

# Valerie Mk2

## Owner's Manual



## SKAA<sup>®</sup> Pro Wireless Vocal Microphone



designed in Canada  
rocks the whole universe of SKAA speakers and receivers

**DILLINGER** LABS

# Introduction

Thank you for choosing Valerie Mk2; the SKAA Pro wireless vocal microphone by Dillinger Labs. Valerie Mk2 features dual mode SKAA / SKAA Pro operation, an Analog Preamp with a dedicated gain fader and Fat Channel (DSP processing), all built in.

- Valerie Mk2 uses pro-grade SKAA wireless audio; it's 100% bluetooth and WiFi free
- Works with all SKAA Speakers and Receivers including products by SOUNDBOKS, Wet Sounds, Electrotec, Dillinger Labs, Cewin Vega, and more
- Supports both SKAA and SKAA Pro modes
- 19 ms latency in SKAA Pro Mode and 36 ms in SKAA Mode
- One Valerie Mk2 can feed up to four Receivers in SKAA Mode and up to two Receivers in SKAA Pro Mode
- Condenser (Electret) mic capsule for capturing vocal detail
- Fat Channel (DSP processing) is built in to fatten and sweeten your vocal sound
- 6 Fat Channel presets each deliver a unique combination of gate, compression, EQ and limiting
- Analog Mic Preamp is built in
- Drive the Fat Channel as soft or as hard as you like by adjusting the analog Preamp Gain using a dedicated fader
- With the 6 Fat Channel presets and the ability to finely control Preamp Gain (this is completely separate from the volume system), you can craft a wide array of sounds right from Valerie's user interface
- Digitally control Global Volume (power amp volume) of all downstream SKAA Speakers / Receivers with the dedicated volume buttons
- Valerie Mk2 runs for 12 hours from a full charge using its internal Li-Ion battery
- Charge it using any ordinary USB charger you already own
- Charge and use Valerie Mk2 at the same time

**For the intrepid few who always wondered what this meant but were too busy kicking butt to ask ...**



The SKAA® standard for wireless audio guarantees compatibility between all products bearing the SKAA Compatible Badge. It also guarantees product antenna performance by verifying reliable operating distance minimums have been met. SKAA transmitters work with iOS & Android mobile devices, Mac & Windows computers, televisions and any product having a line output, S/PDIF output or a headphone jack.

SKAA semiconductor components enable SKAA to be embedded in consumer audio and pro audio products. Not based on Bluetooth or WiFi, SKAA is a global standard built from the ground up specifically for audio. Learn more at [www.SKAA.com](http://www.SKAA.com)

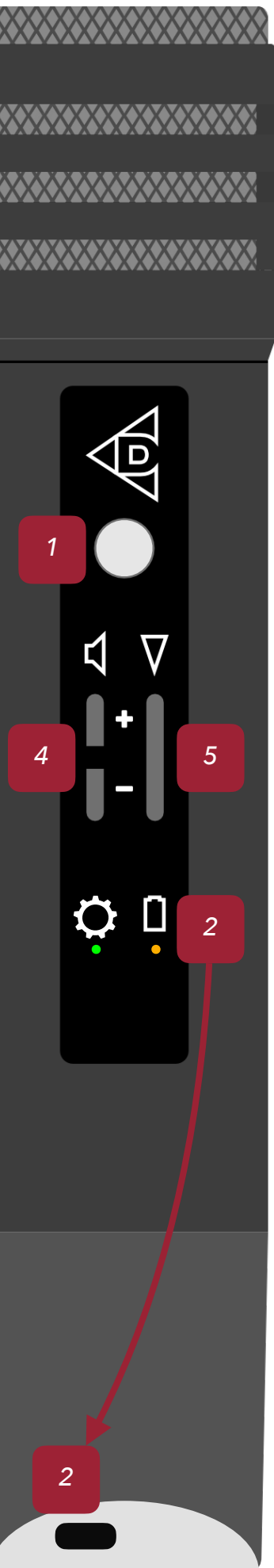
## Packing List

- Valerie Mk2 SKAA Pro Microphone
- 1 meter Type-A to Type-C Charging Cable
- Protective Nylon Bag
- QR Code Card (link to manual and more)

***We like to make our products easy to use ... and Valerie Mk2 is no exception!***

Still, to fully unleash the considerable capabilities of this shiny new work of art, we vehemently advise you to read this Owner's Manual. Its pages are brimming with invaluable insights, irreverent commentary, and other assorted nuggets of paradigm-altering revelation. We really poured a lot of TLC into this one and hope you love your Valerie Mk2 as much as we do.


