GAI-TRONICS®

A HUBBELL COMPANY

Model 12576-500 Desk Set Access Panel Docking Station with VFD

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Introduction

The desk-top mounted Model 12576-500 Docking Station is an optional accessory for the Model 727-001 Desk Set Access Panel. The access panel/docking station combination is a component of the GAI-Tronics SmartSeries ADVANCE system that is used for public address, site communication, and emergency notification.

How to Use the Assembly

Application

The Model 12576-500 Docking Station is a desktop-mounted assembly that is used in conjunction with the Model 727-001 Desk Set Access Panel. The Model 12576-500 Docking Station consists of the following main components:

- Vacuum fluorescent display (VFD)
- Two configured push buttons, ACK/NEXT and PREV
- Piezo alarm with volume control knob

When the Model 727-001 Desk Set Access Panel is connected to the Model 12576-500 Docking Station, SmartSeries ADVANCE system activity can be monitored via the VFD. The piezo audible alarm is typically used to alert personnel of updated system status.

The ACK/NEXT push button contains an LED that is pre-defined to provide system status information, while the button has been pre-defined to acknowledge faults or to scroll to the next active fault in the system. The PREV push button is pre-defined to allow the operator the ability to scroll to the previous fault that has been acknowledged but is still active.

The piezo alarm and its associated volume control are located on the rear of the unit. The volume control knob that allows the operator to adjust the output level of the piezo alarm from off to full.
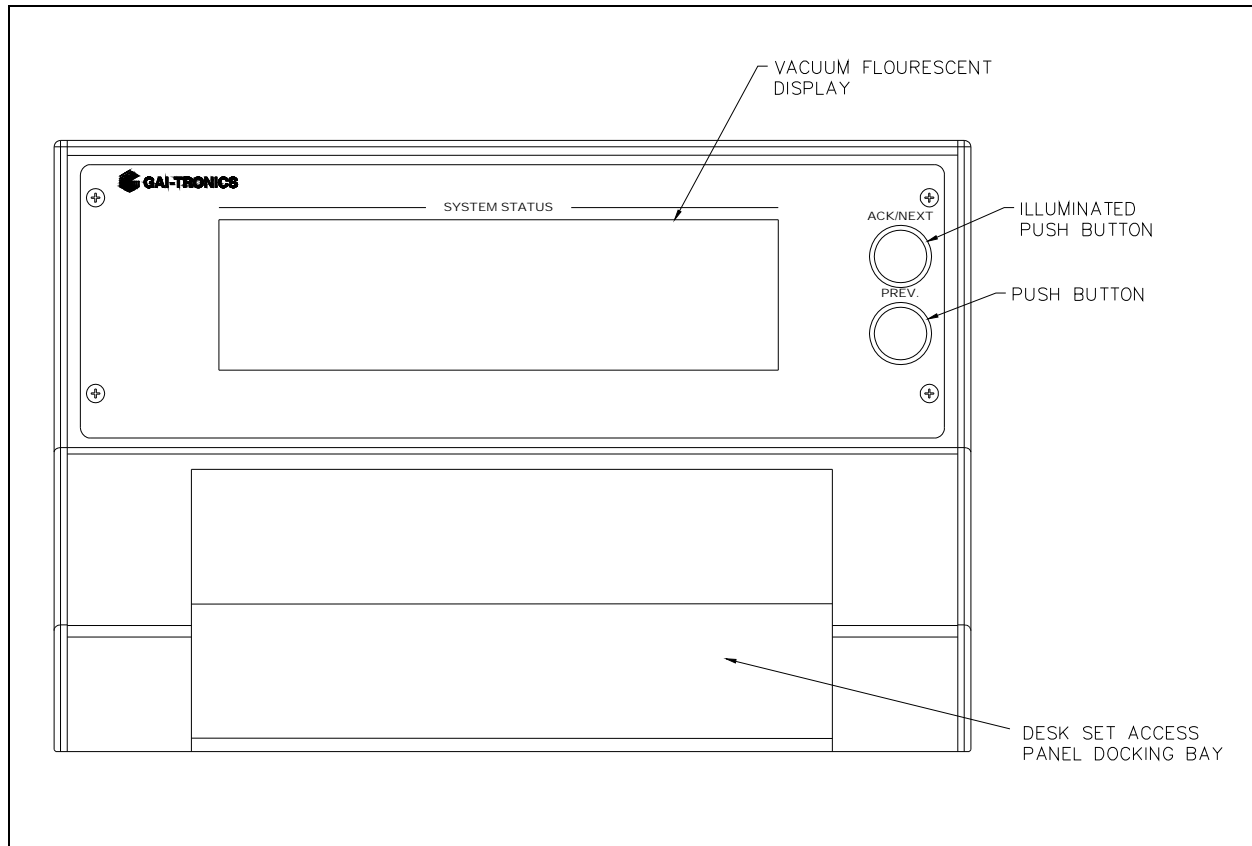
Hardware Configuration

Figure 1. Model 12576-500 Docking Station

Interfaces

NOTE: All connections, except for the optional desk mic, are made to the rear of the docking station instead of the rear of the desk set.

