Power Failure Bypass System

The PF-6A power failure bypass system makes it possible to receive calls during phone system and power outages. The PF-6A bypass unit connects 6 pre-assigned single line station phones directly to user-assigned C.O. trunks. A built-in ground start converter permits outbound calls from standard phones.

When the system is restored, calls in progress are not lost. The PF-6A bypass unit will reconnect phones to their station circuits after they become idle.

The PF-6A can be configured to operate when power is lost or from an opening/closing of an alarm contact or manual closure.

Alternatively, the PF-6A can be used to convert six incoming ground start lines to loop start lines. This accommodates installation of telephony equipment requiring loop start lines (example: key systems, call sequencers, answering machines, voice mail, etc.)

Applications

• Prevents busy signals or unanswered calls during power and system failures
• Converts ground start lines to standard loop start lines

Features

• Transfers six C.O. trunks directly to the designated analog station phones
• Stackable to increase capacity
• Allows user to receive calls, as well as make calls during power or system failure
• Compatible with loop start lines or 48V ground start lines
• Automatic ground start converter eliminates “ground start buttons”
• Power restoration will not interrupt calls in progress
• Operates on power failure or normally open - normally closed alarm contacts

Specifications

Power: 120 V AC/13.8V AC 1.25A, UL listed adapter provided or 24-48V DC, 100mA
Dimensions: 211mm x 160mm x 46mm (8.3” x 6.5” x 1.8”)
Shipping Weight: 1.2 kg (2.6 lbs)
Environmental: 0°C to 32°C (32°F to 90°F) with 5% to 95% non-condensing humidity
Connections: (1) RJ21X, (1) RJ11

Phone...715.386.8861

Made in the U.S.A.
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IF YOU HAVE A PROBLEM WITH A VIKING PRODUCT, PLEASE CONTACT: VIKING TECHNICAL SUPPORT AT (715) 386-8666

Our Technical Support Department is available for assistance Monday through Friday 8 a.m. - 5 p.m. central time. So that we can give you better service, before you call please:
1. Know the model number, the serial number and what software version you have (see serial label).
3. It is best if you are on site.

RETURNING PRODUCT FOR REPAIR

The following procedure is for equipment that needs repair:
1. Customer must contact Viking's Technical Support Department at 715-386-8666 to obtain a Return Authorization (R.A.) number. The customer MUST have a complete description of the problem, with all pertinent information regarding the defect, such as options set, conditions, symptoms, methods to duplicate problem, frequency of failure, etc.
2. Packing: Return equipment in original box or in proper packaging so that damage will not occur while in transit. Static sensitive equipment such as a circuit board should be in an anti-static bag, sandwiched between foam and individual-

RETURNING PRODUCT FOR EXCHANGE

The following procedure is for equipment that has failed out-of-box (within 10 days of purchase):
1. Customer must contact Viking’s Technical Support at 715-386-8666 to determine possible causes for the problem. The customer MUST be able to reproduce the problem through recommended tests for diagnosis.
2. If the Technical Support Product Specialist determines that the equipment is defective based on the customer’s input and troubleshooting, a Return Authorization (R.A.) number will be issued. This number is valid for fourteen (14) calendar days from the date of issue.
3. After obtaining the R.A. number, return the approved equipment to your distributor, referencing the R.A. number. Your distributor will then replace the product over the counter at no charge. The distributor will then return the product to Viking using the same R.A. number.
4. The distributor will NOT exchange this product without first obtaining the R.A. number from you. If you haven’t followed the steps listed in 1, 2 and 3, be aware that you will have to pay a restocking charge.

TWO YEAR LIMITED WARRANTY

Viking warrants its products to be free from defects in the workmanship or materials, under normal use and service, for a period of two years from the date of purchase from any authorized Viking distributor. If at any time during the warranty period, the product is deemed defective or malfunctions, return the product to Viking Electronics, Inc., 1531 Industrial Street, Hudson, WI, 54016. Customer must contact Viking’s Technical Support Department at 715-386-8666 to obtain a Return Authorization (R.A.) number.

This warranty does not cover any damage to the product due to lightning, over voltage, under voltage, accident, misuse, abuse, negligence or any damage caused by the product by the purchaser or others. This warranty does not cover non-EWP products that have been exposed to wet or corrosive environments. This warranty does not cover stainless steel surfaces that have not been properly maintained.

NO OTHER WARRANTIES
Viking makes no warranties relating to its products other than as described above and disclaims any express or implied warranties or merchantability or fitness for any particular purpose.

EXCLUSION OF CONSEQUENTIAL DAMAGES
Viking shall not, under any circumstances, be liable to purchaser, or any other party, for consequential, incidental, special or exemplary damages arising out of or related to the sale or use of the product sold hereunder.