# Quick Start Guide



1. *Hold down the Power Button for a few seconds to turn the mic **ON** or **OFF**. The Power Button glows when Valerie Mk2 is ON. Pull down the Preamp Gain fader (slider 5) to about 50%.*

2. *Look at the Battery indicator. If it's flashing, power OFF your Valerie and charge it with any USB charger (with Type A output) and the charging cable included with Valerie. The Battery Indicator will light up during charging and will extinguish when charging is done. When mic is charged, start over from step 1.*

3. *Power ON your SKAA receiver or speaker. If it's a multi-mode speaker, make sure it's acting as a SKAA receiver (for example, select SKAA mode on Stage One or select JOIN mode on Soundboks). Refer to its owner's manual if necessary. Set your speaker's LOCAL volume to 50%. If you have more than one Speaker/Receiver, repeat this step for the remaining units.*

4. *Bond your speaker or receiver to Valerie Mk2: Double Click the Bond Button  on your SKAA Speaker/Receiver. You will see the Bond Indicator glow bright Amber once Bonded. If you have more than one Speaker/Receiver, repeat this step for the remaining units. Operate the Global Volume (+/-) buttons on Valerie – if you see the Bond Indicator on your Speaker/Receiver flashing when you do, it has successfully Bonded to Valerie.*

5. *Speak into the microphone. Say something like "I've got a Polish uncle; and a Czech one too, a Czech one too". As you do, push up the Preamp Gain fader (slider) to about 80%. The Preamp Gain affects your mic's level, but it also affects the timbre of your sound (clinical vs. warm). Adjust GLOBAL VOLUME (that's the +/- buttons on Valerie). Use GLOBAL VOLUME to change the volume of your whole speaker system. Now adjust LOCAL VOLUME on each individual Speaker/Receiver so your overall system is balanced to your liking.*

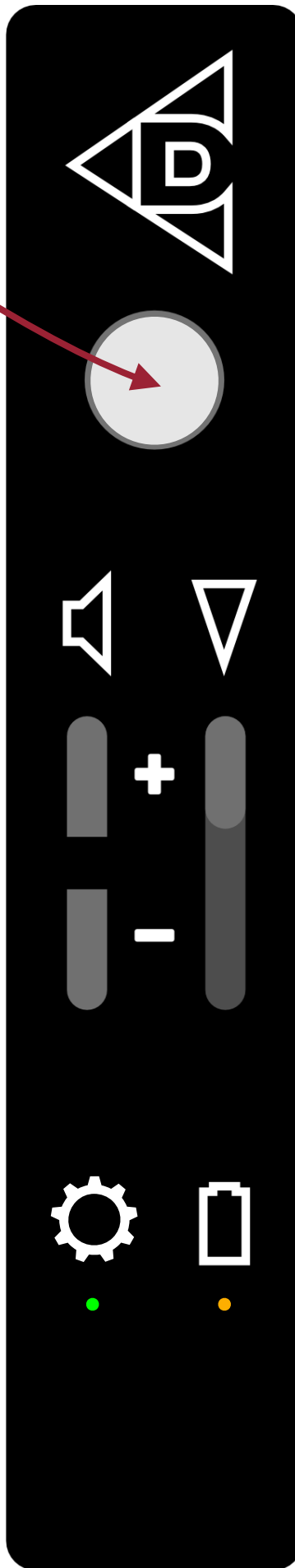
# Power, Mode & Sleep

*Hold down the Power Button for a few seconds to turn Valerie Mk2 ON / OFF. The Power Button illuminates either red or green when Valerie is ON.*

**●** *In SKAA mode the Power Button will lite up green and Valerie Mk2 will feed up to 4 SKAA Receivers at 36 ms of latency*

**●** *In SKAA Pro mode the Power Button will lite up red and Valerie Mk2 will feed up to 2 SKAA Receivers at 19 ms of latency*

- While powered ON, change Valerie's mode by six-clicking (click the Power Button 6 times, fast). This reboots Valerie and you'll see the illuminated color of the Power Button change from green to red or vice versa.
- Once you change Valerie's mode, it will stay that way until you manually change it again. Mode is persistent, even surviving power OFF / ON.
- NOTE – Speakers/Receivers always follow the mode of the transmitter (in this case, Valerie Mk2). There's no action required on the Speaker/ Receiver side when you change modes; they will follow the mode of the Transmitter automatically.



