

CIRCUIT BOARDS

Standard & Advanced Speaker Phone/Ringdown Circuit Boards

FEATURES and BENEFITS

STANDARD SPEAKER PHONE/ RINGDOWN CIRCUIT BOARD

The Standard Speaker Phone /Ringdown series circuit board pack is telephone line powered for basic operation and does not require external power. This circuit board kit supports both keypad and up to three auto dialer switches. It also includes a single Auxiliary Device Relay to remotely control an external device (e.g.: security camera). The Auxiliary Device Relay is closed whenever the telephone is off-hook. Provision of a supplementary power supply will increase the speaker volume capability from 82 dB to 85 dB at 0.5 meter.

Accessories and Options

- Microphone with connector
- Small 2" (51 mm) speaker with connector
- Conformal coating

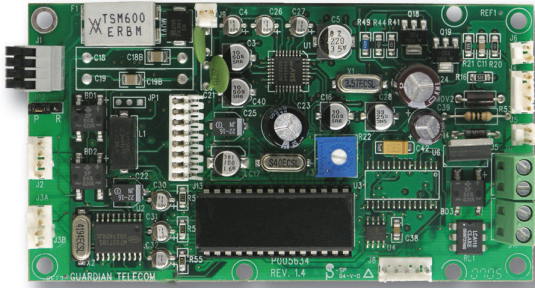
ADVANCED SPEAKER PHONE/ RINGDOWN CIRCUIT BOARD

The Advanced Speaker Phone /Ringdown series circuit board pack is intended for use where a supplemental power supply is available. The advanced series product offers an integrated 5W audio amplifier providing superior audio quality over typical line powered devices. In addition, three Auxiliary Device Relays are available; one primary control and two supplemental controls. The primary control relay works independently. The two supplemental control relays are also independent but cannot be activated simultaneously. These relays are suitable for controlling cameras, external lighting, electronic door locks, etc.

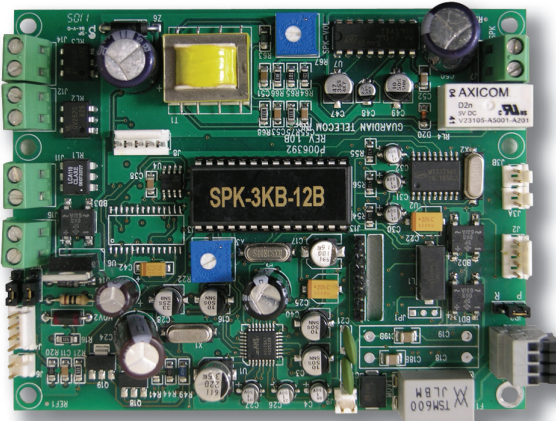
Note: In the event of a supplemental power failure, the Advanced Speaker Phone / Ringdown device will continue to operate in a basic functional mode. The primary and supplemental relay controls will continue to function, audio will still function at a reduced level.

Accessories and Options

- Microphone with connector
- Large 4" (102 mm) waterproof speaker with connector
- Conformal coating



Standard
Speaker Phone/Ringdown
Circuit Board



Advanced
Speaker Phone/Ringdown
Circuit Board

ENCLOSURES AND ACCESSORIES

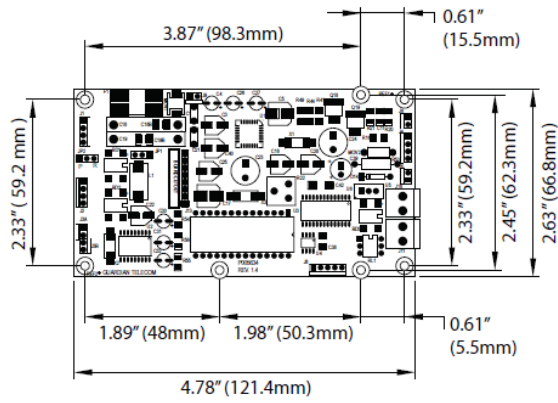
Guardian Telecom enclosures and accessories were designed with the versatility to enhance our two major product lines Telephones & Page/Talk.

