



Death From Below Owner's Manual



SKAA[®] Pro Subwoofer



we created SKAA's thousand pound gorilla sub in Canada
then we squeezed it down to 34 lbs in a plasma furnace



introduction

Thank you for choosing Death From Below ("DFB") by Dillinger Labs, the world's first SKAA / SKAA Pro battery subwoofer for mobile PA.

- Feed DFB from Dani transmitters, Soundboks 3, 4 & Go speakers, other SKAA Nadja Hub speakers, as well as any of the many types of SKAA /SKAA Pro transmitters found on SKAAstore.com
- Pro-grade SKAA wireless audio. 100% Bluetooth-free. 100% WiFi free.
- Use up to 4 SKAA receivers (any combination of Death from Below and any other SKAA receivers) at the same time with any one SKAA transmitter
- Remembers up to 10 of your favorite sources
- Low latency – great for live performance
- Choose from 5 epic EQ presets including ones specifically tuned for use with popular Soundboks speakers
- Configure DFB's audio routing right from the front panel. Select from LEFT, RIGHT or MONO MIX audio. You can set up stereo subs if that's what you want.
- DFB remembers your EQ and audio routing setups – they'll be active until you change them again.
- A built-in bank of 8 ultra-fast film capacitors jacks up DFB's performance by giving its amps instant access to energy when needed; that is, by ensuring the amps are never starved for power – the resulting enhanced impulse response is what's behind DFB's extra-ballsy bass punch. Double the punch with no battery life hit – nice.
- Dual tuned ports extend DFB's bass response down to 35 Hz while maximizing SPL output
- Steel grills suck for subwoofers. They're heavy and block around 30% of their surface area with metal material. They're a ball & chain on driver cone dynamics and what's worse, they waste battery energy as a result. Instead, DFB's light-weight aluminum vanes enable 99% unencumbered airflow to and from the drivers and ports. DFB ships with 4 vanes for extra protection.
- Compatible with the (optional) SKAA cmd app

For the curious and intrepid few who always wondered what this meant but were too afraid 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

- Charge the internal battery and play DFB at full volume at the same time
- Internal battery charges from empty to full in 2.5 hours using the included 125W brick power supply
- Battery fuel gauge LED stack displays battery life remaining
- A system with two DFBs and two Soundboks 4s pole mounted atop the DFBs is an ideal setup for the gigging mobile DJ
- DFB is not just for Soundboks. Use DFB to complement virtually any full-range PA speaker. Also, any powered speaker (QSC, JBL, EV, Mackie, etc.) can be converted to SKAA wireless just by adding a pro receiver such as Streetheart

We like to make our products easy to use and DFB is no exception !

Still, to fully unleash the potency of your brand new clawing, snarling beast, we vehemently advise you to read this Owner's Manual. Its pages are brimming with juicy morsels of invaluable insights, irreverent commentary, and other assorted nuggets of paradigm-altering revelation. We really put our foot in this one and we hope you love your DEATH FROM BELOW subwoofer as much as we do!

creating the clawing, snarling beast

We didn't just take an AC-powered sub and strap a battery on it – DFB is built and optimized from the ground up to be a battery speaker. In the world of battery speakers, bags of Watts is actually a bad thing. Imagine how long a 115 Wh battery would power a 3600 W speaker ... $115/3600 = 0.03$ hours. Even once you consider crest factor, you still end up at 0.38 hours (23 minutes). Would you buy that speaker?

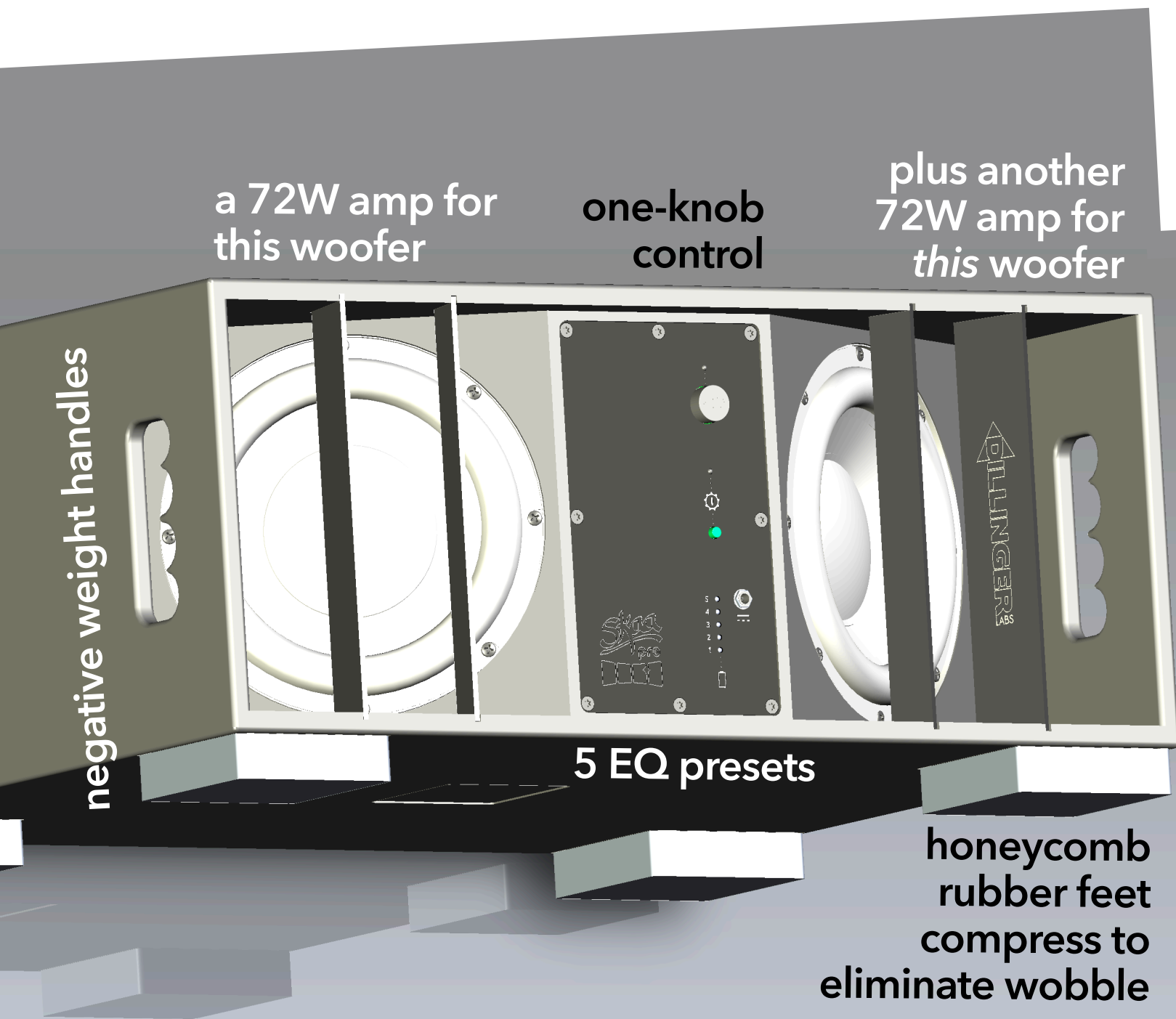
*Yeah no – the same rules don't apply. The challenge is how to take an amp rating like 144W and translate it into paint peeling SPL output – killer real world volume that rivals the 3600 W monster. It sounds like magic but it's a carefully choreographed dance of cutting edge electrical, acoustical and battery engineering which makes DFB awesome. Make no mistake, DFB's first impression on people is, almost invariably, "That thing is f*cking loud!". Maybe it IS like magic. We're super proud of DFB, as is probably painfully obvious to you by now. 😊*

To say we're honoured to have you as part of the family is an understatement. Our whole universe exists because of you. Thank you for your purchase! We're fanatics about one thing especially: making sure you're not just satisfied, but that you LOVE your new DFB. You should know that the people who support you are also part of the development team. If you love your DFB and especially if you don't, please reach out to us and share!

dillingerlabs.com/contact

... the DFB development team at Dillinger Labs

the details ... sweated



getting started

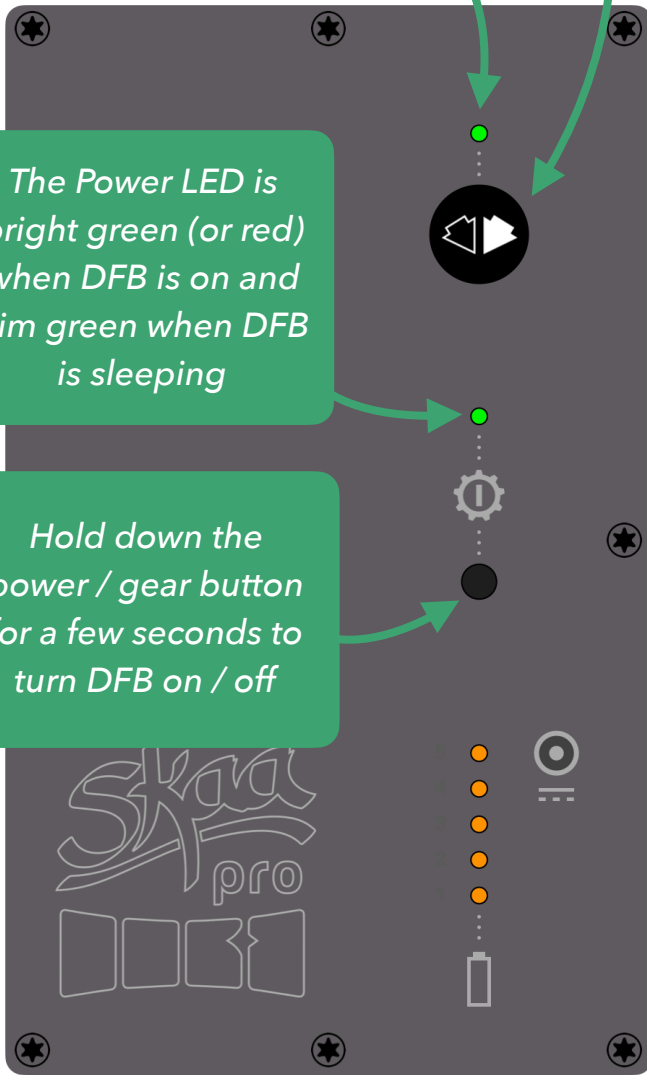
- Power DFB ON / OFF by holding the power button down for a few seconds
- A bright Green Power LED means DFB is on
- A dim Green Power LED means DFB is sleeping
- A bright Red Power LED means DFB is on and Bonded to a SKAA Pro Transmitter
- DFB has a local volume control knob that doubles as the Bond Button
- Turn the volume knob clockwise to increase the volume and counter clockwise to decrease it – 30 steps (clicks on the knob) will take you from zero volume to full up
- Watch the Bond Indicator as you turn DFB's volume knob – it will flash once for every one of the 30 steps - when it stops flashing, you've arrived at one extreme or the other
- Remember, the output level of DFB depends on both its Local Volume (DFB's volume knob) and the Global Volume set by the SKAA Transmitter (for example, Dani's volume knob)
- Global and Local volume example: say Dani is set to 50% and DFB is set to 80% then the net output level will be $0.5 \times 0.8 = 0.4 = 40\%$.
- Bond Button: Triple click (click 3 times, fast) to mute DFB's output. Triple click again to unmute.
- Bond Button: Double click to search for a new transmitter; one that's not on your DFB's Green List (favorites list). Once DFB has Bonded to a new transmitter, its Bond Indicator will glow bright Amber.
- Bond Button: Press and hold the Bond Button for a few seconds to add an Amber-Bonded transmitter to the Green List. The Bond Indicator will glow bright Green. DFB memorizes the transmitter as a "favorite" and will look for it specifically the next time you power on.
- See the included SKAA Receiver User's Guide for more Bond Button / Bond Indicator features and functions
- Death From Below will play nice with all the kids in the schoolyard. Other SKAA-based speakers including Soundboks 3, 4, and Go as well as non-SKAA powered speakers can benefit from the addition of DFB.
- Just add a Dillinger Labs Streetheart Receiver to any powered speaker to make it SKAA and SKAA Pro compatible
- DFB natively supports the professional Dani SKAA/ SKAA Pro transmitter as well as all other SKAA wireless audio transmitters and sources
- Check out the 68 "sweet hookups" – a collection of use case diagrams at the end of this manual – they're just the tip of the iceberg but we bet at least a few of them will inspire you to try some crazy-ass stuff with your DFB

Volume Knob: Rotate clockwise/ counterclockwise to adjust DFB's volume; this knob can also be clicked – it is the SKAA Bond Button, too

Bond Indicator: shows your Bond status with SKAA Transmitters

The Power LED is bright green (or red) when DFB is on and dim green when DFB is sleeping

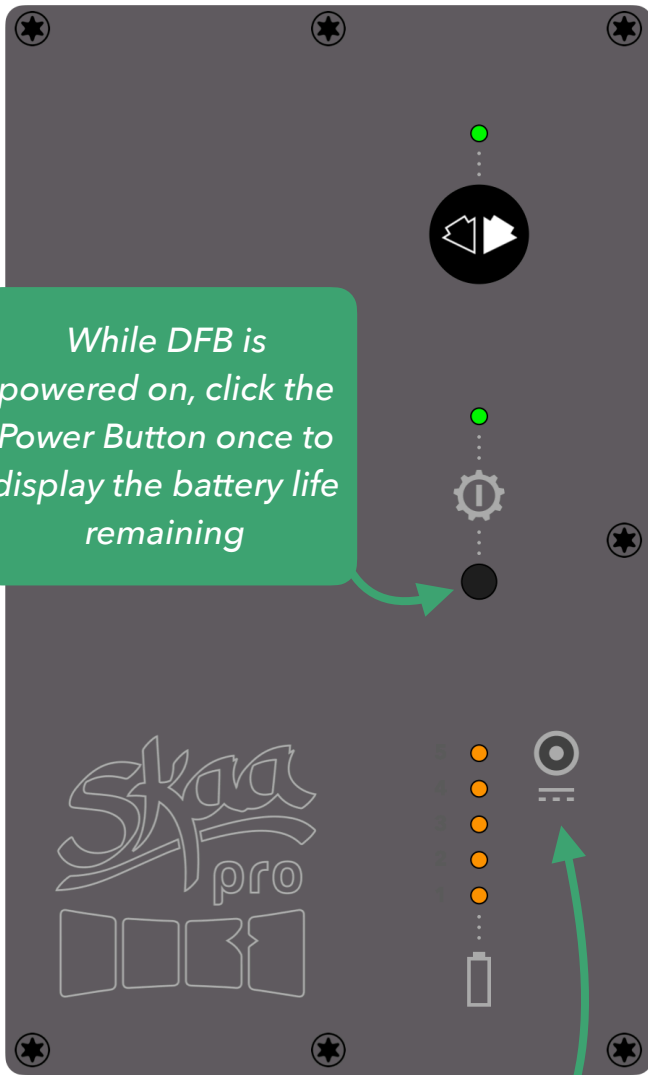
Hold down the power / gear button for a few seconds to turn DFB on / off



battery & charging

You can continue to use Death From Below while charging, even at full volume!

While DFB is powered on, click the Power Button once to display the battery life remaining



Power Jack - Use the included 125W Brick Power Supply to charge DFB

- Death From Below runs for up to 40 hours from a full charge using its internal battery
- Many battery subs from well-known brands waste up to 20% of their battery capacity in a voltage conversion process – we think that’s nuts, so we don’t do it that way. We’ve chosen DFB’s audio amplifiers carefully so that wasteful boost conversion isn’t needed – now you know the secret behind DFB’s fantastic battery life
- Use only the included Brick Power Supply for charging
- The battery will charge to full in about 2.5 hours (from fully depleted)
- Go ahead and use DFB (even at full volume) while you charge it
- The Battery Fuel Gauge (LED stack) gives you a visual indication of the amount of energy remaining in the battery – when activated, it stays on for a few seconds and then automatically shuts off
- To activate the Battery Fuel Gauge while DFB is powered on, click the power button once
- If DFB is powered off, power it on and the Battery Fuel Gauge will turn on after a few seconds – that is, you always get to see the Battery Fuel Gauge indication whenever you power on DFB
- When there is about 45 minutes of operating time remaining, the bottom LED in the Fuel Gauge stack will start to flash (that’s the LED right above the battery icon) – no click on the power button is needed to get this “low battery” (flashing) alert
- DFB automatically powers off when the battery is fully depleted
- When DFB’s battery is charging, the top LED in the stack (the one right beside the power jack) will glow – even if DFB is off
- Once charging has finished, the top LED in the stack will turn off, letting you know that DFB’s battery is fully charged
- If DFB remains not Bonded to a SKAA transmitter for an extended period of time, it will enter a power saving sleep mode (DFB’s power LED will be dim Green during sleep)
- If the Brick Power Supply is plugged in, DFB will stay in sleep perpetually until Bond is restored, but if the Brick Power Supply is NOT supplying external power, DFB will eventually power itself off
- Keep in mind that DFB’s cascade into sleep and possibly auto off is triggered solely by a lack of Bond – the presence or absence of audio is completely immaterial to this process

EQ and Audio Routing

After you enter either EQ select mode or Audio Routing mode, turn the knob clockwise/counterclockwise to navigate through the available options

Bond Indicator: shows your Bond status with SKAA Transmitters

Double click the power / gear button to enter EQ select mode

4 click the power / gear button to enter Audio Routing select mode

Use the LED stack to navigate through the EQ and Audio Routing Options

- Double click (2x click) the Power/Gear button to enter the **EQ select mode**
- Then use the Volume Knob to navigate through DFB's five EQ presets using the orange 5-LED Stack

- 5 - Big Wide Bottom 35 - 170 Hz
- 4 - Tight & Punchy 50 - 90 Hz
- 3 - Max battery life 75 - 110 Hz
- 2 - Matched for Soundboks Go
- 1 - Matched for Soundboks 3/4

- Quad click (4x click) the Power/Gear button to enter **Audio Routing select mode**
- Then use the Volume Knob to navigate through DFB's three Audio Routing options using the orange 5-LED Stack

- 5 - (not used)
- 4 - Left channel audio
- 3 - Right channel audio
- 2 - Mono Mix audio
- 1 - ~~Stereo~~ (disabled on DFB since it's a single-channel speaker)

- New out of the box, your DFB is set to EQ 1 and Mono Mix. These are the Factory Default settings.
- If you ever do a Factory Reset on your DFB (6x click on the Bond Button), the EQ and Audio Routing will be returned to these Factory Default settings.

the cabinet

4 lightweight vanes protect DFB's drivers while enabling free airflow

1 3/8" (35mm) pole bushing - welded steel and 4" deep

4 big rubber bumpers on DFB's rear wall help during transport & storage

12 mm baltic birch plywood cabinet with gorgeous black speckle coat finish



monkey grip handles reduce weight

dual tuned ports extend bass down to 35 Hz

8" bass drivers enable a low cabinet profile

25 mm thick honeycomb-cell rubber feet compress & self level

- DFB's cabinet is built from high-grade 12mm birch plywood making it both tough and light weight. It has doubled-up side walls for extra strength and rigidity. An internal support at its center guarantee that DFB won't flinch even with heavy top speakers pole-mounted – or when the huge guy at the rave decides to use it as a dance platform.
- 5 of 6 of DFB's birch plywood walls are featureless – so 5/6 walls are pretty much impervious to impact damage
- Gorgeous and robust speckle-paint matte black finish – yes, the classy one – it's beautiful, tough and LIGHTWEIGHT
- DFB's huge honeycomb-cell rubber feet compress to prevent DFB from wobbling regardless of how uneven a surface DFB is placed on
- Big rubber bumpers on DFB's back wall protect the cabinet during transport and storage
- Pop an industry-standard 1 3/8" (35mm) pole (not included) into DFB's bushing and loft a Soundboks 3, 4, Go or virtually any other powered speaker up top – no tripod stand needed
- With its massive welded-steel 4" deep pole bushing, ultra wide stance and anti-wobble honeycomb feet, DFB is a mega-stable pole base for your Soundboks or other pro-grade full-range top speaker
- Two monkey grip handles enable serious manhandling while literally reducing DFB's weight at the same time
- Weather resistant – DFB is good to go, regardless of where and when your gig is happening
- Gorgeous 3mm-thick anodized aluminum control panel. It's hefty to make DFB tough, and its anodized finish makes it a great heat sink for DFB's audio amplifiers. With a heat sink this big, DFB can actually deliver the full rated amplifier wattage to your cottage.

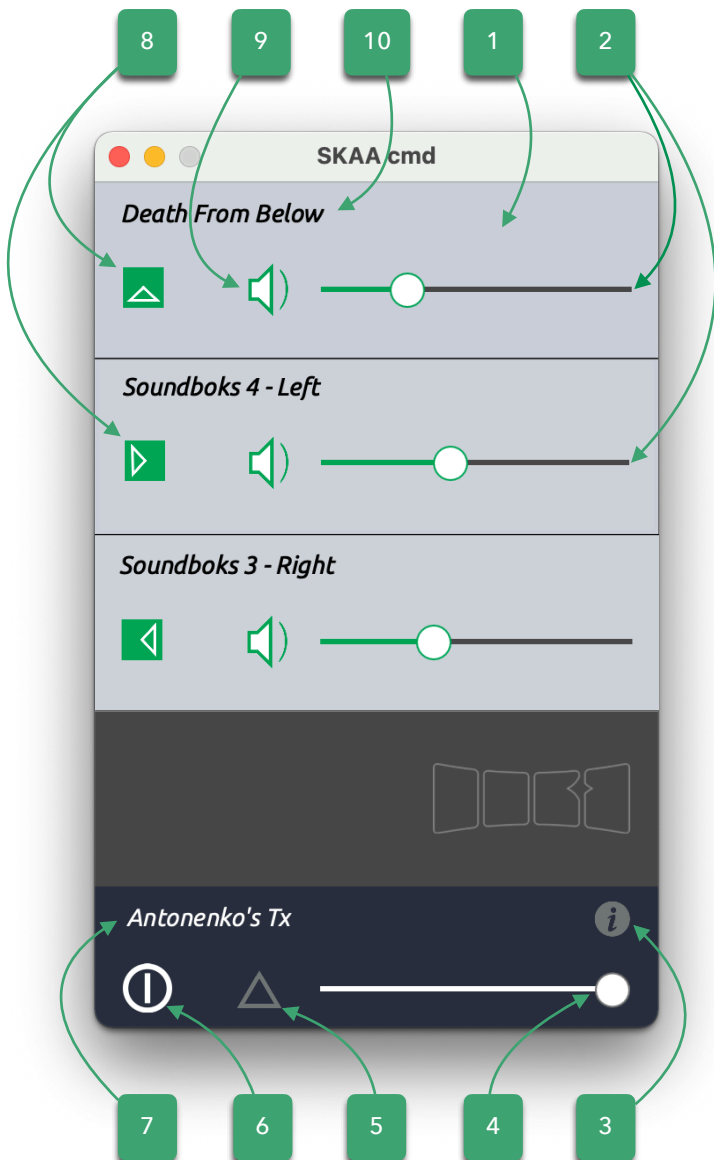
SKAA cmd

SKAA cmd ("SKAA command") is The App You Don't Really Need. If you never download it, never install it, and never launch it, your DFB will still work just hunky dunky. But once you learn about what SKAA cmd can do, you might just *want* it...

