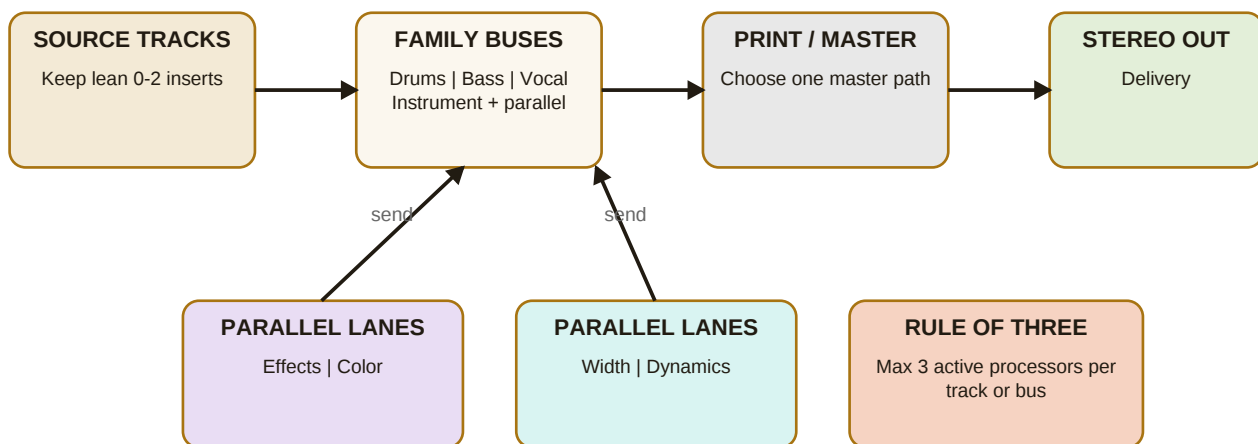


DIHWorld Audio

Bus Routing & 42-Plugin Placement - Visual Guide

A user-friendly companion to the 7 Main Bus, Cascading Effects, Better Buses, Family Affair, and 42 Plugin Placement documents.

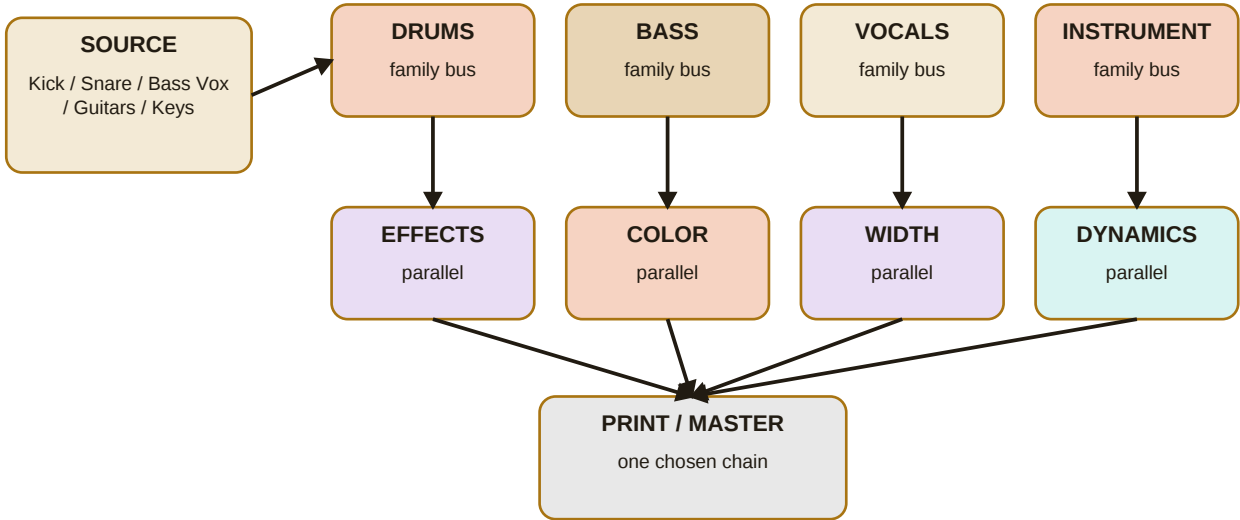


Read this first: Start buses and sends around -18 dB for safe auditioning. Many processors may settle around -14 to -10 dB; unity is acceptable only when clean and bypass/output matched. Keep active chains short, keep ANKH as final containment authority, and keep SESHAT last as observation only.

