Lencore

THE LEADING MANUFACTURER OF SOUND MASKING SYSTEMS.

A GREAT SOUND MAKES NO NOISE®

LENCORE SPECTRA – i.NET™ SOUND MASKING SYSTEM

Music Page Interface (MPI) Specifications – Model G05

Lencore Music Page Interface (MPI) replaces all the bulky head end equipment that that is associated with music and paging systems. With the MPI there is no need for additional cable home-runs, amplifiers, separate equalizers, special switching equipment or matching vendors for compatible product interfaces. In fact, the MPI technology is so sophisticated that it can make zone additions, modifications, deletions and other changes to the paging system on the fly, without rewiring, and eliminates the need for running multiple home runs back to the electrical closet or through building risers to create separate or additional zones.

When connected to the Lencore Spectra i.Net™ Sound Masking System, the MPI provides the ability to program up to 99 individual zones for paging using standard DTMF tones through a POTS telephone wire. The system is also programmed for all call and emergency broadcast paging. The system's easy to use full one octave band equalizer can be adjusted to either individual zones or can be adjusted for all zones and provides exceptional fine tuning capabilities.

When the MPI is connected to the Spectra i.Net's™ web appliance (i.LON®) programming can be set for up to 1.5 million square feet of space through a single device. The creation, modification, addition and deletion of zones or groups for paging and masking can be easily controlled through the i.LON's® web browser using the included Lencore Sound Manager. No software or proprietary software needs to be installed on the client's side. The Lencore Spectra i.Net™ System is an open platform system. In addition, volume and equalizer settings for paging and music can be programmed through the Sound Manager offering tremendous adjustment and control capabilities with unprecedented flexibility.

The unmatched capabilities and superior paging quality of Lencore's system automatically compensates and readjusts for frequency line loss while ensuring a quality signal that is continuously and uniformly broadcast and distributed throughout the entire system. Essentially this means that throughout the miles of audio wire, line loss will be virtually negligible. This results in a crystal clear page whenever you need it, wherever you are in your facility.

These features and qualities are just some of the benefits of the Lencore Spectra i.Net™ System that make it the only networked sound masking system uniquely qualified to support the masking, paging and music needs for any facility with adjustment capabilities unsurpassed in the industry

The MPI unit typically installs in the Telephone or IT closet. The MPI accepts a POTS line for all call and zoned telephone paging. In addition, there are left and right audio inputs for music or all-call page modification.

TECHNICAL SPECIFICATIONS:

PAGING VOLUME ADJUSTMENTS:
Four channels/OP.
Maximum output: 5.3 Volt RMS at speaker terminal.
Attenuation range: 48 dB, in 1 dB steps, plus a mute setting.

PAGING ZONES:
Individual channel, groups or global paging zones.

E.B./MUSIC VOLUME ADJUSTMENTS:
Four channels/OP.
Maximum output: 5.3 Volt RMS at speaker terminal.
Attenuation range: 48 dB, in 1 dB steps, plus a mute setting.

EMERGENCY BROADCAST/MUSIC ZONES:
Individual channel, groups or global music zones.

PAGING/E.B./MUSIC OCTAVE EQUALIZER:
One page/music equalizer for all channels.
10 bands, 31.5 Hz to 16 kHz, each user adjustable by ±5 dB in 1 dB steps

POWER SUPPLY:
Input from building power: 100-240 VAC,, 50-60 Hz, 1.0A
Output to MPI device: 7.5 VDC, 4.0A, 30W max.

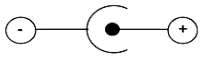
DIMENSIONS: 6" x 8 3/8" x 1 7/8"

Lencore Acoustics Corp. • 1 Crossways Park Drive West • Woodbury, NY 11797 • (P) 516-682-9292 • (F) 516-682-4785 • email: info@lencore.com

Music Page Interface (MPI) Specifications – Model G05 (page 2)

ELECTRICAL SPECIFICATIONS:

- Input voltage..... 7.5 Volts DC.



- Input current..... 333 milliamps DC.
- Power usage..... 2.5 Watts.
- On/Off slide switch.

INPUTS:

LonWorks® network. Connects to i.LON™100 Internet Server. Screw terminals.