SKAA cmd adds a long list of features to your SKAA setup. Use it with Cassandra, Diz and Ursula transmitters. Add custom names to Receivers, easily mute any or all of your Receivers, adjust individual volumes, see which Receivers are Bonded to your Transmitter and more.

The SKAA cmd App is available for iOS, Android, Mac, and Windows. Download it from Apple's App Store, Google Play, and at SKAA.com/TLC.

Check out the SKAA cmd App User's Guide, also on SKAA.com/TLC.



1. Each Transmitter has 4 bays and you can Bond a single Receiver or a Cluster into each bay

2. Slide a fader to change the volume of a Receiver – its volume is also affected by 4.

3. Click the "i" ball to see the SKAA cmd app version and the Transmitter firmware version

4. Global volume control. This fader affects volume on all Bonded Receivers.

5. Mute Macro: clicking this triangle is the same as individually clicking the speaker icon for each Bonded receiver – it's a quick way to mute all of them. Press each Receiver's speaker icon individually to unmute.

6. Transmitter Power Mode
RED: Always ON
GREY: Always OFF
WHITE: ON only when there is audio

7. Click to change the name of your Transmitter

8. Audio Routing: The Green Bond Block lets you choose whether a Receiver is playing Left, Right, Mono Mix or Stereo audio. Since DFB is a single-channel device, the stereo option is hatched out (disabled in DFB). From the factory, DFB is configured for Mono Mix audio (that's the icon with a downward firing speaker). Make one DFB Left and another DFB Right if you want stereo subs.

9. Click to mute this Receiver. Click again to unmute.

10. Click to change the name of your Receiver

specifications

Parameter	Conditions	Value
Cabinet Construction		12mm birch plywood construction with black speckle coat finish
Battery Capacity		115 Wh, 12-cell Li-ION built-in battery pack
Run Time	Normal Listening	40 Hours
Run Time	Full Volume	5 Hours
Charge Time	From Empty	2.5 Hours
Amplifier Power		144W RMS (2 x 72W Infineon Merus Amplifier ICs)
Amplifier Type		Multi-rail Class D
Heat Sink	Direct connected by aluminum block	215 x 130 x 3 mm aluminum plate to amp heat sink
Woofers	each woofer	8" diameter, rubber surround, 80W continuous power, 120W peak power
Woofer Impedance	each woofer	4Ω
Punch Enhancement		8 x 100V 15uF Film Capacitors = 120 uF total
Port		Dual Tuned Bass Reflex Ports
Frequency Response	Reference: 75 Hz at 1W, AES17 LPF	35Hz - 180Hz +/- 3 dB
Acoustical Max Level		122 dB SPL
THD+N	50Hz - 150Hz	<0.01%
SNR	A-weighted, Ref: 1W at 75Hz	82 dB
Digital Resolution	each of 2 available channels	48 kSamples/s, 16 bit
Antenna Type		FE Model B0
RF Power	Maximum	18 dBm
Wireless Range	Actual range depends also on the actual antenna performance of the transmit-side SKAA device	Up to 50 meter reliable range
Inputs		SKAA or SKAA Pro wireless audio source
Standard Compatibility	SKAA OS 2.1 and later	Any SKAA or SKAA Pro Transmitter, any Nadja Hub
Transport Latency	I2S Digital to I2S Digital, SKAA	36.71ms +/- 1.5 samples
(cont.)	I2S Digital to I2S Digital, SKAA Pro	19.39ms +/- 1.5 samples
Max Receivers	Concurrent per Transmitter	4 (with SKAA source) , 2 (with SKAA Pro source)
Dimensions With Feet (HxWxD)		10.8 x 24.3 x 19.5 inches 27.4 x 61.7 x 49.5 cm
Dimensions W/O Feet (HxWxD)	Cabinet only, without bumpers and feet	9.8 x 24.3 x 18.7 inches 25 x 61.7 x 47.5 cm
Mass - Metric	Anywhere	15.5 kg
Weight - Imperial	near the Earth's surface	34 lbs
Power Supply Rating	External floor brick type	Input: 100-240 VAC, 50/60Hz, Output: 26V 125W

important information

Read the following information carefully. Failure to follow these safety guidelines may result in personal injury or user dissatisfaction.

1. Do not poke the woofers. They don't like it.
2. Never place anything into DFB's tuned ports. If it's raining, stack a little something under DFB's back feet to tilt it a bit – you want water running OUT of DFB's tuned ports, not IN.
3. Only use the provided Brick Power Supply for charging DFB.
4. Never store or operate DFB near a heat source.
5. Do not charge DFB during electrical storms.
6. Once fully charged, unplug the Brick Power Supply from DFB. This will extend battery life.
7. Listening to DFB at maximum volume may lead to hearing loss or partial hearing loss. We do not recommend listening with volume over 80% within 4 meters of your DFB.
8. Not for use by children under the age of 12.
9. Any disassembly of your Death From Below subwoofer will void your warranty.
10. When using DFB with poles and top speakers, use only 1 3/8" steel poles from a brand you trust, and get your bud to help you loft that Soundboks.
11. Death From Below is not your brother, mother or your friend. You will love it but it may not love you back.


This Owner's Manual is being continuously improved with the most up-to-date and accurate information on DFB. Please check our [website](#) for the most recent version.

Have questions or comments about Dillinger Labs products? We want to hear from you! Reach out to us [here](#).












Check out SKAA's [YouTube channel](#) for great how-to vids.












SKAA® RECEIVER USER'S GUIDE

Each SKAA receiver uses a *Green List* to remember your *favourite* audio sources (SKAA transmitters). A Green glowing Indicator on your receiver means you are listening to a favourite, or hunting for one. You can also *explore* to find new transmitters—an Amber Indicator means you are *exploring* for transmitters which are not on your Green List. The  Bond Button on your receiver lets you select which audio source (SKAA transmitter) you're listening to.








Essentials

 Button	Command	Indicator
Hold a few seconds	<u>Add / Delete</u> Manually add / delete the current transmitter to / from your Green List	 to  = Added  (flash) = Deleted
-	<u>Auto Add</u> SKAA will automatically add the current Amber transmitter to your Green List if you listen to it for 30 minutes	 to  = Added
1 Click	<u>Green Mode</u> Rotate through your list of <i>favourite</i> transmitters (Green List) — when a favourite transmitter is found, the search stops and audio plays from that transmitter	 (dim) = Hunting  (flash) = Next one  (bright) = Bonded
2 Clicks	<u>Amber Mode</u> <i>Explore</i> for new, unknown transmitters (ones which are not already on your Green List)	 (dim) = Hunting  (bright) = Bonded

More Commands

 Button	Command	Indicator
3 Clicks	<u>Mute</u> do again to Unmute; any Click command will first Unmute and then do its function	 ,  or  = Muted (slow flash)
4 Clicks	<u>Red Mode</u> If you have 2 or more transmitters on your Green List, power on just the one you want to hear and it plays automatically.	 (dim) = Hunting  (bright) = Bonded
6 Clicks	<u>Factory Reset</u> Clear Green List. Start Over!	 (flash) = Reset Done
Hold during power on	<u>Make a Cluster of Receivers:</u> 1. Power off all transmitters and receivers 2. Power on the Master receiver while holding down its Bond Button—hold the button down until the Indicator begins to flash Red 3. With the remaining receivers within 3 meters of the Master receiver, power on the first one, wait for its Indicator to flash Red and then power on the second one; continue until all of them are powered on 4. Once all of the Indicators stop flashing (turn solid Red), power off all of the receivers	 (flash) = Receiver has entered 'Cluster Up' mode  (bright) = The Cluster has been successfully made

QUESTIONS AND ANSWERS

Question	Answer
How does the Green List work?	You can store up to 10 SKAA transmitters on your Green List. These are your “favourite” audio sources. Every time you add a transmitter, it is assigned the first open spot on the Green List. When you single click the  Bond Button, the receiver hunts through the Green List much like a car radio hunts for radio stations when you press seek. If the Indicator is dim Green and flashes every few seconds, this tells you the receiver is hunting through the Green List. Say you have 5 transmitters on your Green List; your receiver will hunt through the list one by one: 1, 2, 3, 4, 5 and then back to 1 and so on. The dim Green Indicator flashes every time the receiver moves to the next spot on the list. This hunting goes on for up to 1 minute. If your receiver doesn't find any of your favourite transmitters, it stops hunting and just waits for the last bonded favourite. If your receiver does find one of your favourite transmitters, the hunting stops, the Indicator turns bright green, and your receiver starts playing audio from that favourite. A dim Green Indicator that is NOT flashing means the receiver is just sitting on one spot, waiting for a specific favourite transmitter to show up.
How do I bond with a specific Green transmitter?	Play audio from your source device and ensure it has a SKAA transmitter connected. Click the  Bond Button on your receiver. The receiver hunts through the Green List, flashing the Indicator as it goes. Once your receiver finds one of your favourite transmitters, it bonds to it and plays audio from that transmitter. If that isn't the transmitter you wanted, click the Bond Button once more. Repeat until your receiver bonds with the transmitter you want and you're hearing the correct audio playing.
How do I select transmitters if I can't reach my Bond Button?	Say you want to put your receiver on a high shelf where you can't reach the Bond Button easily. First, set up your Green List: add all of the transmitters you'll want to use. Then 4-click the  Bond Button to enter Red Mode. Now put the receiver up on the high shelf. Power on just one of your transmitters and power off all others. The receiver automatically bonds to the transmitter that's on.
How do I delete a transmitter from my Green List?	Factory Reset (6 Clicks of the Bond Button) clears the Green List and lets you start over from scratch. If however, you'd like to delete just one transmitter from your Green List, first bond your receiver to the transmitter you wish to delete. See the section above: How do I bond with a specific Green transmitter? . Once you are bonded to it, hold down the  Bond Button for a few seconds until you see the Indicator flash Red –this Red flash means the transmitter has been deleted.
What is a Cluster?	Clusters are an optional convenience for “power users”. A Cluster is several SKAA receivers behaving as one product. A left & right speaker pair, for example, or a sound bar and subwoofer.
What is the Master receiver?	In any Cluster, there is a single Master receiver, and all of the other receivers in the Cluster follow its behaviour. You can control the entire Cluster by operating the  Bond Button of the Master. A receiver must have a physical Bond Button in order to become the Master.
How do I “uncluster” several receivers?	Do the Make a Cluster of Receivers procedure once for each receiver, but omit Step 3. Do them one at a time. This gives each of the receivers a functioning  Bond Button, and each of them will thereafter operate independently.
What are some tips for making Clusters?	Each step in the Make a Cluster of Receivers procedure has a 10-second time limit. When you see the Master's Indicator start to flash Red, you have 10 seconds to power on the next receiver. When that receiver's Indicator starts to flash Red, you have 10 more seconds to power on the next one, and so on.
Why does only one of my Bond Buttons work?	When you make a Cluster from several receivers, the first one powered on in the Make a Cluster of Receivers procedure becomes the Master of the Cluster. Only the Master's  Bond Button works because a Cluster uses just one Green List –the Master's Green List. The Bond Button of each of the other receivers will work only for the Mute / Unmute function (3-Click of the Bond Button).
Can any group of receivers be made into a Cluster?	No. The receivers must be members of the same product family. If they are not, the Make a Cluster of Receivers procedure won't work. This is because only receivers which were designed to work together (as a single product) can be made into a Cluster.

setting up Soundboks speakers to work with your DFB

Hub speaker

Click the  button to set Soundboks' mode to:


Host

In this mode the Soundboks will act as a SKAA transmitter (what we call a Hub speaker) relaying its own audio to up to 4 additional Satellite Speakers (for a total of up to 5 speakers)

Satellite speaker

Click the  button to set Soundboks' mode to:

Join

Use the  Bond Button to connect this Satellite speaker to any SKAA transmitter, or to any Hub speaker (a Hub acts like a SKAA transmitter)

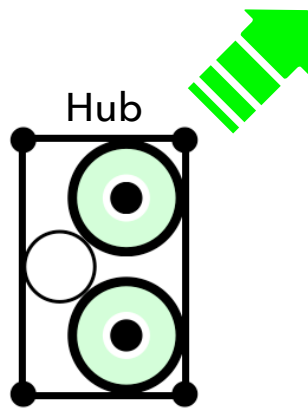
SKAA or SKAA Pro operation

- Use the Soundboks App on your phone to set your Hub speaker (Soundboks speaker in Host mode) to SKAA or SKAA Pro mode (all downstream Bonded speakers will automatically follow the mode of the Hub)
- SKAA mode – Bond up to 4 more speakers at standard low latency (for a total of 5 speakers in the SKAA cell)
- SKAA Pro mode – Bond up to 2 more speakers at ultra-low latency (for a total of 3 speakers in the SKAA cell)

Soundboks speaker models

- All of the following Soundboks speakers will work for the use cases described in this doc
- Soundboks 3
- Soundboks Go (will support all those use cases that do not depend on combo [XLR/TRS] jacks)
- Soundboks 4

Hub speakers have SKAA transmitters built in

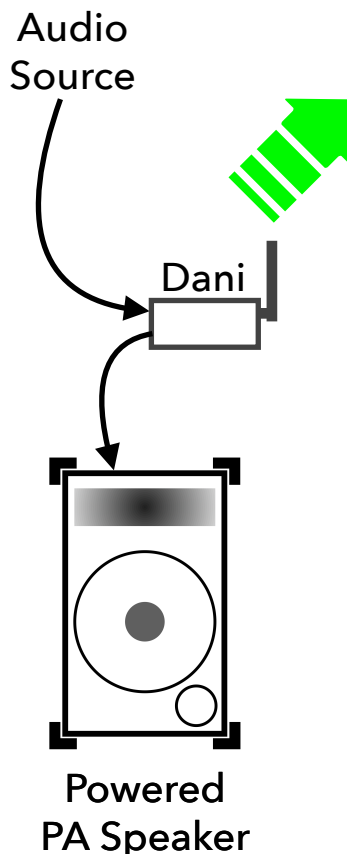


For example:

- Soundboks 3 (in Host mode)
- Soundboks 4 (in Host mode)
- Soundboks Go (in Host mode)*
- And many others
- They all support both bluetooth and wired sources

* Soundboks Go can serve as a Hub in all use cases that don't require TRS/XLR wired input

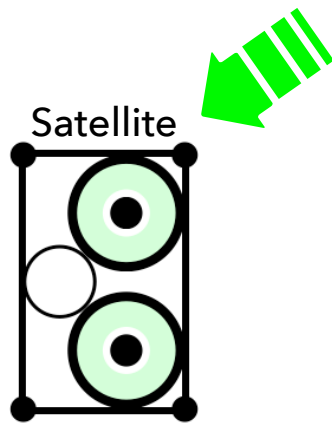
and you can always cook your own Hub ...



The do-it-yourself Hub:

- Use any powered PA speaker (Mackie, EV, QSC, JBL, etc.)
- Add a Dani SKAA/SKAA Pro transmitter
- Daisy chain your audio source into Dani's inputs and then out from Dani's thrus to the PA speaker (use TRS patch cables)
- Enables you to both hear the audio and transmit it to up to 4 Satellites
- Not as good as a speaker with SKAA Hub function built in (Soundboks 3, 4 and Go all have it built in) because:
- Bluetooth input not supported
- There's no latency compensation to exactly time align the wired speaker with the wireless ones

Satellite speakers have SKAA receivers built in

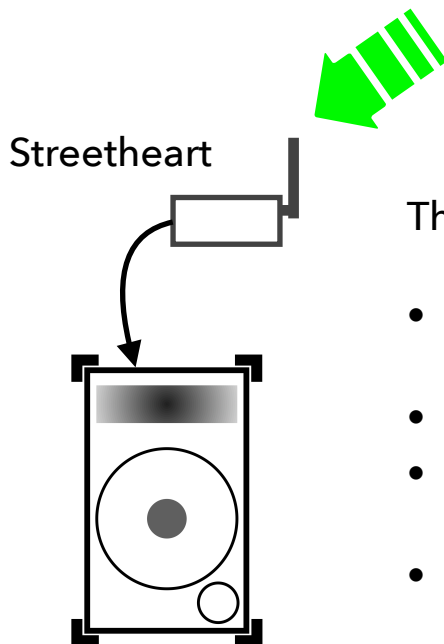


Satellite

For example:

- Soundboks 3 (in Join mode)
- Soundboks 4 (in Join mode)
- Soundboks Go (in Join mode)
- DFB itself is a satellite speaker!
- And many others

and you can always grow your own Satellite ...



Streetheart

The do-it-yourself Satellite:

- Use any powered PA speaker (Mackie, EV, QSC, JBL, etc.)
- Add a Streetheart SKAA/SKAA Pro receiver
- Connect Streetheart's outputs to the PA speaker using 2 TRS patch cables
- Not quite as slick as a speaker with SKAA receive capability built in (Soundboks 3, 4 and Go all have this built in)

Powered
PA Speaker

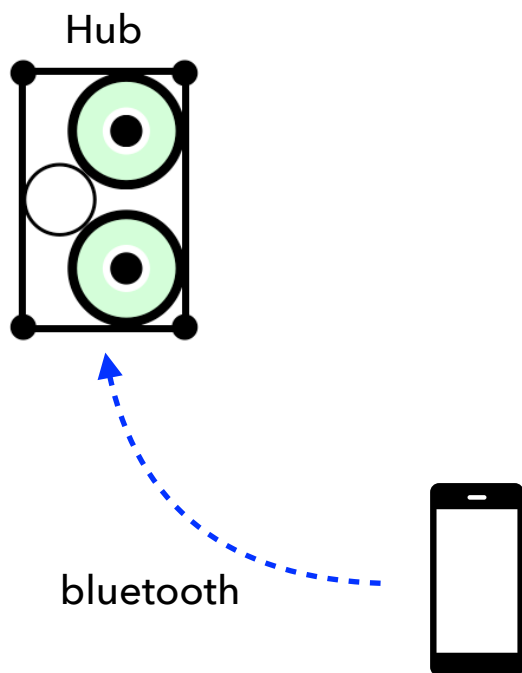
the sweet hookups: contents

Hookups	Use Case
1 - 12	Music & Party
13 - 16	Deckless DJ
17 - 20	Movies, TV, Social Media & Games
21 - 30	Instruments / Live Performance
31 - 34	Studio Recording
35 - 46	PA
47 - 54	Talk and Sing – Mics
55 - 58	Multi-person Jams
59 - 62	Pool & Yard
63 - 68	Pro DJ

The Hookups

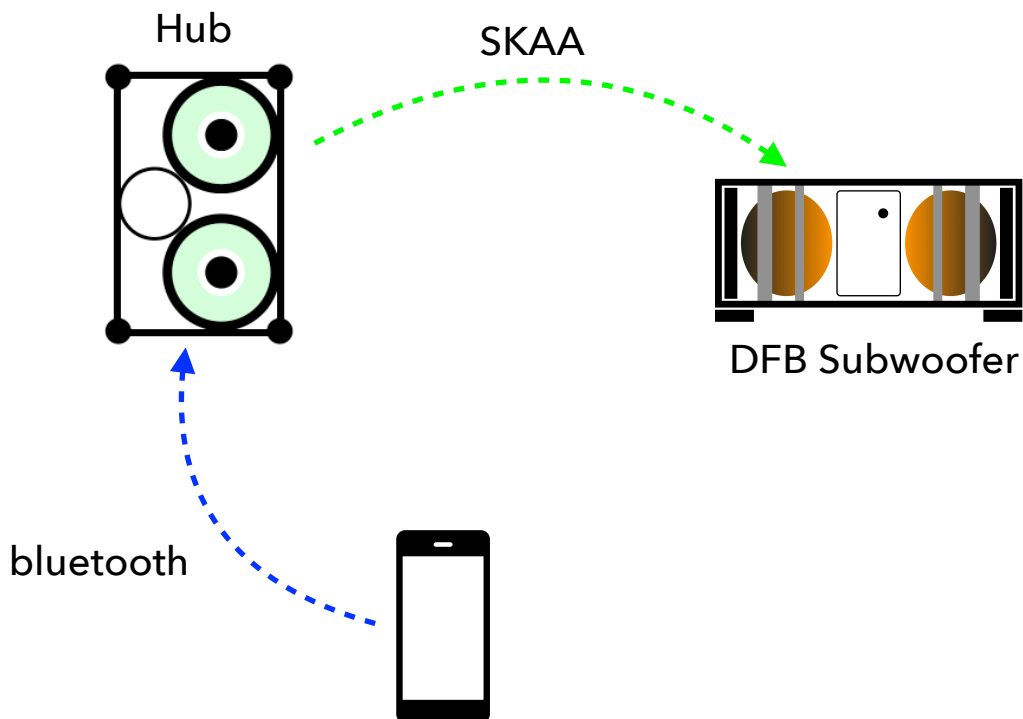
1

you play music like this every day



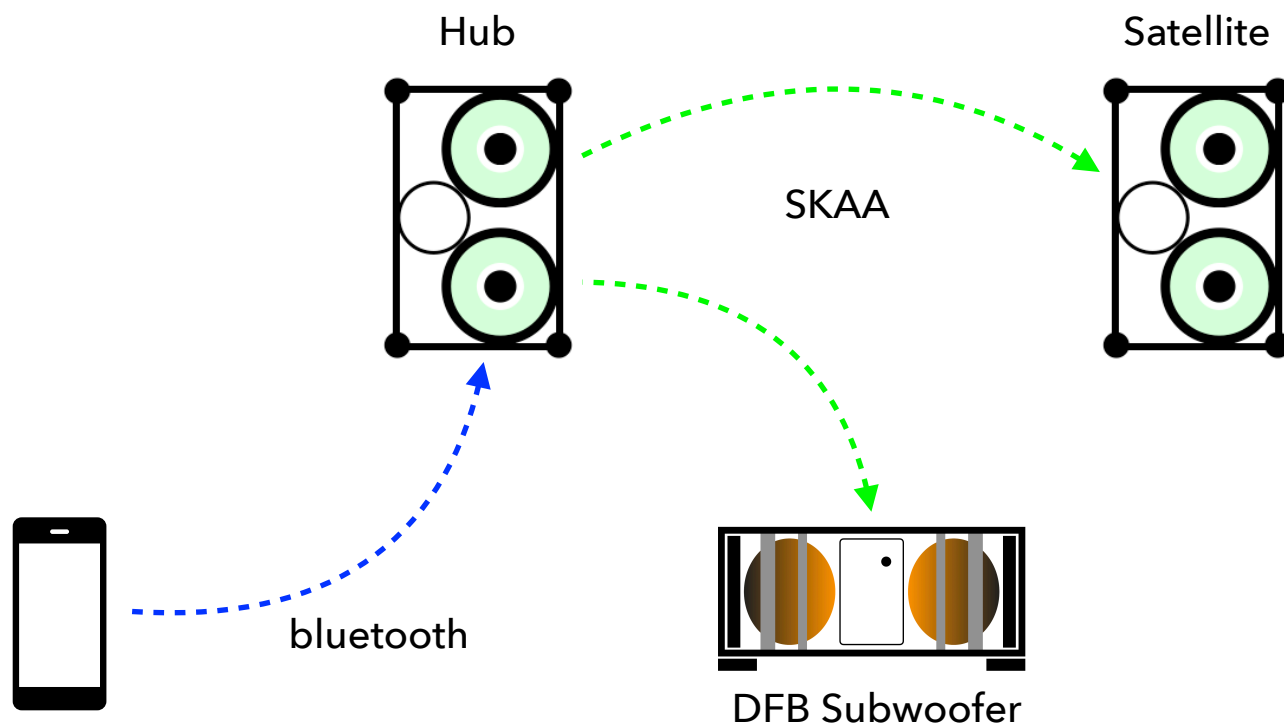
2

now pimp the bass ...



