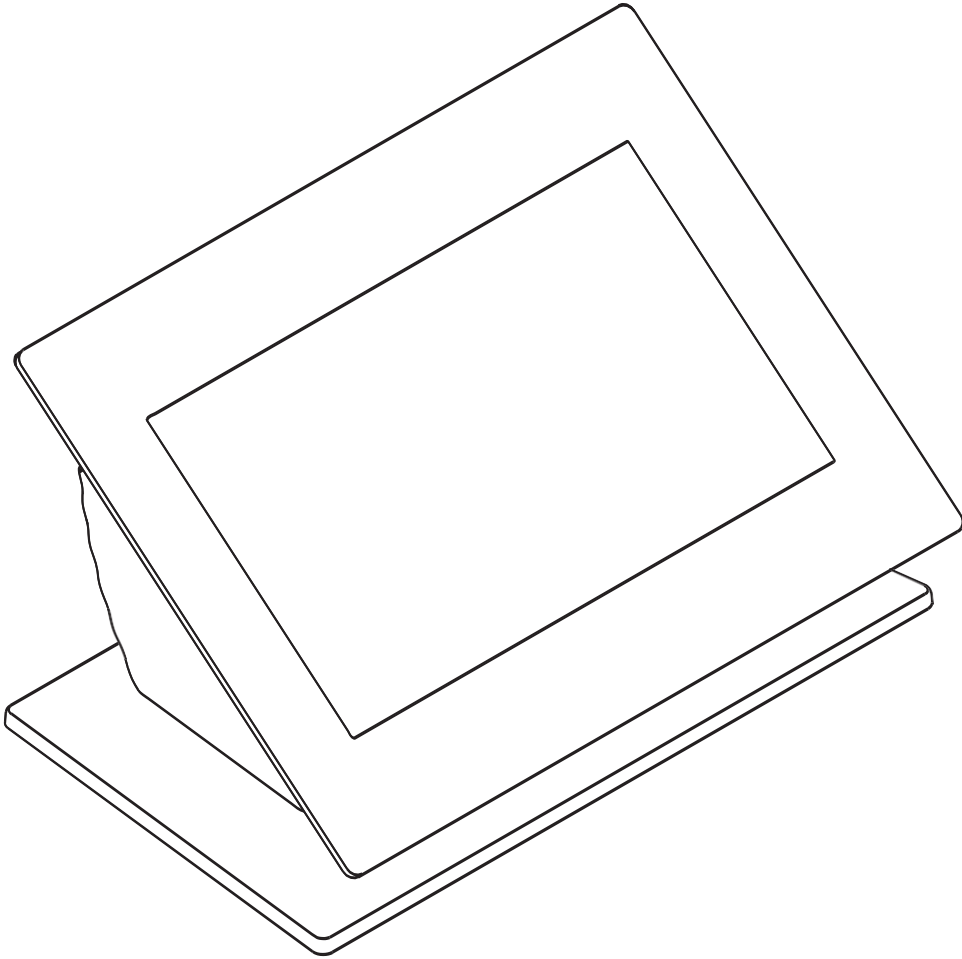# Hardware Installation Guide

Galaxy – Networked, Table-Mounted, 7" 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.

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.

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

WARNING!:   TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

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 Do not submerge the apparatus in water or liquids.

7 Do not use any aerosol spray, cleaner, disinfectant or fumigant on, near or into the apparatus. Clean only with a dry cloth.

8 Clean only with a dry cloth.

9 Do not block any ventilation opening. Install in accordance with the manufacturer's instructions.

10 Keep ventilation opening free of dust or other matter.

11 Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

12 Do not unplug the unit by pulling on the cord, use the plug.

13 Only use attachments/accessories specified by the manufacturer.

14 Unplug this apparatus during lightning storms or when unused for long periods of time.

15 Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

16 Adhere to all applicable, local codes.

17 Consult a licensed, professional engineer when any doubt or questions arise regarding a physical equipment installation.

