

MODEL 300PBX-SC, SERIES C
INSTALLATION INSTRUCTIONS FOR MODEL 300PBX-SC

Address all communications and shipments to:



FEDERAL SIGNAL CORPORATION
Electrical Products Division
Service Department
2645 Federal Signal Drive
University Park, IL 60466-3195

INSTALLATION INSTRUCTIONS FOR MODEL 300PBX-SC

SAFETY MESSAGE TO INSTALLERS

People's lives depend on your safe installation of our products. It is important to follow all instructions shipped with the products. This device is to be installed by a trained electrician who is thoroughly familiar with the National Electrical Code and will follow the NEC Guidelines as well as local codes. The selection of the mounting location for the device, its controls and the routing of the wiring is to be accomplished under the direction of the Facilities Engineer and the Safety Engineer. In addition, listed below are some other important safety instructions and precautions you should follow:

- Read and understand all instructions before installing or operating this equipment.
- Avoid installing telephone wiring during a lightning storm.
- Installation of telephone jacks in wet locations must be avoided unless the jack is designed specifically for that application.
- Before touching uninsulated telephone wires or terminals, ensure that telephone line has been disconnected from the network interface.
- Exercise caution during installation or modification of telephone lines.
- After installation, test the device to ensure that it is operating properly.
- After testing is complete, provide a copy of this instruction sheet to all personnel.
- Establish a procedure to routinely check the device for proper activation and operation.
- File these instructions in a safe place and refer to them when maintaining and/or reinstalling the unit.

Failure to follow all safety precautions and instructions may result in property damage, serious injury, or death to you or others.

A. FCC Regulations.

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.

Any changes made by the user not approved by Federal Signal Corporation can void the user's authority to operate the equipment.

This equipment complies with Part 68 of the FCC rules. Located on the equipment is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN). If requested, this information must be provided to the telephone company.

The REN is used to determine the quantity of devices which may be connected to the telephone line. Excessive REN's on the telephone line may result in the devices not ringing in response to

an incoming call. In most, but not all areas, the sum of the REN's should not exceed five (5.0). To be certain of the number of devices that may be connected to the line, as determined by the total REN's contact the telephone company to determine the maximum REN for the calling area.

This equipment cannot be used on the telephone company provided coin service. Connection to Party Line Service is subject to State Tariffs.

If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. If advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications in order to maintain uninterrupted service.

If trouble is experienced with this equipment, please contact:

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University Park, IL 60466-3195
708-534-3400

If the trouble is causing harm to the telephone network, the telephone company may request you to remove the equipment from the network until the problem is resolved.

This equipment uses the following USOC jacks: RJ11C.

It is recommended that the customer install an AC surge arrestor in the AC outlet to which this device is connected. This is to avoid damaging the equipment caused by local lightening strike and other electrical surges.

This equipment is Hearing-Aid Compatible (HAC).

The telephone Consumer Protection Act of 1991 makes it unlawful for any person to use a computer or other electronic device, including fax machines, to send any message unless such message clearly contains in a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time it is sent and an identification of the business or other entity, or other individual sending the message and the telephone number of the sending machine or such business, other entity, or individual. (The telephone number provided may not be a 900 number or any other number for which charges exceed local or long-distance transmission charges.)

B. General.

The Federal Model 300PBX-SC is a telephone interface device which allows station access from a PABX to a paging amplifier. Input connection to the Model 300PBX-SC is made by means of a standard modular jack. No other input power is required. The Model 300PBX-SC is designed to be connected to a dedicated station line in place of a telephone instrument. By calling the station number to which the 300PBX-SC is connected, a direct paging access is made to the paging amplifier. When this connection is made, an alert tone is sounded both in the phone and the paging speakers. After the page, the 300PBX-SC will automatically disconnect either on CPC, call time out, toll restriction, or by dialing #7.

Output provisions from the Model 300PBX-SC to the paging amplifier includes both an audio output and a double throw relay circuit to activate the music mute or other function during page. The audio output is 600 ohms balanced or for direct connection to an audio amplifier input, a high impedance output with screwdriver level adjust is provided.

The entire unit is housed in a sturdy box approximately 1-3/4" x 4" x 5-7/8" which can be mounted to most surfaces by means of #6 screws through the holes provided in the mounting flanges, with 4-9/16" mounting hole centers.

C. Unpacking.

The unit should be removed carefully from the carton and inspected for any possible damage in transit. If there is any evidence of damage which might have occurred in shipment, immediately notify your supplier or the transportation company which delivered it. Claims for damage sustained in transit must be made upon the carrier. Save all packing material for the claim agent who will supply you with the proper forms and give you the necessary instructions for filling out a claim.