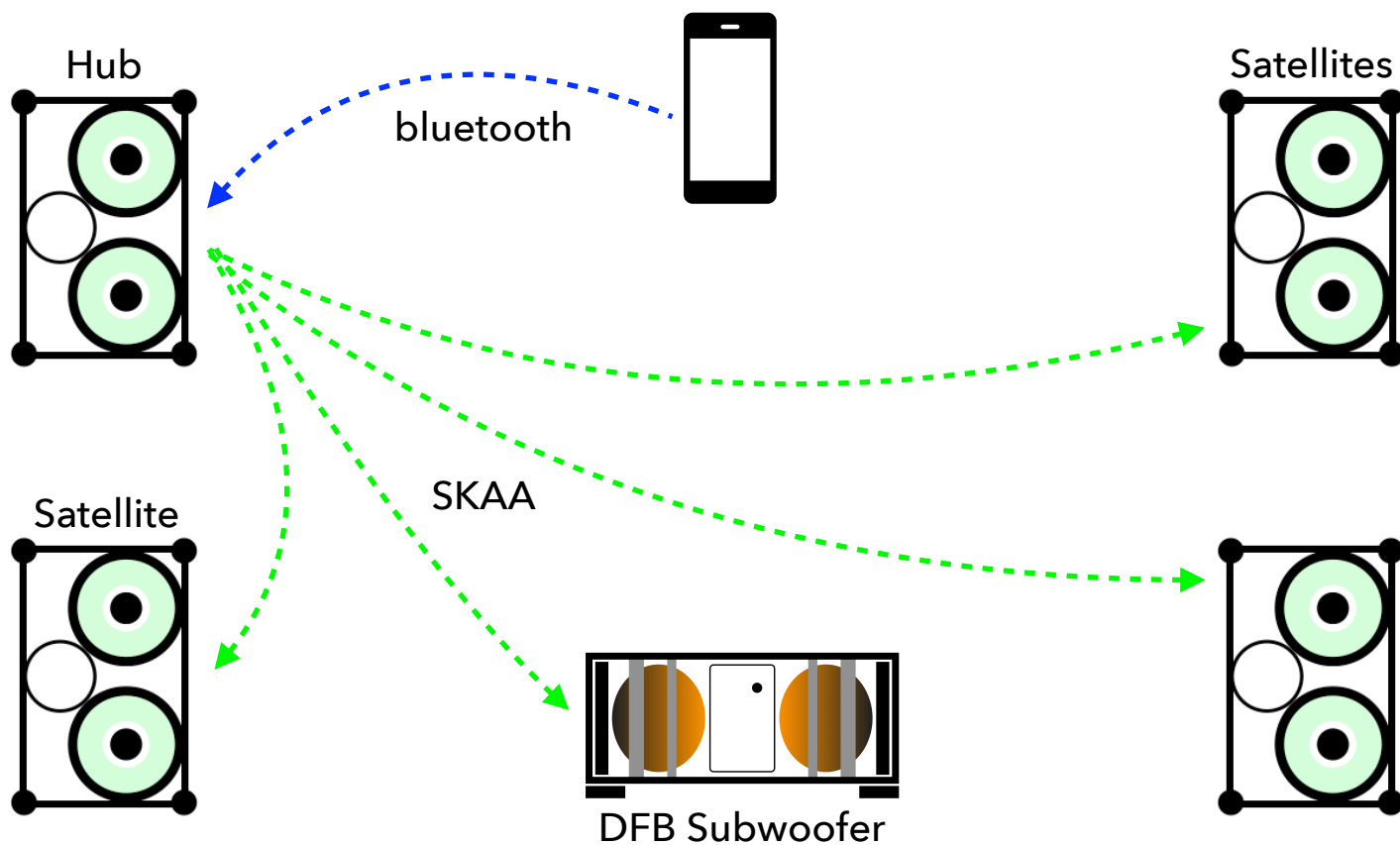
3

... the party setup



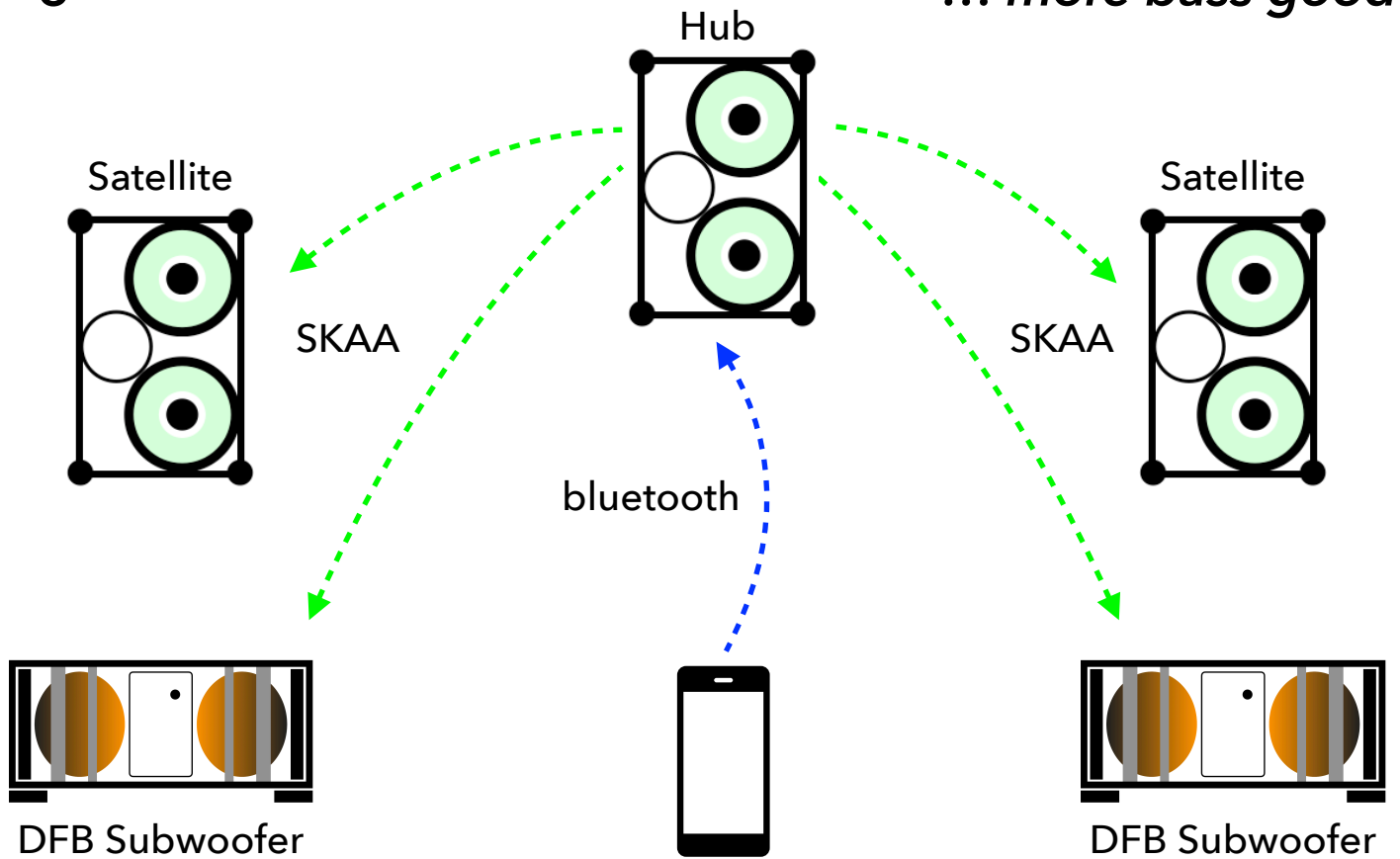
4

... maxed out



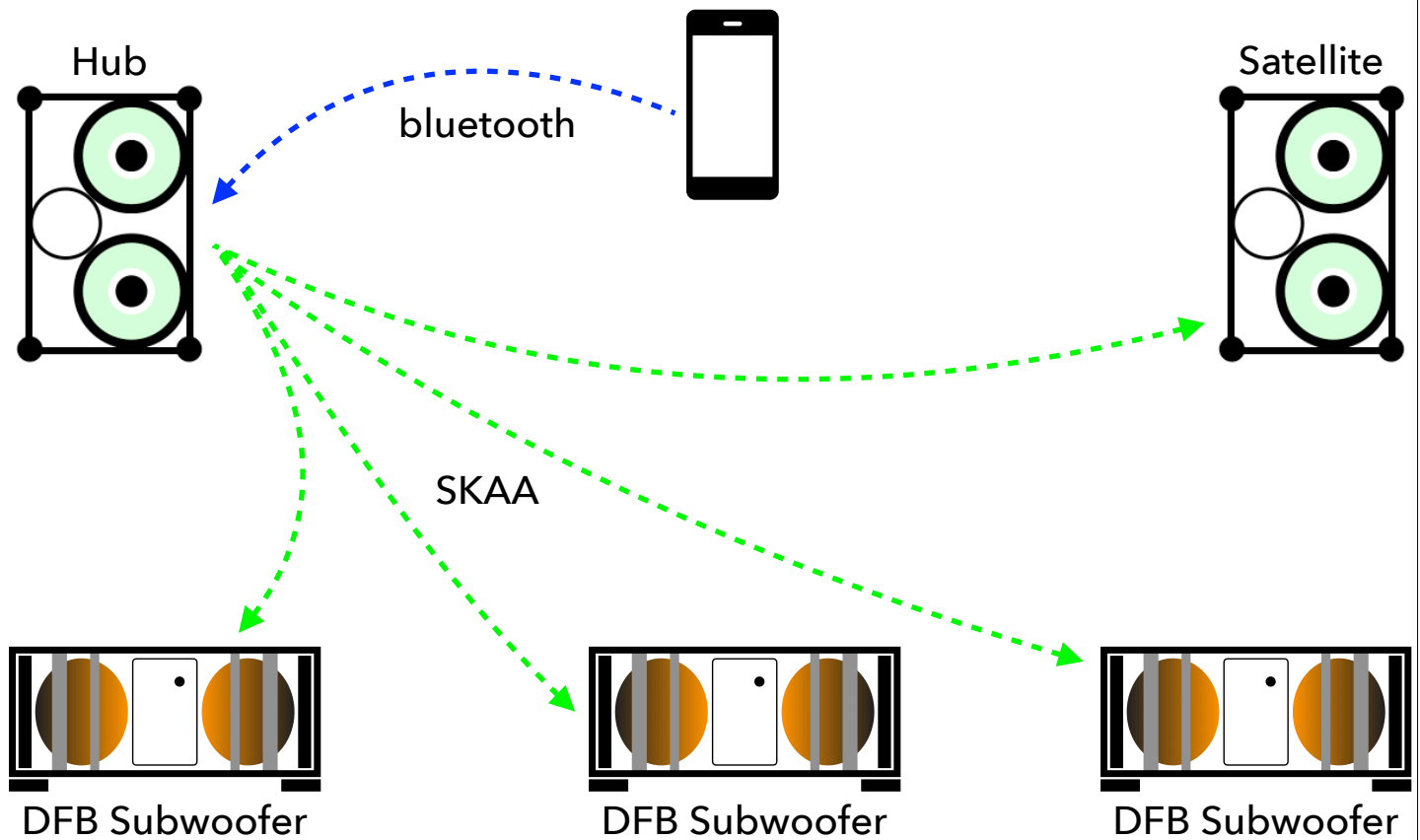
5

... more bass good

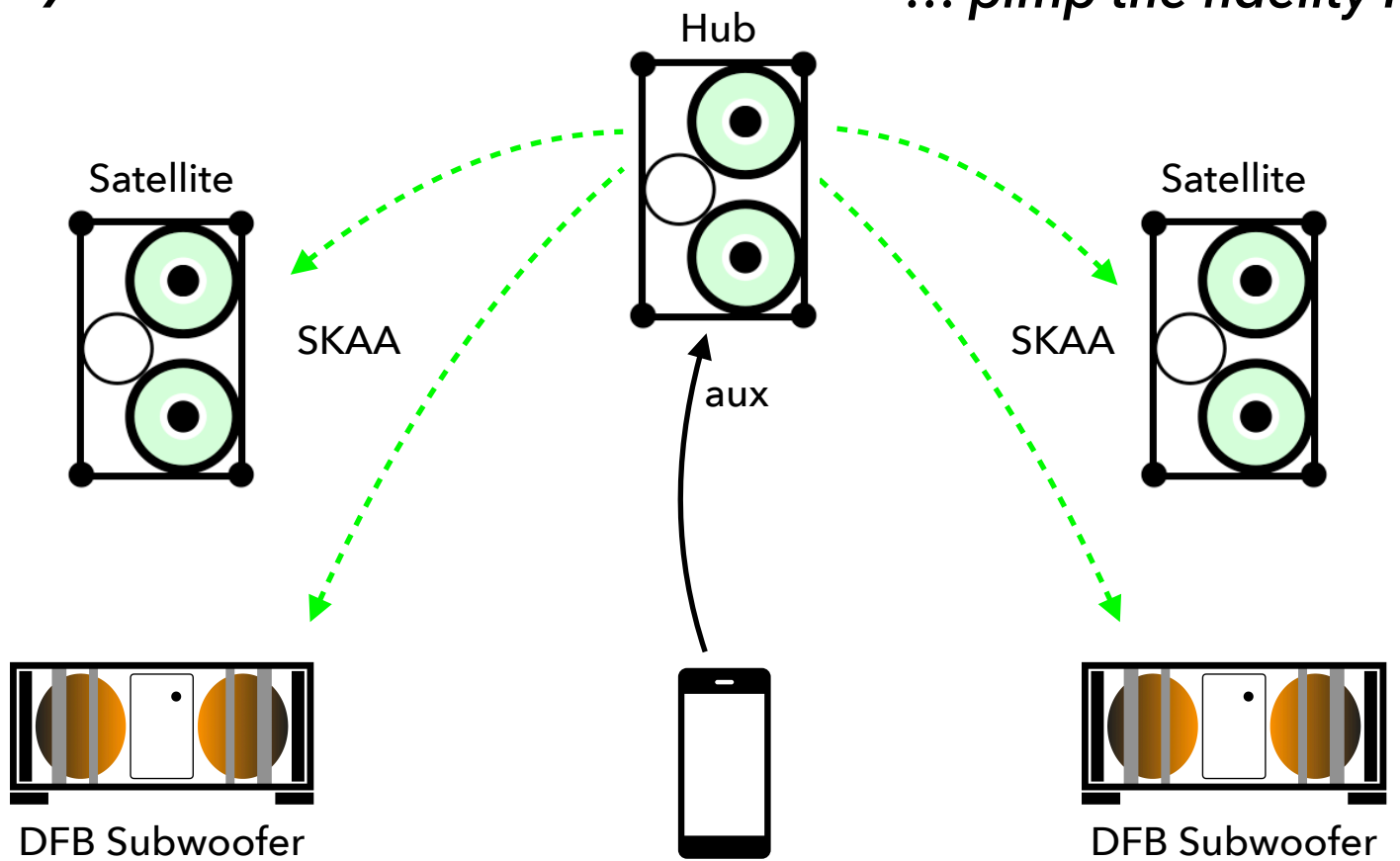


6

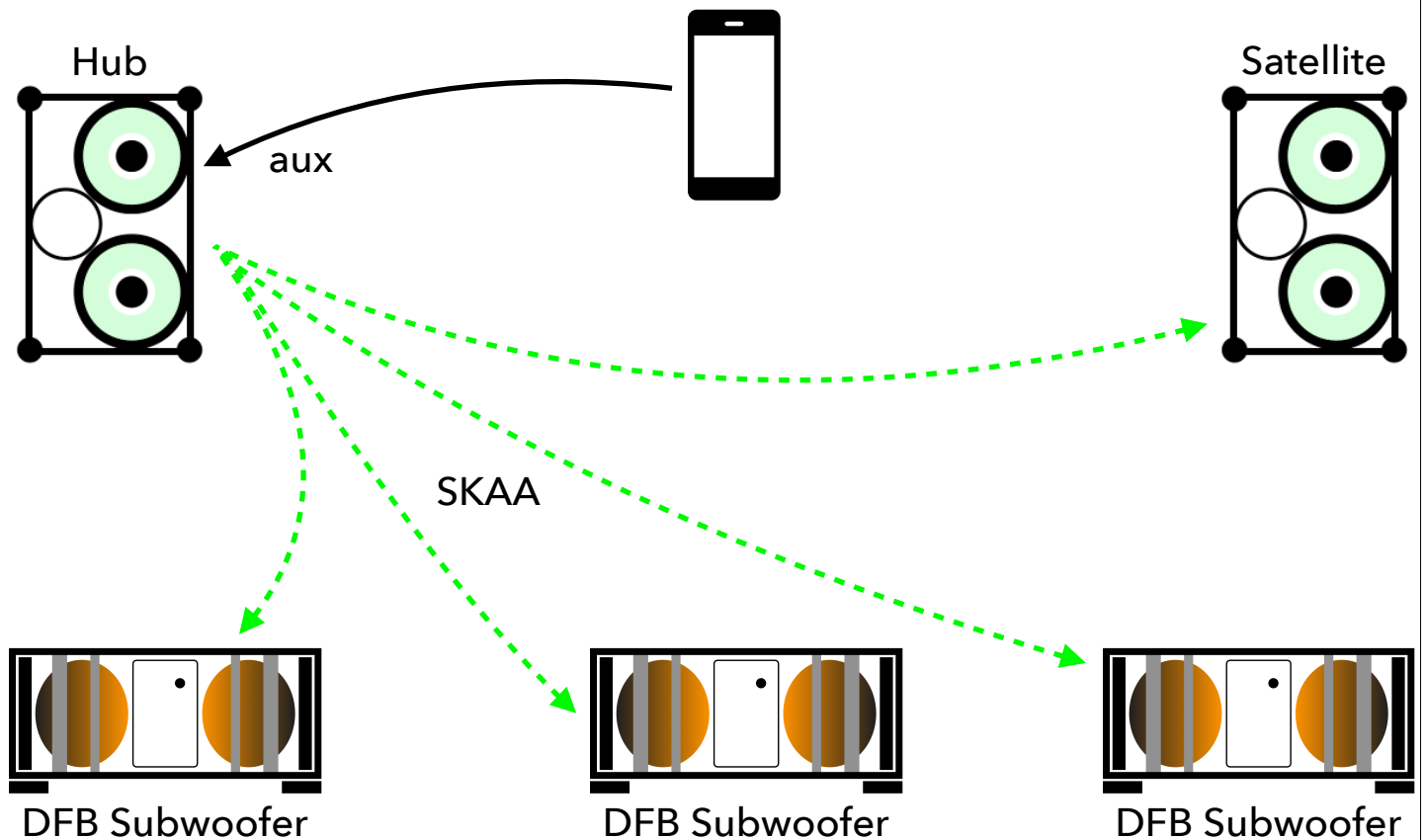
... meet the cops



7

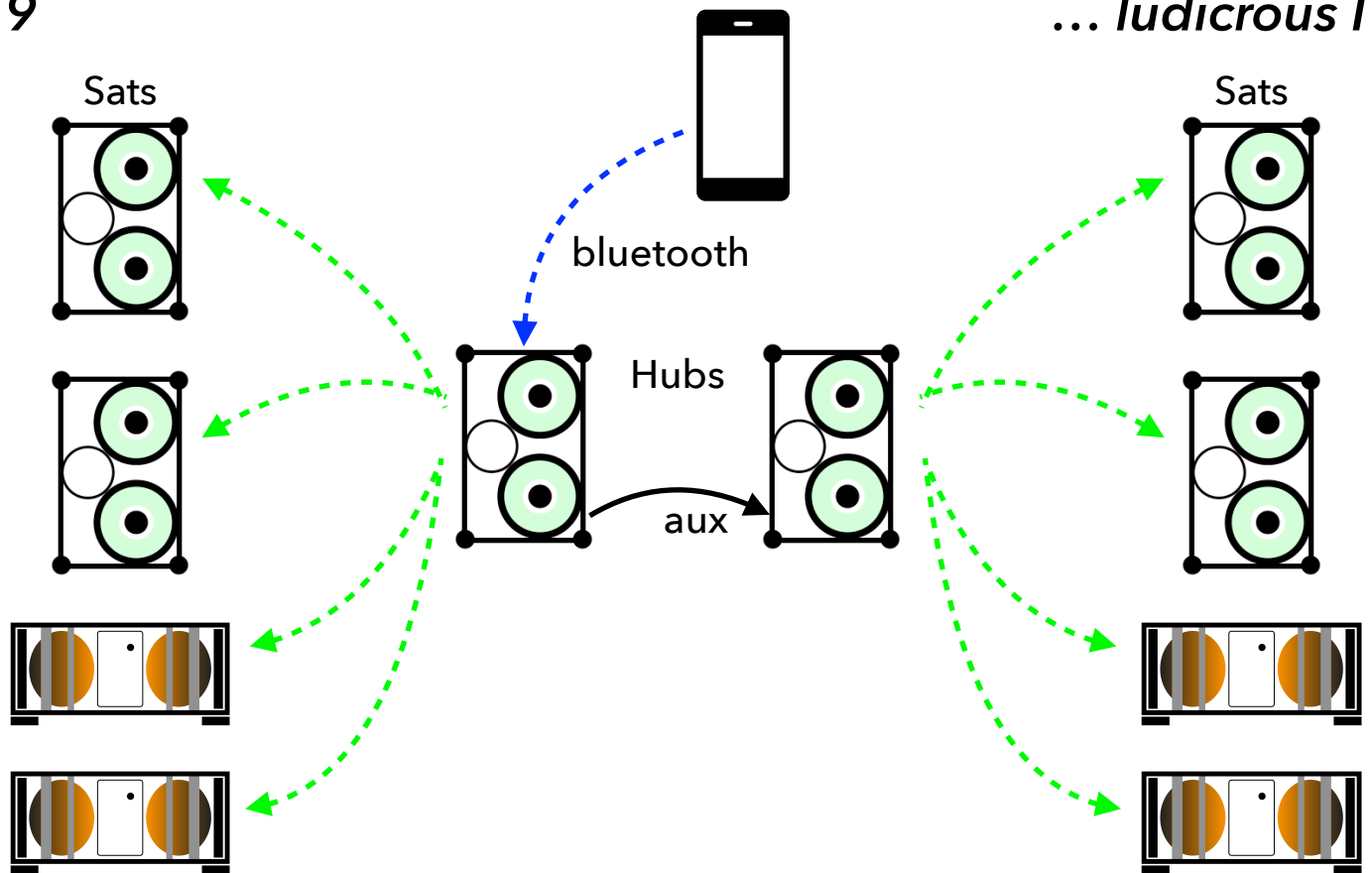
... pimp the fidelity I

8

... pimp the fidelity II

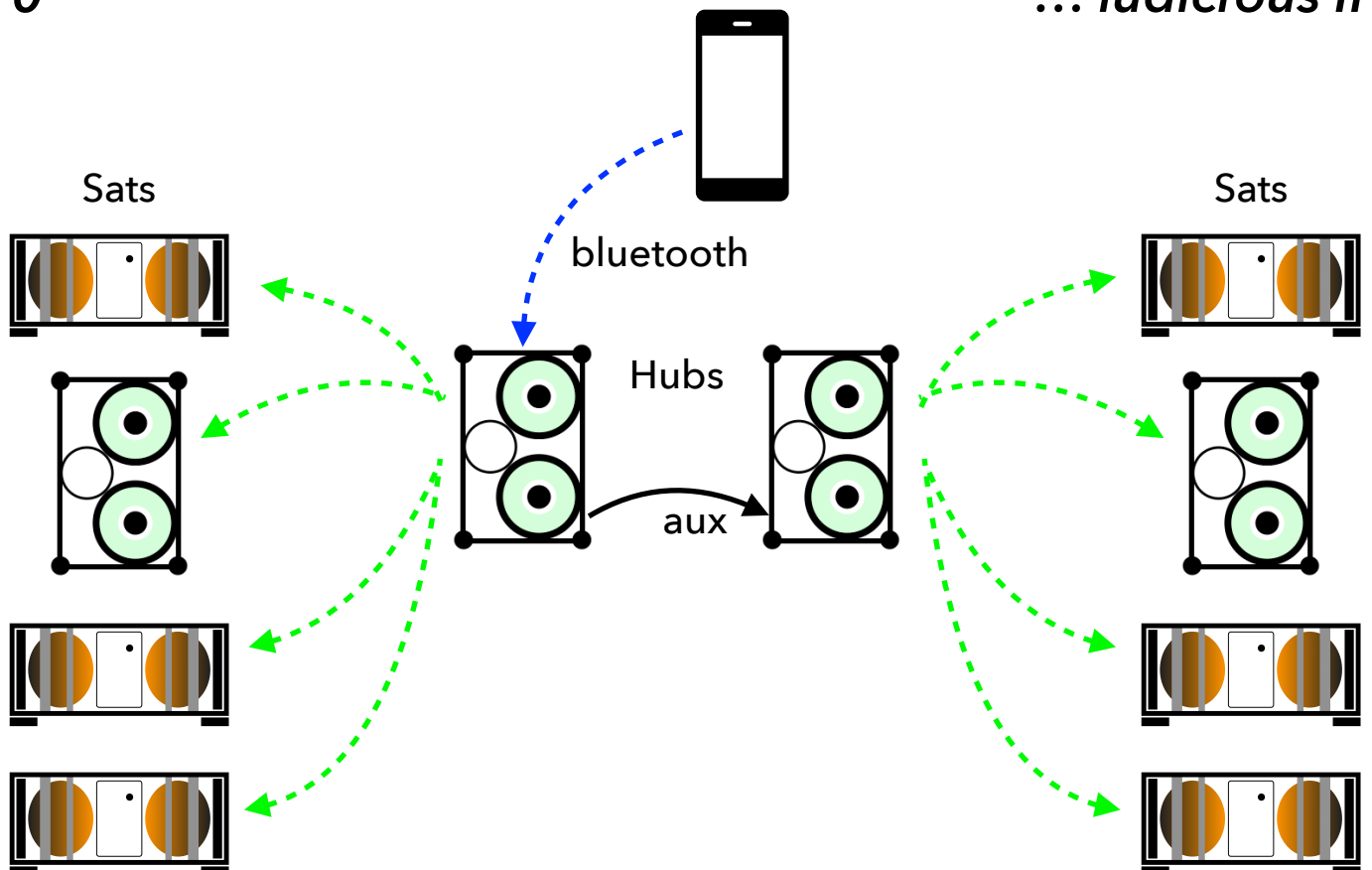
9

... ludicrous I

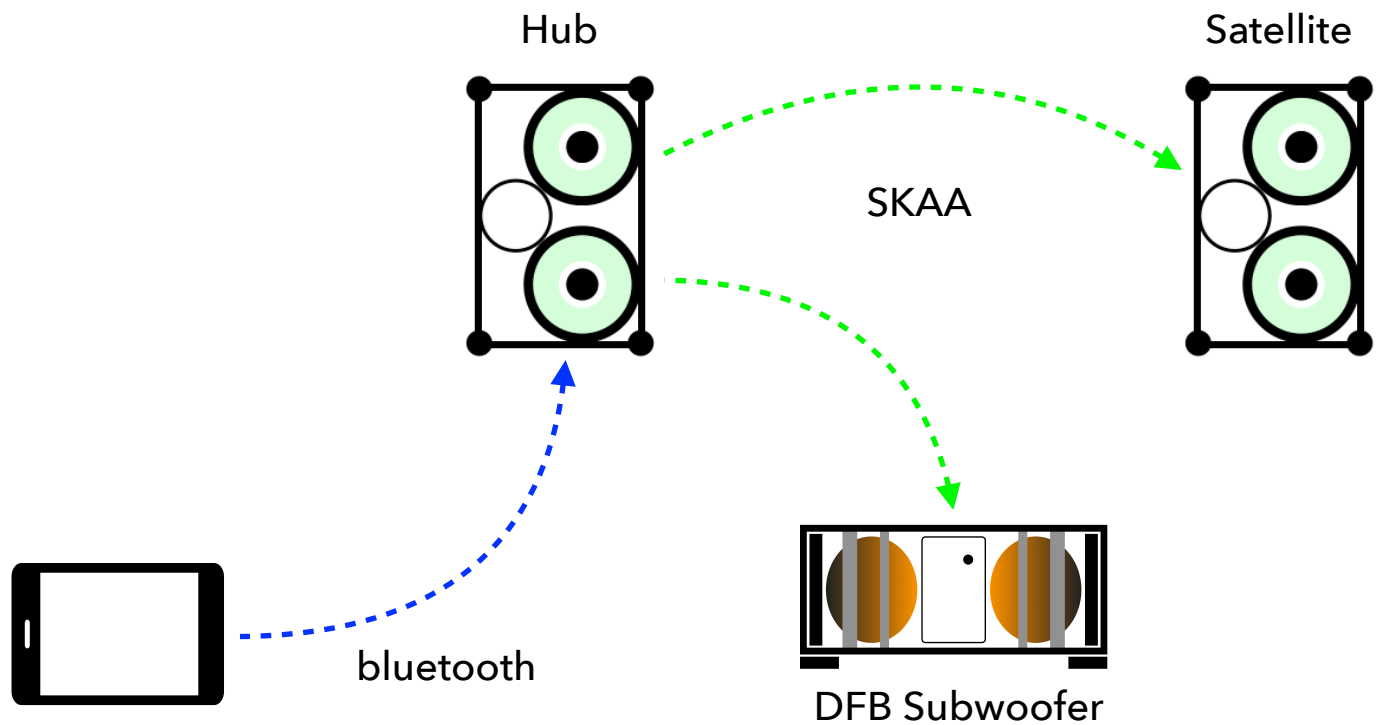


10

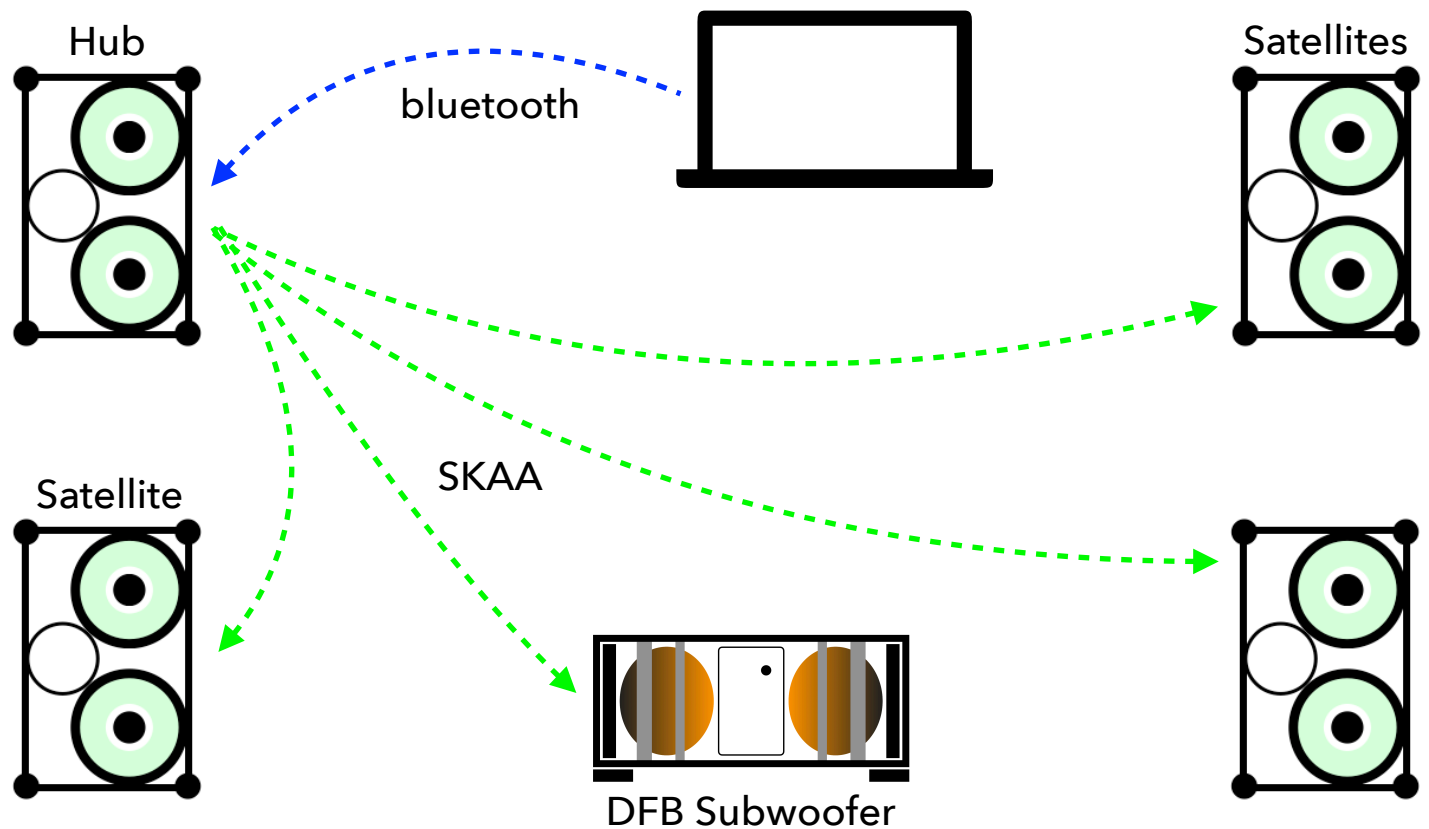
... ludicrous II



