

Cella
REFERENCE GUIDE
&
WARRANTY INFORMATION

[Revision: 1.0]

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DEAR CREATIVE PROFESSIONAL...

THANK YOU for investing in Prodigy Engineering's Cella, the 2-channel remote-controllable microphone preamplification system. Cella is an elegantly compact 2-channel version of our award-winning flagship 8-channel preamplifier, Anima.

Cella is the result of years of study, new research, real-world experience, and passionate engineering. Like Anima, Cella has been designed without the slightest compromise in quality to provide the finest audio amplification and distinctive sonic character in a reliable and powerful package.

I wish you great success and hope that you enjoy your new investment!

Chae H. Ham
Principal Design Engineer
Prodigy Engineering

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General Safety Guidelines

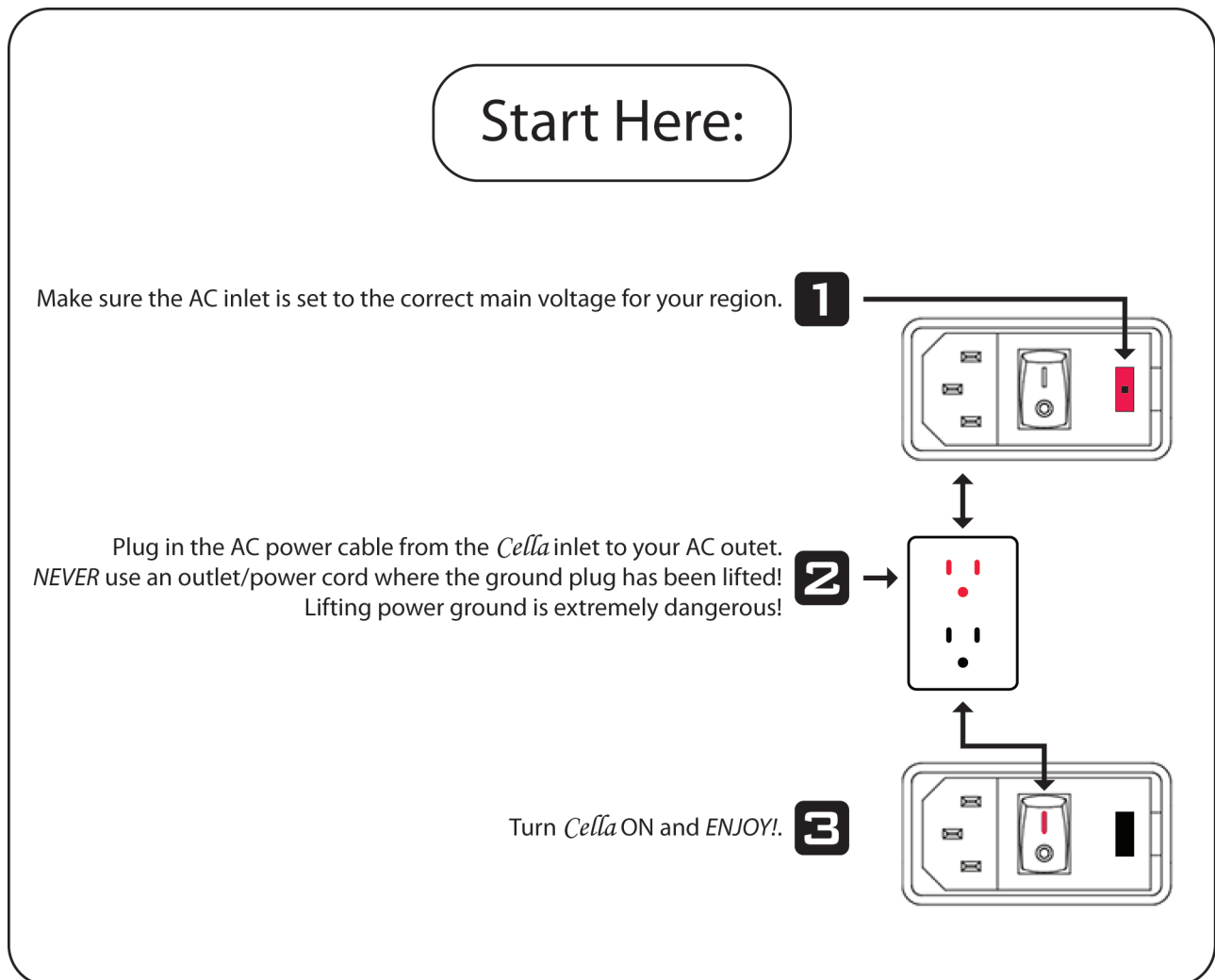
- 1) **Read Instructions:** Carefully read all instructions regarding the proper use of this product.
- 2) **Water and Moisture:** This product should be operated and stored in a cool and dry environment. Operation of this product near water or in environments that have high levels of humidity may lead to premature failure.
- 3) **Ventilation:** Install this product in a cool and well-ventilated area such that the top and bottom ventilation openings are not obstructed.
- 4) **Temperature:** This product should ideally be operated at room temperature or cooler (40°-75° F)
- 5) **Grounding:** Care should be taken to ensure that the ground plug on the AC power cord is not damaged or defeated. Deliberately removing or lifting this safety ground is extremely dangerous!
- 6) **Cabling:** Ensure that all cables are in good condition. Cables or connectors with obvious damage (exposed inner wires/frayed ends/etc.) should be repaired or replaced immediately.
- 7) **Servicing:** Contact Prodigy Engineering for ALL service inquiries. Servicing of this device shall be performed only by Prodigy Engineering personnel. There are no user-serviceable parts inside. Disassembly by a third-party is strictly prohibited and will void the manufacturer warranty. Failure to comply may lead to limited future technical support from Prodigy Engineering.