A 3-conductor ac power cord is included with the access panel. One end of the power cord is connected to the 3-prong connector located on the back of the power supply, while the other end is plugged into a grounded ac electrical outlet. The compatible ac input voltages are 120 V ac/240 V ac (auto-ranging), 50/60 Hz. The 5-pin DIN plug from the power supply is connected to the 5-pin DIN jack on the rear of the access panel.

The data and audio connection to the system control unit is provided by an RJ-45 jack on the rear of the access panel. The following are the physical connections of the RJ-45 jack:

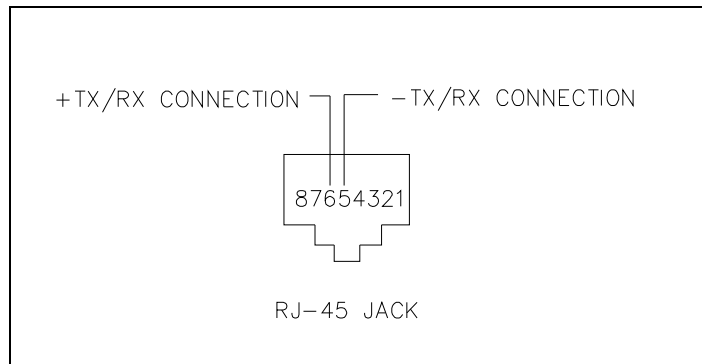| Pin	Connection
1	No connection
2	No connection
3	No connection
4	No connection
5	− TX/RX connection
6	+ TX/RX connection
7	No connection
8	No connection

Figure 2.

The DB-15 connector on the rear of the docking station is used for connecting the desk set to the docking station. This connection allows the user to connect the power and the data/audio connection to the rear of the docking station to ease overall installation of the docking station. All of the data lines for the VFD and the two push buttons are also combined into the DB-15 connection made to the desk set. If the optional desk mic is used, the connection is still made at the rear of the desk set.
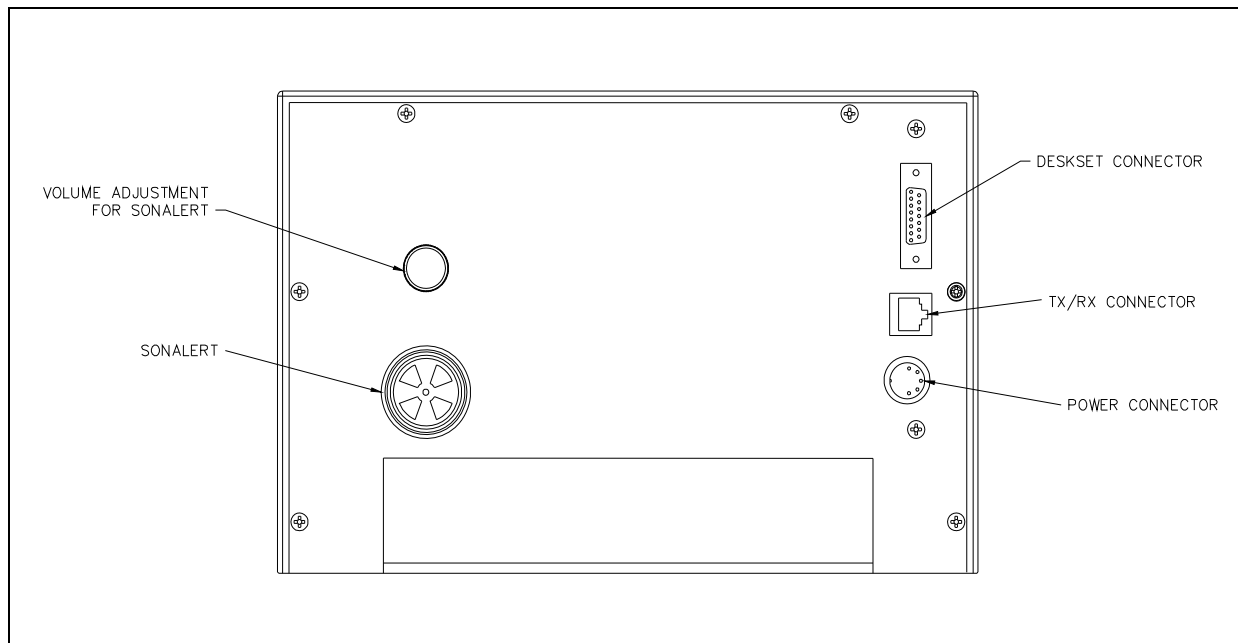