11 *all of the above 10 hookups work with tablets, too*

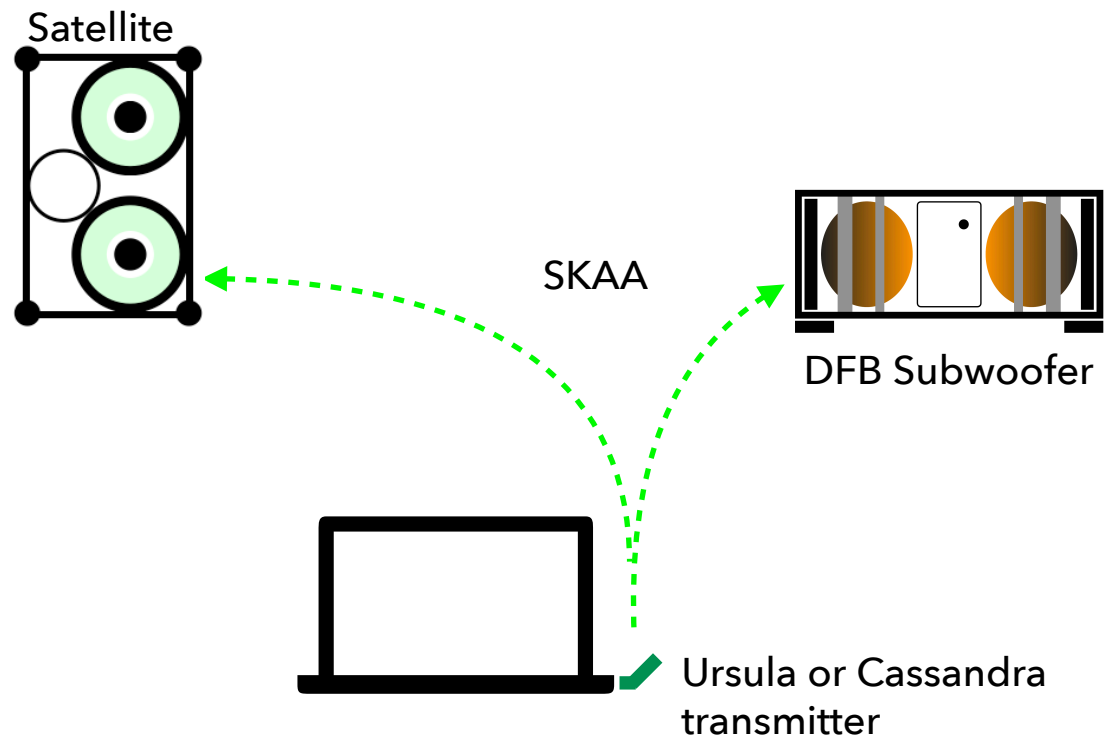


12 *... and notebooks*



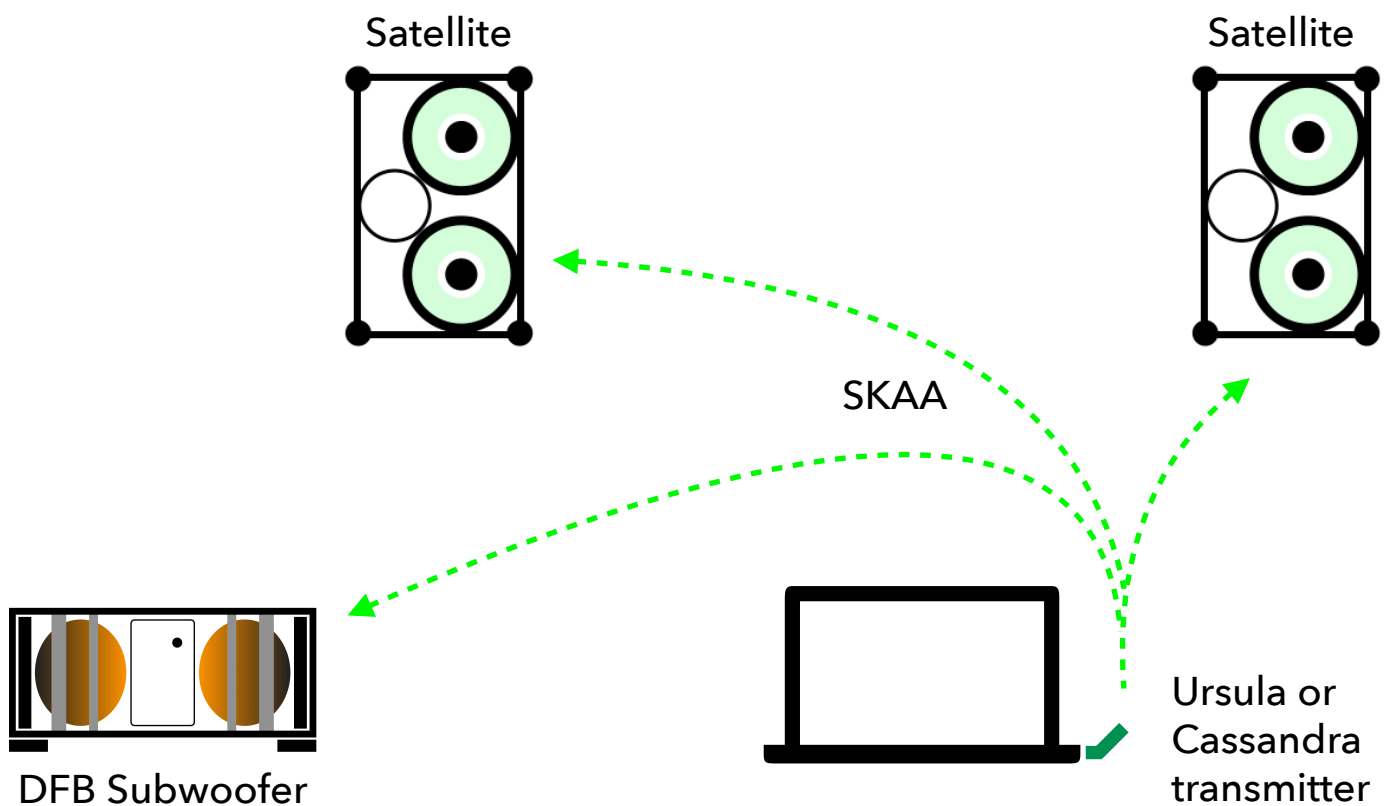
13

the ever-more-common deckless DJ



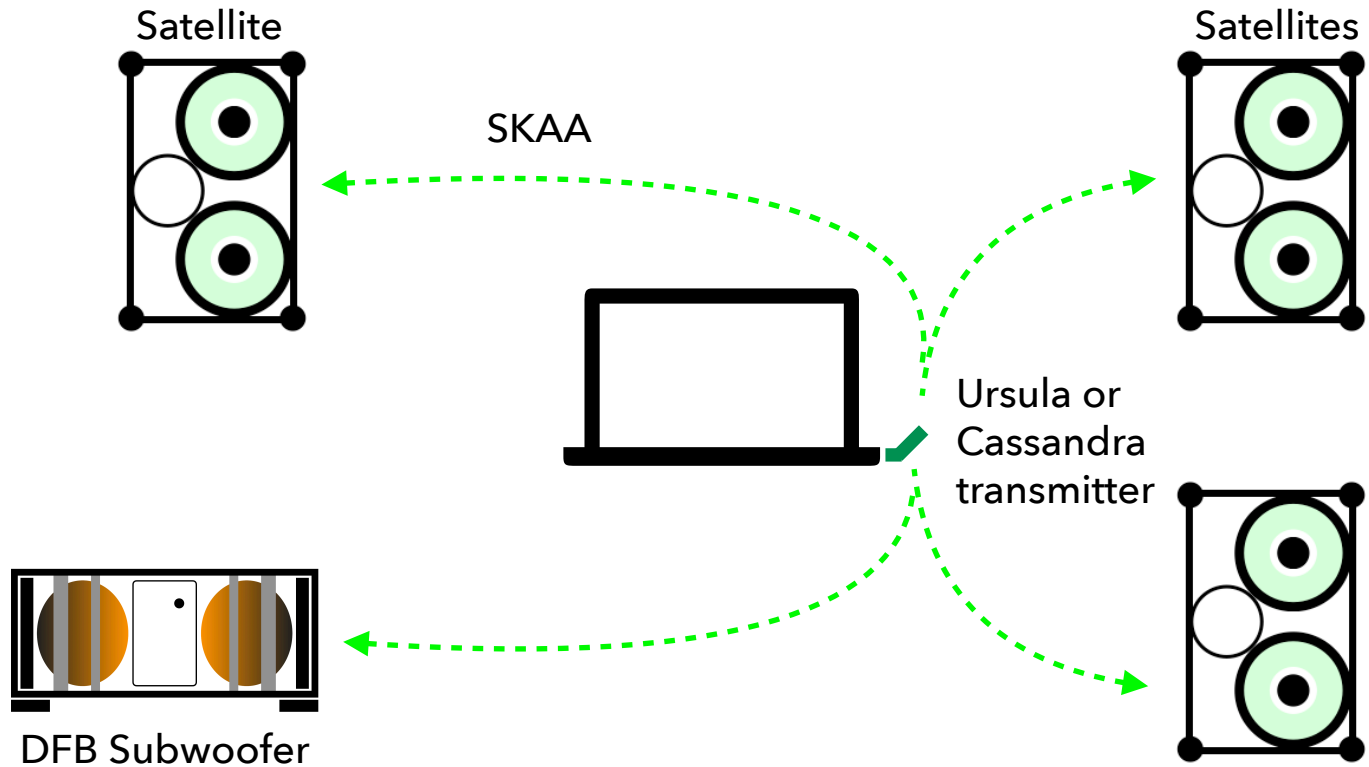
14

... and for a bigger room



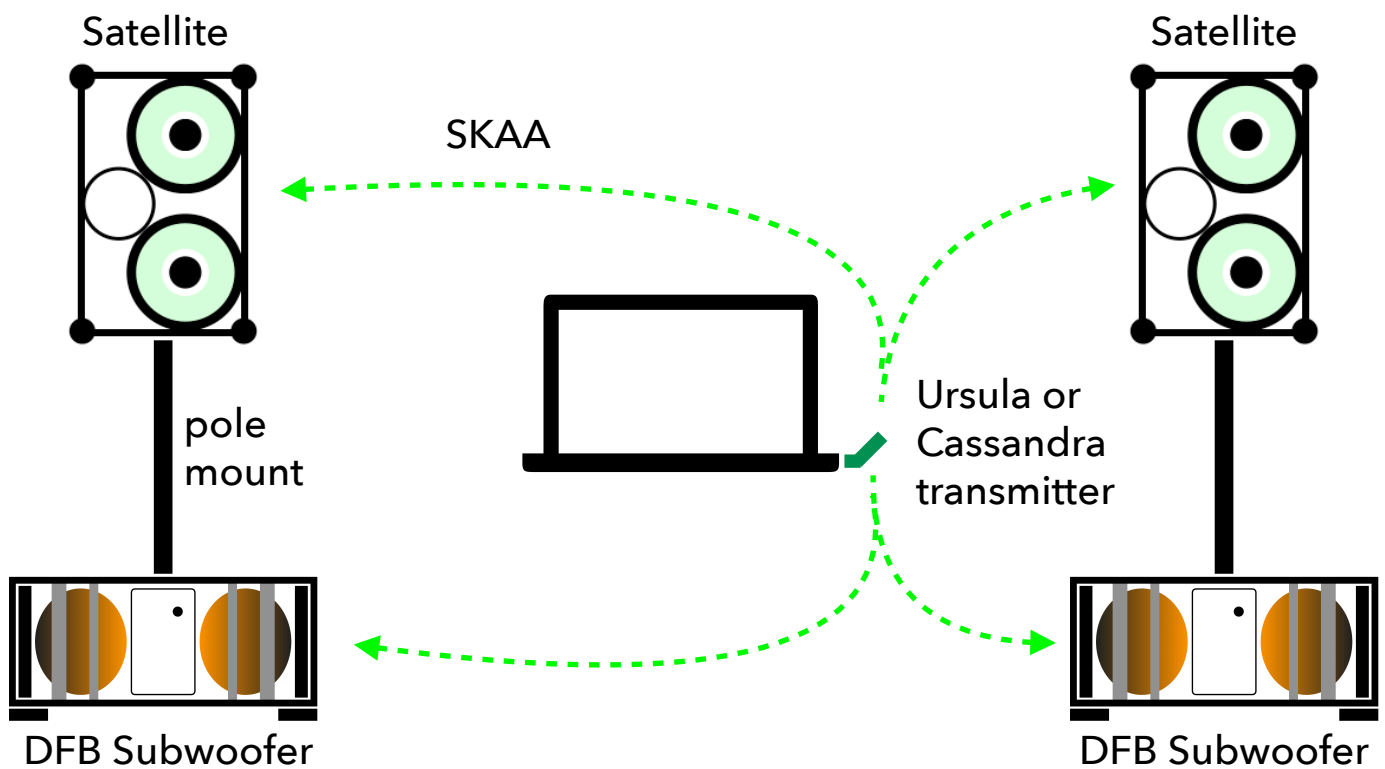
15

deckless DJ in a hall



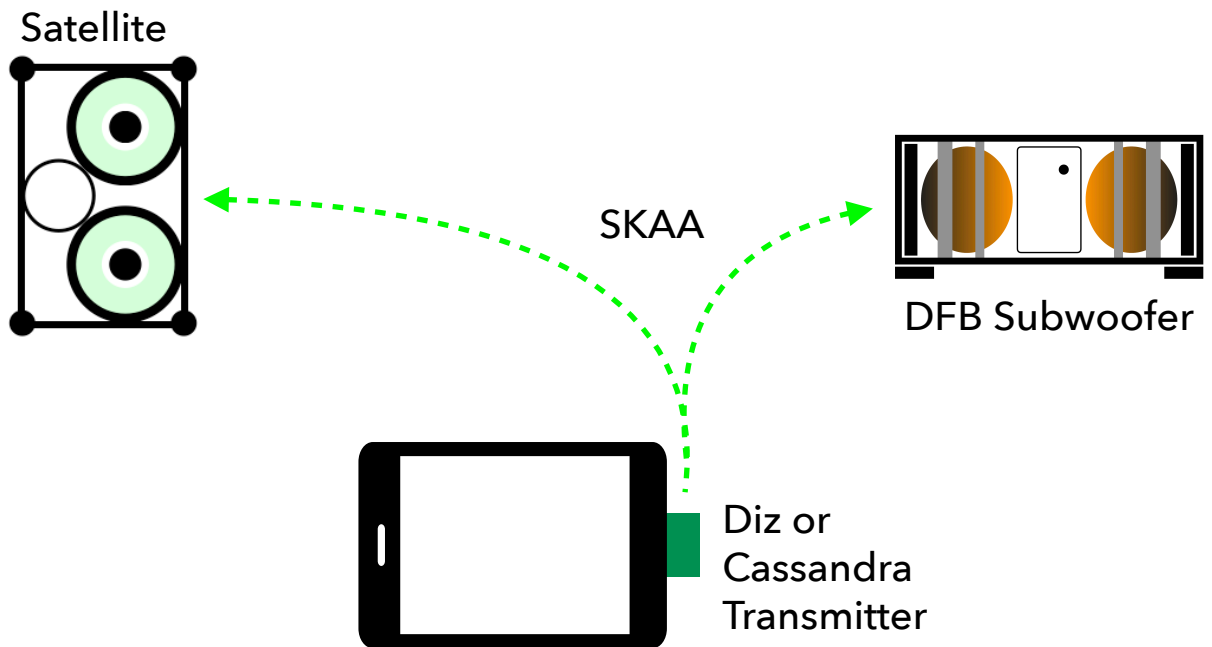
16

even better ... dope stereo towers



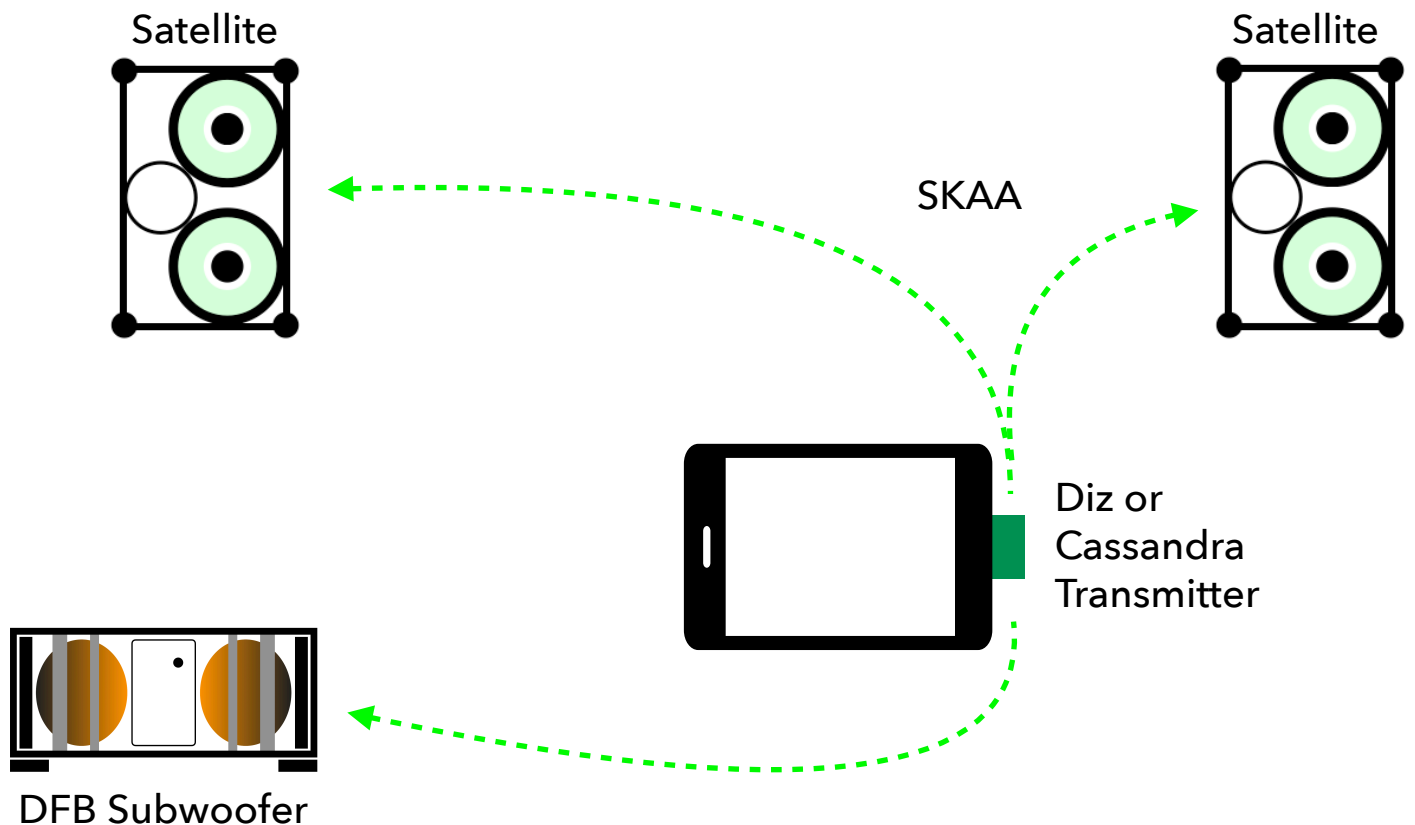
17

watch vids, social media, play games



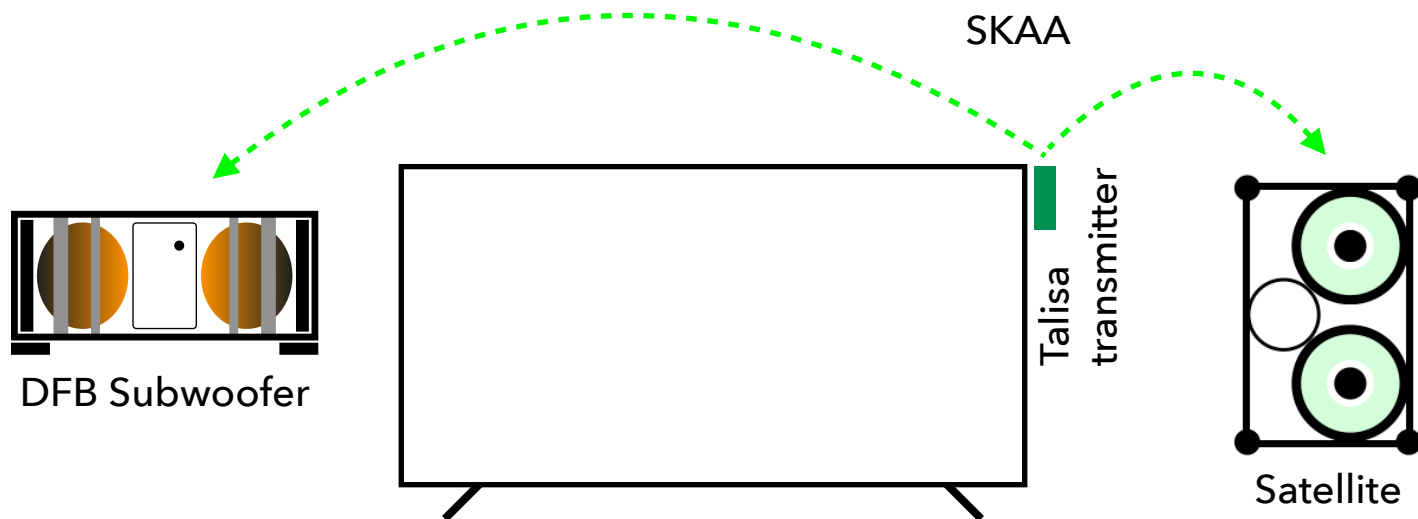
18

... let's play that game in stereo, shall we?



