

Friedman IR-X



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What is Friedman IR-X

The Friedman IR-X is a dual-channel, all-tube preamp with built-in cabinet simulation. Two 12AX7 tubes. 200V plate voltage — not the "starved plate" design of cheap tube pedals, but tubes running at proper voltage like in a real amp. The same circuits Dave Friedman has been building for LA's top guitarists for over 20 years.

Two channels, two characters

Channel 1 — from pristine clean to gritty edge-of-breakup. The BRIGHT switch (3-way) shapes the top end: off for warm tones, on for that Friedman sparkle.

Channel 2 — high-gain territory. From classic rock crunch to modern metal saturation. The TIGHT switch firms up the low end for palm-muted precision.

BOOST — extra gain stage on top of either channel. For solos or when you need more.

Architecture

Up to the SEND jack — a full tube preamp with two channels, 3-band EQ, and BRIGHT/TIGHT switches.

After the RETURN jack — a 96 kHz power amp simulator (with PRESENCE and THUMP for shaping power section character) and cabinet/microphone simulation.

Between SEND and RETURN you can insert an effects loop. Or use the IR-X as preamp only (SEND to a real cab), or as IR processor only (external preamp into RETURN).

Usage

The IR-X was designed as a complete amp replacement:

- **Studio** — balanced output straight to your interface. Record two tracks simultaneously: BALANCED OUT with IR and SEND without — for reamping or processing with a different IR in your DAW.
- **Live** — BALANCED OUT to the mixing console, SEND to your stage amp. Consistent front-of-house sound plus familiar monitoring.
- **Practice** — headphone output. Full tube tone.
- **Pedalboard** — fits on your board, replaces your amp.

Cabinet simulation

18 impulse responses from Friedman and OwnHammer. Each channel has 3 IR slots. Load your own WAV files (44.1–96 kHz) via USB.

The IR section is bypassable — use the IR-X as a pure tube preamp into a real cab, or run external

IR processors.

Presets

128 MIDI-programmable presets. Each stores: channel, boost status, FX loop status, IR selection per channel. PRESENCE and THUMP settings require the software.

The IR-X cleans up beautifully with your guitar's volume knob — roll it back and the overdrive disappears, leaving a clean tone. That's the Friedman signature.

My impressions

I also have a Quad Cortex and Fender Tone Master Pro. Great processors, no complaints about the sound. But under my fingers — there's a difference. Tubes respond to dynamics differently, the sound breathes. Roll back the guitar volume — the overdrive smoothly fades into clean. Processors do this too, but it feels... mechanical? Or maybe I'm just telling myself that — I don't know. But playing through the IR-X is more enjoyable, that's a fact.

Now, when I listen to a solo guitar recording on its own — honestly, I can't hear the difference. I've put tracks side by side: IR-X, Quad Cortex, plugins — good luck telling which is which. And I think that's not a bug, it's a feature. Good processors today model everything: harmonics, power supply sag, even cascading stage interactions. Pros can't tell them apart in blind tests. I can't tell the recorded IR-X from its captured impulse response when listening solo either. But in the mix — it's different. I admit this could be placebo.

But! When the guitar sits in a mix — that's where it gets interesting. Less mud in the lows, doesn't get buried, doesn't mask the vocals. Especially noticeable on double-tracked rhythms — they just sit in their place and don't smear everywhere. With processors I had to sculpt with EQ, carve out resonances — but here it just sounds right out of the box.

Why? I don't think it's tube magic. The IR-X is just well engineered — it gives you a signal with the right spectrum from the start, organized harmonics, no garbage that haunts you later in the mix. Maybe the Quad Cortex with the right settings would do the same. But the IR-X does it out of the box, no menu diving.

Solo — probably placebo. Playing feel — not. Mix — looks like good engineering, not tube magic.

IR Library

The IR-X comes with 18 cabinet impulse responses — a mix of Friedman's own captures and collaborations with OwnHammer. You can load your own, but the stock ones are genuinely good — I've tried tons of third-party IRs and came back to these.

