USER MANUAL

Dogma IR-C

Impulse response capture

Measure the acoustics of a room, a hall or a piece of hardware, and save it as an impulse response for any convolution reverb. Guided from the first level check to the finished file.



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This manual covers Dogma IR-C 0.4 for Windows and macOS. Screenshots may show an earlier build; the controls are the same. The latest edition is always at isaacaudio.com/manuals/.

CHAPTER 01

Introduction

Dogma IR-C turns any space into a reverb. It plays a sweep through your loudspeaker, records the room with your microphone, and computes the room's impulse response (IR): a short audio file that holds the way the space sounds. Load that file in Dogma IR-REV, or in any convolution reverb, and your sounds play in that room.

It works the same way for hardware. Connect a plate, a spring or an outboard reverb on a cable, and Dogma IR-C captures it too.

Guided from start to finish

Three steps on the screen: LEVEL CHECK sets the level for you, START measures, and the file is saved by itself, ready to load in the reverb.

Laboratory processing

Exponential sweeps, regularised deconvolution in double precision, harmonic distortion separated from the IR, and repeats combined so a cough or a door is thrown out.

A report for every take

Reverb time per octave (EDT, T20, T30), clarity C50 / C80, peak-to-noise ratio, distortion and a plain grade: EXCELLENT, GOOD or NOISY.

Whole-room averaging

Measure from several positions and the ROOM tab averages them as ISO 3382-2 describes, with confidence limits, and marks the position closest to the room's average.

Hardware on a cable

LINE mode starts the sweep at 2 Hz so the low end of a plate or spring is captured exactly; a loopback calibration removes your interface's own colour and delay.

Any recorder

GENERATE saves the sweep as a file: play it from any device, record on any recorder, and ANALYZE RECORDING finds the sweep and corrects the clock difference.

What you need

- An audio interface, a loudspeaker with a flat response (no "bass boost" or room DSP: whatever the speaker colours ends up in the IR) and a microphone.
- Your DAW, or no DAW at all: the standalone application measures directly through the audio interface.
- A quiet space. Air conditioning, fans and fridges raise the noise floor.

> NO FEEDBACK RISK
>
> Dogma IR-C only ever outputs the sweep, never what comes into it. You can monitor the microphone through the speaker and nothing will howl: there is no need to mute the track.

CHAPTER 02

Installation and activation

Dogma IR-C installs in about a minute, on Windows and on macOS. One installer puts every format in the folder your DAW already scans.

System requirements

- **Windows 10 or 11**, 64-bit, or **macOS 11 (Big Sur) or newer**, on Apple Silicon or Intel (one universal build), and a 64-bit DAW.
- A host for one of the formats below, or none at all.
- On Windows, the **Microsoft Edge WebView2 Runtime**, which draws the plugin window. It is part of Windows 11 and almost every Windows 10. If it is missing, the installer offers to open Microsoft's download page. On macOS nothing extra is needed.
- Administrator rights: plugins are installed in the folders every DAW on the computer shares.
- To measure a space: an audio interface, a loudspeaker and a microphone. A measurement microphone is best, but any microphone works.
- To measure hardware (plate, spring, outboard reverb): two cables, interface output to the unit's input and the unit's output back to an interface input.

FORMAT	HOSTS
VST3	Cubase, Nuendo, Studio One, Ableton Live, FL Studio, REAPER, Bitwig, Cakewalk and most others
AU (macOS)	Logic Pro, GarageBand, Ableton Live, Digital Performer, and every host that reads Audio Units
CLAP	REAPER, Bitwig Studio, FL Studio, Studio One
AAX	Pro Tools (the AAX is signed by PACE, as Pro Tools requires)
Standalone	No DAW needed: Dogma IR-C runs as its own application with your audio interface

Installing on Windows

1. **Close your DAW.** Windows locks a plugin file that is loaded, and the installer cannot replace it. Pro Tools in particular must be closed.
2. **Run** `Dogma-IR-C-…-Windows-Setup.exe` (double-click) and approve the Windows permission request.
3. If Windows shows **"Windows protected your PC"**, click `More info` and then `Run anyway`. SmartScreen warns about any installer it has not seen many times before.
4. Choose the language and accept the license agreement.
5. **Choose the formats.** The default installs all of them. Untick what you do not need, for example AAX if you do not use Pro Tools.
6. Click `Install`, then `Finish`. The Start menu now has an **Isaac Audio › Dogma IR-C** folder with the standalone application.