..OVERVIEW..

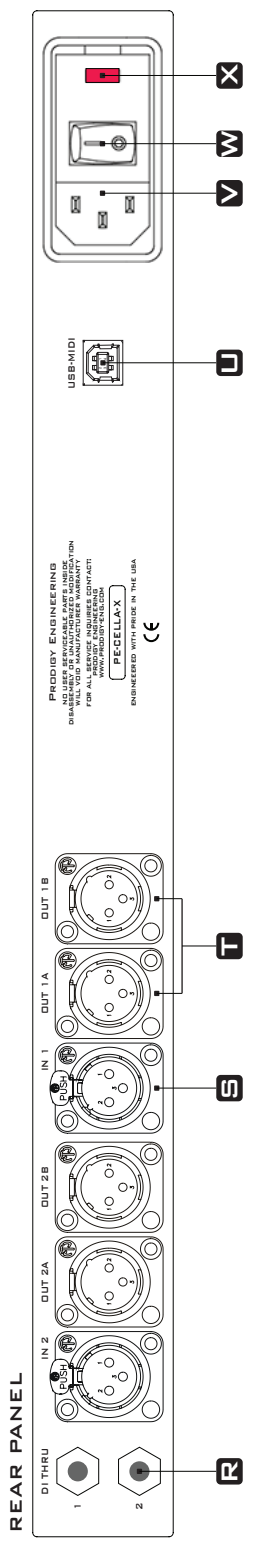
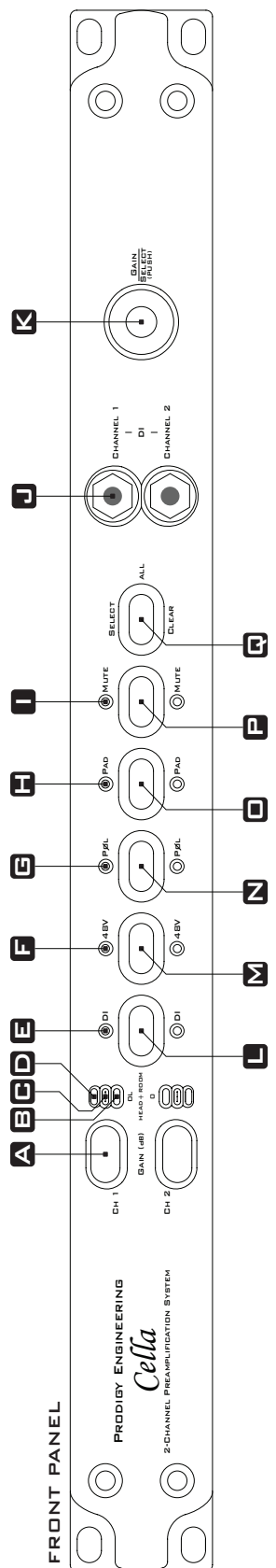
The Prodigy Engineering Cella is an uncompromised, high-quality 2-channel preamp adapted from our flagship 8-channel, Anima. Although the Cella is rich in useful features, basic operation is just as easy as using a conventional preamp, and in some ways more ergonomic.

Included in this package:

- Cella
 - USB Cable
 - AC Power Cord
 - Reference Guide
-



Cella should be located as far away from power transformers, old CRT TVs, and other known “noise generators” for optimal noise performance. Take care not to obstruct any of the ventilation openings on the top and/or bottom of Cella. If Cella will be mounted in a rack, allow sufficient space (1RU) for air to freely travel above and below the unit--LET IT **BREATHE!** Following these guidelines will ensure the longest operational life of your investment.