Page:

- POTS line telephone input. RJ11 connector.

CO (Central Office) POTS line description

1. It is a 2 wire (tip and ring) analog appearance.
2. It is configured to be loop start.
3. Battery voltage is 48 volts.
4. Loop current is 23 milli amps.
5. Must have DTMF signaling capacity.
6. Must have Hang up (winking) supervision.

- All call page, 10k ohm input impedance, single ended RCA jack (special order).

USAGE:

- Lift telephone receiver.
- Dial access code.
- Wait for short dial tone.
- Dial two digit paging zone number and the # key *or* Dial 00# for all call page.
- Wait for short beep.
- Issue page.
- Hang up.

Music:

- Music RCA jacks must be single ended (unbalanced).
- Left channel, 10k ohm input impedance, single ended RCA jack (phono connector).
- Right channel, 10k ohm input impedance, single ended RCA jack.
- Input impedance is 10K ohms.
- Maximum input is 0.35 Vrms. (0.9899 Vp-p).
- Gain from RCA jack to RJ45 pins 7 and 8 is 2. (With 620 ohm terminator).
  Note: Left and right channels are combined to form one music input.
  All music inputs using the RCA jacks are single ended inputs.
  All OP music measurements done with masking turned off.
- OP output to speakers is 5.23 Vrms 14.7927 Vp-p) with music attenuation set to 18 on VBApp.

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- OP output to speakers is 6.59 Vrms (18.6393 Vp-p) with music attenuation set to 20 on VBApp.
- OP output to speakers is 10.33 Vrms (29.2177 Vp-p) with music attenuation set to 24 on VBApp.
- Maximum input to amplifier clipping is 0.38 Vrms with music attenuation set to 24 on VBApp.
- Maximum output overall of OP amplifier at clipping is 11.1 Vrms (31.3955 Vp-p).

OUPUTS:

- Cat5e data cable, RJ45 connector. Connects to OP's.
- Page output, pins 4 and 5 of RJ45 is a balanced output.
- Music output, pins 7 and 8 of RJ45 is a balanced output.
- Three ground (common) screw terminal block. Connects to (-) of first OP.

ADAPTIVE EQ OUTPUT:

Note: Besides the normal Adaptive EQ procedure these output signals can be used as a signal generator. All measurements are made differentially with a ground strap from MPI board to test equipment. Short Cat5e were used, approximately 6-feet.

31.5 Hz.:	0.440 Vrms (1.2445 Vp-p) unterminated. 0.297 Vrms (0.8400 Vp-p) terminated into 620 ohms.
63 Hz.:	0.495 Vrms (1.4001 Vp-p) unterminated. 0.410 Vrms (1.1597 Vp-p) terminated into 620 ohms.
125 Hz.:	0.514 Vrms (1.4538 Vp-p) unterminated. 0.460 Vrms (1.3011 Vp-p) terminated into 620 ohms.
250 Hz.:	0.518 Vrms (1.4651 Vp-p) unterminated. 0.475 Vrms (1.3435 Vp-p) terminated into 620 ohms.
500 Hz.:	0.516 Vrms (1.4595 Vp-p) unterminated. (500 Hz is best for field testing). 0.476 Vrms (1.3463 Vp-p) terminated into 620 ohms.
1 kHz.:	0.500 Vrms (1.4142 Vp-p) unterminated. 0.463 Vrms (1.3096 Vp-p) terminated into 620 ohms.
2 kHz.:	0.450 Vrms (1.2728 Vp-p) unterminated. 0.417 Vrms (1.1795 Vp-p) terminated into 620 ohms.
4 kHz.:	0.348 Vrms (0.9843 Vp-p) unterminated. 0.322 Vrms (0.9108 Vp-p) terminated into 620 ohms.
8 kHz.:	0.241 Vrms (0.6817 Vp-p) unterminated. 0.223 Vrms (0.6307 Vp-p) terminated into 620 ohms.
16 kHz.:	0.186 Vrms (0.5261 Vp-p) unterminated. 0.172 Vrms (0.4865 Vp-p) terminated into 620 ohms.

MISCELLANEOUS:

- Momentary push button to sequentially initialize attached OP's.