Installing on macOS

1. **Quit your DAW.**
2. **Double-click the installer** (`.pkg`; if you downloaded a zip, double-click the zip first, and read **Start here.txt** inside it).
3. The installer is not signed with an Apple certificate, so the first time macOS stops it. **macOS 15 and newer:** click `Done`, open `System Settings › Privacy & Security`, scroll down to the message about the installer and click `Open Anyway` (your password), then `Open`. **macOS 11 to 14:** right-click (or Control-click) the installer › `Open` › `Open`.
4. Follow the installer: accept the license agreement and keep the plugins you want (all of them by default). It asks for your password, since the plugins go to the shared folders.
5. Open your DAW. Logic Pro checks every new Audio Unit once on its first scan: let it finish.

Where the files go

Windows

ITEM	FOLDER
VST3	`C:\Program Files\Common Files\VST3\Dogma IR-C.vst3`
CLAP	`C:\Program Files\Common Files\CLAP\Dogma IR-C.clap`
AAX	`C:\Program Files\Common Files\Avid\Audio\Plug-Ins\Dogma IR-C.aaxplugin`
Standalone	`C:\Program Files\Isaac Audio\Dogma IR-C\Dogma IR-C.exe`
Your measurements	`Documents\Isaac Audio\Dogma IR-C\` (created by the first measurement)

macOS (for every user of the Mac)

ITEM	FOLDER
VST3	`/Library/Audio/Plug-Ins/VST3/Dogma IR-C.vst3`
AU	`/Library/Audio/Plug-Ins/Components/Dogma IR-C.component`
CLAP	`/Library/Audio/Plug-Ins/CLAP/Dogma IR-C.clap`
AAX	`/Library/Application Support/Avid/Audio/Plug-Ins/Dogma IR-C.aaxplugin`
Standalone	`/Applications/Isaac Audio/Dogma IR-C.app`
Your measurements	`~/Documents/Isaac Audio/Dogma IR-C/` (created by the first measurement)

Updating and removing

Updating: run the new installer over the old one, on Windows or on macOS. There is no need to uninstall first, and your presets and settings are kept.

Removing on Windows: `Settings › Apps › Installed apps`, then **Dogma IR-C › Uninstall**. **On macOS:** delete the files listed above (**Dogma IR-C.vst3**, **.component**, **.clap**, **.aaxplugin** and the app). Your own presets stay in your Documents folder.

> INSTALLING FROM THE ZIP INSTEAD (WINDOWS)
> Extract the whole zip to a folder first (right-click › Extract All); do not run anything from inside the zip. Double-click **Install Dogma IR-C.bat** and approve the permission request: it copies the plugin formats to the folders above. **Uninstall Dogma IR-C.bat** removes them.

Activation

Dogma IR-C needs a license file to pass audio. There are two kinds: the license of a purchase, tied to your computers, and the personal license of the beta programme.

If you bought Dogma IR-C

Your license covers **two computers**. Activating one takes a minute:

1. **Open Dogma IR-C** in your DAW. Without a license, the window shows a short notice with a button: `Activate this computer`.
2. Click it. Your browser opens **your account** on our website, with this computer's code already filled in. Sign in with the link from your purchase email if you are asked to.
3. Optionally give the computer a name ("Studio PC"), then click `Activate and download the license`.
4. **Windows:** leave the downloaded file in your Downloads folder. **macOS:** move it to `~/Library/Application Support/Isaac Audio/Beta` (see below). The plugin finds it within a few seconds and starts working; you do not need to restart the DAW. It shows its terms once: click `I agree`.