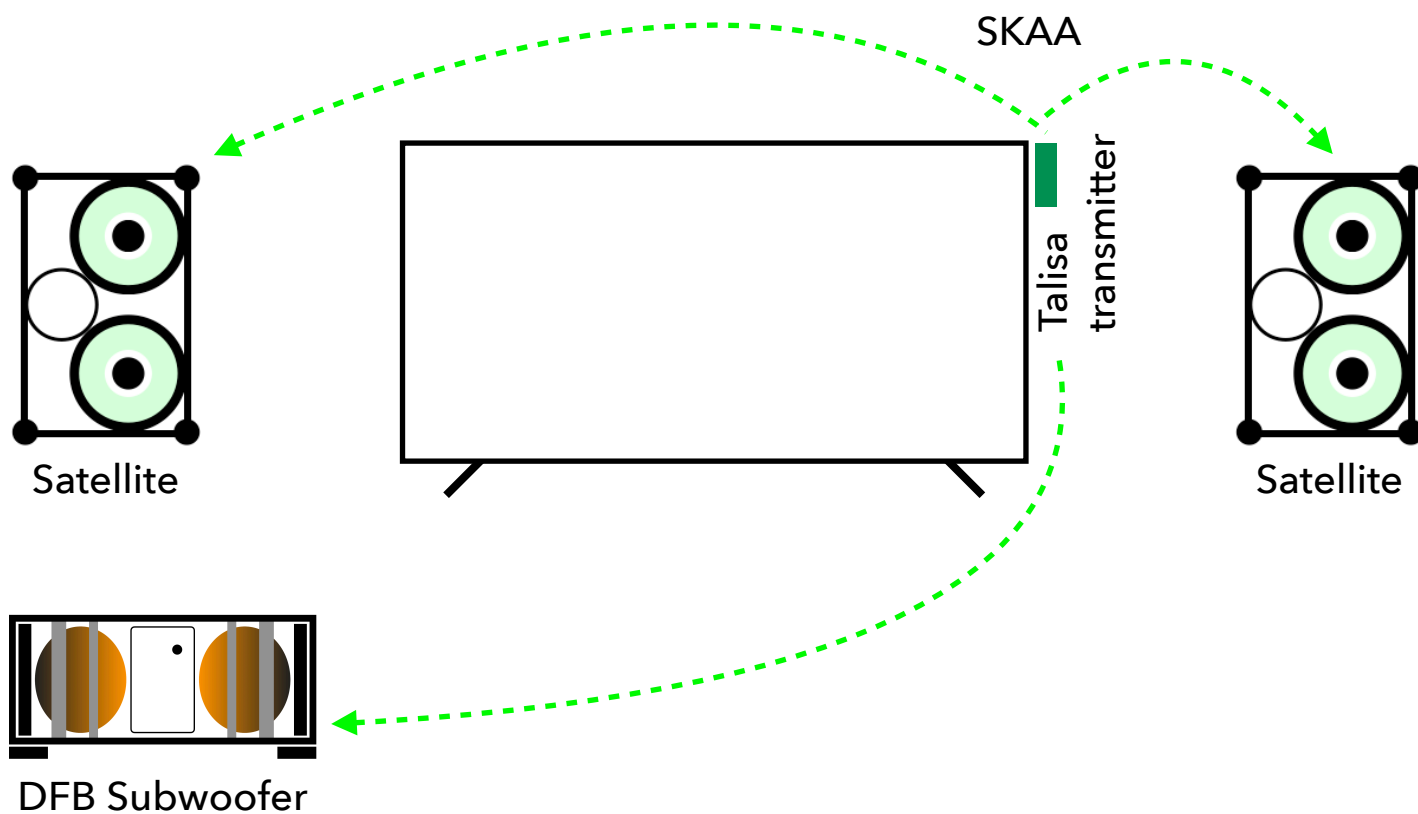
19

watch vids, play games on TV



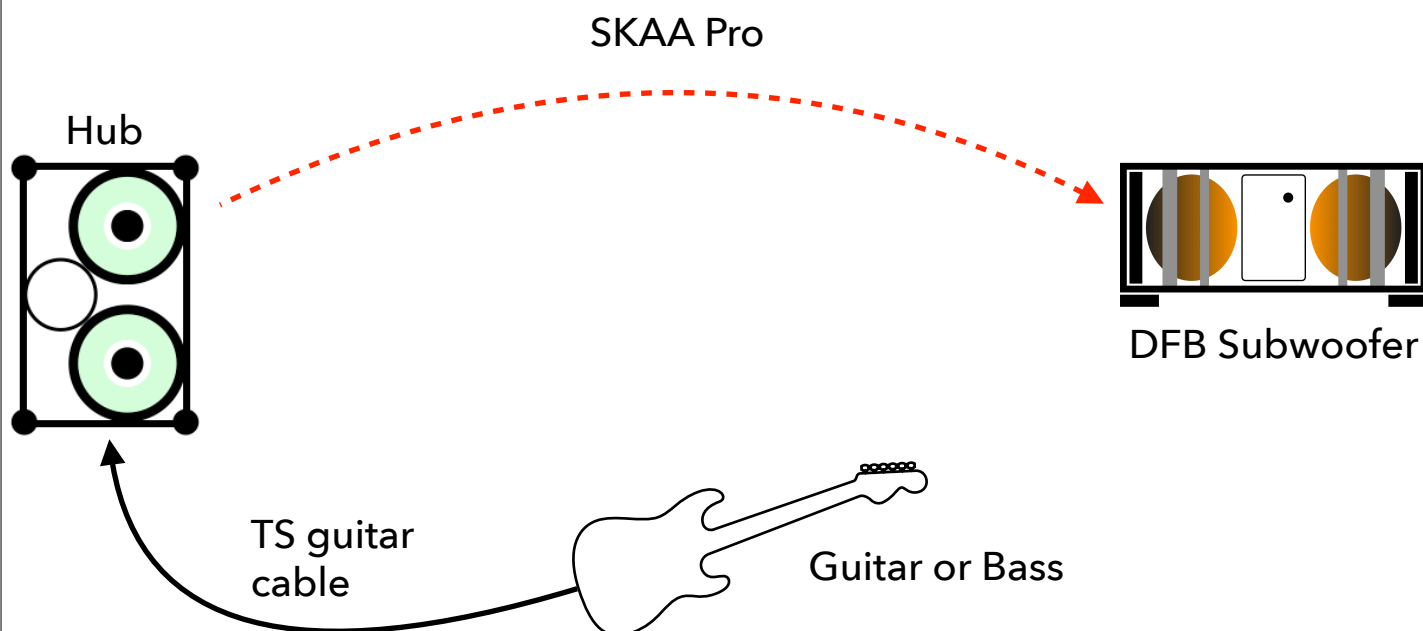
20

... stereo TV with mondo bass



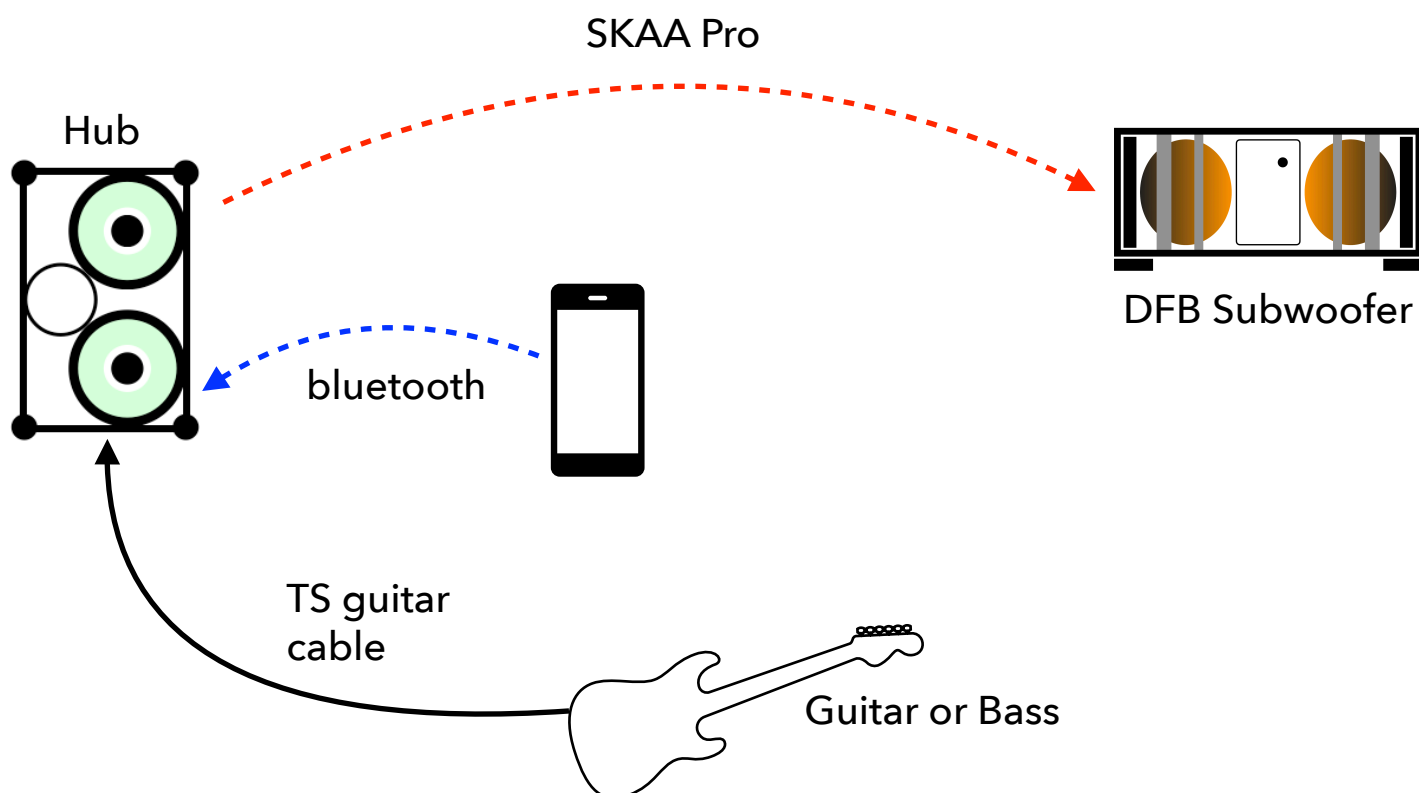
21

play live



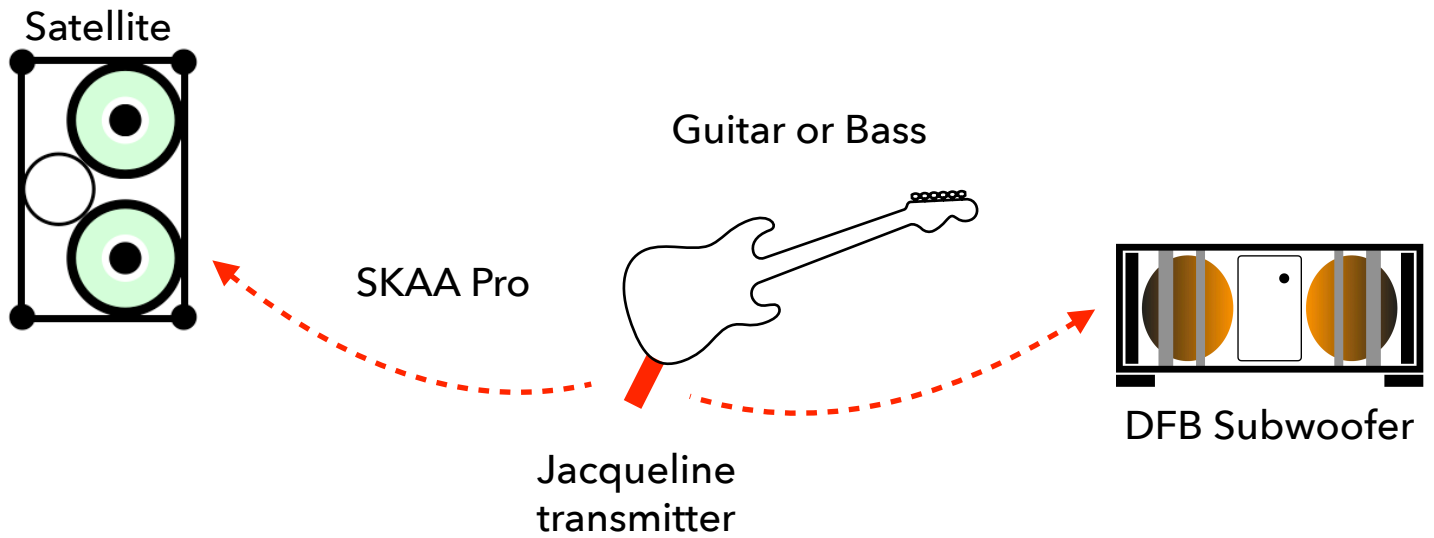
22

... add a backing track



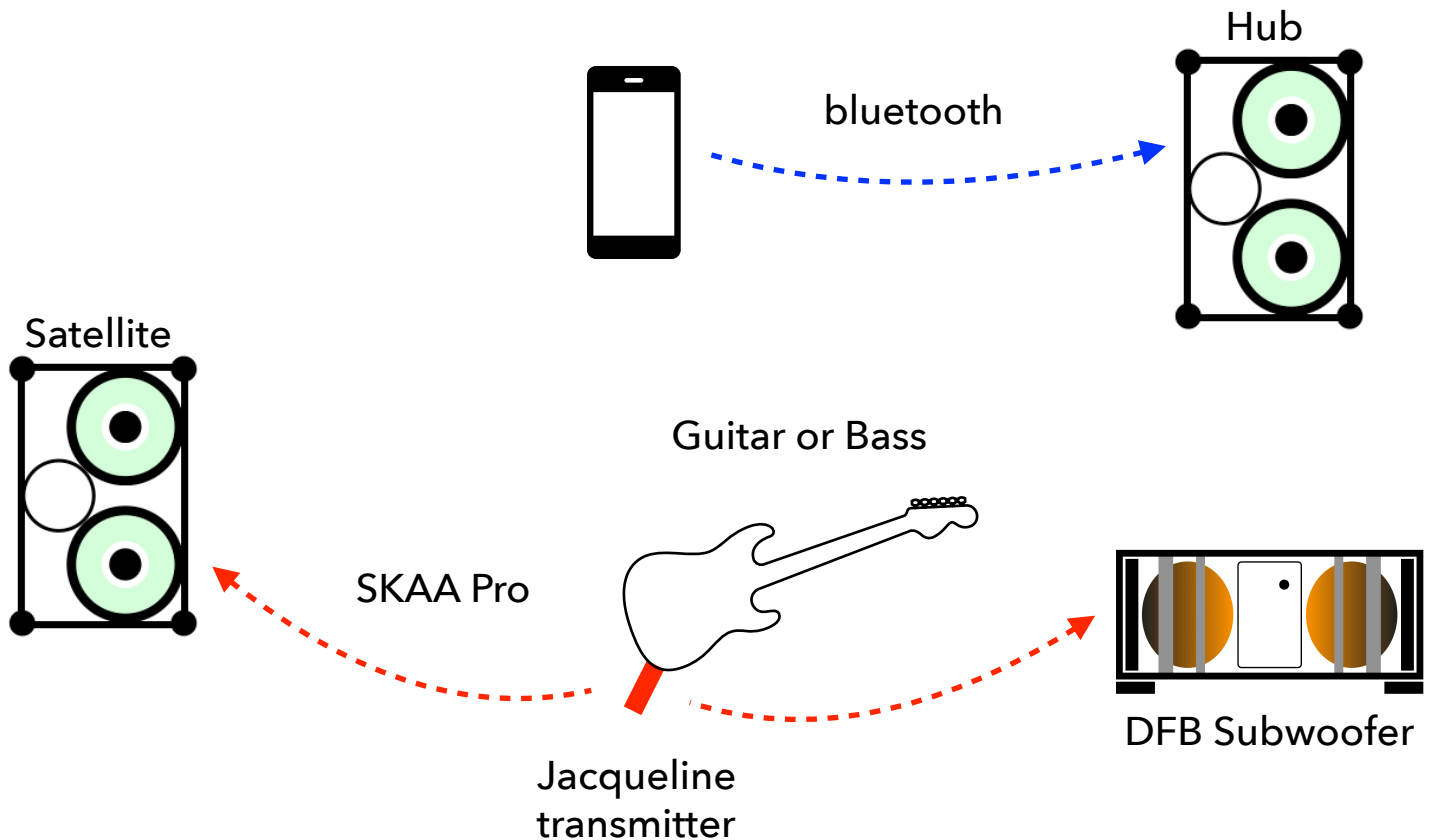
23

play completely wireless



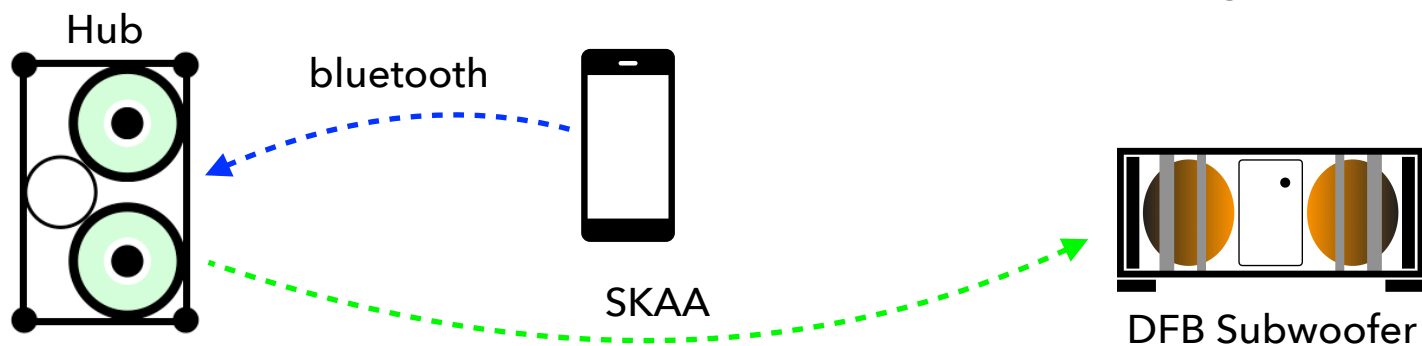
24

... with backing track I



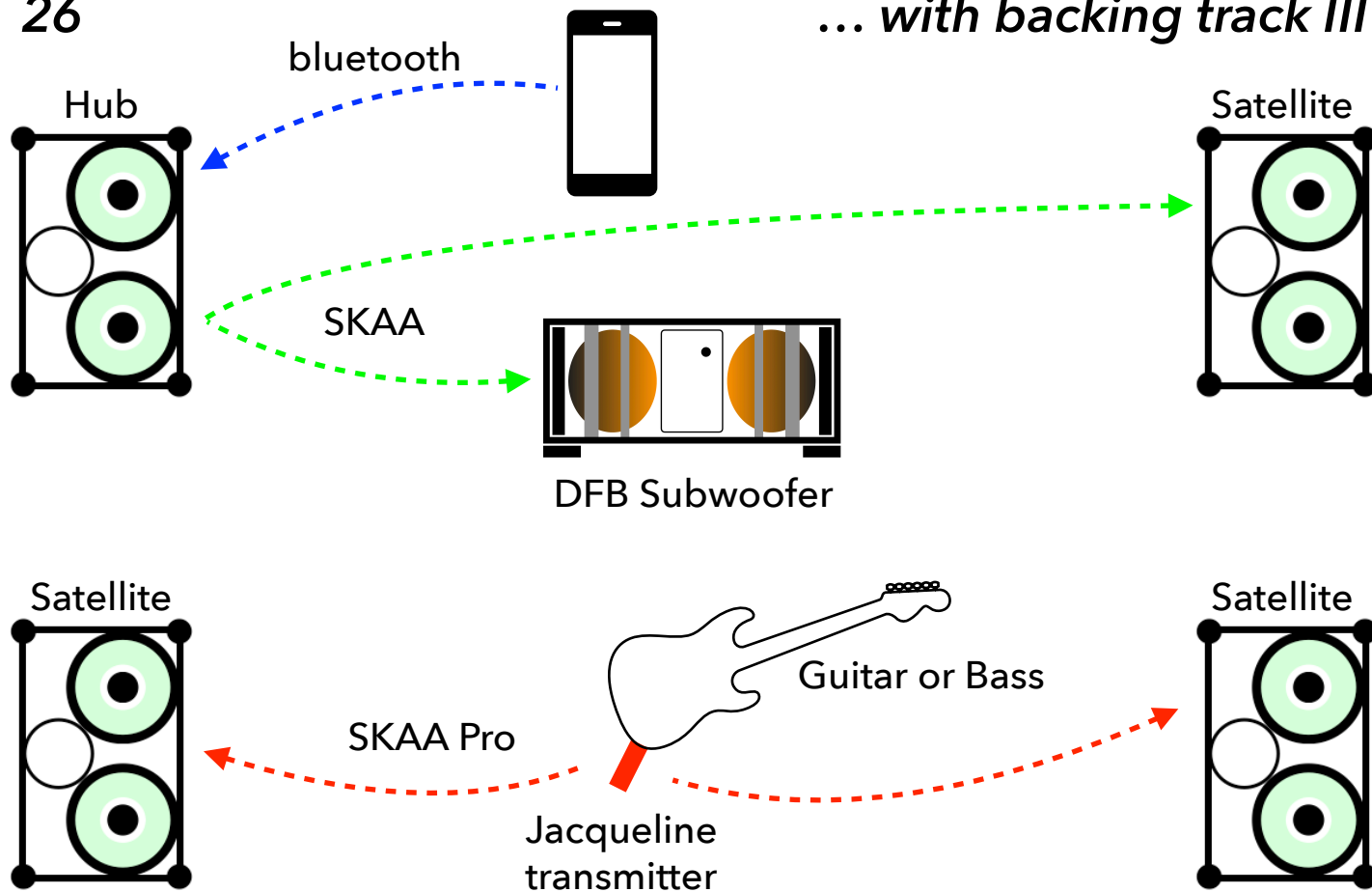
25