Maintenance and Repair

WARNING!: Advanced technology, e.g., the use of modern materials and powerful electronics, requires specially adapted maintenance and repair methods. To avoid a danger of subsequent damage to the apparatus, injuries to persons and/or the creation of additional safety hazards, all maintenance or repair work on the apparatus should be performed only by a Zykronix authorized service station or an authorized Zykronix International Distributor. Zykronix is not responsible for any injury, harm or related damages arising from any failure of the customer, owner or user of the apparatus to facilitate those repairs.

FCC Statement

This device complies with Part 15 of FCC Rules. Operation is Subject to following two conditions:

1. This device may not cause harmful interference, and

2. This device must accept any interference received including interference that cause undesired operation.

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.

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 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.

IC Statement

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and

2. This device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. l'appareil ne doit pas produire de brouillage;

2. l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

RoHS STATEMENT

The Zykronix Galaxy is in compliance with European Directive 2011/65/EU – Restriction of Hazardous Substances (RoHS2).

The Zykronix Galaxy is in compliance with "China RoHS" directives. The following chart is provided for product use in China and its territories:

部件名称 (Part Name)	Z-SYS Galaxy					
	有害物质 (Hazardous Substances)					
	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	X	O	O	O	O	O
机壳装配件 (Chassis	X	O	O	O	O	O

本表格依据 SJ/T 11364 的规定编制。

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。 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。

（目前由于技术或经济的原因暂时无法实现替代或减量化。）

This table is prepared following the requirement of SJ/T 11364.
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: 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.
(Replacement and reduction of content cannot be achieved currently because of the technical or economic reason.)

Warranty

For a copy of the Zykronix Limited Warranty, visit the Zykronix website at www.Zykronix.com

Introduction

The Z-SYS Galaxy series touchscreen controllers provide remote management services for a Z-SYS audio system. The functionality of the Galaxy touchscreen controller is defined and configured by the system designer using Z-SYS Designer. Refer to the Z-SYS Designer on line help for setup and operation. Z-SYS Designer software can be downloaded from the Zykronix website (www.Zykronix.com).
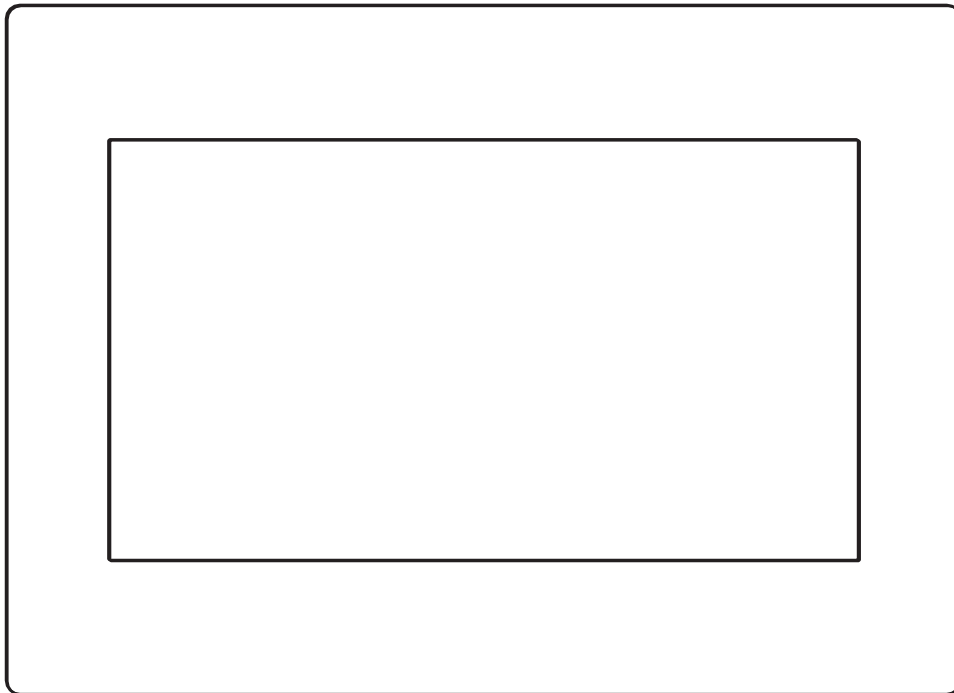
Galaxy Features

The Galaxy series products are network enabled, projected-capacitive touchscreen, control panels. The Galaxy products are designed to connect to a Z-SYS system via Z-LAN or to an auxiliary network to which the system Core Processor(s) is connected. The Galaxy products offer low latency uncompressed audio services via USB, allowing the Galaxy products to join a Z-LAN network via standard 10/100/1000 Mbps Ethernet connections.