> THE LICENSE FOLDER ON MACOS
> macOS asks before an app reads your Downloads, so on a Mac the plugin looks only in its own folder. In Finder choose `Go › Go to Folder…`, paste `~/Library/Application Support/Isaac Audio/Beta` and press `Return` (create the **Isaac Audio** and **Beta** folders if they are not there yet), then drag the license file in. The plugin's "license required" notice has a button that opens this folder too.

> GOOD TO KNOW
> The license file is valid for 60 days, and the plugin renews it by itself in the background whenever the computer is online. If a computer stays offline longer than that, activate it again from your account: it is the same computer, so it does not use another slot. To move the license to a new computer, release the old one under **Active computers** in your account (up to three times a year; write to us if you need more).

If you are a beta tester

Testers use one personal file for all the Dogma plugins: `ISAAC-AUDIO-Beta-License.isaaclic`, issued in your name.

- **Downloaded the zip from the beta site?** The license is already inside it, and the installer copies it into place: on Windows to `Documents\Isaac Audio\Beta` (so does **Install ... .bat**), on macOS to `~/Library/Application Support/Isaac Audio/Beta`. Nothing to do.

- **Don't have it?** Sign in to the beta site and click `Download license` on the downloads page. On Windows you can leave it in Downloads: the plugin finds it there. On macOS, move it to `~/Library/Application Support/Isaac Audio/Beta` (see below).
- The first time you open the plugin, it shows the beta terms with your name once. Click `I agree`.

License details and status

Click the **DOGMA label** in the top-right corner of the window, to see whom the license is issued to and until when, the plugin's version (on the window's first line), and to open the support or feedback page.

> WITHOUT A LICENSE
>
> The plugin passes no sound and shows a "license required" notice with buttons to the website and the license folder. As soon as a valid file is in place, it unlocks by itself within a few seconds.

CHAPTER 03

Setting up a measurement

Dogma IR-C sits on an **audio track** whose input is the microphone and whose output is the loudspeaker. It plays and records by itself: you do not press Play or Record in the DAW.

The measurement track, in any DAW

1. **Create an audio track**: mono for one microphone, stereo for two.
2. **Input** = the microphone (or the output of the hardware unit). **Output** = the loudspeaker in the room (or the input of the hardware unit).
3. **Insert Dogma IR-C** on the track, as the first plugin.
4. Turn on **Record Arm** and **Input Monitoring** for the track. Without monitoring, most DAWs do not pass the microphone to the plugin.

HOST	RESCAN IF NEEDED	WHERE TO FIND IT	ARM AND MONITOR
Pro Tools (AAX)	Scans at every launch	Insert › plug-in › Noise Reduction › Dogma IR-C (mono or stereo track)	Record Enable (red) and Input Monitoring (I)
REAPER	Preferences › Plug-ins › VST (or CLAP) › Re-scan	FX › VST3: Dogma IR-C (Isaac Audio)	Record Arm; right-click it › Monitor Input
Cubase / Nuendo	Studio › VST Plug-in Manager › Rescan	Inserts › Isaac Audio › Dogma IR-C	Record Enable and Monitor
Studio One	Options › Locations › VST Plug-ins › Reset Blocklist, restart	Browser › Effects › Isaac Audio	Record and Monitor on the channel
Ableton Live	Settings › Plug-Ins › Use VST3 System Folders › Rescan	Plug-Ins › VST3 › Isaac Audio	Arm, and Monitor = In
FL Studio	Options › Manage plugins › Find plugins	A Mixer insert slot › Dogma IR-C	Select the input on the Mixer track; it is always monitored
Bitwig Studio	Automatic	Browser › Dogma IR-C	Arm, and Monitoring = On or Auto
Cakewalk	Preferences › File › VST Settings › Scan	Audio FX › Isaac Audio	Record Arm and Input Echo

> WORK AT 48 KHZ
> Dogma IR-C works at every sample rate and saves the IR at the project's rate, but 48 kHz is the best all-round choice.

Without a DAW: the standalone application

The simplest way to measure: no track, no arming, no monitoring. The application plays and records straight through the audio interface.