Here's my cheat sheet — which IR for what:

Name	Description	Profile
6402 57 121 (MAIN)	Dave's iconic bare wood cabinet. Acquired from a 70's rock icon, already in its nude look. Resonant and lively, fitted with four rare 1990's 6402 Greenback speakers. This cab has been by Dave's side since the beginning and shaped the voicing of his amps. Captured with SM57 and R-121 for a balance of cut and body.	STUDIO OD DIST CLASSIC
V30 (MAIN)	The Friedman 4x12 — closed back, Baltic birch, tongue and groove construction. Tight bottom, big midrange, balanced top. The Celestion Vintage 30 sound has become ubiquitous in modern guitar. In this cab: powerful thump, just the right amount of cut. Captured with single SM57 and API preamp for a pure punchy sound.	LIVE OD DIST AGGR MODERN
1984B V30 GB (MAIN)	A rare UK model 4x12 from the 80's rock era. This 1984B "Bass" cabinet has British Greenback on top and V30's on bottom. The blend of speakers and careful mic'ing creates a huge tone — massive bottom, cutting top.	STUDIO CLEAN OD DIST BRIDGE
1960 GREEN 5757121	The classic 1960B cabinet from the 80's. Fitted with 20W British Greenbacks — a distinctive sonic signature that sings with 80's to modern rock tones. Captured with a pair of SM57 on two speakers plus R-121 for body. Fed into API preamps with EQ to enhance presence.	STUDIO CLEAN OD DIST BRIDGE
DS112 57 1973	The Friedman Dirty Shirley 1x12 open back with G12-50GL. Detailed top end with airy bass and mid response. Perfect for clean tones or bluesier sounds. Captured with SM57 and Soyuz 1973 into API preamps.	STUDIO CLEAN EDGE OD CLASSIC
BLACK 57 160	Dave's vintage 4x12 with checkerboard grill cloth. Celestion G12H-30 "Black Back" 55Hz 30W speakers. Muscular sounding — great for heavier rock, but warm enough for Strat tones. Mic'd with SM57 and M160 ribbon.	STUDIO CLEAN OD DIST CLASSIC
GREEN	The Friedman 4x12 sets the standard for modern rock cabinets. 16-ohm Celestion G12M-25 Greenback delivers classic tonality that sits perfectly in a band. Captured with single SM57 and API preamp for pure punchy sound.	LIVE CLEAN OD DIST CLASSIC
6402 57	Dave Friedman's favorite 4x12 in bare wood. Primary workshop cab used to voice his amplifiers since the beginning. Four 6402 Greenback speakers. Captured with single SM57 for pure punchy sound.	LIVE OD DIST CLASSIC