The Galaxy products use a color graphics display with a 400 nit anti-glare LCD. The control surface is a capacitive touch interface that is reliable, bright, and easy to use.

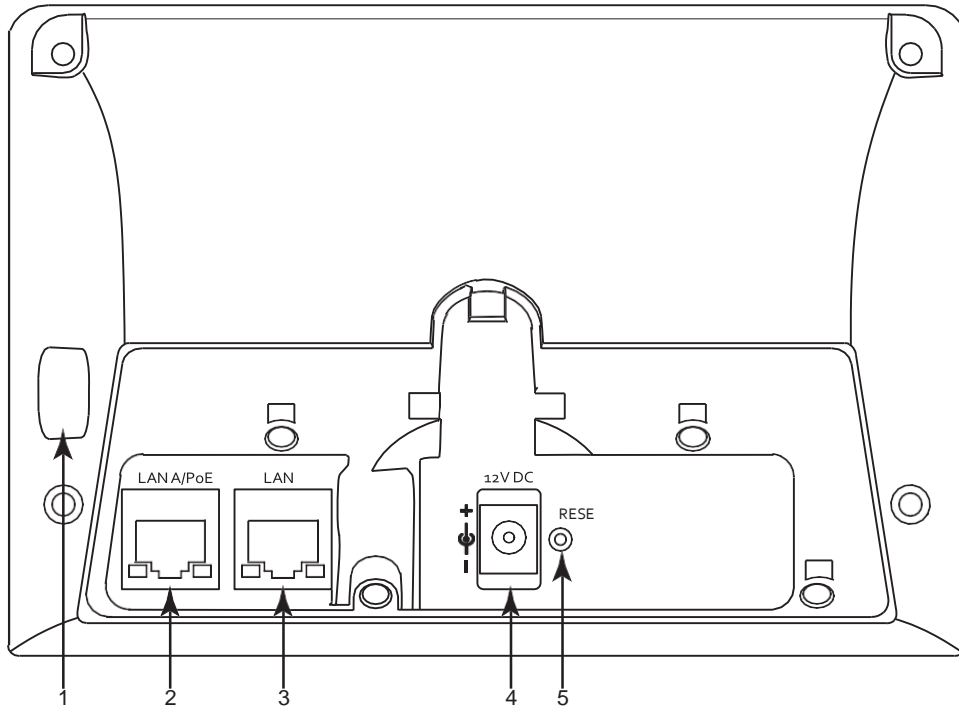The Galaxy can be mounted on a table, desk, or other similar horizontal surface.

Galaxy Front Panel Features

— Figure 1 —

1. Capacitive-touch control surface and LCD viewing area (7" diagonal)

Galaxy Rear Panel Features

— Figure
2 —

1. USB 2.0 Micro-AB OTG
   interface

2. Z-SYS LAN A with PoE
   (RJ45)

3. Z-SYS LAN B
   (redundancy) (RJ45)

4. 12V DC AUX Power input (power supply not
   included)

5. Unit Reset Button

Touchscreen Galaxy Packing List

1. Z-SYS Galaxy Touchscreen assembly (1)

2. Through-the-table Mounting Pipe (1)

3. Mounting-Pipe Rubber Washer (1)

4. Mounting-Pipe Mounting Nut (1)

5. Hardware Installation Guide (TD-000508) (1)

6. Warranty Statement (TD-000453) (1)

7. USB cable (USB 2.0 Host male to USB
   Micro-B male) (1)

Installation

The Z-SYS Galaxy is designed to be mounted on a table, or desk.