D. Specifications.

FCC Registration No:	HVV USA-34877-KX-N
Phone Line Connector:	RJ-11 (2)
Ringer Equivalence:	0.3B
Ring Detection:	15.3Hz to 68Hz @ 40V to 150 V.
Alert Tone Frequency:	600Hz.
Page Access Time:	Programmable, 2-hour call timer
Dial Tone Detect Frequency:	400Hz.
Relay Contacts:	220VAC/DC @1 Ampere, Resistive
Connectors:	Terminal Block
High Impedance Output:	47K ohms.
600 OHM Output:	With internal termination, -5db; without internal termination, -0.5db.
Size:	1-3/4" x 4" x 5-7/8"
Shipping Weight:	.95 lb./.431 kg.

E. Programming.

1. Security Code Set Up.

The security code allows the user/installer to program the 300PBX-SC. The factory preset security code is **845464**. To program your personal security code, follow the directions below.

- Call into the 300PBX-SC.
- Dial * followed by **845464** (a double beep should be heard).
- Enter your new **6 digit security code** followed by, **#47** (a double beep should be heard).

Note: The security code must be 6 digits and cannot include an * or #.

Important: It is recommended that the factory set security code be changed. This number should be written down and stored in a safe place.

Note: While programming, if no Touch Tones are entered for 20 seconds, the 300PBX-SC will disconnect.

2. Programming and Using Remote Access Features (Requires a Touch Tone phone).

If a valid Touch Tone sequence is entered while programming, a double beep will be heard. Three beeps indicate an error.

To begin programming, call the 300PBX-SC. When the device answers, you have 20 seconds to enter * followed by your **6 digit security code** (a double beep should be heard). The 300PBX-SC may now be programmed.

Note: While programming, if no Touch Tones are entered for 20 seconds, the 300PBX-SC will disconnect.

Programming Functions and Operational Features

Digits + Location

(1) Access Code (6 digits, 0-9, no digits disables) (factory disabled).....	6 digits + # 45
(1) Call Timer (0-1 hrs, 00-59 mins, 00-59 secs) (factory disabled, 3 sec minimum) ...	5 digits + # 48
(1) Silence Time Out (01-99 secs) (factory disabled).....	2 digits + # 49

Note: To disable or eliminate the use of the above features, enter the # + location number (**45, 48, or 49**) without any preceding numbers.

Alert Tones On (factory setting).....	* 9
Alert Tones Off	* 0
Exit Programming and Disconnect	# 7
500ms hookswitch flash on LINE OUT port.....	# 1
2 second disconnect on LINE OUT port.....	# 2
Hang up LINE IN and LINE OUT port.....	# 7

(1) Disabled from factory

F. Operation.

The 300PBX-SC allows remote access to loop start C.O. lines, analog PABX stations and any other 600 ohm audio devices.

The 300PBX-SC can be set up with secured or unsecured access, a call timer, a silence timer, and basic toll restriction. While in normal operation, touch tone commands are utilized for hookswitch flashes, momentary disconnects and hang-ups. All programming is stored in non-volatile memory.

The 300PBX-SC will answer, provide an alert tone (if enabled), and wait 20 seconds for an access code to be entered (Secured Access). For applications where immediate activation of the **LINE OUT** relay is required, do not program any access codes.

When the **LINE OUT** relay has been actuated, several other commands can be used. For a 500ms hookswitch flash on the **LINE OUT** port, dial **#1**. To create a 2 second disconnect on the **LINE OUT** port for making a new call, dial **#2**. To disconnect the 300PBX-SC, dial **#7**. The 300PBX-SC will also disconnect when a CPC break occurs on the **LINE IN** port or after the call timer* or silence timer* has expired. When disconnecting, both **LINE IN and LINE OUT** relays are opened.

* Must be programmed.

G. Maintenance.

SAFETY MESSAGE TO MAINTENANCE PERSONNEL

Listed below are some important safety instructions and precautions you should follow:

- Read and understand all instructions before performing any maintenance to this unit.
- Any maintenance to the device **MUST** be done with power turned off.
- Any maintenance to the device **MUST** be performed by a trained electrician in accordance with NEC Guidelines and local codes.
- Never alter the unit in any manner. Safety in hazardous locations may be endangered if additional openings or alterations are made in units specifically designed for use in these locations.
- The nameplate, which may contain cautionary or other information of importance to maintenance personnel, should not be obscured if exterior of housings used in hazardous locations are painted.

Failure to follow all safety precautions and instructions may result in property damage, serious injury, or death to you or others.

Do not attempt to repair or modify this equipment. There are no user serviceable components inside. The Federal Signal factory will service your equipment or assist you with technical problems that cannot be handled satisfactorily and promptly locally.

All maintenance, service, or repairs **MUST BE** performed by the factory in order to ensure continued compliance with Part 15 and Part 68 of the FCC rules.

If it becomes necessary to return a unit to Federal Signal for adjustment or repair, it can be accepted only if authorized in advance. Request for authorization should clearly indicate the service requested and give all pertinent information regarding the nature of malfunction and, if possible, its cause.

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