... with backing track II



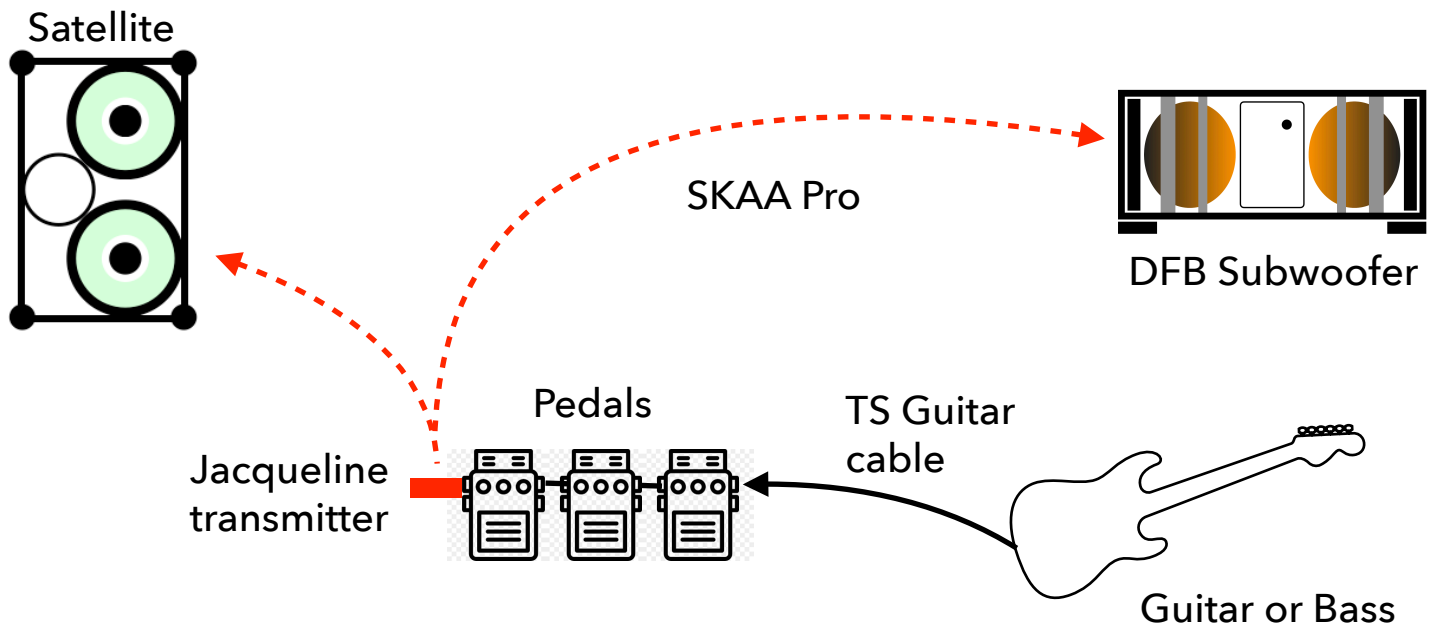
26

... with backing track III



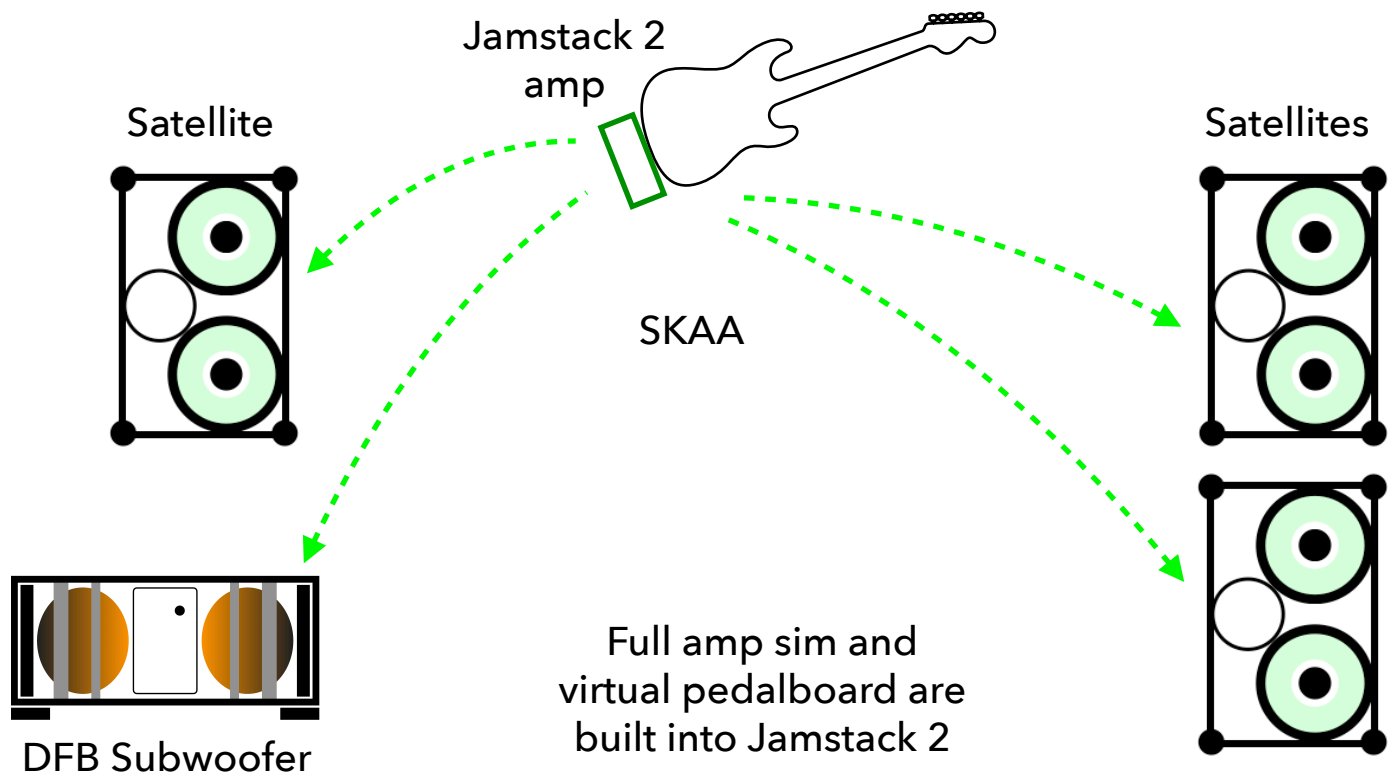
27

play with distortion & FX



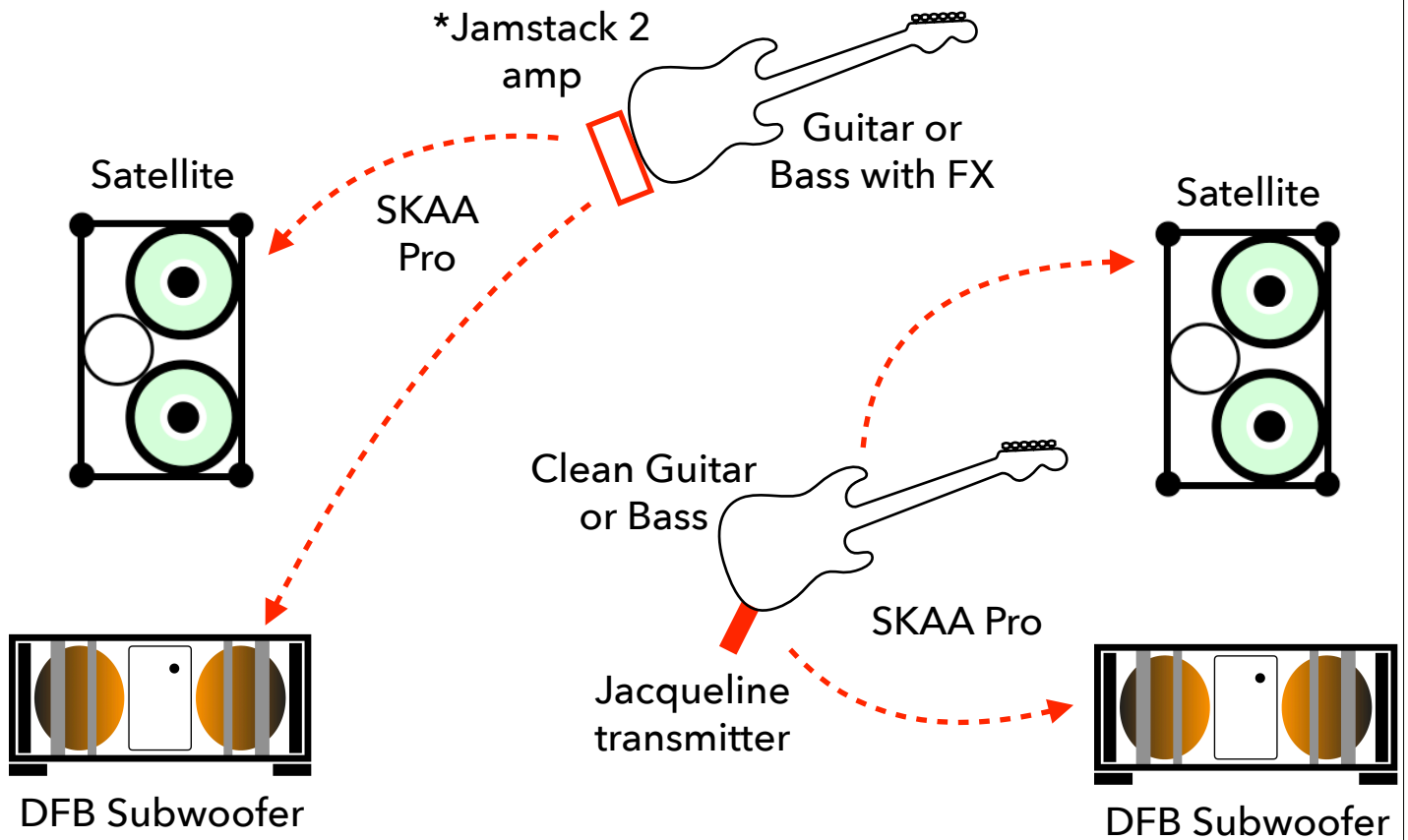
28

... or use a SKAA guitar amp



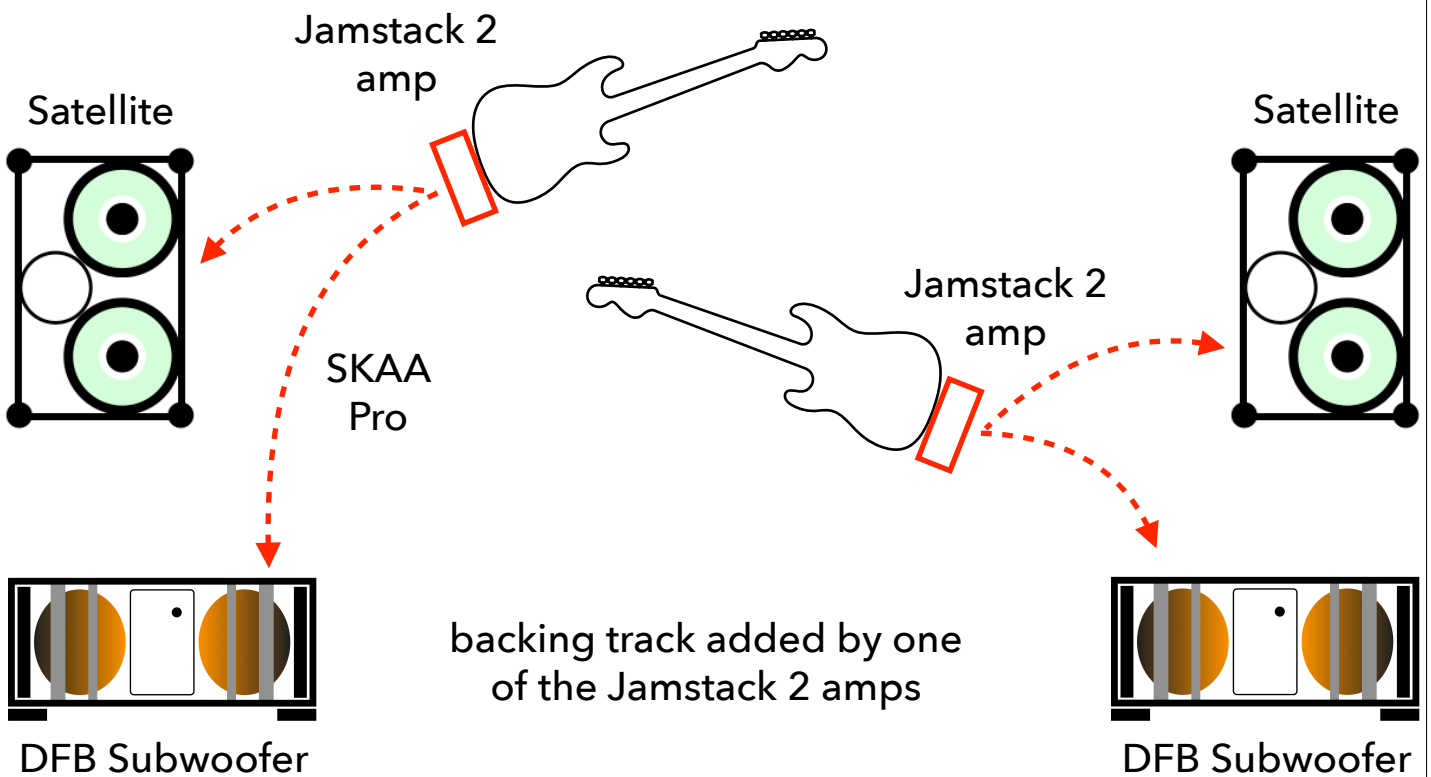
29

hybrid jam

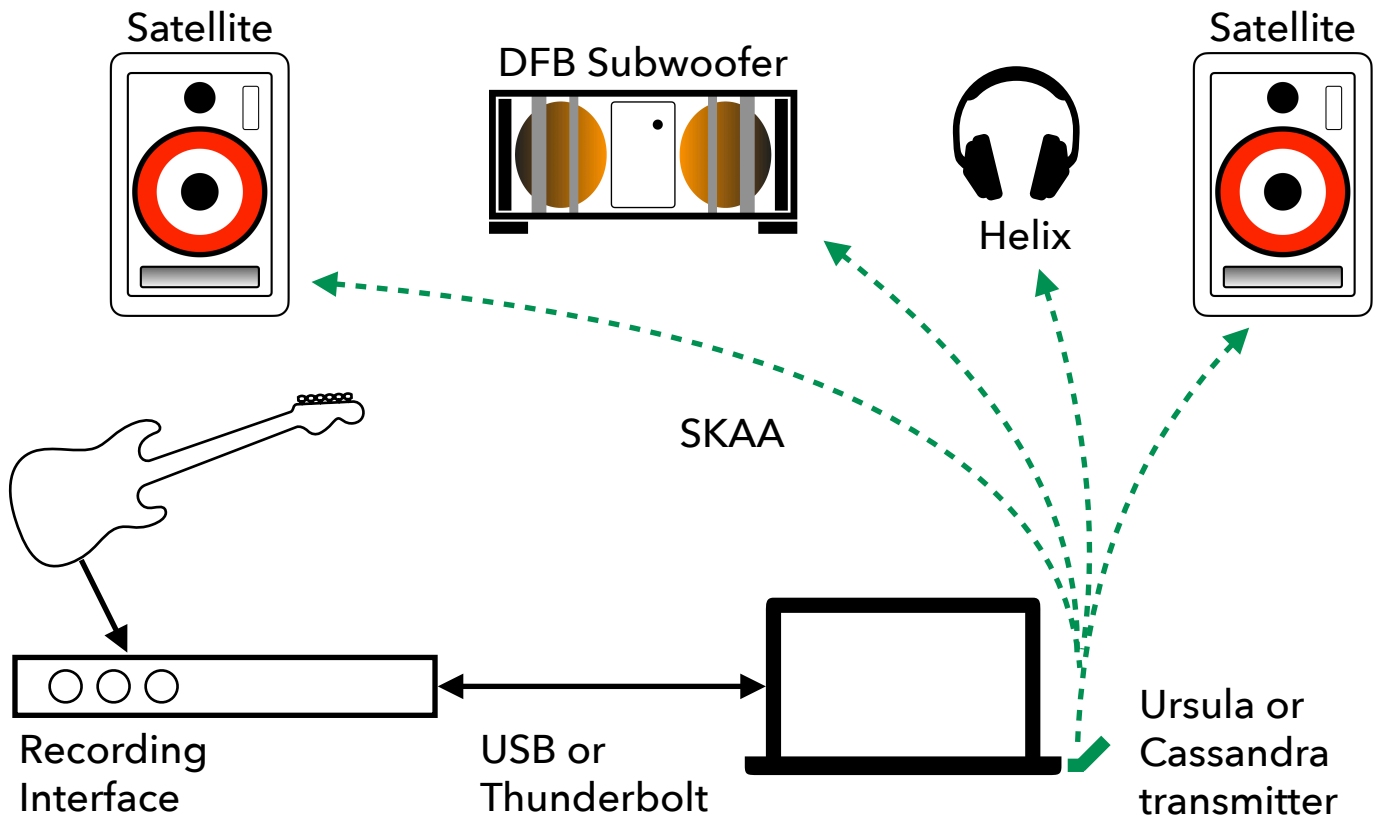


30

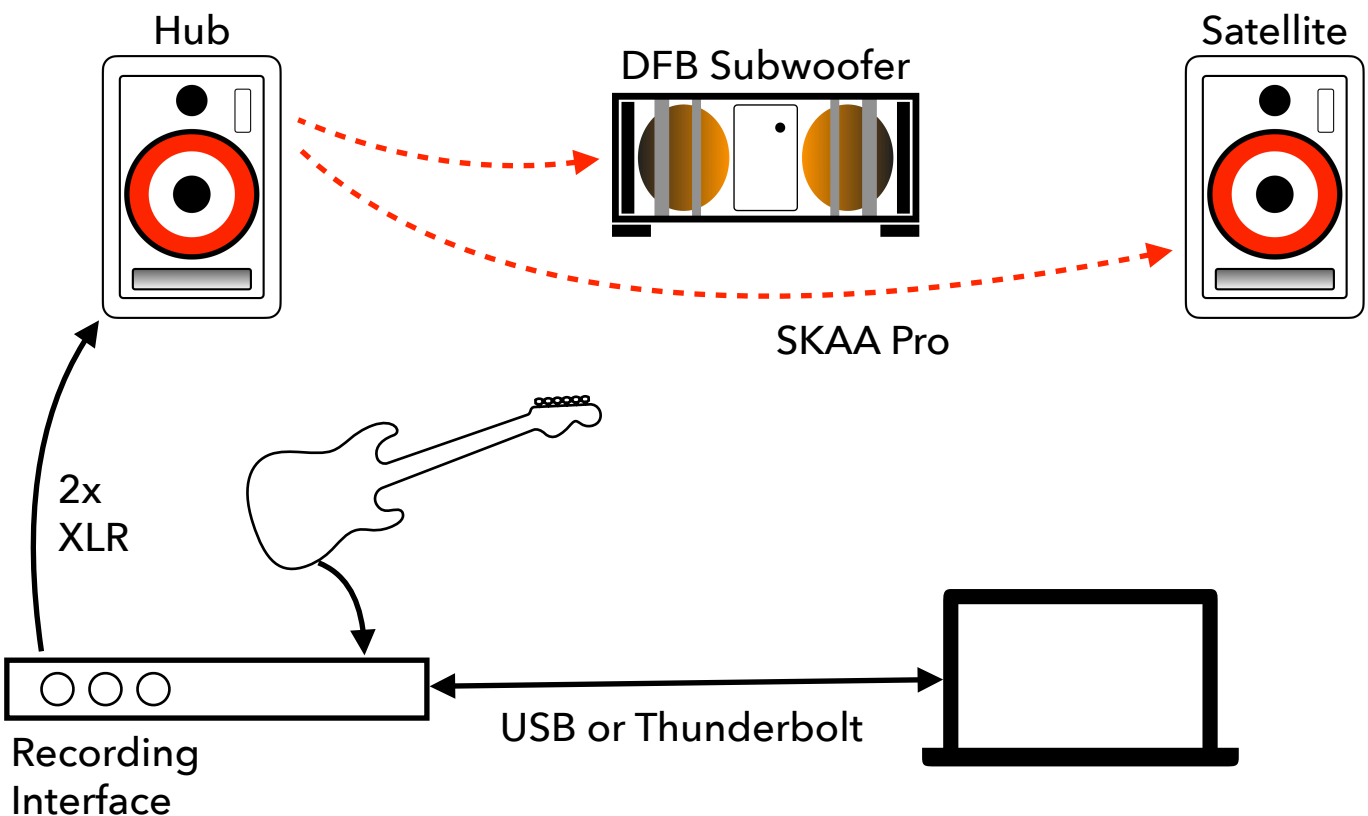
Jamstack 2 pro jam with backing track



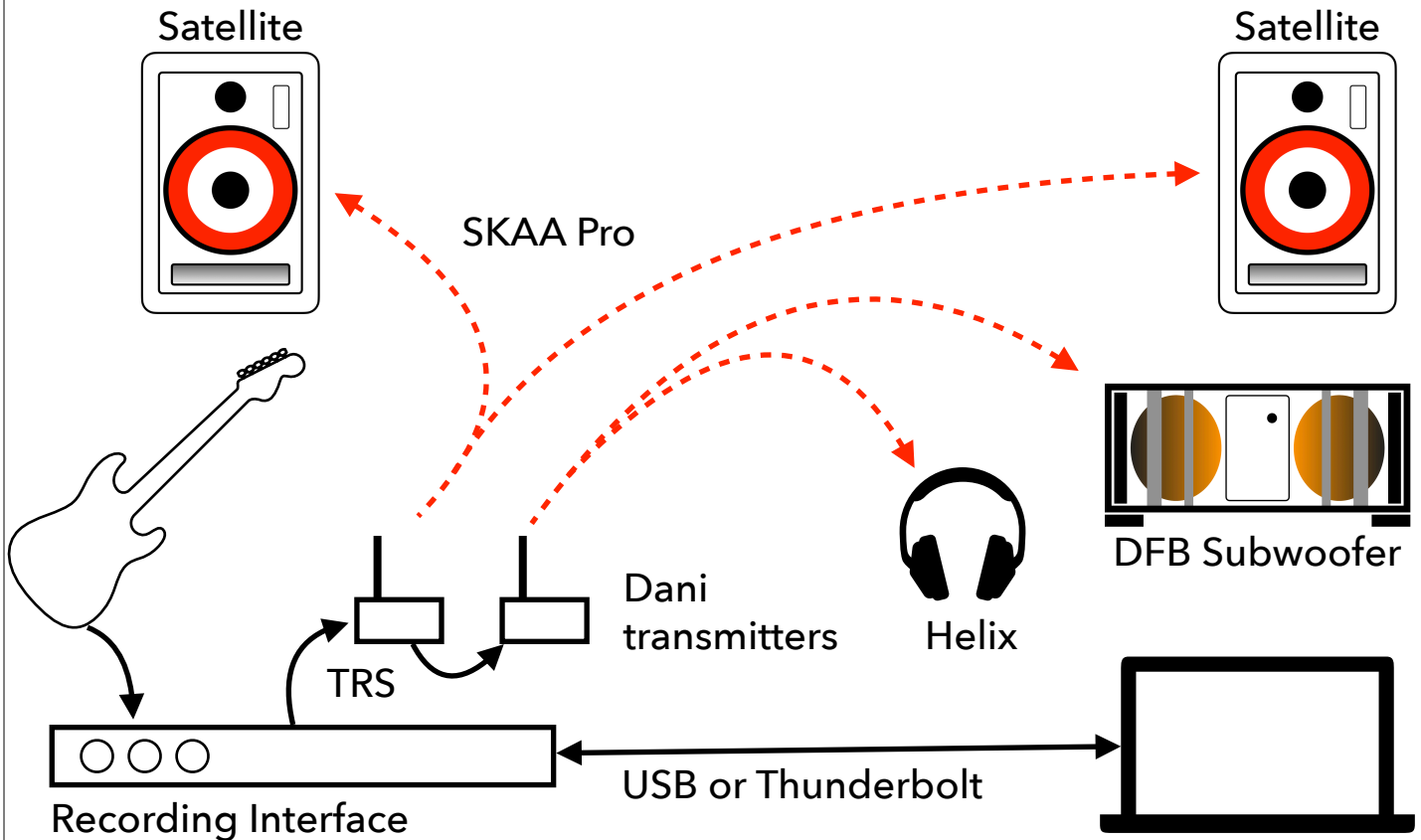
31

