Generate a CPC Disconnect Signal

The CPC-1 will generate a CPC disconnect signal on a PABX analog station (or any other line that does not provide this signal).

A CPC (Calling Party Control) signal is a momentary break in phone line loop current, which is used to signal automated telco equipment (ie. voice mail, call sequencers, etc.) the distant party has hung up. Central Office telephone lines typically provide this signal, but Analog PABX stations do not.

The CPC-1 will generate a 1 second disconnect when it detects a busy signal, reorder tones (fast busy), return to dial tone, or silence.

*Note: Not intended for use on Telco CO lines.*

### Features

- Phone line powered (no AC needed)
- Generates CPC disconnect on:
  - Return to dial tone (programmable)
  - Busy signal
  - Reorder (fast busy)
  - Steady silence (programmable)
- LED shows:
  - In use
  - Audio detected
  - Generated CPC signal
- Caller ID compatible

### Applications

- Tandem PABX configuration
- Analog PABX station to Trunk talk paths between two PABXs
- Voice Mail behind PABX
- Add CPC disconnect signal to T-1 channel bank lines
- Call sequencers behind PABX
- VOIP modems

### Specifications

- **Power:** Telephone line powered (20VDC, 20mA minimum)
- **Dimensions:** 74mm x 53mm x 25mm (2.9” x 2.1” x 1.0”)
- **Shipping Weight:** 0.45Kg (1 lbs)
- **Environmental:** 0° C to 32° C (32° F to 90° F) with 5% to 95% non-condensing humidity
- **CPC Disconnect Time:** 1 second nominal
- **Connections:** 4 position screw terminal block

www.vikingelectronics.com
Information: (715) 386-8861
**Wiring**

**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.

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**Programming**

<table>
<thead>
<tr>
<th>DIP Switch 1</th>
<th>DIP Switch 2</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>OFF</td>
<td>Silence time disabled (factory default)</td>
</tr>
<tr>
<td>OFF</td>
<td>ON</td>
<td>Will CPC on 10 seconds of silence</td>
</tr>
<tr>
<td>ON</td>
<td>OFF</td>
<td>Will CPC on 20 seconds of silence</td>
</tr>
<tr>
<td>ON</td>
<td>ON</td>
<td>Will CPC on 30 seconds of silence</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DIP Switch 3</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFF</td>
<td>Will not CPC on a return to dial tone (factory default)</td>
</tr>
<tr>
<td>ON</td>
<td>Will generate a CPC on a return to dial tone</td>
</tr>
</tbody>
</table>
A. Generating a CPC Disconnect

The CPC-1 monitors audio activity on the line to determine when to generate a CPC disconnect signal. A CPC disconnect signal is generated if busy signal cadence, or a reorder tone (fast busy) cadence is detected. Using DIP switches 1 & 2, the CPC-1 can also be programmed to generate a CPC disconnect signal based on uninterrupted silence. The CPC-1 will not respond to originating Dial Tone, but can be programmed to generate a CPC disconnect signal if the line returns to Dial Tone (steady audio).

B. LED Operation

The CPC-1 is in use when the LED is on. The LED will light extra bright when audio is detected. For example, a busy signal can be seen as the LED toggling between "on" and "extra bright" in a 1/2 second pattern. Steady silence shows as steady on, dial tone shows as steady extra bright, and talking shows a random pattern.

The LED will wink "off" for 1 second when the unit generates a CPC disconnect signal. The LED will then remain off when the line is cleared and not in use.
IF YOU HAVE A PROBLEM WITH A VIKING PRODUCT, CONTACT: VIKING TECHNICAL SUPPORT AT (715) 386-8666

Our Technical Support Department is available for assistance Monday 8am - 4pm and Tuesday through Friday 8am - 5pm 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).
2. Have your Technical Practice in front of you.
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 (RA) 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 packing 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 individually boxed. All equipment should be wrapped to avoid packing material lodging in or sticking to the equipment. Include ALL parts of the equipment. C.O.D. or freight collect shipments cannot be accepted. Ship cartons prepaid to: Viking Electronics, 1531 Industrial Street, Hudson, WI 54016
3. Return shipping address: Be sure to include your return shipping address inside the box. We cannot ship to a PO Box.
4. RA number on carton: In large printing, write the R.A. number on the outside of each carton being returned.

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 step 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 Viking product 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 use of 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.

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Product Support: (715) 386-8666

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