1. The Routing Rules That Govern Everything

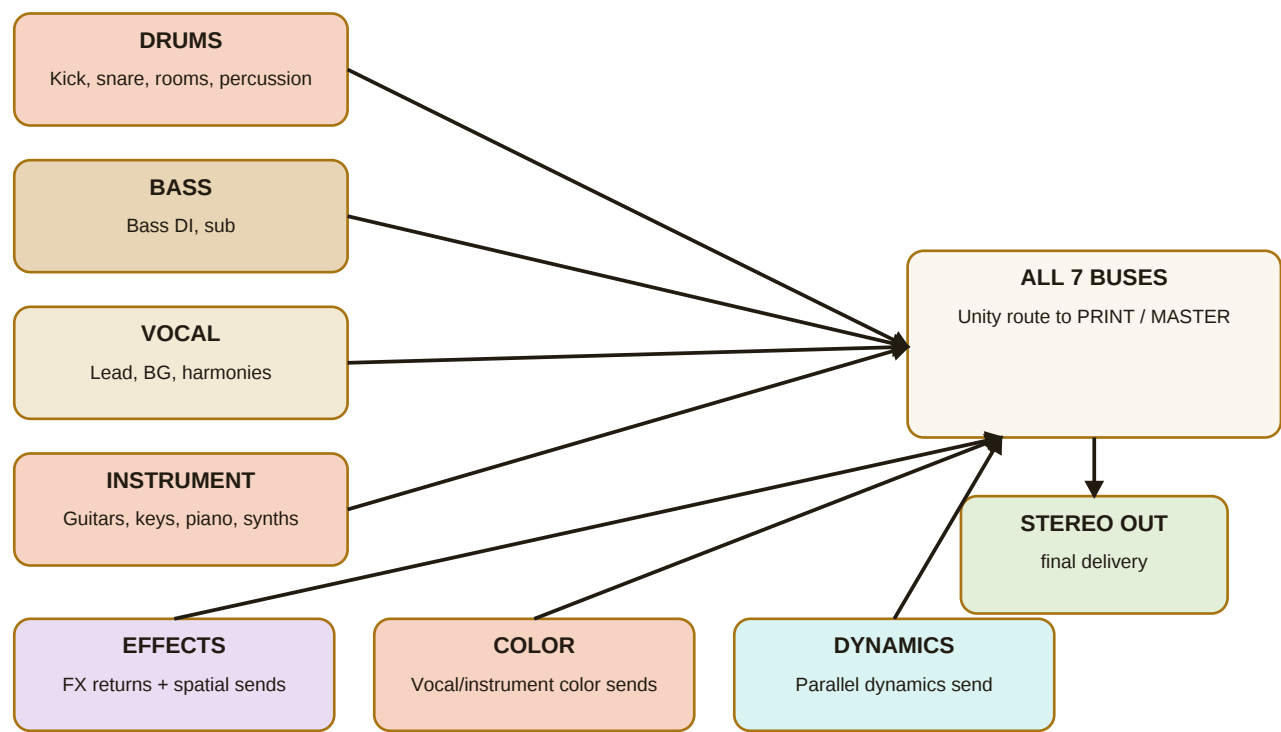
These rules recur across the uploaded templates and should be treated as the operating baseline.

Rule	Practical meaning
Start safe	Begin buses/sends around -18 dB. Optimize by ear; -14 to -10 dB is common, unity can be valid when clean.
Bypass-match	Approve tone, width, spatial placement, and loudness only after output is matched to bypass.
Three-active limit	Up to 3 active processors on a source track or family bus. Extra inserts are alternates/audition slots.
Keep source tracks lean	Move color, shared space, width, dynamics, and print decisions onto dedicated buses.
ANKH	Final containment authority on master/print chains.
SESHAT	Observation only, last on print/master endpoint; not part of the musical processing chain.