Name	Description	Profile
65W 57121	Captured from a classic 1960B cab. The vintage G12-65 with its signature massive dust cap has a fat warm sound with beefy low end. Captured with SM57 and R-121 combination.	STUDIO CLEAN OD DIST CLASSIC
CREAM65 57121	Captured from a pristine 80's UK 1960A 4x12 fitted with new Celestion Creamback 65W. Phase-aligned SM57 and R-121 on a single speaker. Balanced tone with a hint of vintage vibes.	STUDIO CLEAN OD DIST BRIDGE
EV12L 57121	The vintage EV12L has tonality almost inverse of modern speakers, yet delivers perfectly balanced cleans and crushing rock/metal tones equally well. SM57 and R-121 captured the smooth curve of this vintage 12" in an extremely oversized 2x12 closed back cab.	STUDIO CLEAN DIST AGGR NEUTRAL
MESRECT V30 57421	This iconic combination of Vintage 30 and oversized cabinet quickly became a mainstay in heavy music. Works equally well for full-bodied cleans and dirty tones. Captured at high volume through SM57 and MD-421.	STUDIO CLEAN DIST AGGR MODERN
GREEN+V30 MIX 5757121	One of Friedman's preferred combinations: two Greenbacks and two V30's in the same 4x12. A blend of these speakers with SM57 on each, R-121 added on V30 for extra body.	STUDIO CLEAN OD DIST BRIDGE
OH BE-412 M6402	16-ohm, 6402 cone Celestion G12M-75's from 1989 captured in Friedman BE-412 by Kevin Rowe of OwnHammer. Shure SM57 and Sennheiser MD421 through mid-late 1970's API 312 preamps.	STUDIO OD DIST BRIDGE
OH BE-412 M75BB	16-ohm, 1777 cone Celestion "black back" G12M-75's from 1975 captured in Friedman BE-412 by Kevin Rowe of OwnHammer. Shure SM57 and Sennheiser MD421 through mid-late 1970's API 312 preamps.	STUDIO OD DIST CLASSIC
OH BE-412 EV12L	8-ohm Electro Voice EVM-12L's from 1989 captured in Friedman BE-412 by Kevin Rowe of OwnHammer. Shure SM57, Sennheiser MD421, and Royer 121 through mid-late 1970's API 312 preamps.	STUDIO CLEAN DIST AGGR NEUTRAL
OH BE-412 V30EN	16-ohm, 444 cone Celestion Vintage 30's from 1999 captured in Friedman BE-412 by Kevin Rowe of OwnHammer. Shure SM57 and Sennheiser MD421 through mid-late 1970's API 312 preamps.	STUDIO OD DIST AGGR MODERN
OH BE-412 M25EN	16-ohm, 1777 cone Celestion G12M-75's from 2003 captured in Friedman BE-412 by Kevin Rowe of OwnHammer. Shure SM57 and Sennheiser MD421 through mid-late 1970's API 312 preamps.	STUDIO CLEAN OD DIST CLASSIC

Profile tags legend

Use case

- LIVE — simpler, faster, more predictable for live use; usually more direct and punchy
- STUDIO — more "produced" and mix-ready; often multi-mic or more complex texture
- BOTH — equally suitable for both

Gain range

- CLEAN — best for clean tones
- EDGE — edge of breakup, light crunch at the boundary of clean and overdrive
- OD — overdrive, medium-density rock distortion
- DIST — full distortion
- AGGR — more aggressive, dense, high-gain

Voice character

- CLASSIC — more vintage, familiar rock character
- BRIDGE — halfway between classic and modern
- MODERN — more modern, dense, focused character
- NEUTRAL — less colored, less "typically vintage"

Notes

- Profile ratings are practical interpretations based on descriptions and typical properties of these cabinets/speakers.
- The OH BE-412 M25EN preset name contains "M25EN" but the description says "G12M-75's" — table matches the original screenshot.

Glossary

Terms used in IR descriptions and what they actually mean.

Cabinet terms

Term	Meaning
IR (Impulse Response)	A snapshot of a cabinet+mic+room captured as a short audio file. Convolution with this file makes your signal sound like it went through that cab. Affects tone as much as (sometimes more than) the preamp itself.

Term	Meaning
cab / cabinet	Guitar speaker cabinet — the box with speakers. Shapes low end, midrange, top end, and overall feel.
4x12 / 2x12 / 1x12	Cabinet format: number of speakers × speaker size. 4x12 = bigger and more massive, 1x12 = more compact and lighter sound.
closed back	Cabinet with sealed rear panel. Usually tighter bass, more focus, more punch.
open back	Cabinet with open rear panel. Usually more airy, less focused bass, more "room" feel.
oversized cab	Larger-than-standard cabinet. Often more volume, bass, and "mass" in the sound.
bare wood	Unfinished/uncovered wood cabinet. Sometimes implies more lively cabinet resonance.
Baltic birch	Cabinet material. Stiff, popular choice for quality cabs.
tongue and groove construction	Cabinet joinery type. Strong construction, fewer rattles, good resonance control.