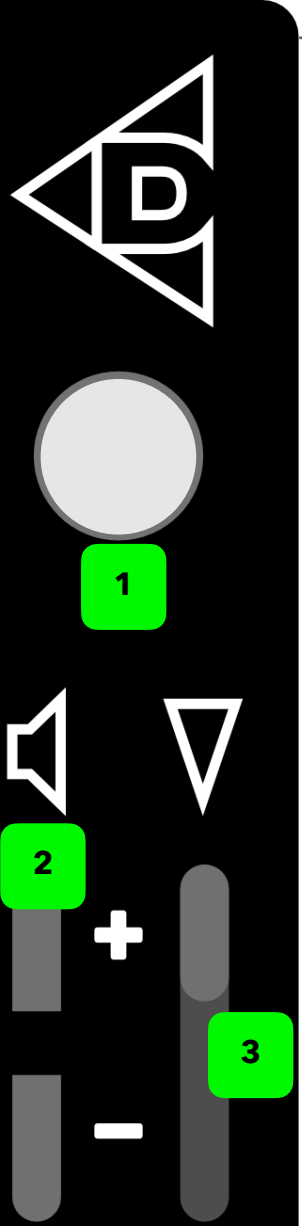
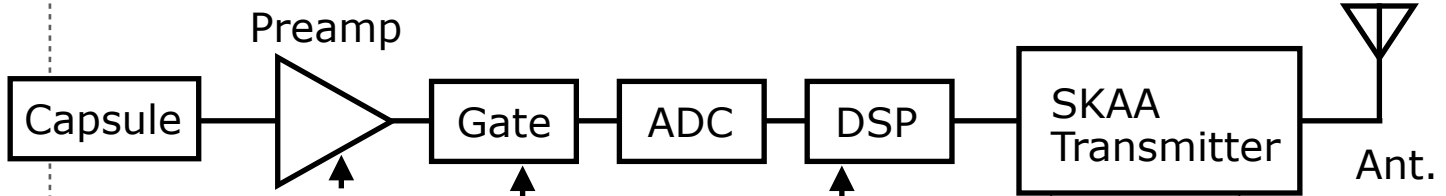
- SKAA Pro mode (red) is ideal for live PA (ie singing). For talk (speech), SKAA mode can be super useful since up to 4 Speakers/Receivers can be Bonded with no need for a mixer.
- A good rule of thumb is, use SKAA Pro mode if you have only 1 or 2 Speakers/Receivers; you'll benefit from the lower latency. When you need to Bond 3 or 4 Speakers/Receivers to your mic, use SKAA mode.
- Virtual Off (VO) is a sleep mode in which Valerie turns off its SKAA radio following a period of silence. This results in Bonds being dropped to all downstream Speakers/Receivers.
- In SKAA mode, Valerie Mk2 will go to Virtual Off state after 2.5 minutes of no audio (silence)
- In SKAA Pro mode, Valerie Mk2 will go to Virtual Off state after 20 minutes of no audio (silence)
- When in VO, Valerie's Power Button brightness will be dimmed
- If silence continues for an extended period, Valerie Mk2 will power itself OFF automatically and the Power Button will no longer be lit. If Valerie is plugged into a charger, then this auto power OFF will not happen.