2. Seven Main Bus Template

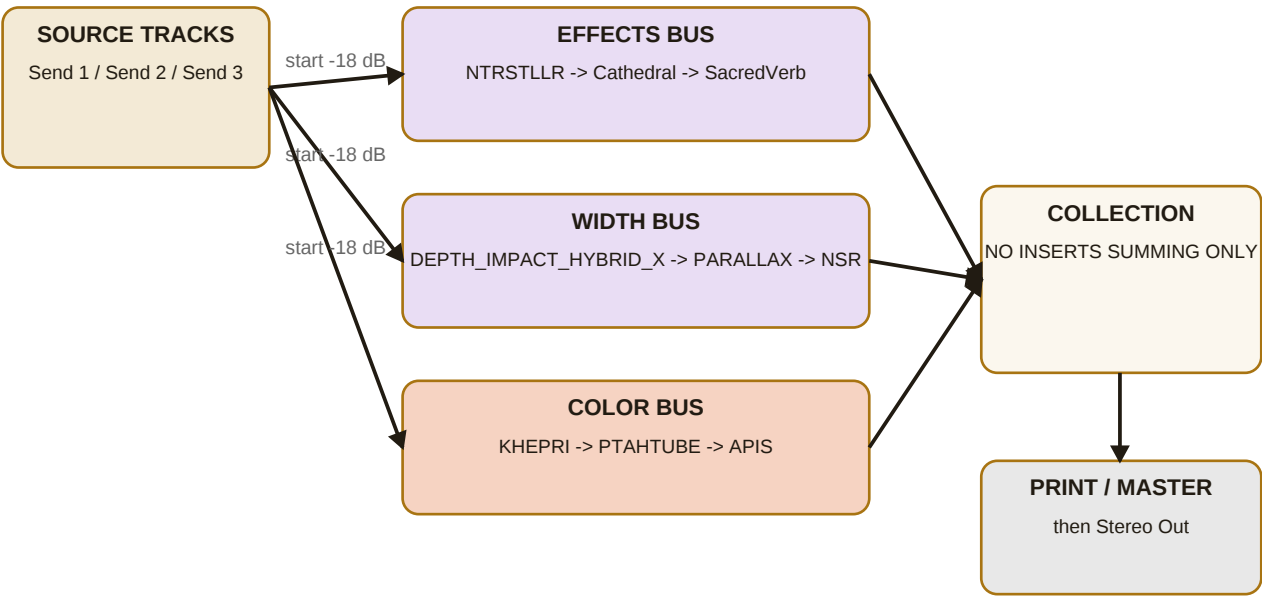
One musical family per bus, then all seven buses feed the print/master path.



Bus	Starter chain	Key substitution / note
DRUMS	ANUBIS -> DIH_DRUM_MORPHER -> BALLPARK	DRUMKRUSHGLUE can replace ANUBIS or BALLPARK when glue matters more than guard.
BASS	MARIANA -> NTRPL -> MONOLITH	DEPTH_BOOST_PRO replaces MONOLITH for definition; do not add sub only because the name s
VOCAL	GOLD -> AEGIS_NOVA -> SILVER	WPR can replace SILVER for ribbon warmth; TRIPLER is for BG/harmony; EchoLocate can occupy
INSTRUMENT	KHEPRI -> PTAHTUBE -> APIS	THOTH or TEHUTI can replace a color slot when harmonic pitch is the actual problem.
EFFECTS	NTRSTLLR -> Cathedral -> SacredVerb	Keep spatial processors here; avoid stacking PARALLAX here when a WIDTH bus exists.
COLOR	KHEPRI -> PTAHTUBE -> APIS	SOVEREIGN can replace one color slot for stronger bus authority.
DYNAMICS	OTIS -> DEBO -> LOOKOUT	SPHYNX belongs on print/master unless this bus is acting as mix-bus preparation.

3. Cascading Effects Bus Template

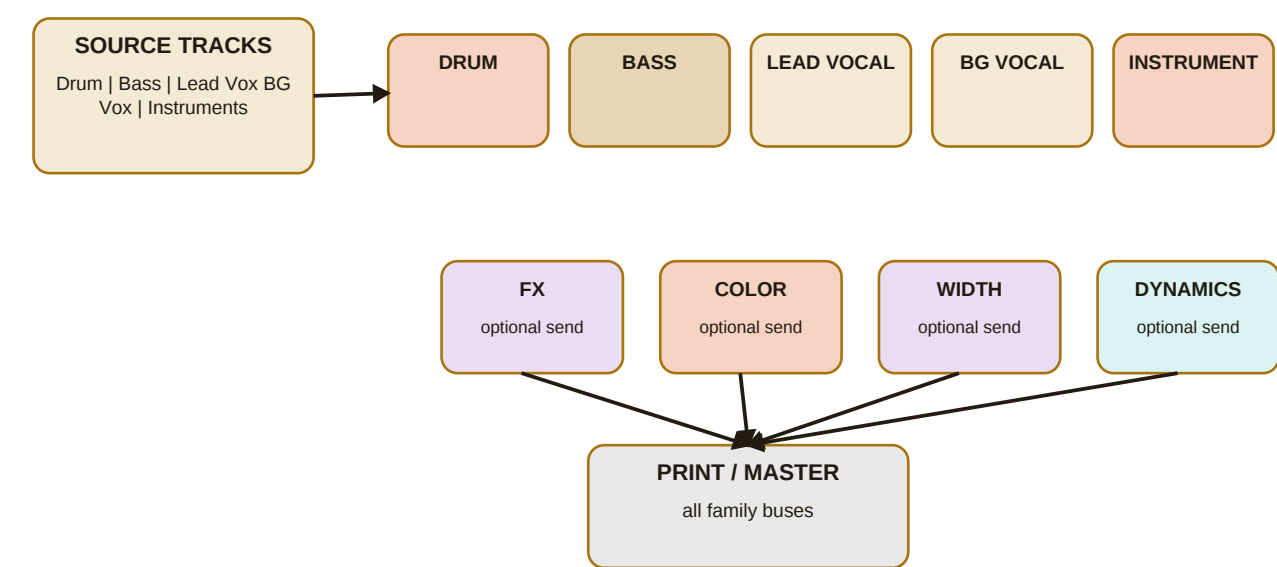
Use three deliberate parallel lanes feeding one clean collection point. The collection channel sums only - it has no inserts.