General Requirements

The Galaxy

- Must have access to the Z-LAN Ethernet.
- Must be mounted with sufficient space for adequate ventilation.
- Mounting surface Thickness:
  - Maximum – 4" (102 mm),
 - Minimum – Not specified

Power Source

- PoE (Power over Ethernet – IEEE 802.3af class 3 device) LAN A only
- 12V DC AUX Power source (not supplied)
  - 12V DC @ 1A (12W)
  - Barrel connector:
    - » Negative contact – 5.5mm +/- 0.2mm
    - » Positive contact – 2.5mm +/- 0.2mm
    - » Length - 9.5mm +/- 0.3mm

Installation Configuration

Select one of the following:

1. Through the Table Mounting (Figure 3)
   a. Galaxy
   b. Mounting Surface (table, desk...)

   c. Mounting Pipe - 31.6 mm (1.25 in), Nut and Washer
   d. Galaxy Cables - through the table

2. Free Standing (Figure 4)
   a. Galaxy

   b. Mounting Surface (table, desk...)

   c. Galaxy Cables - over the table
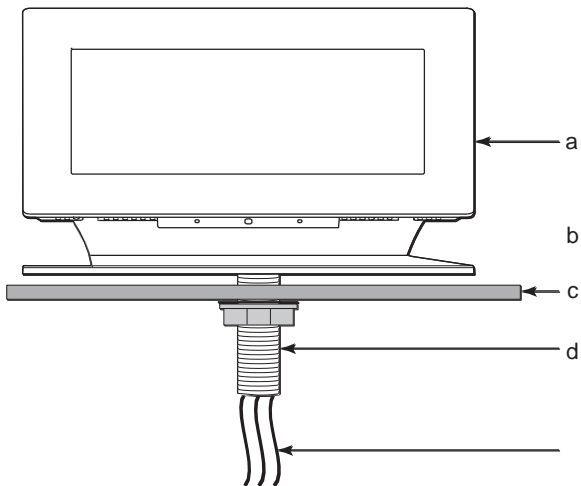
— Figure 3 —

— Figure 4 —

Prepare for Installation (both options)

Refer to Figure 5

1. Remove the Galaxy from the box.

2. Remove 4 screws (1) from the bottom of the assembly. Save for later use.

3. Remove the Base (2).

⚠ **NOTE:** If the Cable Cover (3) falls off during disassembly, be sure to replace it before re-installing the Base (2).
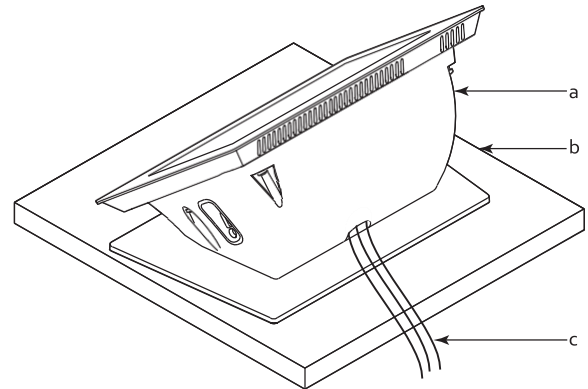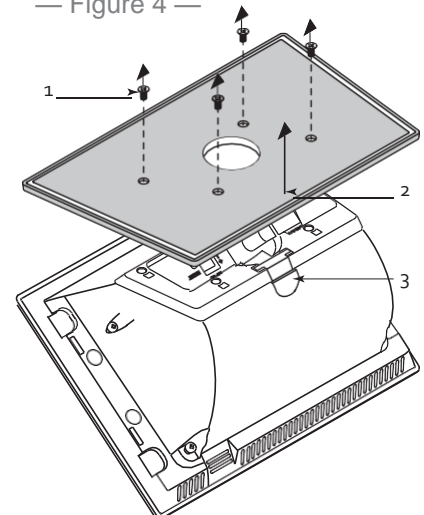
— Figure 5 —

Through-the-Table Mounting

1. Drill a 33.3 mm (1-5/16 inch) hole through the mounting surface in the spot where you want to mount the Galaxy.

Refer to Figure 6

2. Screw end with fewer threads on Mounting Pipe (1) into the bottom

side of the Base (2). Refer to Figure 7

3. Run the cables (1) through the Nut (2), Washer (3), mounting surface (4), and Mounting Pipe/ Base assembly (5)

Refer to Figure 8

4. Connect the cables to the proper connectors in the Galaxy

    a. LAN A/PoE - required for network. (PoE is optional if you use the 12V DC AUX Power source)

    b. LAN B - optional (for redundant network)

    c. 12V DC AUX Power input - optional (required if you are

not using PoE) Refer to Figure 9

NOTE: If the Cable Cover (3) fell off during disassembly, be sure to replace it before re- installing the Base (1).