## **Pro Tip:**

*You can disable the VO feature by clicking the Power Button five times, fast. The LED under the gear icon will flash 5 times to confirm. Now all Speakers/Receivers will stay Bonded to Valerie Mk2 indefinitely. Valerie will stay powered ON until you turn it off manually. The VO feature will be enabled again the next time you power ON your Valerie.*

# Quick Reference – Signal Path & Controls

Valerie Mk2



- 3**
  - Preamp Gain fader (slider)
  - Control the gain of Valerie's built-in analog preamp with this fader
  - Drive into the compressor (DSP) hard or soft and change the character of your sound
- 1**
  - Double Click the Power Button to change the Fat Channel Preset
  - The Gear Indicator (4) will change color
  - See the table for a quick reference of which color represents which Preset
- 4**
- 2**
  - Global Volume (+/-) Buttons
  - Mute/Unmute Bonded speakers by 3x clicking the Power Button
- 1**
  - Remote control the volume of Bonded Speakers/Receivers
- 1**
  - 6x click the Power Button to change Valerie's Mode
  - Green Power Button = SKAA
  - Red Power Button = SKAA Pro

Power Button	Function
Hold	Power Valerie Mk2 ON or OFF
1x click	Fuel Gauge check – count battery LED flashes
2x click	Change Fat Channel Preset (see color table)
3x click	Mute/Unmute all Bonded Speakers/Receivers
4x click	-
5x click	Disable Virtual Off (VO = sleep) function
6x click	Toggle Mode (SKAA or SKAA Pro)

	Preset	Description
	Gab	Talk – gentle gate & EQ A
	Hawk	Talk – aggressive gate & EQ A
	Chase	Sing – fast/hard compression & EQ B
	Silk	Sing – slow compression & EQ B
	Catch	Sing – fast/hard compression & EQ C
	Goo	Sing – slow compression & EQ C
	None	No dynamics / EQ (no DSP at all)

*Remember to add Valerie to the Green List of the speakers you're using; see the SKAA Receiver User's Guide later in this manual*

Bonded SKAA Speaker(s)/Receiver(s)

SKAA wireless audio

Global Volume & Mute

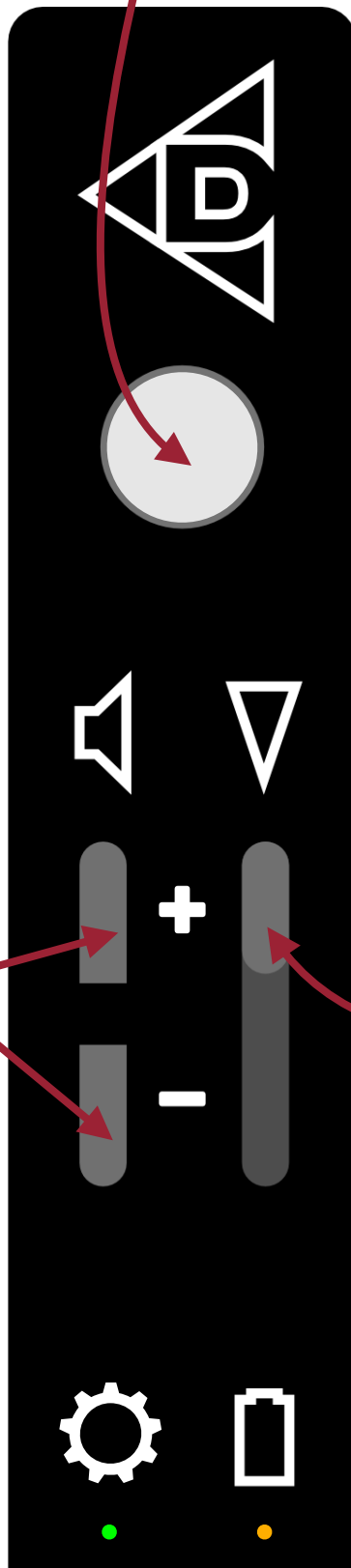
# Volume Control & Preamp Gain

- Speaker/Receiver Bond Indicators will slow flash when they're muted
- Valerie's GLOBAL Volume control buttons provide 30 volume steps from 0 to full
- The Bond Indicator on all Bonded receivers flashes when you use the +/- buttons on Valerie
- This flashing tells you the receiver is Bonded to Valerie and volume control data is flowing
- Flashing stops when you reach the bottom (0) or top (30)
- NOTE: many speakers and receivers also use 30 steps for their LOCAL Volume controls
- Both GLOBAL and LOCAL volumes matter. For example if the GLOBAL volume is 50% and the LOCAL volume is 80%, the speaker's actual volume =  $0.5 \times 0.8 = 0.4$ , or 40%