Figure 3. Model 12576-500 Docking Station Typical Connections (Rear View)

Installation

⚠WARNING⚠ **Please adhere to all warnings, safety, and operating instructions on the unit and in the installation manual.**

1. **Disconnect power before servicing.**
2. **Avoid servicing the unit during electrical storms.**
3. **Do not touch uninsulated wires.**

Mounting

Remove the docking station from its protective packing. Simply position the docking station on a sturdy horizontal surface in a convenient location.

NOTE: There are two #8-32 threaded inserts located on the bottom of the assembly that can be used to anchor the assembly to a horizontal surface. The maximum screw penetration that is allowed from the base of the docking station to the internal hardware is 0.375 inches (9.5 mm).

Data Connection

Connect the RJ-11 data cable from the RJ-45 jack on the rear of the docking station to the API connecting block located in the ADVANCE control cabinet. If the 7-foot cable is not long enough, use a twisted-pair cable terminated on one end with either a RJ-11 or RJ-45 plug. This connection is not polarity-sensitive and may be wired in either orientation.

NOTE: A 7-foot RJ-11 data cable is included with the desk set assembly.

Power

Connect the 3-conductor ac power cord provided with the docking station as follows:

1. Plug one end of the power cord into the 3-prong power connector at the rear of the power supply.

2. Plug the 5-pin DIN connector of the power supply into the 5-pin DIN jack on the rear of the docking station.

3. Connect one end of the DB-15 cable to the desk set and slide the other end through the center of the docking station, so that it is visible at the rear of the docking station.

4. If an optional desk mic has been purchased, slide the XLR plug on the end of the desk mic cable through the center of the docking station and connect it to the desk set.

5. Set the desk set feet into the holes in the docking station allowing the desk set to lock into position.

6. Connect the other end of the DB-15 cable to the rear of the docking station.

7. Plug the power supply power cord into a grounded ac electrical outlet.

8. The assembly does not contain an integral power switch. The desk set access panel and docking station will power up immediately.

Operation

Operation of this assembly is highly dependent on the attached system's software configuration. The software is factory-created and subsequently downloaded to the associated ADVANCE system control unit via an external PC at system start-up.

The docking station in conjunction with the desk set access panel offers several standard features in addition to the ones that are listed in the desk set access panel's manual. These include a VFD to provide system status in a text format, a piezo alarm to alert a user of a change in system status, and two push buttons that can be used to acknowledge and scroll through system faults listed on the VFD.

Vacuum Fluorescent Display (VFD) and Control

The VFD displays status messages from the system control unit in a text format. Typically, the push buttons to the right of the VFD are configured for NEXT and PREVIOUS functions. Use the NEXT push button to view each additional new message. The NEXT push button can be configured to flash when a new message is available. Use the PREVIOUS to cycle backward in order to review old status messages.

Piezo Alarm

The piezo alarm is an audible indicator. It is typically configured to sound when a new message is available on the VFD. If configured as described above, press the NEXT push button to display each new message. When the last available new message has been displayed, the piezo alarm turns off. The exact details of the operation of the piezo alarm are configurable. Located on the rear of the docking station is a volume control knob that can be used to adjust the volume level of the piezo alarm from off to full on.

How to Diagnose Assembly Faults

Servicing Guidelines

1. Notify plant personnel of a system shutdown prior to servicing the unit.

2. Disconnect power before connecting external wiring or installing or removing the access panel.

Symptom	Action
Access panel assembly does not function. (No push buttons detected, no LED lamps activate, VFD is blank, and handset is not functioning.)	• Verify ac power is applied to power supply. Verify that ac power cord is plugged in. Also verify that ac outlet is active. • Verify that the LED is lit on top of the desktop power supply. • Verify that the data cable is properly connected between the docking station and the control unit. • Call for service of the access panel.
LEDs are blinking and sounder is beeping.	• Verify that the DB-15 cable is properly connected to both the desk set and the docking station.
ACK/NEXT and PREV push buttons are not detected.	• Verify that the DB-15 cable is properly connected to both the desk set and the docking station. • Call for service of the access panel.
LED lamp for the ACK/NEXT push button does not activate.	• Verify that the DB-15 cable is properly connected to both the desk set and the docking station. • Verify that an LED lamp is installed in the faulty illuminated push button. • Replace the faulty LED lamp. • Call for service of the access panel.
Piezo alarm does not function.	• Ensure that the piezo volume control is not turned all the way off. • Call for service of the access panel.
VFD does not function, even during a lamp test.	Call for service of the access panel.