1. Open **Start › Isaac Audio › Dogma IR-C**.
2. Once: on Windows click the icon in the window's top-left corner (or right-click the title bar), on macOS the application's menu (**Dogma IR-C**, beside the Apple menu) › **Audio/MIDI Settings**. Choose the API (Windows: WASAPI; macOS: Core Audio), the **Output** your speaker is on, the **Input** your microphone is on, 48000 Hz and a buffer of 256. The settings are kept.
3. Make sure **Mute input** in the same menu is *not* ticked.
4. From here everything works as in a DAW: LEVEL CHECK, then START.

> IN THE STANDALONE
> Only inputs 1–2 and outputs 1–2 of the interface are used: connect the microphone to input 1 (or 2) and the speaker to outputs 1–2. A USB microphone with the computer's speakers works too: they are two devices with two clocks, and the default of 2 repeats measures and corrects the difference.

CHAPTER 04

Your first measurement

Five minutes from a new track to a reverb of your own room.

1. **Set up the track** as in chapter 3, and open the plugin window. At the top of the display are three steps: **1 LEVEL CHECK › 2 MEASURE › 3 LOAD IN REVERB**. The next step is always highlighted.
2. **Start quietly.** Turn the speaker down to a modest level before the first sweep: it covers every frequency, including very low and very high ones.
3. **Type a NAME** for the room or the microphone position, for example *Hall*. It becomes part of the file name.
4. **Click LEVEL CHECK.** A 3-second test sweep plays and nothing is saved. Then do what the plugin says:
   - `LEVEL IS RIGHT ✓`: carry on.
   - `SET LEVEL TO … dBFS ›`: click the line, and the LEVEL knob is set for you. You can check again.
   - `TOO QUIET EVEN AT FULL LEVEL`: raise the microphone gain on the interface, or the speaker.
   - `NO SIGNAL`: nothing reaches the plugin. Check Record Arm, Input Monitoring and the track's input.
5. **Click START** (the large button) and keep the room quiet. First the plugin listens to the room's noise for a few seconds; then the sweep plays. With the default settings a take lasts about a minute. You see the sweep's frequency, the microphone level and the progress. Press START again to stop at any time.
6. When it ends, the IR is **saved by itself** and the display shows **SAVED ✓** with the reverb time (RT) and the grade.
7. **Click NEXT: LOAD IT IN THE REVERB ›**. The FILES tab opens with the new file selected: `COPY PATH` copies its full path, `OPEN FOLDER` shows it in Explorer (Finder on macOS). In Dogma IR-REV, choose **LOAD IR...** and paste the path or pick the file.

> **TWO TAKES ARE BETTER THAN ONE**
>
> Use SHORT (8 s) while you set up and place the microphone, then LONG (30 s) for the take you keep. A longer sweep gives a cleaner IR: about 3 dB less noise every time its length doubles.

CHAPTER 05

The interface

One window, five knobs and six tabs. Hover any control and a short explanation appears.



The Measure tab after a finished measurement: the level check and the sweep are done, and step 3 is highlighted.

1. **NAME**: the room or mic position; it goes into the file name.
2. **Tabs**: MEASURE, IR, REPORT, ROOM, FILES, SYS.
3. **The three steps**: the next one is always highlighted.
4. **Summary**: sweep length, level, tail time and the total time of the take.
5. **Live view**: the mic level over the sweep, then the result and its grade.
6. **Mode**: CAPTURE, GENERATE or LOOPBACK.
7. **Source**: SPEAKER for a room, LINE for hardware on a cable.
8. **SHORT / LONG**: an 8 s or a 30 s sweep in one click.
9. **REPEATS, OUTPUT, IR TAIL**, set with the three knobs below them.
10. **Status line**: what the plugin is doing, and the saved file.
11. **Meters**: MIC (what the microphones hear) and SWEEP (what goes to the speaker).
12. **SWEEP LENGTH**.
13. **LEVEL** and **TAIL TIME**.
14. **LEVEL CHECK**: a 3-second test sweep.
15. **START**: runs the measurement; press again to stop.

The tabs

TAB	WHAT IT SHOWS
MEASURE	The three steps, the live view during a take and the result afterwards.
IR	The measured impulse response and its energy-decay curve, with T30.
REPORT	Reverb time and clarity per octave, the quality checks and any warnings.
ROOM	Every position measured in this room, their average and its confidence (chapter 7).