Lane	Level discipline	Purpose
EFFECTS	Start -18; -14 to -10 common; unity only if clear	Spatial material only.
WIDTH	Start -18; -14 to -10 common; unity only if clear	Width/depth moves only; collapse-check before printing.
COLOR	Start -18; -14 to -10 common; unity only if clear	Harmonic color lane; max 3 active processors.
COLLECTION	Unity route	No inserts. If tone is needed, place it on a lane above or print bus below.

4. Better Buses - Cleaner Session Handoff

A practical Logic layout: descriptive bus names, short chains, clear family placement, and explicit handoff labels.

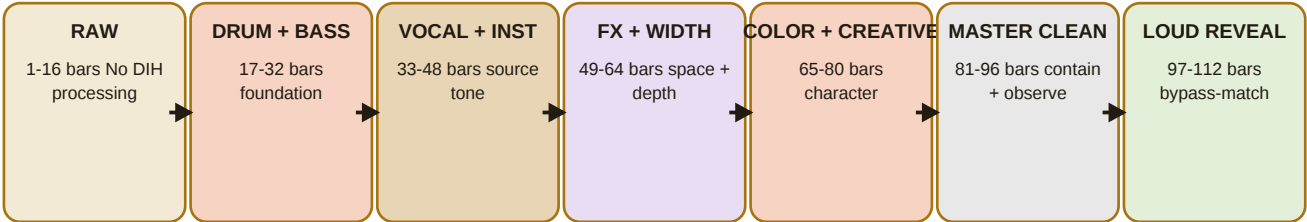


Handoff label	Meaning
ACTIVE	Processor is part of the current musical pass.
BYPASSED ALT	Documented alternate; present but not active.
QC ONLY	Observation, metering, or validation only.
PRINT CHAIN	Final chain chosen for the bounce.

Approval focus: every bus should have a clear musical reason; parallel COLOR / FX / WIDTH / DYNAMICS should not be hidden source-track clutter; SESHAT remains observation only; ANKH remains final containment authority; final print is bypass/output matched.

5. FAMILY AFFAIR Demo - How to Reveal the Whole Suite

The demo shows all 42 plugins without stacking them all at once. Extra processors are scene reveals, bypassed alternates, or QC-only slots.



DEMO PRINCIPLE

The listener hears the raw source first. Families enter in order, each with a clear job, family home, and moment in the demo. The proof is organized placement, not maximum simultaneous processing.

Family	Count	Plugins
VOCAL_MIC_SOURCE	6	GOLD, SILVER, WPR, AEGIS_NOVA, TRIPLER, EchoLocate
DYNAMICS_GUARD	4	ANUBIS, OTIS, DEBO, LOOKOUT
BASS_LOW_END	4	MARIANA, MONOLITH, DEPTH_BOOST_PRO, NTRPL
DRUM_INSTRUMENT	3	DIH_DRUM_MORPHER, BALLPARK, DRUMKRUSHGLUE
COLOR_AMP_TAPE	4	APIS, PTAHTUBE, KHEPRI, SOVEREIGN
FIELD_TONE_BALANCE	2	AUSET, AUSAR
DIMENSIONAL_IMPACT_MOVE	3	DEPTH_IMPACT_HYBRID_X, PARALLAX, NSR
FX_SPATIAL	3	NTRSTLLR, Cathedral, SacredVerb
HARMONICS_PITCH	3	THOTH, TEHUTI, AU
CREATIVE_TRANSFORM	3	SLOTMACHINE, ARCHAEOLOGIST_X, SERQET
MASTERING_CORE	5	ANKH, SPHYNX, MAAT, HORIZON_X, PLATINUM
MASTER_FIELD	1	IMHOTEP
UTILITY_OBSERVATION	1	SESHAT

6. How to Read Plugin Placement

The 42-plugin placement schematic defines a Smart Position class, first recommended placement, useful secondary position, exact group/bus lane, parallel guidance, and a user-facing note.