*Global Volume Buttons (+/-) remote control the volume of all Bonded speakers and receivers*

- To balance out your speaker system, start by reducing your Global Volume to around 50% (15 clicks down from full up).
- Then pick the speaker which needs to be loudest and set its Local Volume to full up. Set the remaining speakers' Local Volumes to your liking.
- Now control whole system from Valerie's +/- buttons

*Mute or Unmute all Bonded receivers with 3x clicks of the Power Button*



- Valerie has a built-in analog mic preamp. The preamp gain is controlled by a dedicated fader. It's the slider on the right hand side of the user interface.
- This fader is useful for several things. But it's not intended for setting the volume level of your vocals. For that, use the Global Volume Buttons on the left.
- The fader's prime purpose is to make sure a healthy (but not too strong) vocal signal arrives at the ADC (analog to digital converter). See the previous page.
- You'll want to set the fader up higher, around 90%, for soft talkers and lower, around 50%, for loud talkers. In a loud environment such as a trade show, people will naturally talk louder. So a low fader position will work better in that situation, too.
- The Preamp gain also affects how hard your vocal is hitting the compressor in Valerie's DSP. A higher fader means your vocal will be more compressed. A lower fader will allow for more dynamics in your vocal.

*Pro Tip: If you hear distortion in the vocal audio, pull down the Preamp Gain Fader a little bit. You may be overdriving Valerie's ADC with a signal that's too strong.*

*The Preamp Gain fader is NOT for volume control – it has a completely different purpose*

*About Feedback: If you hear feedback, pull down the Preamp fader to instantly stop it. Then make sure your mic's grille (capsule) is pointed away from your speakers and push the fader back up. Also, you can try a different Fat Channel Preset. Depending on your exact environment, some Presets will suppress feedback better than others. And note SKAA mode is more immune to feedback than SKAA Pro mode.*

# Battery & Charging

- Valerie Mk2 runs 12 hours from a full battery
- Click the Power Button to activate the Fuel Gauge and count the number of times the Battery Indicator flashes. Check the table below for the meaning.
- When 3% battery energy remains, the Battery Indicator will begin to flash slowly indicating Low Batt state. That's your cue to charge Valerie.
- When the battery is fully depleted, Valerie Mk2 will power itself OFF automatically
- Any USB power adapter will charge Valerie Mk2 including ordinary mobile phone chargers
- Fast charging is supported. A charger capable of at least 2 Amperes (2 A) will charge Valerie in 2.5 hours from empty.
- Valerie's Type C jack is for POWER ONLY. If you plug Valerie into your computer, nothing magical will happen except Valerie's battery will become fuller.
- Li-ION batteries benefit from being charged BEFORE they're fully depleted –getting into this habit will extend your battery life

Batt Indicator	Meaning
1 flash	Fuel Gauge – 25% Batt Energy remains
2 flashes	Fuel Gauge – 50% Batt Energy remains
3 flashes	Fuel Gauge – 75% Batt Energy remains
4 flashes	Fuel Gauge – Battery is Full
slow flash	3% or less Batt Energy remains
solid ON	Battery Charging in Progress
OFF	(during charging) means Charging Complete

## Pro Tips

- **Many other USB power sources can also be used to charge Valerie Mk2. For example computers, cars, power banks, TVs and even some mixers and speakers with Type A ports. Just make sure Valerie's Battery Indicator is glowing solid when you plug into any power source. This tells you charging power is actually getting to the battery. Depending on the capabilities of the specific source, charging may take more time than with a good charger (some may take 10 hours or more).**
- **You can use Valerie Mk2 while you're charging it. But be aware that chargers, power banks, computers and other USB power sources are notoriously noisy. If you plan to charge Valerie during a real gig, make sure you test it first and convince yourself that the power source's noise is not audible in your vocal audio.**

*While Valerie Mk2 is powered ON, Click the Power Button once to activate the Fuel Gauge*

*The Battery Indicator flashes a number of times when Fuel Gauge is activated*

*Charge Valerie by plugging the included Charging Cable into this jack. Connect the other end to any USB charger and plug it into AC power.*