- A** 7-Segment Gain Indicator
- B** Headroom Meter (0) LED Indicator
- C** Headroom Meter (+) LED Indicator
- D** Headroom Meter (OL) LED Indicator
- E** DI LED Indicator
- F** Phantom Power LED Indicator
- G** Polarity LED Indicator
- H** Pad LED Indicator
- I** Mute LED Indicator
- J** DI Input Jack
- K** Rotary Encoder & Push Switch
- L** DI Switch
Switches input from mic input XLR to 1/4" Jack
- M** Phantom Power (+48V) Switch
Toggles +48V on/off at the mic pre input
- N** Polarity Switch
Toggles polarity from 0° (in-phase) to 180° (reverse)
- O** Pad Switch
Engages -22dB attenuator at input of mic preamp
- P** Mute Switch
Mutes preamp channel
- Q** Select/Clear All Selections Switch
Pressing when no channels are selected selects all channels. Pressing again or when channels are selected, clears all selections
- R** DI Thru Jack
Can be used as a thru connection to feed a guitar amp or as an input if the front panel DI Jack is not being used
- S** Microphone Input XLR
- T** Line Output (A and B) XLR
Each channel is equipped with dual parallel outputs. In the studio output A and B can be used to feed two separate processors to create a blend of creative effects. In live sound scenarios, A could be used to feed the Front-Of-House mixer, while B is used to feed the monitor mixer.
- U** USB Connector
Used to connect to the Cella RCU software or to Pro Tools to be controlled as a "Digit-Pre"
- V** IEC AC Inlet
- W** Power Switch
- X** Line Voltage Indicator
Make sure this displays the correct voltage for your region.

.:BASIC OPERATION:.

Channel Selection: Channels are selected by briefly pressing inward on the rotary encoder. A selection is indicated by blinking decimal points in the 7-segment display.
In order to change gain or to switch features (**48V/POLARITY/PAD/MUTE**) on/off, one or more channels must be selected.
The **SELECT/CLEAR ALL** switch may be used to select/deselect all channels at once.

Changing Gain: The selected channel(s) gain can be increased/decreased by turning the rotary encoder.

.:ADVANCED FEATURES:.

Cella is remotely controllable from it's own RCU software as well as Pro Tools (and compatible control surfaces like the ICON D-Command® & D-Control®) via USB/MIDI as if it were the Avid PRE®. The only adjustments that may need to be made on Cella are to MIDI Channel when controlling from Pro Tools and Cella ID when connecting to the Cella RCU. By default, Cella is ready for Pro Tools or RCU control and is set to: MIDI Channel: 1, Cella ID: 1

To modify either control setting, enter SETUP MODE:

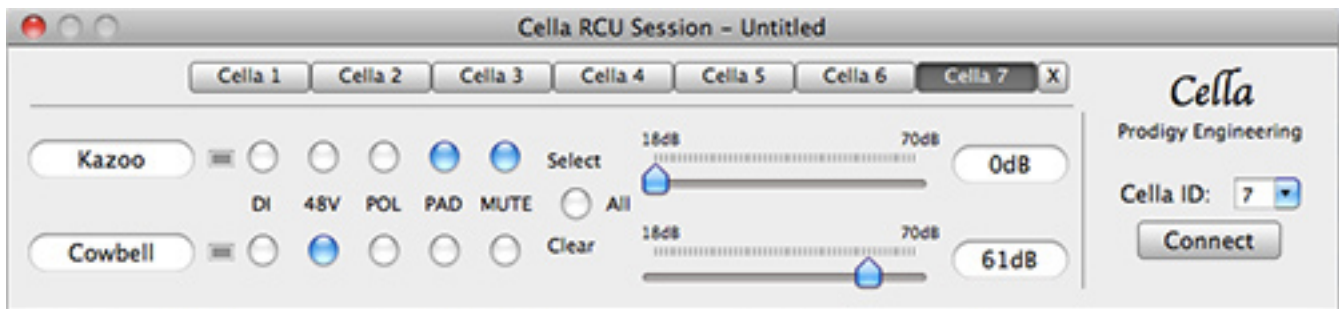
- 1) Push in on the rotary encoder and hold it until the gain displays flash "00" several times. When the "00" stops flashing Channel 1's display will show MIDI Channel and Channel 2's display will show Cella ID.
- 2) Turn the encoder to change the values up/down. A brief push of the encoder will toggle between MIDI channel and Cella ID.
- 3) Push in and hold the encoder to save the changes. Pressing the Select/Clear All switch will exit setup mode without saving any changes.