TAB	WHAT IT SHOWS
FILES	Your IR files, COPY PATH, OPEN FOLDER and ANALYZE RECORDING… (chapters 9 and 10).
SYS	Advanced: loopback calibration, Keep Delay and the window size. Not needed to start.

The meters

MIC shows what the microphones hear. While the sweep plays, its peaks should land in the marked zone, between **−12 and −3 dBFS**. **SWEEP** shows what is sent to the loudspeaker.

Working with the controls

ACTION	RESULT
Drag up / down	Changes a knob. Hold `Shift` for fine adjustment.
Mouse wheel	Changes the knob under the pointer.
Double-click	Returns the control to its default.
Click a value box	Type a value and press `Enter`. Units and shorthands are understood: `-3.5`, `2.5k`, `40 ms`.
Hover	Shows a short explanation of the control.

CHAPTER 06

Settings in depth

The defaults are right for most rooms. This chapter explains every setting, and when to change it.

SETTING	RANGE	DEFAULT	WHAT IT DOES
Mode	Capture · Generate · Loopback	Capture	**Capture** plays the sweep, records the microphones and makes the IR. **Generate** only plays the sweep and saves it as a file, to play from another device (chapter 9). **Loopback** measures your interface through a cable (chapter 9).
Source	Speaker · Line	Speaker	**Speaker**: the sweep starts at 10 Hz, for a loudspeaker in a room. **Line**: it starts at 2 Hz, for hardware on a cable. Never use Line with a speaker connected.
Sweep Length	2 – 60 s	30 s	Longer is cleaner: about 3 dB more signal-to-noise per doubling, and better separation of distortion. SHORT sets 8 s, LONG 30 s.
Level	−60 – 0 dBFS	−12 dBFS	The sweep's peak. Let LEVEL CHECK set it. Aim for microphone peaks around −6 dBFS, never clipping.
Tail Time	1 – 30 s	5 s	Silence after each sweep while the room dies away. Make it longer than the reverb plus a second; for a hall or a church, about 1.5 × its reverb time (6 s of reverb: 9–12 s). Too short and the plugin warns that the tail was cut.
Repeats	1 – 8	2	**2** also measures and corrects the clock difference when playback and recording are on two devices (a USB microphone, an aggregate device); on one interface it measures zero and changes nothing. **3** throws out a take spoiled by a door or a cough. **1** is the shortest, for one interface only.
Output	L+R · Left · Right	L+R	Which loudspeaker plays the sweep. On a mono track it goes to the single channel.
IR Tail	Truncate · Extend · Raw	Truncate	**Truncate** ends the IR where the noise begins (recommended). **Extend** continues the decay smoothly below the noise, per octave. **Raw** leaves it untouched.
Use Loopback	Off · On	Off	Divides by the loopback calibration: removes the interface's own delay and colour. Needs a LOOPBACK take first. Optional.
Keep Delay	Off · On	Off	**Off**: the IR starts 2 ms before the direct sound. **On**: the real time of flight to the microphone is kept, for multi-microphone setups.

Sweep Level, Tail Time and the other settings can be automated, and all of them are saved with the project, together with the NAME and the window size.

How long a take lasts

A take is a few seconds of noise measurement, then *Repeats × (Sweep Length + Tail Time)*. The defaults, 2 × (30 + 5) s, make about 75 seconds; the TOTAL in the summary always shows the exact figure.

CHAPTER 07

Measuring a whole room

A measurement from one spot describes that spot. Rooms vary from place to place more than any measuring error, which is why the ISO 3382 standard defines accuracy by the number of positions measured. The ROOM tab does that bookkeeping for you.

Placing the speaker and the microphone

- **The speaker** goes where the sound source you want to recreate would stand: the singer's spot, the stage, the drum riser.
- **The microphone** goes at least 1 m from walls and at the height of a listener's ears, or where you would put a room mic.
- **Stereo:** place the two microphones at equal distances from the speaker, so the channels stay in phase.
- **Large spaces:** raise TAIL TIME (about 1.5 × the reverb time) and use the LONG sweep.