CIRCUIT BOARDS

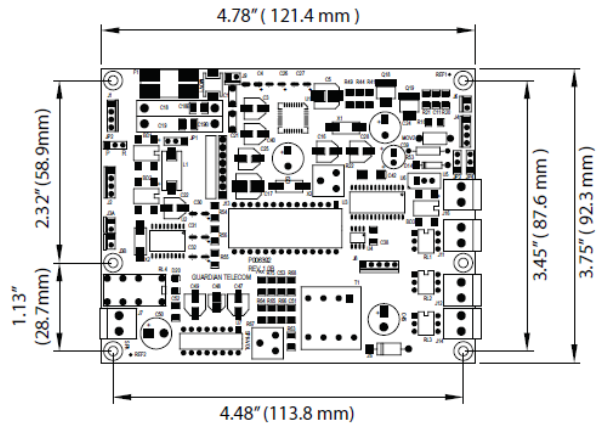
Guardian Telecom Speaker Phone/Ringdown Circuit Boards support both keypad and auto dialer switches for reliable communication. Auxiliary Device Relays provide remote operation of external lighting, cameras, locks and other devices.

Speaker Phone / Ringdown Circuit Boards are used to upgrade Guardian Telecom telephones, as replacement parts for Guardian HDE Series Telephones and as communication parts by leading makers of Elevators, & and more.

OVERALL DIMENSIONS

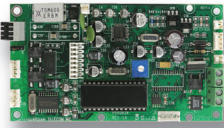


Standard Speaker Phone / Ringdown Circuit Board

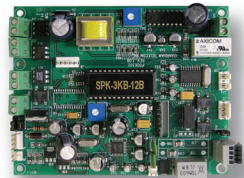


Advanced Speaker Phone / Ringdown Circuit Board

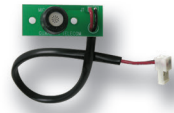
Standard & Advanced Speaker Phone/Ringdown Circuit Boards



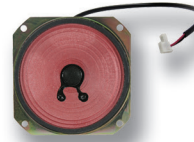
Standard Speaker Phone / Ringdown Circuit Board – P006010



Advanced Speaker Phone / Ringdown Circuit Board – P006393



Microphone with Connector – P004593



4" (102 mm) Waterproof Speaker with Connector – P006474



2" (51 mm) Speaker with Connector – P006473

ENGINEERING SPECIFICATIONS

AUDIO PERFORMANCE

Audio Range Frequency Response	300 - 3400 Hz
Dialing Method	DTMF
Transmit Objective Loudness Rating (TOLR)	Nominal -38 +/- -3 dB
Maximum Speaker Volume	
Line Powered	
- Standard	82 dB @ 0.5 meter
- Advanced	82 dB @ 0.5 meter
With External Power	
- Standard	85 dB @ 0.5 meter
- Advanced	92 dB @ 0.5 meter

ELECTRICAL

Auto Answer Sensitivity	40 -100 V, 16 - 25 Hz
Line Voltage	24 - 56 VDC
Call Progress Tones	Dial Tone: 350 Hz & 440 Hz @ -16 dBm0 Busy Tone: 480 Hz & 620 Hz @ -24 dBm0 Duty Cycle 500mS On, 500 mS Off
Emergency Relay	130 mA @ 350 V
Auxiliary Device Relays (on Advanced version)	Dual 2,500 mA @ 60V

Environmental

Temperature	-40° to +140°F (-40° to +60°C)
Humidity	0 - 95% RH Non-Condensing

ORDERING INFORMATION

Warranty: Five years parts and labor

Order No.	Description
P006010	Standard Printed Circuit Board Assembly / Hands Free
P006393	Advanced Printed Circuit Board Assembly / Hands Free
<i>Options – Contact Guardian Sales For More Information</i>	
P004593	Microphone with Connector
P006426	4" (102 mm) Speaker – (HDE-10 uses Standard 2" Speaker)
P006473	2" (51 mm) Speaker with Connector
CC	Conformal Coating

Distributed by:



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