Specifications

Electrical

Input voltage .... 120 V ac/240 V ac
Auto-ranging

Input frequency .... 50/60 Hz

Input current draw.. 162 mA @ 120 V ac, nominal
290 mA @120 V ac, maximum
600 mA @120 V ac at startup

Note: This is the combined total current for the desk set and the docking station.

Environmental

Operating temperature range.. +32° F to +120° F (0° C to +49° C)
Relative humidity... Non-condensing 85% max.

Mechanical

Unit dimensions ....11.06 W × 13.61 L × 7.44 D inches (281.0 × 345.7 × 189.1 mm)
Unit weight.. 4.75 lbs.
Docking Station material .... Black ABS
External controls .... Two push buttons
One LED
Piezo Alarm Volume Control

Speaker Volume Control Replacement Parts

Model Number	Description
51002-209	Lens /LED Lamp Replacement
61002-007	Replacement Line Cord
61535-028	Replacement Communication Cable

Reference Material

Reference to Assembly/Model Drawings

Published by	Title	GAI-Tronics Ref. No.
GAI-Tronics	Model 12576-500 Desk Set Access Panel Docking Station Outline	73062

Warranty

Equipment. GAI-Tronics warrants for a period of one (1) year from the date of shipment, that any GAI-Tronics equipment supplied hereunder shall be free of defects in material and workmanship, shall comply with the then-current product specifications and product literature, and if applicable, shall be fit for the purpose specified in the agreed-upon quotation or proposal document. If (a) Seller's goods prove to be defective in workmanship and/or material under normal and proper usage, or unfit for the purpose specified and agreed upon, and (b) Buyer's claim is made within the warranty period set forth above, Buyer may return such goods to GAI-Tronics' nearest depot repair facility, freight prepaid, at which time they will be repaired or replaced, at Seller's option, without charge to Buyer. Repair or replacement shall be Buyer's sole and exclusive remedy. The warranty period on any repaired or replacement equipment shall be the greater of the ninety (90) day repair warranty or one (1) year from the date the original equipment was shipped. In no event shall GAI-Tronics warranty obligations with respect to equipment exceed 100% of the total cost of the equipment supplied hereunder. Buyer may also be entitled to the manufacturer's warranty on any third-party goods supplied by GAI-Tronics hereunder. The applicability of any such third-party warranty will be determined by GAI-Tronics.

Services. Any services GAI-Tronics provides hereunder, whether directly or through subcontractors, shall be performed in accordance with the standard of care with which such services are normally provided in the industry. If the services fail to meet the applicable industry standard, GAI-Tronics will re-perform such services at no cost to buyer to correct said deficiency to Company's satisfaction provided any and all issues are identified prior to the demobilization of the Contractor's personnel from the work site. Re-performance of services shall be Buyer's sole and exclusive remedy, and in no event shall GAI-Tronics warranty obligations with respect to services exceed 100% of the total cost of the services provided hereunder.

Warranty Periods. Every claim by Buyer alleging a defect in the goods and/or services provided hereunder shall be deemed waived unless such claim is made in writing within the applicable warranty periods as set forth above. Provided, however, that if the defect complained of is latent and not discoverable within the above warranty periods, every claim arising on account of such latent defect shall be deemed waived unless it is made in writing within a reasonable time after such latent defect is or should have been discovered by Buyer.

Limitations / Exclusions. The warranties herein shall not apply to, and GAI-Tronics shall not be responsible for, any damage to the goods or failure of the services supplied hereunder, to the extent caused by Buyer's neglect, failure to follow operational and maintenance procedures provided with the equipment, or the use of technicians not specifically authorized by GAI-Tronics to maintain or service the equipment. THE WARRANTIES AND REMEDIES CONTAINED HEREIN ARE IN LIEU OF AND EXCLUDE ALL OTHER WARRANTIES AND REMEDIES, WHETHER EXPRESS OR IMPLIED BY OPERATION OF LAW OR OTHERWISE, INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Return Policy

If the equipment requires service, contact your Regional Service Center for a return authorization number (RA#). Equipment should be shipped prepaid to GAI-Tronics with a return authorization number and a purchase order number. If the equipment is under warranty, repairs or a replacement will be made in accordance with the warranty policy set forth above. Please include a written explanation of all defects to assist our technicians in their troubleshooting efforts.

Call 800-492-1212 (inside the USA) or 610-777-1374 (outside the USA) for help identifying the Regional Service Center closest to you.