Alarm Controls TS-20D

TS-20D Under Desk Push Button DPDT Alternate Action

Brand: Alarm Controls

INTRODUCTION

The Alarm Controls TS-20D is a robust under-desk push button designed for various control applications requiring a Double Pole Double Throw (DPDT) alternate action switch. This device is ideal for discreet installation, providing reliable latching contact closure for security, access control, or industrial automation systems.

SAFETY INFORMATION

Please read and understand all instructions before installing or operating the TS-20D. Failure to follow these instructions may result in damage to the device, property, or personal injury.

- **Electrical Safety:** Installation should only be performed by qualified personnel. Disconnect all power to the circuit before wiring.
- **Mounting:** Ensure the mounting surface is stable and can support the device securely.
- **Intended Use:** Use this product only for its intended purpose as a control switch.
- **Environmental Conditions:** Do not expose the device to extreme temperatures, moisture, or corrosive environments.

PACKAGE CONTENTS

Verify that all items are present before beginning installation:

- 1 x TS-20D Under Desk Push Button
- Mounting Screws (typically included, but may vary)
- Installation Template (if applicable, not specified but common)

PRODUCT OVERVIEW

Figure 1: Alarm Controls TS-20D Under Desk Push Button. This image shows the compact design of the push button, typically featuring a durable casing and the push button mechanism itself, designed for discreet mounting.

The TS-20D is an alternate action (latching) push button switch. This means that when the button is pressed, it latches into the "ON" position, and remains there until pressed again to return to the "OFF" position. It features Double Pole Double Throw (DPDT) contacts, providing two independent sets of Normally Open (NO) and Normally Closed (NC) contacts, allowing for versatile wiring configurations.

- **Push Button:** The primary interface for activation.
- **Mounting Flange/Bracket:** For secure installation under a desk or similar surface.
- **Terminal Block:** For electrical connections (typically screw terminals).

Setup and Installation

Follow these steps for proper installation of the TS-20D:

1. **Choose Mounting Location:** Select a discreet and secure location under a desk, counter, or similar surface. Ensure there is sufficient space for the button and wiring, and that the surface material can hold the mounting screws.

2. **Prepare Wiring:** Disconnect all power to the circuit where the TS-20D will be connected. Identify the wires for your application (e.g., power, control signal, common).

3. **Mount the Button:**

   - Position the TS-20D in the desired location.
   - Mark the screw hole locations using a pencil.
   - Drill pilot holes if necessary, appropriate for the mounting screws and surface material.
   - Secure the TS-20D using the provided mounting screws. Do not overtighten.

4. **Wire the Contacts:** The TS-20D features DPDT contacts. Refer to the wiring diagram specific to your application.

   A DPDT switch has 6 terminals: two common (COM), two normally open (NO), and two normally closed (NC). When the button is in its default (unpressed) state, COM is connected to NC. When pressed, COM connects to NO.

   - Connect your input signal to the Common (COM) terminals.
   - Connect your output/controlled device to either the Normally Open (NO) or Normally Closed (NC) terminals, depending on whether you want the circuit to be active when the button is pressed (NO) or released (NC).
   - Ensure all connections are secure and insulated.

5. **Test Operation:** Once wiring is complete and secure, reapply power to the circuit. Test the button's functionality to ensure it operates as expected for your application.

Operating Instructions

The TS-20D is an alternate action (latching) push button. Its operation is straightforward:

- **To Activate:** Press the button firmly. The button will click and remain in the depressed position, changing the state of its DPDT contacts.
- **To Deactivate:** Press the button firmly again. The button will click and return to its original extended position, reverting the state of its DPDT contacts.

The specific action (e.g., locking/unlocking a door, activating/deactivating an alarm) depends on how the DPDT contacts are wired into your system.

MAINTENANCE

The TS-20D is designed for long-term, reliable operation with minimal maintenance.

- **Cleaning:** If necessary, gently wipe the button and casing with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- **Inspection:** Periodically check the mounting screws for tightness and the wiring connections for security.
- **Avoid Obstruction:** Ensure no objects obstruct the button's movement.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Button does not latch/unlatch	Internal mechanism issue or obstruction.	Ensure no physical obstruction. If issue persists, the unit may be faulty and require replacement.
Device not responding to button press	Incorrect wiring, loose connections, or no power to the controlled device.	Verify all wiring connections are secure and correct according to your system's diagram. Check power supply to the controlled device.
Button feels loose or wobbly	Loose mounting screws.	Tighten mounting screws. Do not overtighten.

SPECIFICATIONS

- **Model:** TS-20D
- **Type:** Under Desk Push Button
- **Action:** Alternate Action (Latching)
- **Contact Configuration:** DPDT (Double Pole Double Throw)
- **Manufacturer:** ALARM CONTROLS
- **ASIN:** B005S3GPLC
- **Date First Available:** October 3, 2011
- *Note: Specific electrical ratings (e.g., voltage, current) are not provided in the product data. Refer to the product packaging or manufacturer's official datasheet for detailed electrical specifications.*

WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please contact Alarm Controls directly or refer to their

official website. Keep your purchase receipt as proof of purchase.

Alarm Controls Contact Information:

- **Website:** www.alarmcontrols.com (*Note: This is a placeholder URL, please verify the actual manufacturer website for support.*)

- **Customer Service:** Refer to the manufacturer's website for contact numbers or email support.

Related Documents - TS-20D

	[TS-27 Request to Exit Station - ALARM CONTROLS Access Control](#) Detailed information on the ALARM CONTROLS TS-27 Request to Exit Station, featuring a large mushroom push button, stainless steel finish, and options for timed output. Specifications include UL 294 and CSA certifications.
	[TS-18, TS-19, TS-20 Under Desk Door Release](#) Alarm Controls TS-18, TS-19, and TS-20 are push button controlled under desk/counter door releases for remote control of doors and access controls. Ideal for front desk and reception or hard to wire areas requiring discreet control of locking devices.
	[TS-12, TS-13 Vandal Resistant Request to Exit Station | Alarm Controls](#) Alarm Controls TS-12 and TS-13 are vandal-resistant request-to-exit stations designed for commercial and industrial applications, offering secure egress with a durable push button and optional timer relay.
	[TS-32 Latching Panic Station - Alarm Controls Product Overview](#) Detailed specifications and features for the Alarm Controls TS-32 Latching Panic Station, a single gang emergency door release with a red mushroom button.

[EB Series Request to Exit Egress Stations - Alarm Controls](#)

The EB Series from Alarm Controls offers single-gang request-to-exit egress stations with momentary push-button switches. These stations remain active as long as the button is depressed and feature compatibility with most systems. Key features include a stainless steel wall plate, a 1-1/2" red mushroom button, and a screened "EXIT" plate. Options for finishes, illumination (LED in various voltages), guard rings, and lift-up covers are available. Specifications include UL and CSA certification, contacts rated 10A at 35 VDC or 120 VAC, screw terminal connections, and a switch depth of 2-1/2". The operating temperature range is -13F to +158F. The document also provides a table for ordering different configurations.

[Alarm Controls SC628 Sonalert Buzzer and PA100 Piezo Buzzer Specifications](#)

Detailed specifications for Alarm Controls SC628 Sonalert Buzzer and PA100 Piezo Buzzer, including features, mounting options, and electrical requirements.