.:CELLA SOFTWARE RCU OPERATION:.

All of Cella's front panel controls can be accessed remotely by using the Cella RCU application (OSX only). The RCU can support up to 8 Cella for a total of 16 channels. In addition to providing the ability to control Cella through the RCU graphical interface, all preamp settings can be saved and recalled instantly in the same way that one would save and open a file.

To setup Cella for RCU control, follow the instructions below:

- 1) Download the latest version of the RCU software from the download section at:
www.prodigy-eng.com/products.html.
- 2) Install the Cella application by dragging it into your "Applications" folder, but do NOT open it yet.
- 2) If you have more than one Cella, enter setup mode and set the Cella IDs sequentially so that the first Cella is assigned ID #1, and the next Cella is #2, then #3, and so on (see page 7 on how to enter setup mode).
By default Cella is set to ID 1.
- 3) Connect Cella to your computer one-by-one using the included USB cable(s).
- 4) Open the Cella RCU application.
- 5) Connect to the attached Cella by their IDs using the pull-down menu and connect button on the right of the RCU. All controls should now be accessible from the RCU.



[for illustrative purposes only]

.:PRO TOOLS OPERATION:.

Cella is controllable from AVID Pro Tools® (and compatible control surfaces like the ICON D-Command® and D-Control®) as if it were the Avid PRE®.

Once Cella is setup, preamp settings can be saved with sessions. When the session is later opened, all the preamp settings that were saved with the session get restored to Cella instantly without the need for clumsy recall sheets and sharpies.

Setup for 1 Cella is very different than setting up for multiple Cella.

PLEASE follow these instructions carefully.

Pro Tools Setup for 1 Cella:

- 1) Connect Cella to your computer using the included USB cable.
- 2) Launch Pro Tools.
- 3) Set up the Cella as a Peripheral in Pro Tools (Pro Tools menu: Setup > Peripherals)
 - a) In the Mic Preamps tab of the Peripherals window, set type #1 to: PRE
 - b) Set Receive From and Send To according to the MIDI channel set on the Cella (by default Cella is set to MIDI Channel 1)
- 4) Open I/O Setup (Pro Tools menu: Setup > I/O Setup) and assign Cella channels 1 and 2 to the inputs of your Pro Tools interface. Holding the Command key while selecting the appropriate box allows you to select one channel at a time. If you do not hold the Command key, Pro Tools will sequentially assign 8 channels (which you can delete by selecting a box and pressing the delete/backspace key).
- 5) In the Mix/Edit window, change the display options to show **Mic Preamps**. You should now be able to control Cella from the mic pre controls in Pro Tools. (Note: not all of Cella's features are controllable from Pro Tools. Pro Tools limits the smallest gain step to be 3dB. Additionally, neither high-pass-filter (HPF) or insert is available on Cella and therefor those commands will be ignored).

Pro Tools Setup for 2 or more Cella:

- 1) **VERY IMPORTANT:** If Pro Tools is open, close it now! If you skip this step, the setup process will become very complicated and pro tools may never be able to correctly connect to Cella.
- 2) Disconnect Cella from your computer.
- 3) Open **Audio MIDI Setup** (Finder > Applications > Utilities > Audio MIDI Setup)
- 4) If you have had Cella connected to this computer previously, you may see Cella icons in the MIDI Studio. Select them all and click "Remove Device"
- 5) Plug in just one Cella, and a Cella icon should appear in the MIDI Studio window.
- 6) Double Click on the Cella icon and rename the first Cella to "aCella". Plug in the next Cella and rename that icon to "bCella". Plug in another Cella and rename that one "cCella" and so on (see photo below).
- 7) Now launch Pro Tools and follow steps 3-5 under "Pro Tools Setup for 1 Cella".



For additional help view the
setup tutorial video online:
WWW.PRODIGY-ENG.COM/SUPPORT.HTML

.:TECHNICAL SPECIFICATIONS:.