Speaker terms

Term	Meaning
speaker	Guitar speaker — one of the main sources of tone character.
Greenback	Classic Celestion speaker type. Usually more vintage midrange, softer top, classic rock character.
Vintage 30 / V30	Modern rock standard speaker. Dense midrange, good cut, often more modern and aggressive than Greenback.
Creamback 65	Modern speaker with vintage leanings. Often a balance between vintage musicality and higher power/evenness.
EV12L / EVM-12L	Electro-Voice EVM-12L. Very flat, powerful, wide response, less "typically Celestion" character.
Black Back	Vintage Celestion variant. Usually associated with older, denser, meatier British sound.
55Hz speakers	Speaker variant with 55Hz bass resonance. Often perceived as fatter and deeper in the low end.
dust cap	Center cap on the speaker cone. Its size and construction affect top end and attack.
cone 6402 / 1777 / 444	Celestion cone type codes. Internal specification that affects tonal nuances. 6402 = 1990s reissue, 1777 = 1970s vintage, 444 = late 1990s V30.

Tonal terms

Term	Meaning
resonant	Cabinet responds actively. Sound feels "alive" not dead.
lively	There's movement and life in the response. Tone isn't flat — there's breathing and response.
voicing his amps	Tuning the final character of amplifiers. The cab was used as reference when developing amp tone.
tight bottom end	Controlled bass. Low end doesn't fall apart or boom.
big bottom	Large, massive bass. Lots of mass in the low range.
big midrange	Pronounced midrange. Guitar reads well in a band.
top end	High frequency range. Responsible for brightness, air, bite, presence.
balanced top end	Nothing sticking out up top. Not too dark, not too bright.
detailed top end	Lots of nuance in the highs. Attack and sound structure clearly audible.
airy bass and mid response	More open, breathing response in bass and mids. Not about "fat" — about free breathing of the range.
cut	Ability to punch through the mix. Helps guitar be heard among drums and bass.
cutting top end	Top end that cuts through well. Useful for rock rhythm and clarity.
body	Fullness / meat / volume. Gives a sense of mass and filled-out sound.
fill out the body of the sound	Make the sound less thin. Usually a ribbon mic or second mic adds low/low-mid content.
presence	The zone of clarity and "coming forward." Helps sound step out in the mix.
punchy	Tight, snappy response. Sound feels fast and energetic.
thump	Low-end impact. The kick feeling from palm mutes and heavy riffs.
pure punchy sound	Minimally decorated sound emphasizing attack. Usually simple SM57 capture, good for quick results.
balanced tone	Nothing sticking out dramatically. Convenient base for various styles and mixing.
classic tonality	Recognizable old rock character. Often associated with vintage British cabs/speakers.
modern guitar sound	Newer rock/metal standard. Denser, more aggressive, more focused.
vintage vibes	Hint of vintage coloration. Not fully old-school, but with a characteristic old-time flavor.
muscular sounding	Strong, dense, with muscle. Good for rock riffs and heavy parts.
full bodied clean	Clean that's not thin but saturated. Useful when clean needs to be big and not empty.

Term	Meaning
dirty tones	Overdriven sounds. Usually from crunch to distortion.
crushing rock and metal tones	Very powerful heavy tones. Implies good high-gain potential.
bluesy sound	Leaning toward blues character. Often softer, warmer, less aggressive than modern high-gain.
sings	Musical sustain and flow. Often about pleasant midrange and singing leads.
massive sound	Large scale tone. Lots of volume, weight, and size.
sit perfectly in a band	Fits well in arrangement. Not necessarily the prettiest solo sound, but very functional in a song.

Microphone terms

Term	Meaning
mic'd / captured with	Which microphones were used. Describes not just the cabinet but this specific IR capture.
single SM57	One SM57 microphone. Usually simpler, more direct, drier, faster in the mix.
SM57 + R-121	Dynamic + ribbon mic. Often balances cut and fullness.
SM57 + MD421	Two classic dynamics. Often gives dense, rocky, studio result.
SM57 + M160	Dynamic + ribbon. Usually adds warmth and smooths top end.
SM57 + Soyuz 1973	Dynamic + large-diaphragm condenser. Can give richer, more open studio clean/edge sound.
phase aligned	Microphone phases aligned. Less comb filtering, better sum of two mics.
API preamp / API 312	API studio preamp. Often associated with fast, dense, rocky character.
captured at high volume	Recorded at high volume. Usually speaker is more "opened up," more mass and natural compression.