Smart Position	Use it like this
INSERT_SAFE	Normal direct insert; can also occupy a documented family-bus slot.
BUS_PREFERRED	Works best on a group bus, aux return, or shared lane.
MIX_BUS	Mix/master-bus placement.
MASTER_FIELD	Master-field / containment role.
OBSERVATION	Analysis/QC role, not musical processing.
CREATIVE_TRANSFORM	Creative transformation role; often scene-based or parallel.
LOW_END_SOURCE	Bass/low-end source role.

Gold - Vocal

family color cue

Brown - Bass

family color cue

Purple - Width/FX

family color cue

Silver - Master

family color cue

Cyan - Dynamics

family color cue

Red-orange - Drum/Color/Creative

family color cue

Green - Harmonics/Observation

family color cue

VOCAL_MIC_SOURCE - Gold

Family chain: Lead: GOLD -> AEGIS_NOVA -> SILVER | BG: GOLD -> TRIPLER -> EchoLocate

Plugin	Smart Position	Primary placement / note
GOLD	INSERT_SAFE	Track insert; opens lead/BG vocal chains
AEGIS_NOVA	INSERT_SAFE	Track insert; lead bus middle
SILVER	INSERT_SAFE	Track insert; lead bus chain end
TRIPLER	INSERT_SAFE	Track insert; BG stacks/doubles; parallel yes for stacks
EchoLocate	INSERT_SAFE	Track insert; BG chain end / localization
WPR	INSERT_SAFE	Track insert; substitution slot; optional width

DYNAMICS_GUARD - Cyan

Family chain: Dynamics Bus: ANUBIS -> OTIS -> DEBO

Plugin	Smart Position	Primary placement / note
ANUBIS	INSERT_SAFE	Track insert; dynamics bus first slot
OTIS	INSERT_SAFE	Track insert; dynamics bus middle
DEBO	INSERT_SAFE	Dynamics bus end; explicit parallel-impact return
LOOKOUT	INSERT_SAFE	Track insert / observation support; transient-sustain shaping

BASS_LOW_END - Brown / low-gold

Family chain: Bass Bus: MARIANA -> NTRPL -> MONOLITH

Plugin	Smart Position	Primary placement / note
MARIANA	LOW_END_SOURCE	Track insert; bass bus first slot
NTRPL	LOW_END_SOURCE	Track insert; bass bus middle
MONOLITH	LOW_END_SOURCE	Track insert; bass bus last slot
DEPTH_BOOST_PRO	LOW_END_SOURCE	Definition alternate replacing MONOLITH; optional controlled sub

DRUM_INSTRUMENT - Red-orange

Family chain: Drum Bus: DIH_DRUM_MORPHER -> BALLPARK -> DRUMKRUSHGLUE

Plugin	Smart Position	Primary placement / note
DIH_DRUM_MORPHER	CREATIVE_TRANSFORM	Instrument track; drum bus first slot
BALLPARK	CREATIVE_TRANSFORM	Track insert; drum bus middle; optional bus energy
DRUMKRUSHGLUE	BUS_PREFERRED	Drum bus end or parallel drum-impact return

COLOR_AMP_TAPE

Family chain: KHEPRI -> PTAHTUBE -> APIS

Plugin	Smart Position	Primary placement / note
KHEPRI	INSERT_SAFE	Track insert; color bus first; parallel color blend
PTAHTUBE	INSERT_SAFE	Track insert; color bus middle; check vocal clarity
APIS	INSERT_SAFE	Track insert; color bus end
SOVEREIGN	MIX_BUS	Mix bus / stronger color authority; replaces one color slot

FIELD_TONE_BALANCE

Family chain: AUSET / AUSAR

Plugin	Smart Position	Primary placement / note
AUSET	BUS_PREFERRED	Group bus; subtle track insert; optional dispersal field
AUSAR	BUS_PREFERRED	Group bus; subtle track insert; optional parallel

DIMENSIONAL_IMPACT_MOVE

Family chain: DEPTH_IMPACT_HYBRID_X -> PARALLAX -> NSR

Plugin	Smart Position	Primary placement / note
DEPTH_IMPACT_HYBRID_X	INSERT_SAFE	Track insert or width/depth bus
PARALLAX	BUS_PREFERRED	Group bus / aux return; parallel yes; width/depth bus
NSR	BUS_PREFERRED	Aux return / group bus; parallel spatial bus