5. Carefully place the Base (1) onto the Galaxy body (2). Make sure the cables are not pinched.

6. Secure the Base to the Galaxy with the 4 screws (3) removed in "Prepare for Installation (both options)".
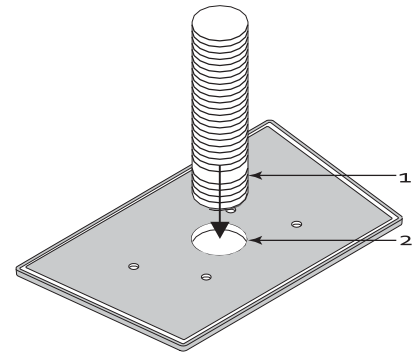
Refer to Figure 10

7. Feed the cables (1) through the mounting surface (2) along with the Mounting Pipe (3).

8. Move the Washer (4) onto the Mounting Pipe (3), then thread the Nut (5) onto the Mounting Pipe.
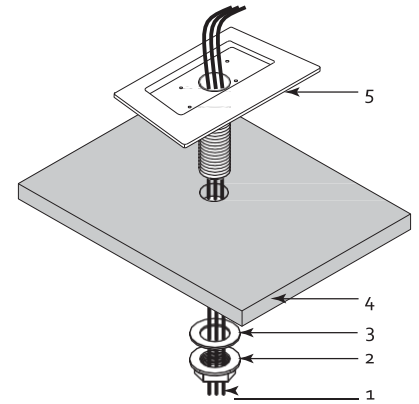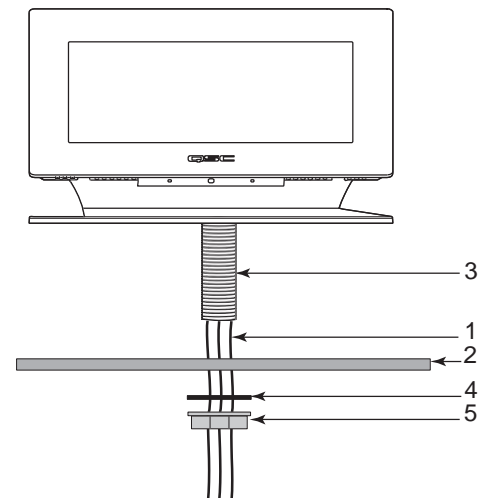
9. Tighten the Nut (5) as needed.
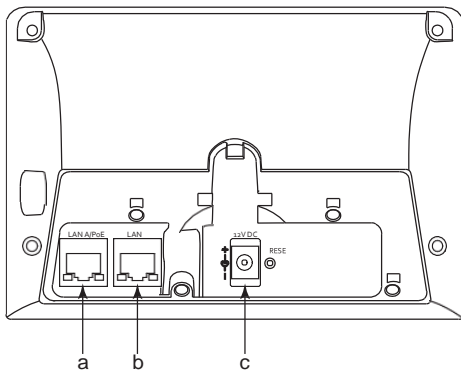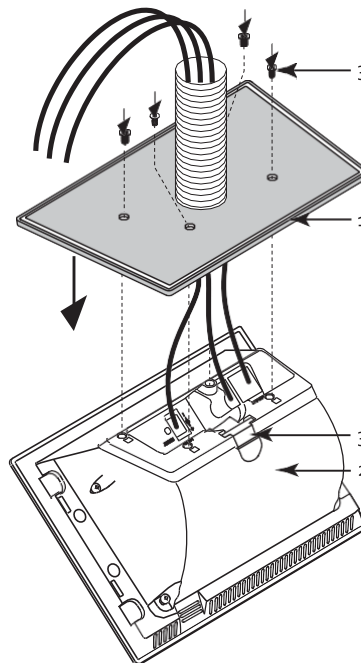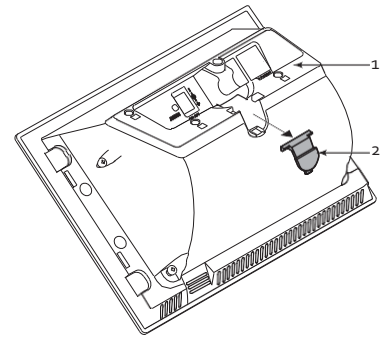
— Figure 6 —