Measuring several positions

1. Every START adds a point to the ROOM tab, labelled **S1M1, S1M2…** (S = speaker position, M = microphone position).
2. Move the microphone **at least 2 m** between points.
3. After 3 microphone positions, move the speaker to a second spot and click **SPEAKER 1 → 2**. Then measure the same microphone positions again.
4. The scale at the top of the tab shows which accuracy level you have reached and what is still missing.
5. **★ marks the position closest to the room's average.** That is the IR to load in your reverb.



The ROOM tab: six positions from two speaker spots, averaged per octave with 95 % confidence limits.

LEVEL (ISO 3382-2)	WHAT IT NEEDS	NOMINAL ACCURACY PER OCTAVE
SURVEY	2 positions	better than 10 %
ENGINEERING	6 positions: 2 speaker × 2 microphone spots or more	better than 5 %
PRECISION	12 positions: 2 speaker × 3 microphone spots or more	better than 2.5 %

- **The table** gives the room's average T30, EDT and C80 per octave, and a **±95 %** row: the range in which the true average of the room lies with 95 % probability.
- **Leave a point out** by clicking it, for example if a door slammed; click again to bring it back. The plugin warns when one point differs a lot from the others.
- **NEW ROOM** starts a new average. The files and the old room's summary stay in the folder, as `Room_<date>.json` and `.txt`.

CHAPTER 08

Reading the results

Every take comes with a report. It tells you whether the IR is clean, and what to change if it is not.

The IR tab



The IR tab: the impulse response, its energy-decay curve, and the reverb time T30.

The bright trace is the impulse response; the smooth curve over it is the energy decay (Schroeder integration). A straight, steady decay down to the noise floor is what a good take looks like. A decay that ends in a shelf of noise early means more level, a longer sweep or a quieter room.

The REPORT tab



The REPORT tab: EDT, T20, T30 and C80 per octave, with the grade and the quality checks.

MEASURE	MEANING
EDT	Early decay time: how fast the first 10 dB fall, scaled to 60 dB. It matches what the ear perceives as reverberance.
T20 / T30	The reverb time, from the −5 to −25 dB (T20) or −5 to −35 dB (T30) part of the decay, scaled to 60 dB. T30 is the standard figure.
C50 / C80	Clarity: the early energy (first 50 or 80 ms) against the late energy, in dB. Higher is clearer; C50 is used for speech, C80 for music.
RT	The reverb time shown after a take: T30 averaged over the mid octaves.

Quality checks

FIELD	GOOD	IF NOT
Input peak	−12 to −3 dBFS, no CLIPPED	Clipping: lower LEVEL or the microphone gain.
Peak-to-noise (PNR)	80 dB or more	Raise the level, lengthen the sweep, add repeats, find a quieter time.
Decay range	45 dB or more (ISO 3382-1 needs it for T30)	As for PNR.
THD (200 Hz – 2 kHz)	Below 1 %	Distortion never enters the IR, but a high figure means the speaker is driven too hard.
Combine	mean or single	"mosaic-tf median" means a repeat was disturbed and filtered out. That is fine, but worth a listen.
"had not decayed"	—	TAIL TIME is too short for this space.
"distortion reaches the start of the IR"	—	The speaker's distortion, with its own reverb, reaches the start of the IR. Lengthen the sweep or lower the level.
"FLAT BELOW 20 Hz – HARDWARE?"	—	The response is flat below 20 Hz: probably hardware or a digital unit measured in SPEAKER mode. Measure it with SOURCE › LINE.

The grade sums it up: **EXCELLENT**, **GOOD** or **NOISY**.

CHAPTER 09

Hardware, other recorders, calibration

Hardware on a cable: plate, spring, outboard reverb

1. Choose **SOURCE › LINE**. An orange "CABLE ONLY" label appears in the window.
2. Connect a cable from an interface output to the unit's input, and from the unit's output back to an interface input. **No loudspeaker in the chain.**
3. Run LEVEL CHECK, then START, as in a room. The sweep starts at 2 Hz instead of 10 Hz, so the unit's low end is measured exactly.
4. When you are done, switch back to **SPEAKER** before connecting a loudspeaker again.