Gain:

18 – 70dB in 1dB steps

Bandwidth:

5Hz to >200kHz

Frequency Response: (@ 18dB gain, 150Ω Source, 600Ω Load):

+/- 0.2dB from 10Hz - 24kHz

+/- 0.5 dB from 10Hz - 90kHz

Total Harmonic Distortion + Noise (@ 18dB Gain, 1kHz 0dBu signal, 150Ω Source, 100kΩ Load):

0.0009%

Slew Rate:

+/- 20V/uS

Common Mode Rejection Ratio:

96dB @ 60Hz

Absolute phase deviation (@1kHz):

<0.25 degrees

Inter-channel phase deviation (@1kHz):

< 0.02 degree

Mic Input Impedance:

1760Ω

DI/Hi-Z Input Impedance:

276810Ω

Output Impedance:

82Ω

Power Consumption:

15 Watts Max

Fuse:

For Mains Voltages 100-120V = **1A/250V Slow-Blow**

For Mains Voltages 220-240V = **500mA/250V Slow-Blow**

Dimensions:

Cella: 19" x 11" x 1.75" (1U)

Weight:

Total shipping weight: 17lbs

::LIMITED WARRANTY::

- 1) Prodigy Group, LLC (Prodigy Engineering) warrants this product to be free of defects in workmanship for a period of 2 years from date of purchase.
- 2) During this warranty period, Prodigy Engineering will repair or replace (at its sole discretion) any failure due to defects in workmanship or defective components.
- 3) Customer must register the product within 10 days of purchase (from the date on receipt) to validate this warranty. Register online at: WWW.PRODIGY-ENG.COM/SUPPORT.HTML
Unregistered owners requesting warranty service may be denied unless a dated receipt can be produced.
- 4) This warranty excludes the following conditions:
 - a. Damage caused by misuse or obvious physical abuse
 - b. Cosmetic blemishes
 - c. Damage resulting from shipping
 - d. Normal wear-and-tear
 - e. Damage resulting from unauthorized disassembly, modification and/or repair.
- 5) Under no circumstances will Prodigy Engineering be held liable for lost profits that result from malfunction or damage.
- 6) Warranty will become VOID if the product is disassembled/modified by any party that does not have direct written authorization from Prodigy Engineering.
- 7) Customer is responsible for all shipping costs to deliver the product to Prodigy Engineering for warranty service. Accordingly, Prodigy Engineering will pay for return shipping.

TO OBTAIN WARRANTY SERVICE

If the customer suspects that warranty repair service may be required, contact Prodigy Engineering immediately to receive further instruction on how to proceed. Do not attempt to return any merchandise before contacting Prodigy Engineering. Customers outside the US should first contact their local authorized distributor.

THE WARRANTY SET FORTH ABOVE IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL OR WRITTEN, EXPRESS OR IMPLIED. PRODIGY ENGINEERING DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IF PRODIGY ENGINEERING CANNOT LAWFULLY DISCLAIM IMPLIED WARRANTIES UNDER THIS LIMITED WARRANTY, ALL SUCH WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY. NO PRODIGY ENGINEERING RESELLER, AGENT, OR EMPLOYEE IS AUTHORIZED TO MAKE ANY MODIFICATION, EXTENSION, OR ADDITION TO THIS WARRANTY.

Before contacting Prodigy Engineering for service, please have the following information ready:

Date of Purchase: _____

Dealer: _____

Product Name: _____

Serial Number: _____

.:APPENDIX:.

Tips for getting the best performance using the DI / Hi-Z inputs.

Unbalanced signals and Hi-Z inputs (like Cella's DI input) are sensitive to noise interference. Because they're unbalanced signals, they do not have the same noise rejection capability that balanced signals do. However, that doesn't mean that you can't get great results. Getting good performance with unbalanced signals just requires some more effort and attention to detail.

The following tips will help you get the most out of using Cella's DI inputs:

- 1) Keep your instrument, instrument cable, and Cella as far away as possible from known 'noise generators' like CRT TVs, power transformers, microwaves, etc...
- 2) Keep the cable connecting your instrument to Cella's DI input as short as possible. The shorter the better. Longer cable has more "opportunity" to pick up stray noise. The extra capacitance from a longer cable may also introduce undesirable frequency response changes.
- 3) If you must use a longer cable make sure not to coil any excess cable. Coiling the cable increases inductance, which may introduce frequency response changes.
- 4) If you are using the DI Thru jacks to send the signal to a guitar amplifier, use the same outlet or powerstrip for Cella and the amp. This will minimize the potential for ground loop noise.
**REMEMBER: NEVER "lift" THE POWER GROUND PLUG.
LIFTING THIS SAFETY GROUND IS ILLEGAL IN MOST AREAS AND VERY DANGEROUS!**

MAILING ADDRESS:

PRODIGY ENGINEERING
P.O. Box 10
BOWIE, MD 20719-0010
USA

TEL: 301-262-3296

WWW.PRODIGY-ENG.COM
INFO@PRODIGY-ENG.COM