recording with Cerwin Vega Studio Monitors

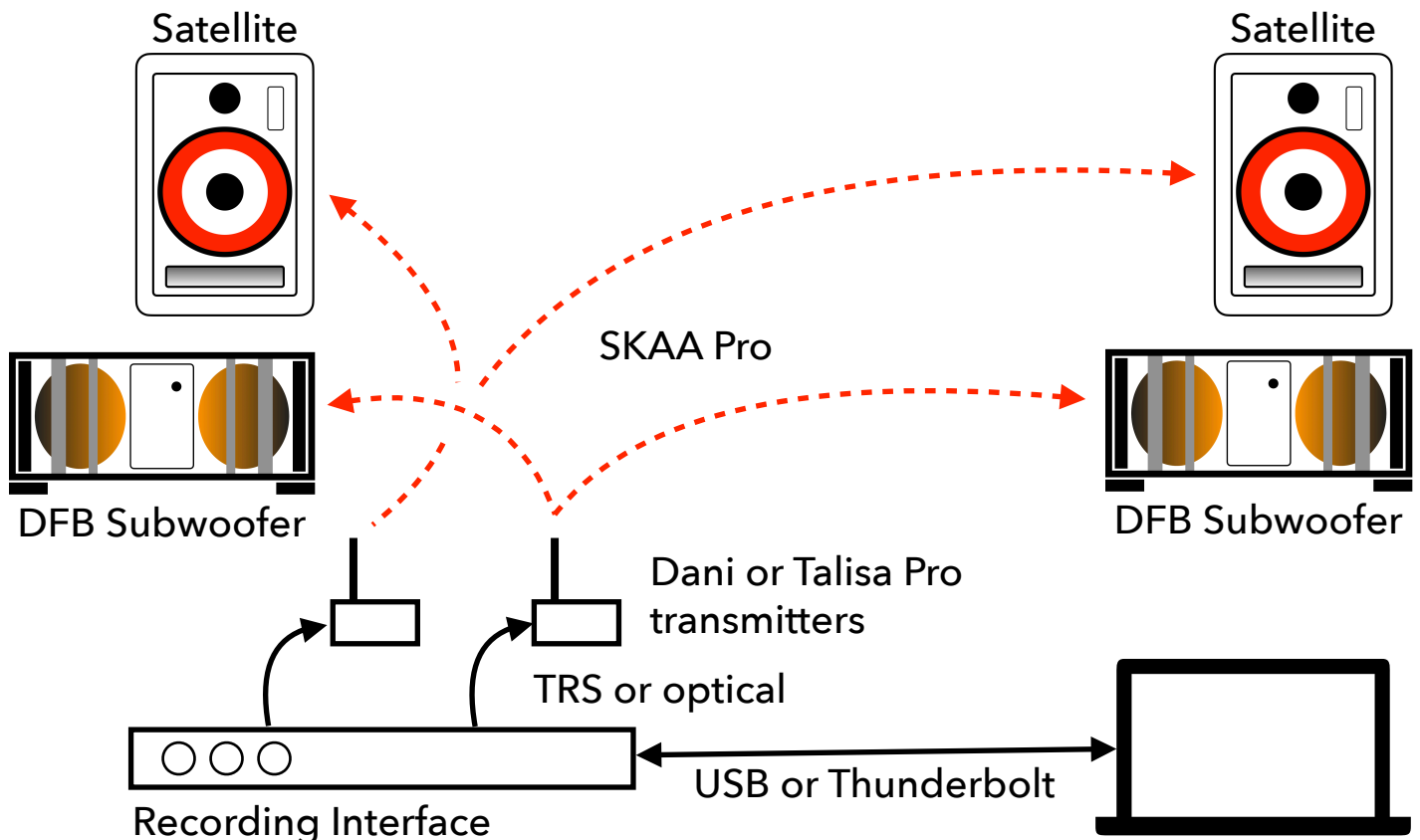
32

... or drop latency like so

33 ... or go with fully wireless speakers & headphones

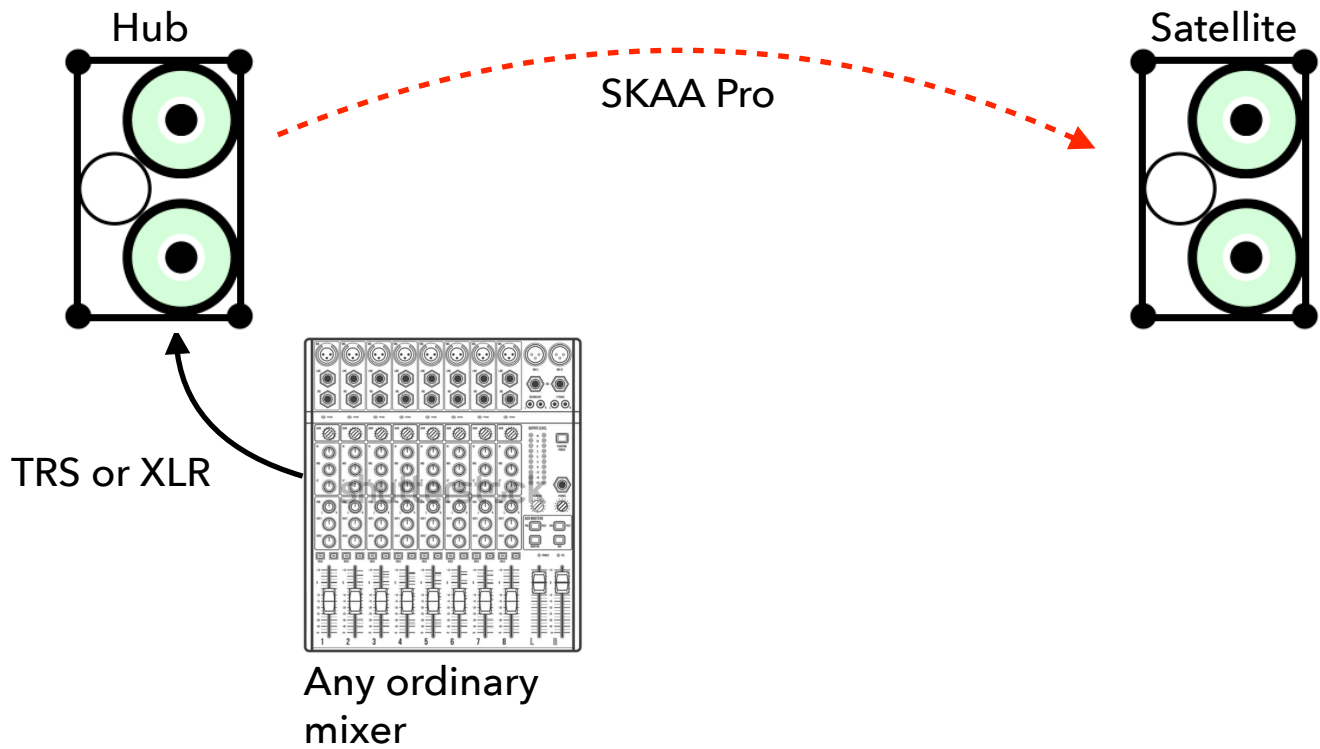


34 pro setup: subs fed by separate DAW outputs



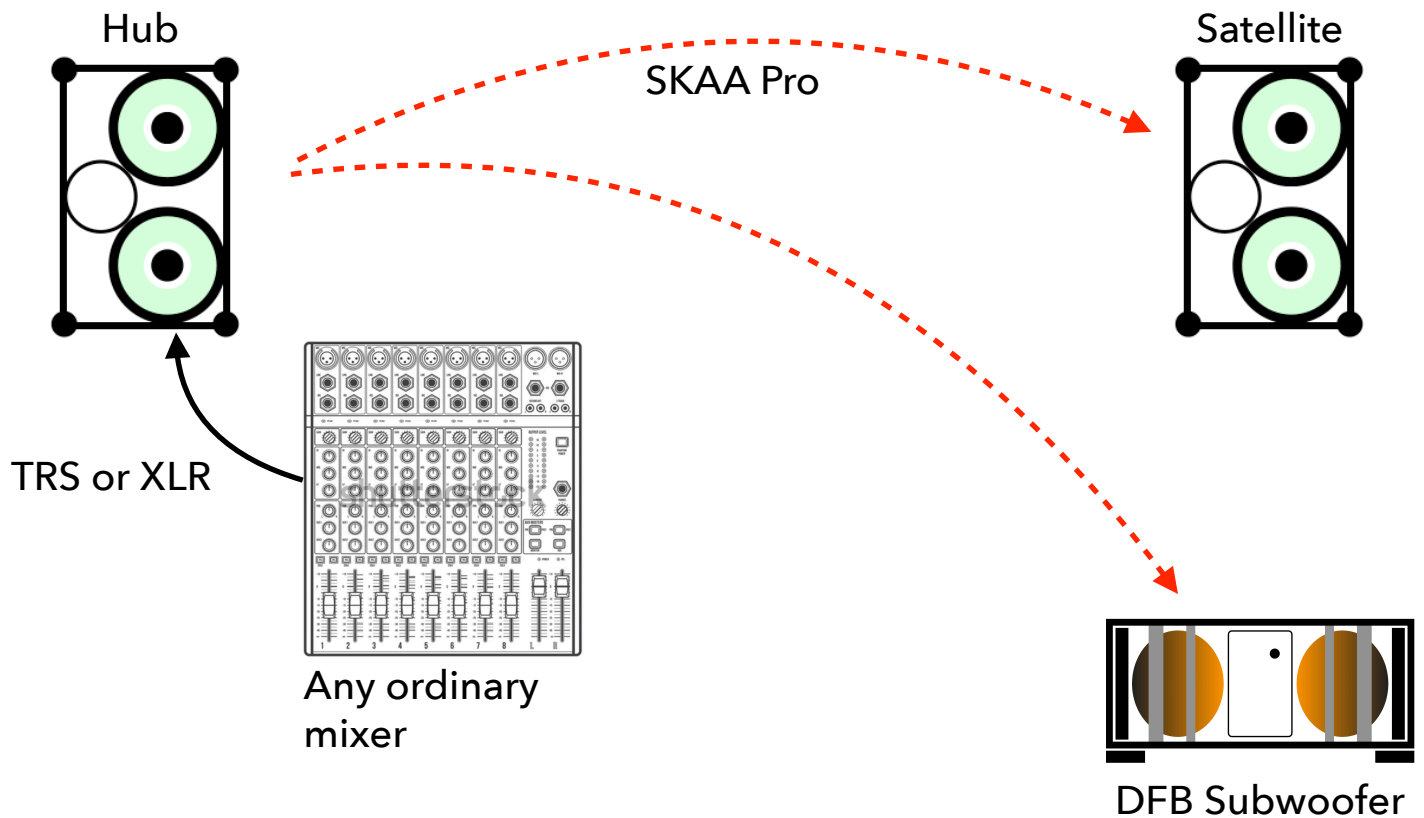
35

basic PA for live performance



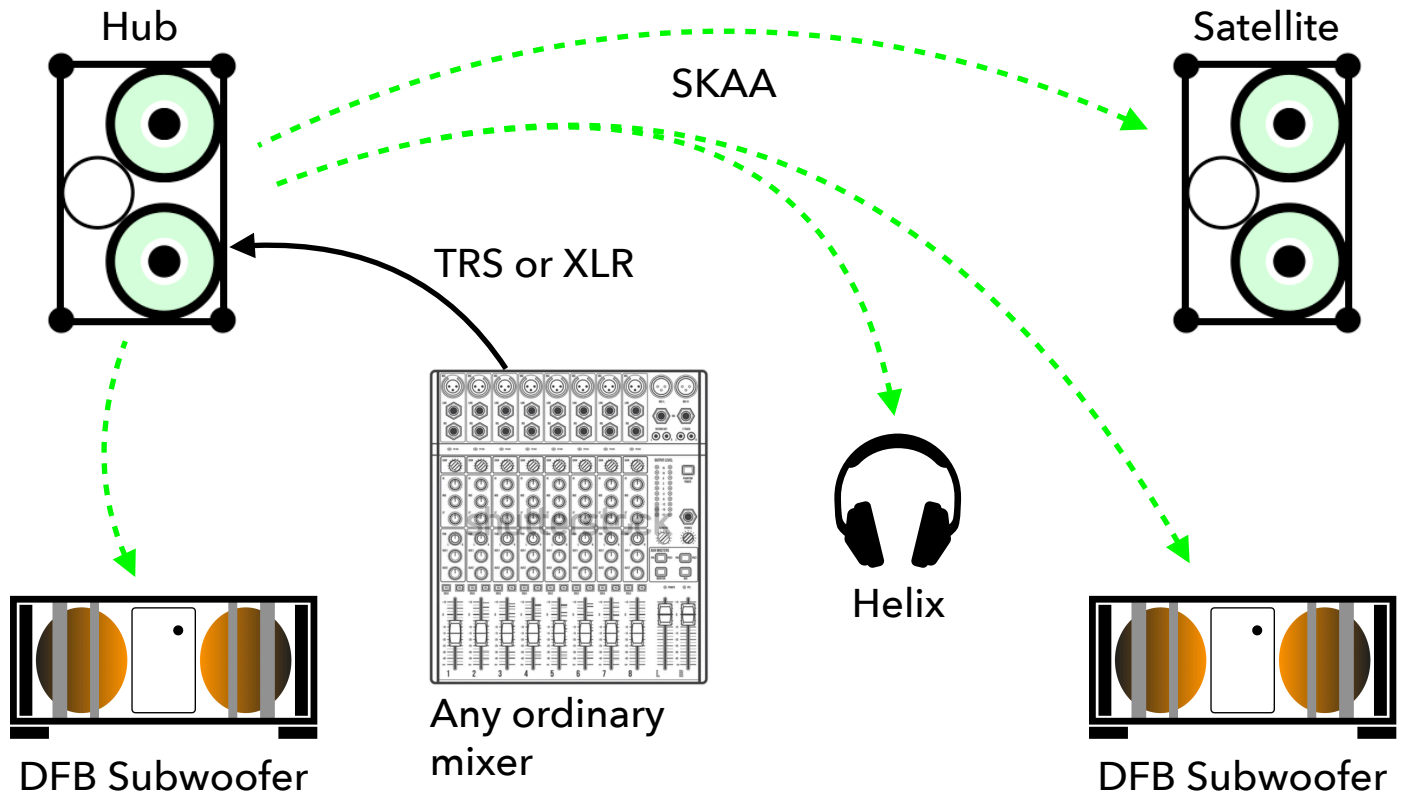
36

... add a sub



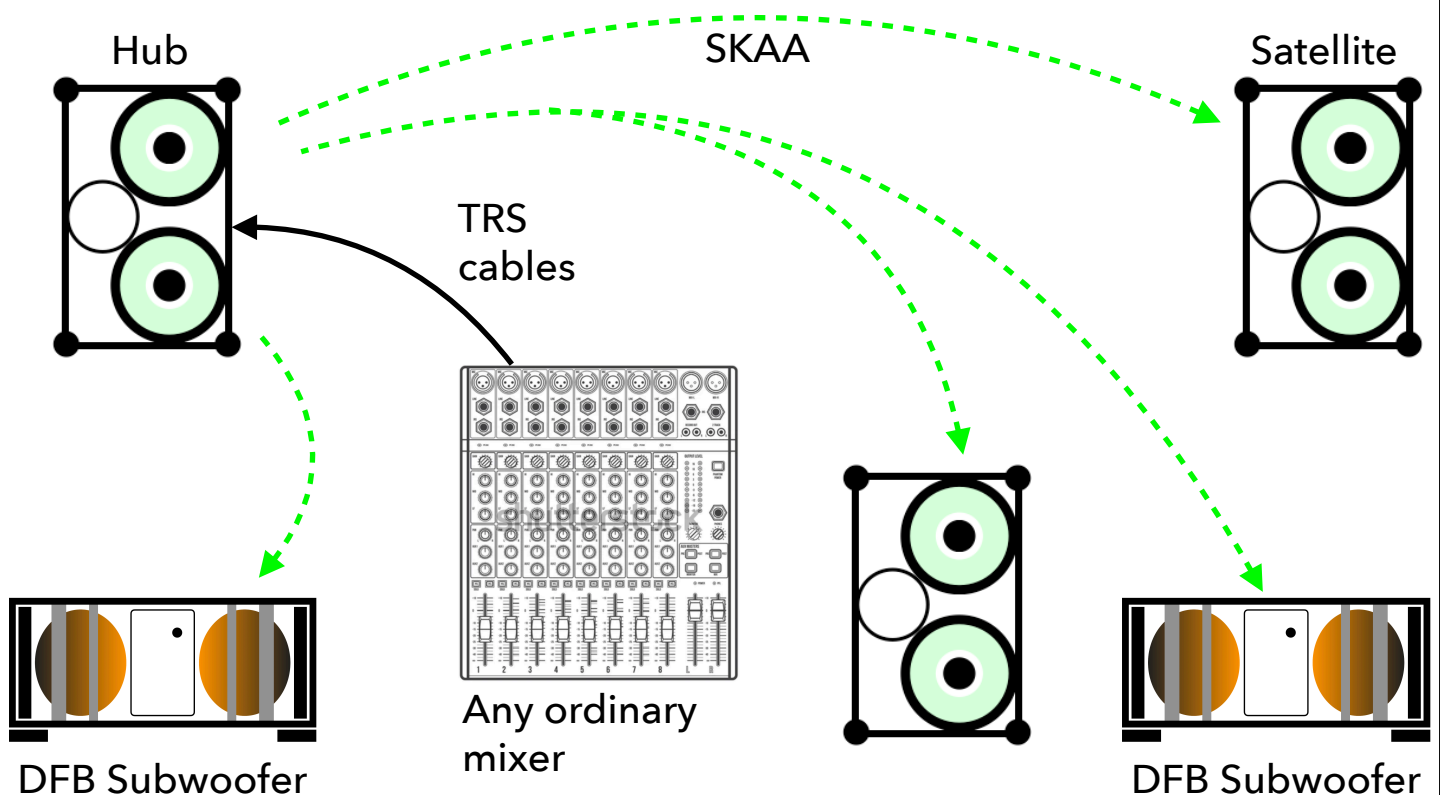
37

... 4 speaker PA with headphones