— Figure 7 —

— Figure 8 —

— Figure 9 —

— Figure 10

Free-Standing Installation

1. Perform the steps in "Prepare for Installation (both

options)" on page 7. Refer to Figure 11

2. Remove the Cable Cover (2) from the

Galaxy (1). Refer to Figure 12

3. Connect the cables to the proper connectors in the Galaxy

    a. LAN A/PoE - required for network. (PoE is optional if you use the 12V DC AUX Power)

    b. LAN B - optional (for redundant network)

    c. 12V DC AUX Power input - optional (required if you are not using PoE)

4. Carefully route the cables as shown.

— Figure 11 —
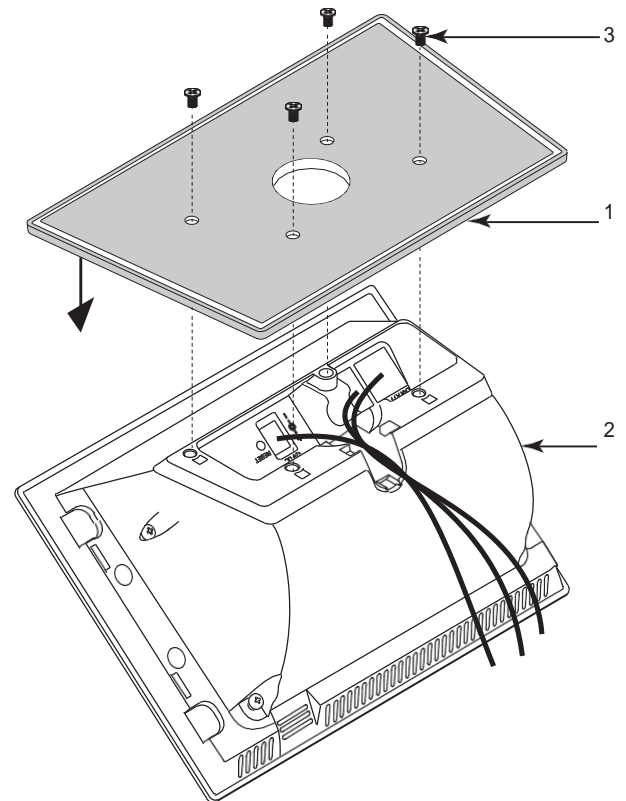
⚠️ **NOTE:** Some cables may have a protective boot over the RJ45 connector. The boots may not fit into the Galaxy cable cavity.