FX_SPATIAL

Family chain: NTRSTLLR -> Cathedral -> SacredVerb

Plugin	Smart Position	Primary placement / note
NTRSTLLR	BUS_PREFERRED	Aux return first; source insert only for dedicated moving delay
Cathedral	BUS_PREFERRED	Shared room/architecture return
SacredVerb	BUS_PREFERRED	Shared reverb return; Solfeggio lanes are musical triggers

HARMONICS_PITCH

Placement: Track insert / harmonics-pitch lane

Plugin	Smart Position	Primary placement / note
THOTH	INSERT_SAFE	Track insert; bus analysis/tone; instrument-bus alternate when pitch is the issue
TEHUTI	INSERT_SAFE	Track insert; bus analysis/tone
AU	INSERT_SAFE	Track insert; sidechain harmonic shaping utility

CREATIVE_TRANSFORM

Placement: Creative Transform Bus

Plugin	Smart Position	Primary placement / note
SLOTMACHINE	CREATIVE_TRANSFORM	Track insert or parallel creative bus; always last in any chain using it
ARCHAEOLOGIST_X	CREATIVE_TRANSFORM	Track insert or parallel creative bus; special moments
SERQET	CREATIVE_TRANSFORM	Track insert / parallel creative; can replace PARALLAX for creative width

MASTERING_CORE

Placement: Clean: SPHYNX -> MAAT -> ANKH -> SESHAT | Loud: SPHYNX -> HORIZON_X -> ANKH -> SESHAT

Plugin	Smart Position	Primary placement / note
SPHYNX	MIX_BUS	Master chain start for clean and loud paths
MAAT	MIX_BUS	Clean-chain middle; balance/justice stage
HORIZON_X	MIX_BUS	Loud-chain middle; replaces MAAT
PLATINUM	MIX_BUS	Authority-chain start; master-bus body
ANKH	MASTER_FIELD	Chain end of every master chain; final containment

MASTER_FIELD + OBSERVATION

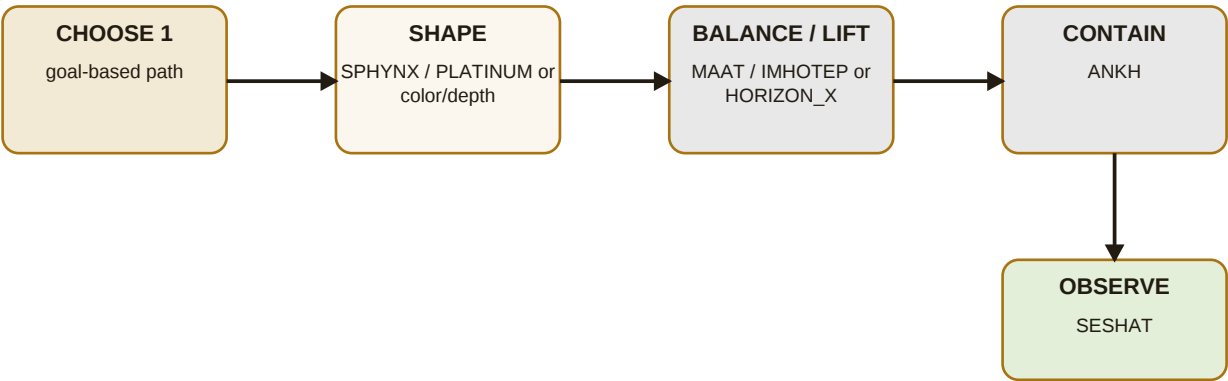
Placement: Authority middle + final QC

Plugin	Smart Position	Primary placement / note
IMHOTEP	MASTER_FIELD	Authority-chain middle between PLATINUM and ANKH
SESHAT	OBSERVATION	Always last on print/master endpoint; QC only; not counted toward 3-active limit

7. Print / Master - Choose the Path by Goal

These are alternatives, not stages to stack together.

Goal	Active chain	When
Clean	SPHYNX -> MAAT -> ANKH -> SESHAT	Prepare, balance, contain, then observe.
Authority	PLATINUM -> IMHOTEP -> ANKH -> SESHAT	Master authority plus macro field structure.
Loud / modern	SPHYNX -> HORIZON_X -> ANKH -> SESHAT	Lift and finish before containment.
Dimensional	DEPTH_IMPACT_HYBRID_X -> MAAT -> ANKH -> SESHAT	Front/back placement before balance and containment.
Color master	KHEPRI or SOVEREIGN -> MAAT -> ANKH -> SESHAT	One color stage, one balance stage, then containment.