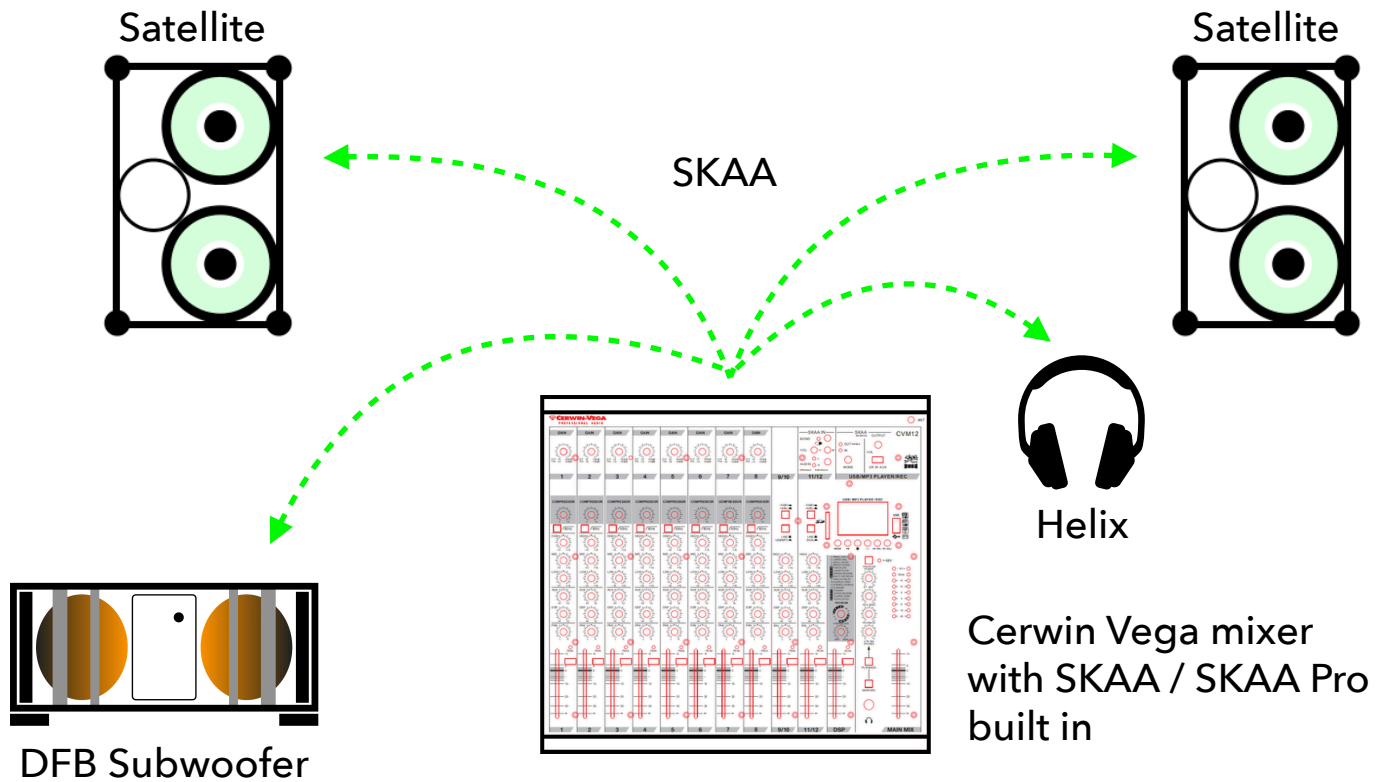
38

... or 5 speakers for better coverage



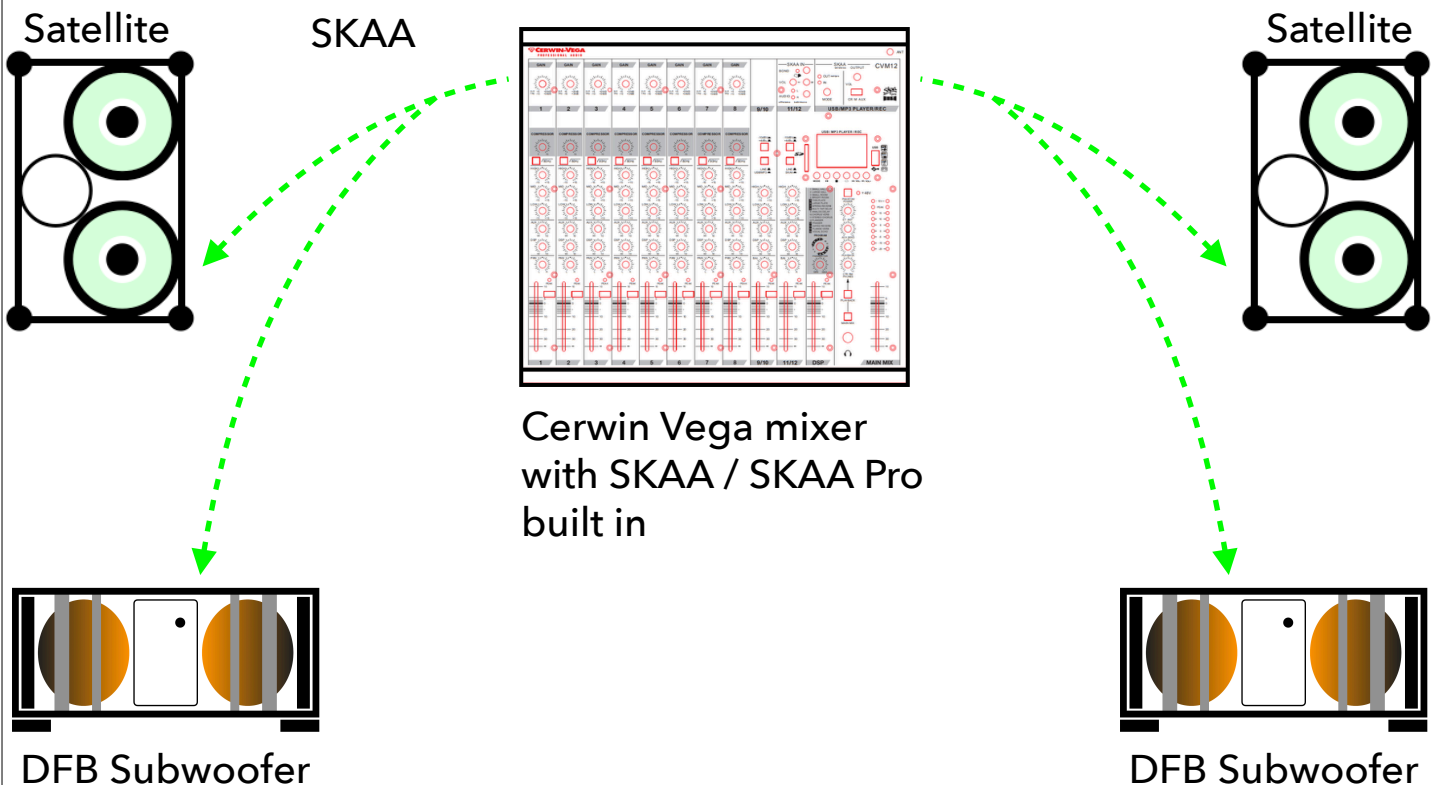
39

fully-wireless PA with Cerwin Vega SKAA mixer



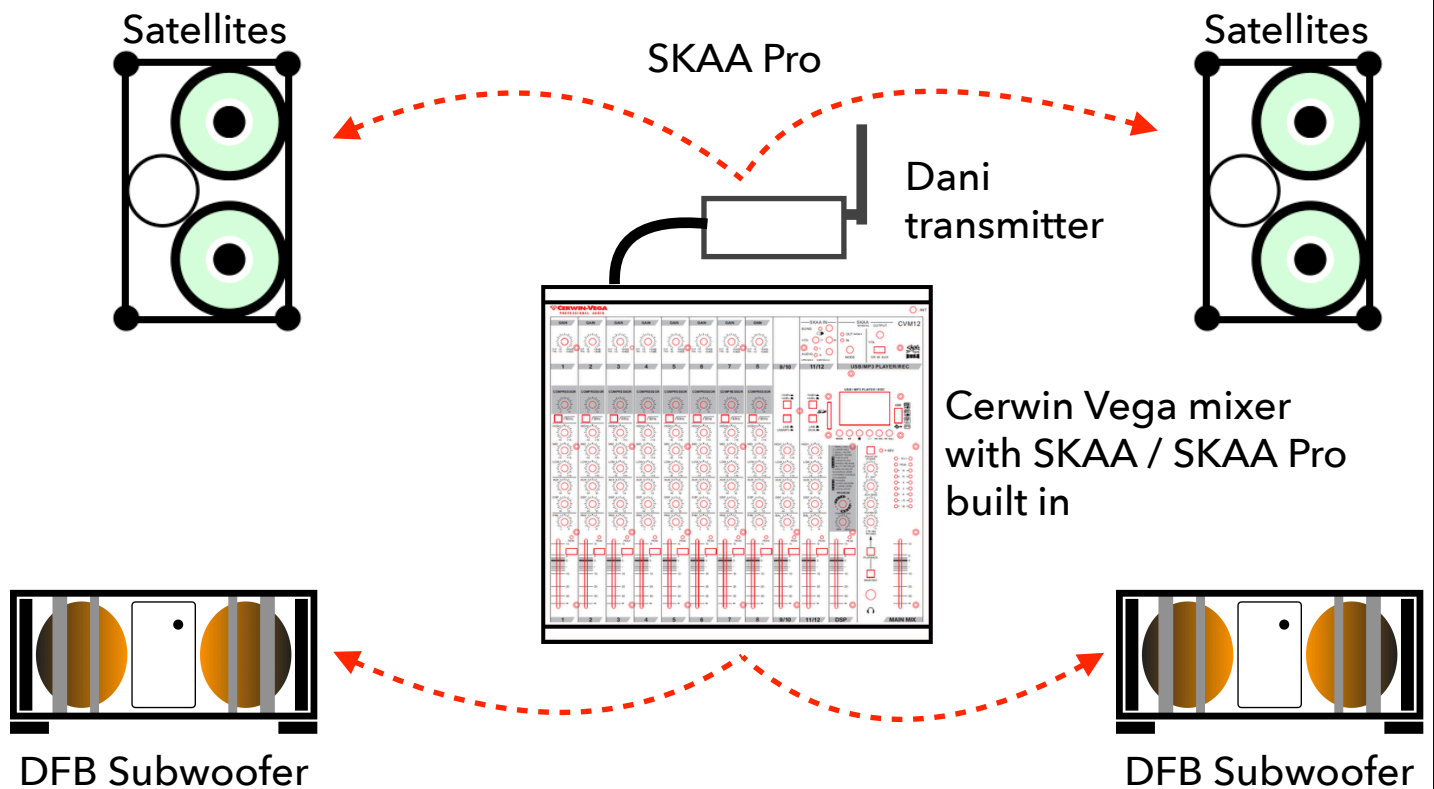
40

... or create a massive front end



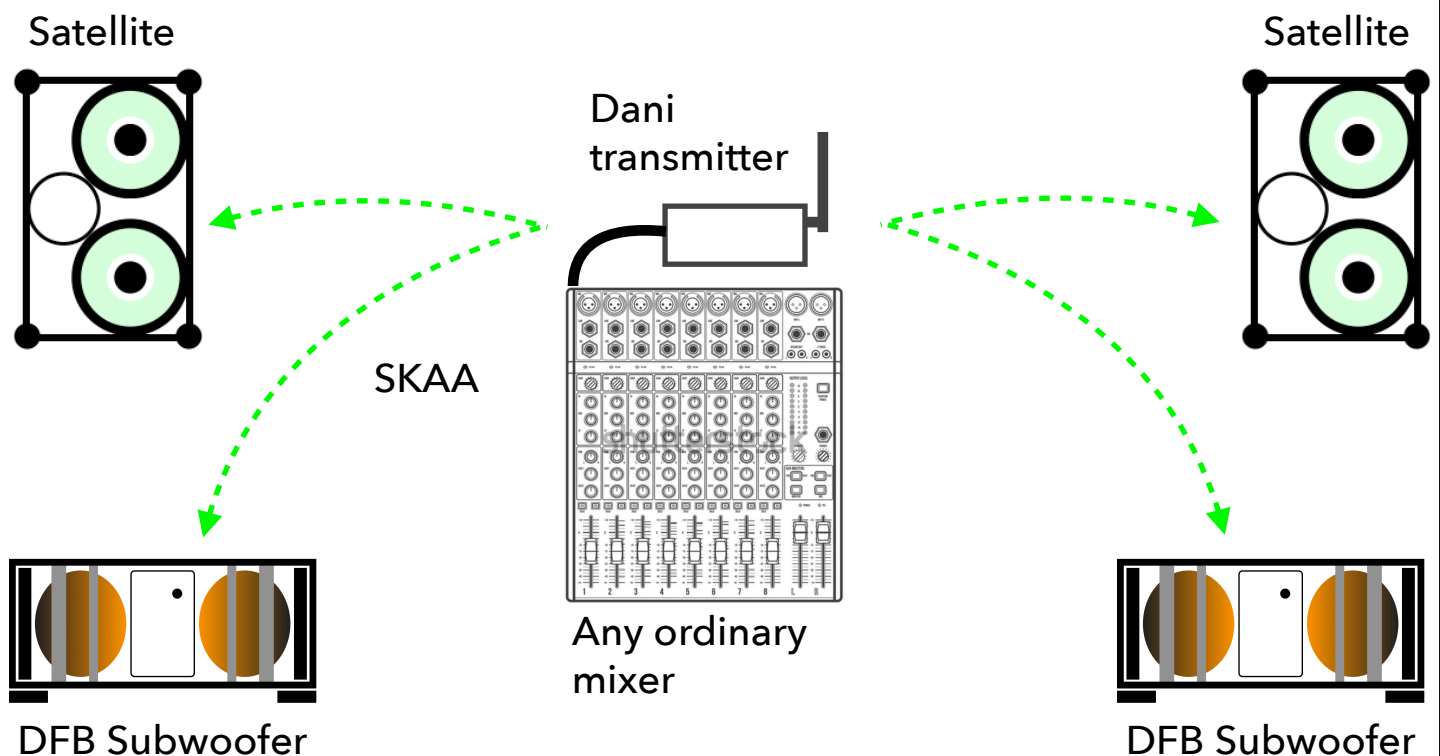
41

... here's the ultra low latency version



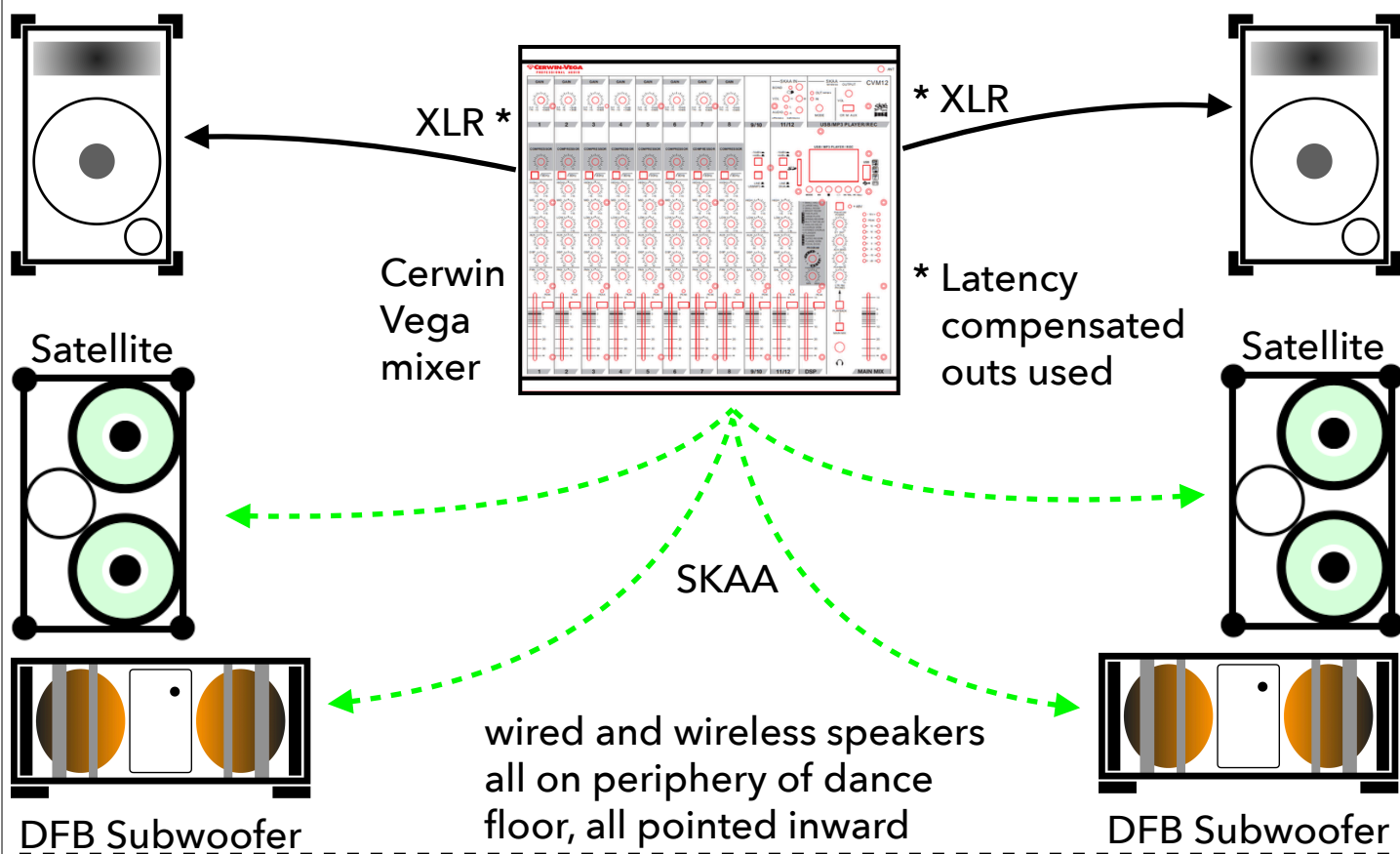
42

convert your old mixer to SKAA wireless



43

... sync wired & wireless



44

... sync'd delay towers