Refer to Figure 13

5. Carefully place the Base (1) onto the Galaxy body (2). Make sure the cables are not pinched.

6. Secure the Base to the Galaxy with the 4 screws (3) removed in "Prepare for Installation (both options)".

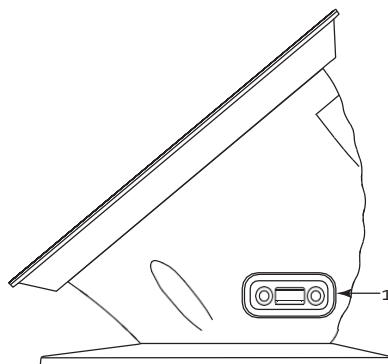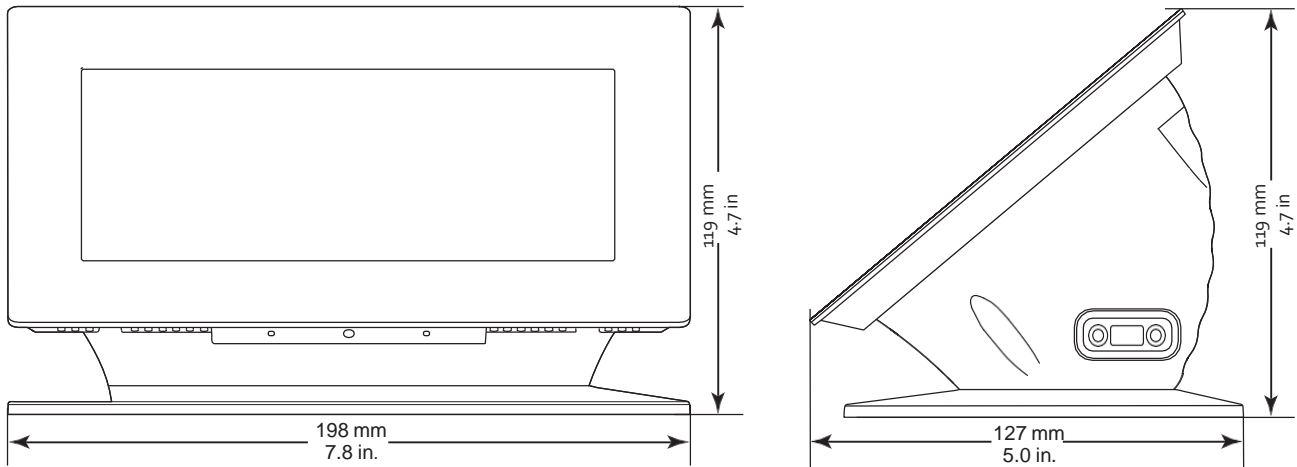LAB A / PoE   LAB   12V   RES
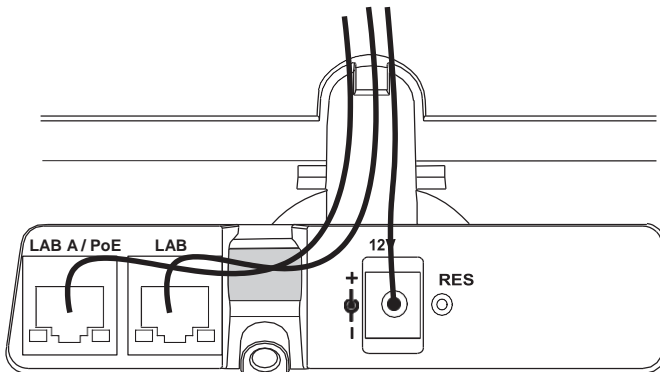
— Figure 12 —

USB

Refer to Figure 14 (1)

USB 2.0 Micro-AB
interface

— Figure 14 —

— Figure 13 —

Galaxy Dimensions

| 198 mm | 127 mm |
| 7.8 in. | 5.0 in. |

Galaxy Specifications

Display

LCD	7" Projected Capacitive Touch (five coordinate simultaneous touch sensitivity)
Luminance:	400 nits (400 lumen/candela per square meter)
Resolution:	800x400

Rear Panel Control	Reset Button (Use a paper clip or similar tool to

reboot the unit) Power

PoE (Power over Ethernet)	IEEE 802.3af class 3 device via LAN A
Optional Power Source (not included)	12V DC AUX Power source (not supplied) 12V DC @ 1A (12W) Barrel connector: Negative contact – 5.5mm +/- 0.2mm Positive contact – 2.5mm +/- 0.2mm Length - 9.5mm +/- 0.3mm

Wireless connectivity	Bluetooth 2.0 & 4.0 + HS

Rear Panel Connectors

RJ45 (x2)	LAN A (PoE) and LAN B ports (10/100/1000 Mbps)
Barrel connector: Power inlet	Accommodates 12V DC AUX

Power source Side Connector	USB 2.0 Micro-AB OTG
Operating temperature range	0C to 50C
Dimensions (HWD)	4.7" x 7.8" x 5.0" (119 mm x 198 mm x

127 mm) Weight

Net	1.9 lbs. (.86 kg)
Shipping	3.1 lbs. (1.4 kg)

Environmental

BTUs	40 max, 23 typical
Humidity	90% rh, non-condensing
Vibration	20 Grms