Output approval: Match the project/platform delivery specification; the templates do not impose a fixed RMS, peak, or crest target. Preserve musical dynamics, confirm zero unintended clipping, and compare at matched loudness before approving the print.

8. Final Session Approval Checklist

A compact final pass before bounce or handoff.

- ☐ Every source track or family bus has a clear musical reason.
- ☐ No source track is carrying a long chain that belongs on a family bus.
- ☐ No track or bus exceeds three active processors during the musical pass.
- ☐ Extra processors are explicitly labeled BYPASSED ALT, SCENE REVEAL, or QC ONLY.
- ☐ Effects, color, width, and dynamics are deliberate sends/parallel lanes, not hidden clutter.
- ☐ Collection channels used for summing contain no inserts.
- ☐ Width and dimensional decisions have been mono/collapse checked.
- ☐ All tone and loudness decisions were judged after bypass/output matching.
- ☐ ANKH remains final containment authority on the chosen master path.
- ☐ SESHAT is last and observation only.
- ☐ No unintended clipping, ringing, harshness, static, or level jump is present.
- ☐ Final delivery follows the actual project/platform specification.

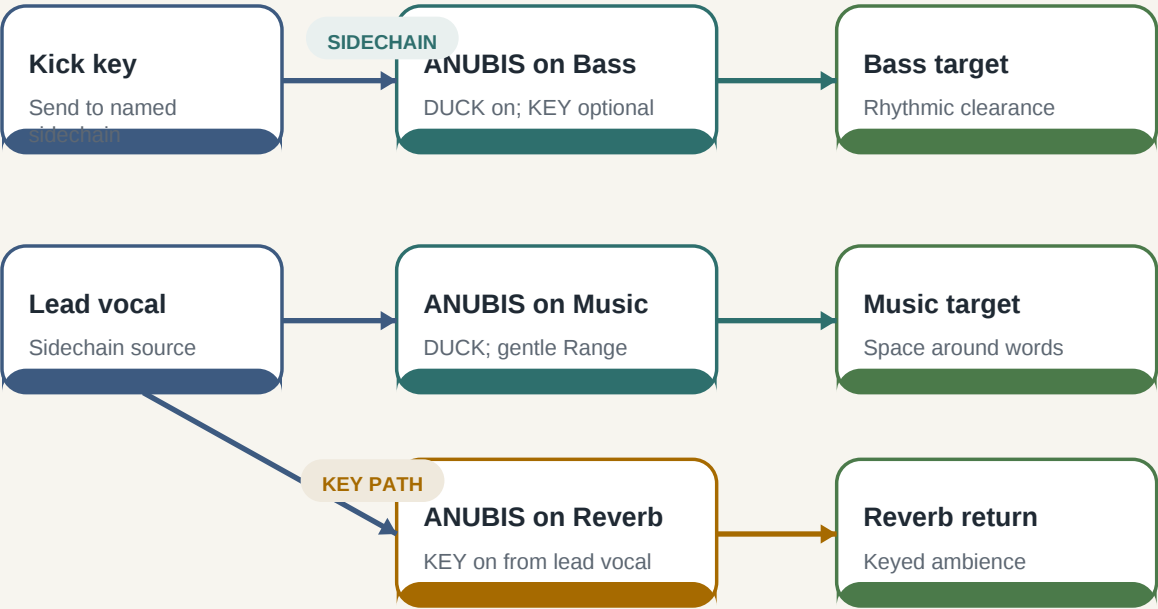
Family Affair specific: every plugin appears at least once in the session; save both the Logic template and the demo print after approval.

Source set used for this visual guide: 7 Main Bus Template; Cascading Effects Bus Template; Better Buses Template; FAMILY AFFAIR Use Case Demo Template; 42 Plugin Placement Schematic. Where a placement row conflicts with the higher authority chain identified in the schematic, the higher authority files win.