> NEVER LINE WITH A LOUDSPEAKER
>
> In LINE mode the sweep begins far below hearing. You cannot hear it, but it moves a speaker's cone a long way. If you measure a speaker in LINE mode by mistake, the report warns and suggests SPEAKER.

Recording on another device: GENERATE and ANALYZE RECORDING

For spaces you cannot bring a computer to, or a recorder you prefer:

1. Choose **GENERATE** and press START. The sweep plays and is saved as `Sweep_<date>.wav`, with a small `.irc.json` file that describes it.
2. Play that file in the space from any player, and record it on any recorder at 48 kHz. Start recording before the sweep and stop after the last tail has died away. With 2 repeats or more, the end of the file carries a short beep that marks the timing.
3. In the FILES tab, click **ANALYZE RECORDING...** and choose the recording. The plugin finds the sweep in it, corrects the clock difference between the two devices, and saves the IR as usual. The report shows a "Clock drift ... from the end marker" line.

Loopback calibration (optional, for the highest accuracy)

Every interface adds a little delay and colour of its own. A loopback take measures them once, so they can be removed from every IR.

1. Cable an interface output to an input, on the same channels and at the same gain you will measure with.
2. Choose the same **Source** you will measure with (Speaker, or Line for hardware).
3. Choose **LOOPBACK** and press START. A `loopback_reference.wav` is saved, and the status line shows the interface's latency.
4. Reconnect the speaker and microphone, choose CAPTURE, and turn on **Use Loopback** (SYS tab).
5. To keep the real time of flight, for example for a multi-channel IR with different distances, turn on **Keep Delay** as well.

SPEAKER AND LINE CALIBRATIONS DIFFER

A calibration made with SPEAKER is not used for a LINE measurement (its sweep has almost nothing below 5 Hz); the report says so. Calibrate again with LINE.

CHAPTER 10

Your files

Everything is saved in `Documents\Isaac Audio\Dogma IR-C\` (macOS: `~/Documents/Isaac Audio/Dogma IR-C/`). Nothing is ever overwritten: every take has the date and time in its name.

FILE	CONTENTS
`IR_<name>_<date>.wav`	**The IR to use.** 32-bit float, mono or stereo, peak −1 dBFS, starting 2 ms before the direct sound. The name appears when NAME was filled in.
`IR_<date>_raw.wav`	The raw recording, aligned to the start of the sweep.
`…_raw.wav.irc.json`	The sweep's parameters, so the raw recording can be processed again.
`IR_<date>_report.txt / .json`	The report: levels, noise, PNR, decay range, distortion, EDT / T20 / T30 / C50 / C80 per octave, and warnings.
`Sweep_<date>.wav` + `.irc.json`	GENERATE mode: the sweep to play from another device, and its description.
`Room_<date>.json / .txt`	The ROOM tab's average.

Loading an IR in Dogma IR-REV

1. In Dogma IR-C's FILES tab, select the IR and click `COPY PATH`.
2. In Dogma IR-REV, click **LOAD IR…** and paste the path into the file dialog (or browse to the folder).
3. The IR plays exactly as measured: Dogma IR-REV does not change its level or colour. You can attach up to two pictures of the room to it.

In other reverbs

The files are standard WAV files and load in any convolution reverb: Space Designer, Altiverb, Convology, REAPER's ReaVerb, Pro Tools' Space and others. Point the reverb's file dialog to the folder above.