EXCLUSIVE REMEDY AND LIMITATION OF LIABILITY
Whether in an action based on contract, tort (including negligence or strict liability) or any other legal theory, any liability of Viking shall be limited to repair or replacement of the product or, at Viking’s option, refund of the purchase price as the exclusive remedy and any liability of Viking shall be so limited.

It is expressly understood and agreed that each and every provision of this Agreement which provides for disclaimer of warranties, exclusion of consequential damages, and exclusive remedy and limitation of liability, are severable from any other provision and each provision is a separable and independent element of risk allocation and is intended to be enforced as such.

FCC REQUIREMENTS

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 what quantity of devices 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, you may contact your local telephone company.

The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the device. If the telephone company makes changes in its facilities, equipment, operations, or procedures that could affect the operation of the device, the customer will be notified at least thirty (30) days in advance of the change.

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

IMPORTANT: Electronic devices are susceptible to lightning and power station electrical surges from both the AC outlet and the telephone line. It is recommended that a surge protector be installed to protect against such surges. Contact Panamax at (800) 472-5555 or Electronic Specialists Inc. at (800) 225-4876.

Installation

Note: The unit can also be powered by 24-48V DC PABX battery supply on terminals 50 & 25.

The Power LED and Active LED will be lit when the PF-6A is in the normal operating mode. The Active LED will go out and the Power LED will stay lit when the Test Button is pressed.
A. Power Fail Bypass Unit

The first six C.O. lines should be interfaced with the PF-6A as shown in the chart to the right. The PF-6A is sensitive to the polarity of the incoming telephone lines, even when using loop start lines. There is a feature in the PF-6A that keeps a “power fail” call from getting interrupted when power is restored (power restoration will not interrupt calls in progress). With loop (or ground) start lines, if the C.O. dial tone coming in is connected in the wrong polarity, this feature will not work. When wired in reverse polarity and power is restored, a call in progress is dropped immediately.

If your system has an alarm contact or manual transfer switch, you must connect it to the red and green wires of the modular jack labeled EXTERNAL ALARM on PF-6A. This must be a normally open maintained contact closure. If normally closed alarm contacts are used, wire them to break the power to the PF-6A when they open.

Note: Loop start and ground start CO lines may be combined on the PF-6A (see Programming). When ground start lines are used, pin 50 (V/S) must be connected to a good earth ground.

B. Ground to Loop Start Converter

The ground start converter in the PF-6A will only work properly when connected in series with the ground start trunks as shown.

Important: Do NOT connect the power adapter when using the PF-6A in the Ground to Loop Start application.

The C.O. lines must be connected in the correct polarity.
Operation

A. Power Fail Bypass Unit

After installation is complete, test the PF-6A by doing ONE of the following:
1. Press and hold the TEST button
2. Move DIP switch 1 to the ON position
3. Disconnect power to the PF-6A
4. Provide a maintained normally open contact closure to the EXTERNAL ALARM input

After installing and testing the PF-6A, instruct office personnel that in the event of the power failure or system failure that the six assigned telephones will be the only means to receive and place calls.

While the PF-6A is in normal operating mode, the six C.O. lines are connected to the trunk inputs, and the six assigned station circuits are connected to their six telephones. In the event of either a power failure or a major PABX alarm, the PF-6A will shift into the bypass mode. In this mode, the six C.O. trunks are instantly connected to the six analog telephones designated, bypassing the PABX/KSU. Incoming calls will now ring directly to the telephones assigned to the six C.O. trunks. Outgoing calls may also be made from each telephone, even on ground start lines.

When power is restored or the major alarm is cleared, the PF-6A will automatically switch back to normal operation. Any C.O. trunk in use at this time will remain connected until the call is completed.

B. Ground to Loop Start Converter

The PF-6A can also be used as a ground start to loop start converter. This accommodates the installation of telephony equipment requiring loop start lines (i.e., key systems, call sequencers, answering machines, voice mail systems, etc.), to ground start C.O. trunks. See Installation for proper wiring in this application.

In this application, the PF-6A will not pass disconnect supervision (“hang up” signals) to the loop start equipment. When a hang up occurs, the PF-6A’s ground start converter automatically “restarts” the line and dial tone is returned to the loop start equipment. The loop start equipment will not detect any disconnect, as this “restart” occurs immediately after the hang up. Typically this will cause the loop start equipment to not release the telephone line when a caller abandons. Nothing can be done about this situation, as the PF-6A cannot distinguish the difference between this abandon condition and the loop start equipment going “off hook” to make an outgoing call.

Note: The PF-6A can ONLY be used to convert ground start lines to loop start. It cannot convert loop start lines to ground start.

Product Support Line...715.386.8666   Fax Back Line...715.386.4345

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