Dynamics / Kick-Key / Duck Template

Visual routing map + quick-start lanes

AT-A-GLANCE SIGNAL MAP



OTHER SESSION LANES

Drum parallel

DRUMKRUSHGLUE or DEBO

Blend below clean drums

Dynamics bus

OTIS -> LOOKOUT

Shape then observe

Print endpoint

SESHAT

Observation only

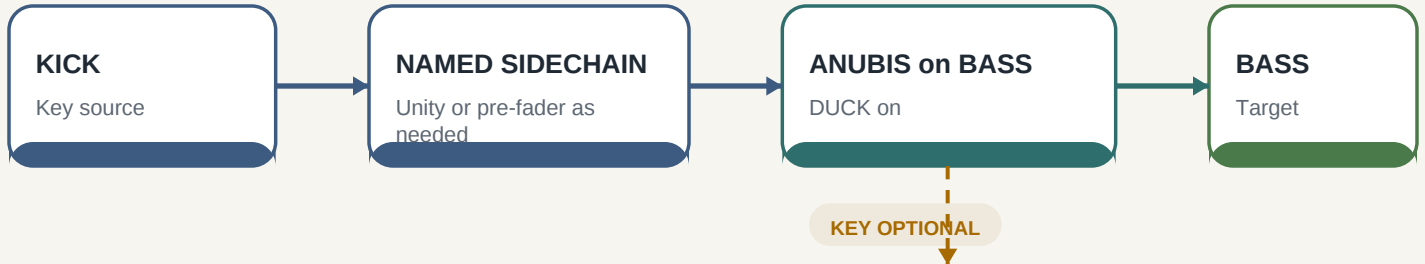
QUICK OPERATING LOGIC

- DUCK** Use for rhythmic clearance or space around words.
- KEY** Enable only when the source should drive gate detection / keyed ambience.
- RANGE** Start shallow or gentle; no deeper than required.
- TIMING** Use fast Attack where specified and make Release follow the groove.

Kick-to-Bass Starting Card

A visual setup sequence for rhythmic clearance

SIGNAL FLOW



KEY is optional: enable it only if the kick should drive gate detection.

SETUP SEQUENCE

- 1 Route kick to ANUBIS Sidechain.
- 2 Enable DUCK for rhythmic clearance.
- 3 Enable KEY only if kick should drive gate detection.
- 4 Start with shallow Range.
- 5 Set fast Attack and tempo-aware Release.
- 6 Check mono and bypass-match.

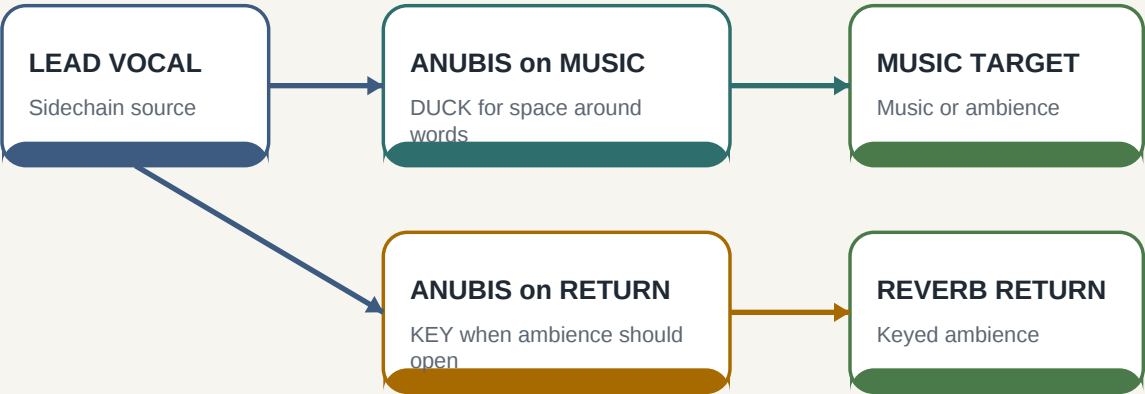
WHAT TO LISTEN FOR

- Range is no deeper than required.
- Attack / Release follow the groove.
- Bypass and output levels are matched.
- Mono remains stable.

Vocal Clearance + Dynamics Stack

Visual guide for keyed space and processor order

VOCAL-CLEARANCE FLOW



Keep Range gentle and Release natural.

DYNAMICS STACK OPTIONS

Clean transient control	LOOKOUT -> OTIS	Shape edge, then density
Pressure and body	OTIS -> DEBO	Build gradually; Gain Match
Drum parallel impact	DRUMKRUSHGLUE -> LOOKOUT	Blend beneath clean bus
Keyed ambience	ANUBIS -> effect return	KEY only; no audible key
Rhythmic clearance	ANUBIS on target	DUCK from kick or vocal

Processor limit

No more than three active processors per lane unless deliberate.

Approval Checklist

Final verification before sign-off

ROUTING + BEHAVIOR

☐

Sidechain source is correct and audible to the detector.

☐

KEY and DUCK states match the intended behavior.

☐

Range is no deeper than required.

☐

Attack, Hold, and Release follow the groove.

☐

Bypass and output levels are matched.

☐

Mono remains stable.

☐

No clipping, static, harshness, or unintended level loss.

☐

No more than three active processors per lane unless deliberate.

FINAL DECISION

Approve only when routing, detector behavior, timing, level match, mono stability, and processor count all satisfy the checklist above.