CHAPTER 11

Troubleshooting

WHAT HAPPENS	WHAT TO DO
The orange line says WAITING FOR AUDIO and the counter does not move	The DAW is not passing audio to the plugin. Turn on Record Arm and Input Monitoring, or press Play. Check that the track is not muted and the plugin is not bypassed. In the standalone: choose the interface again in Audio/MIDI Settings, or close another program that holds it.
The counter moves but no sweep is heard	Check the track's output, the OUTPUT setting, and that the speaker is connected to that output. Raise the speaker gradually.
NO SIGNAL or TOO QUIET	Check the track's input, the microphone gain on the interface, and 48 V phantom power for a condenser microphone.
The report says NOISY	Raise LEVEL (or run LEVEL CHECK again), use the LONG sweep, set REPEATS to 3, and measure when the space is quieter.
The tail is cut	Raise TAIL TIME to about 1.5 × the reverb time.
The plugin does not appear in the DAW	Rescan (chapter 3). Check that the file is in the folder listed in chapter 2 and that the DAW is 64-bit. If the host put it on a blocklist ("failed" plugins), reset the list and scan again.
It does not appear in Pro Tools	Check that `Dogma IR-C.aaxplugin` is in the AAX folder. Quit Pro Tools, delete `InstalledAAXPlugIns` (Windows: `%APPDATA%\Avid\Pro Tools`; macOS: `~/Library/Preferences/Avid/Pro Tools`) and launch again: Pro Tools rescans everything.
macOS says the plugin "is damaged" or "cannot be opened"	The files still carry the download's quarantine mark. Open Terminal, run `sudo xattr -dr com.apple.quarantine /Library/Audio/Plug-Ins "/Library/Application Support/Avid/Audio/Plug-Ins" "/Applications/Isaac Audio"` (your password), then rescan in your DAW.

WHAT HAPPENS	WHAT TO DO
The window is empty, or the DAW shows only a list of parameters (Windows)	Install the Microsoft Edge WebView2 Runtime (search "WebView2 Runtime" on microsoft.com) and restart the DAW.
No sound, and a "license required" notice	Activate the computer (chapter 2). The plugin unlocks a few seconds after the license file arrives.
"Windows protected your PC" or an antivirus warning	Click More info › Run anyway. If an antivirus quarantines the file, restore it or add an exception for its folder.
Clicks or dropouts	Raise the buffer size of your audio interface, and compare with another plugin on the same track. If it persists, please write to us (see the Support chapter).

CHAPTER 12

Specifications and support

Formats	VST3, AU, CLAP, AAX (PACE-signed), Standalone · Windows 10 / 11, 64-bit · macOS 11 or newer, Apple Silicon and Intel
Tracks	Mono or stereo (one or two microphones)
Sample rates	All rates the host offers; the IR is saved at the project's rate
Sweep	Exponential sine sweep, 2–60 s, from 10 Hz (Speaker) or 2 Hz (Line), 1–8 repeats
Processing	Regularised deconvolution in double precision, harmonic separation, robust combination of repeats, clock-drift correction
Analysis	EDT, T20, T30, C50, C80 per octave (ISO 3382-1), peak-to-noise, decay range, THD; room averaging per ISO 3382-2
Output files	WAV, 32-bit float, mono or stereo; text and JSON reports
Latency	None added to the track

Getting help

We answer every message ourselves. Please include:

- What you did, what you expected, and what happened instead.
- The DAW and its version, the format (VST3, AU, CLAP, AAX, Standalone), your Windows or macOS version, the audio interface, the sample rate and buffer size.
- A screenshot of the plugin window, and the version number (click the DOGMA label in the top-right corner: it is on the first line of the license window).
- For a sound issue: a short audio clip before and after, and the preset or settings.
- In Pro Tools: the newest log, from `Documents\Pro Tools\Logs` on Windows or `~/Library/Logs/Avid` on macOS.

Email	support@isaacaudio.com
Beta testers	The feedback page, isaacaudio.com/beta/feedback/ (also from the plugin: click the DOGMA label › Report a problem / feedback). You can attach files and follow the answers there.
Manuals	isaacaudio.com/manuals/

Safety

> **PROTECT YOUR EARS AND SPEAKERS**
>
> A sweep covers every frequency, including very low and very high ones, and in LINE mode it starts at 2 Hz. Start at a low monitoring level, especially when trying presets or typing values.

License agreement

Dogma IR-C is licensed, not sold, under the Isaac Audio End User License Agreement shown by the installer and published at isaacaudio.com/legal/eula/. The software is provided as is. Beta versions are for testing and may contain faults: keep backups of your projects.

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