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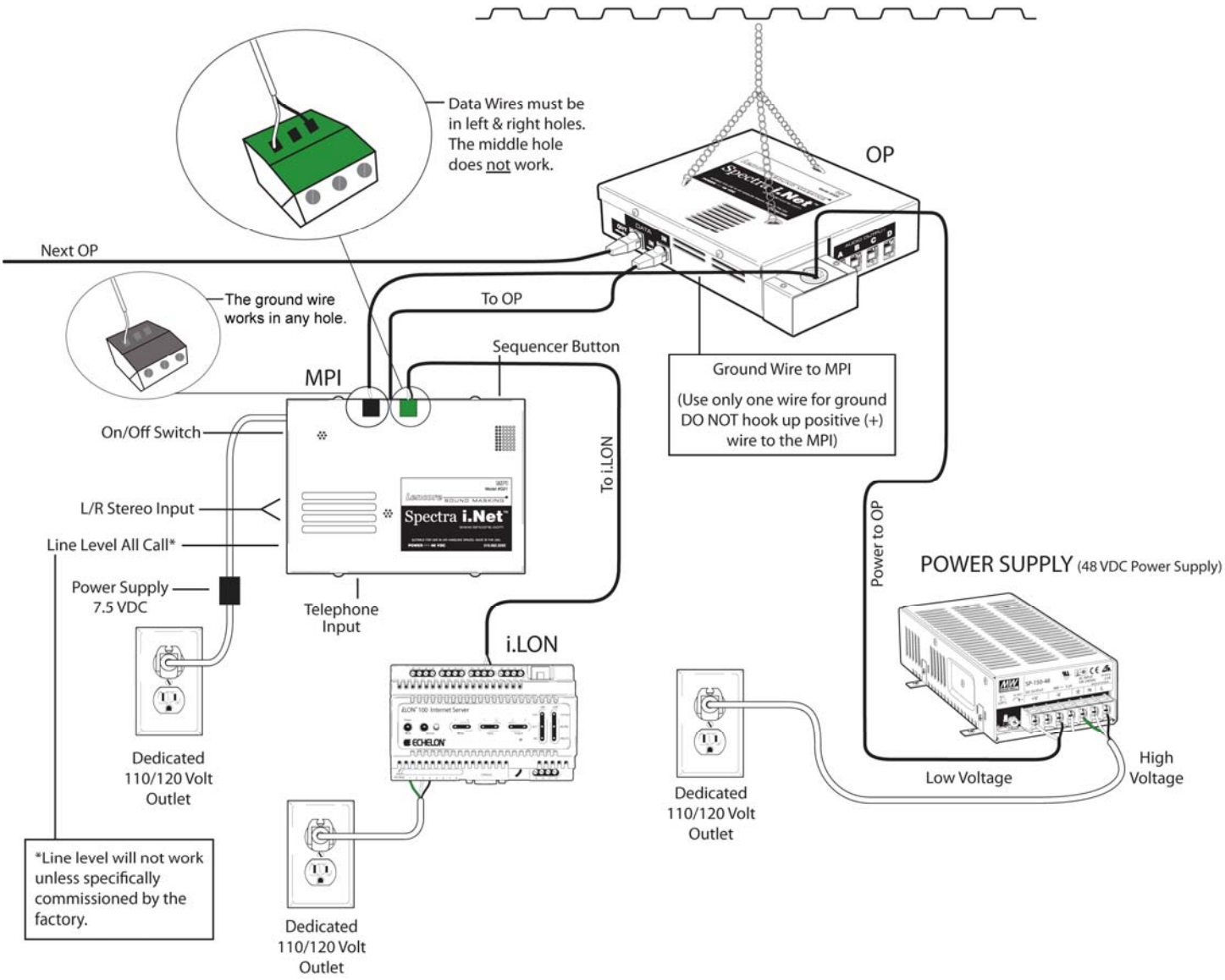
LENCORE SPECTRA – i.NET™ SOUND MASKING SYSTEM

Music Page Interface (MPI) Specifications – Model G05 (page 4)

Wiring Schematic for Spectra i.Net's Music Page Interface (MPI)



Other Systems Also Available

Spectra i.Net™ (Networked)' Spectra®, CrossNetOne™ (Networked), CrosswaysOne™

In-plenum and direct field
all available with paging/music.

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