



# A new creative approach in a classic form.

Designed by experienced sound engineers, for the most demanding recording / mixing / stem mastering tasks.

N-Trophy is a fully discrete, modular analog in-line console designed to become the heart of a modern analog or hybrid studio, where sound quality and fast, creative work is a key. Where you don't want to be overwhelmed by increasingly complex technology, but focus on the art itself. That is the way it should be. And all that you will experience with N-Trophy is just that. A beautiful classic console look is combined with an innovative approach to working on an analog console. It is an exceptional console in so many aspects, like never before. Why? Read and see...

N-Trophy is a result of three years of meticulous development and countless hours spent on listening tests in our professional analog recording studio. Maximum care has been taken to choose every single component in N-Trophy's audio path for the best possible sound quality and musicality. There is no smallest compromise anywhere. We designed special audio transformers and discrete opamps, as well as original six-band passive EQ, THD Stage, Tube Optical Compressor with innovative detection and compression circuits and unique stereo width expansion modules. At the same time, we eliminated all points where classic analog consoles used to be weak or overcomplicated. The signal path is also as short as possible, despite plenty of N-Trophy's creative sound-shaping tools. It has also our revolutionary zero-loss Summing Matrix, where every channel is directly connected. Other analogue consoles use traditional long summing bus architecture that is a kind of compromise. We spent a lot of time in our lab and studio to develop the best possible summing circuits to complete N-Trophy's top-quality audio path. They are all based on the legendary Jensen JE990 discrete opamps. We have also taken special care to develop the classic linear power supply with a custom double shielded toroidal transformer, acting as a power conditioner for very low noise performance. +/- 24V console powering ensures very large headroom.

Our goals were to reach the best possible sound quality together with exceptional creativity, musicality and practical functionality. In many scenarios, you will not need any additional analog gear to do all studio tasks. N-Trophy gives you practically all creative sound-shaping tools that music producers ever wanted to have in one analog console, but never got them before. Until now.

N-Trophy is also extremely enjoyable and easy to use, allowing artist / engineer to focus on the fast creative work, where our console simply shines. Surely, it sets a completely new approach in modern music recording and production in analog domain. It never tries to replace processes that are better in the digital domain, like very sharp eq curves, or phase-manipulating plugins, but what is possible and sounds best in analog - it does with perfection.

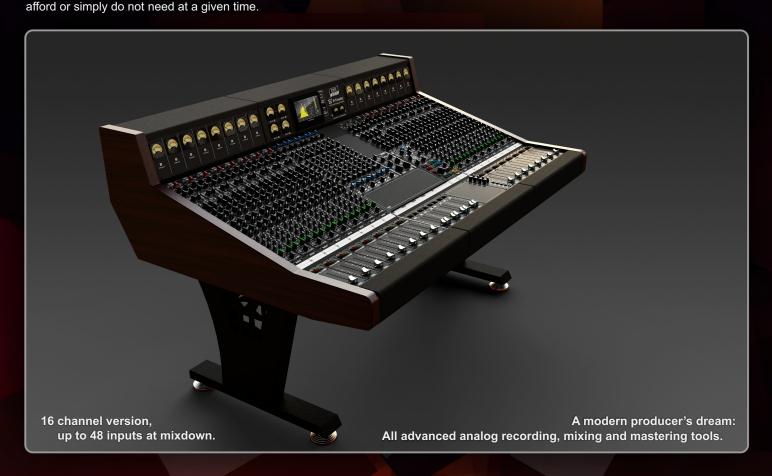
N-Trophy delivers extremely vital, deep, musical, and audiophile-quality sound with lots of details, for the most demanding classical recordings, or earth-shaking, saturated and colored sound for modern genres. It depends on you. Our console gives you simply everything to become a real Unhindered Maker...

## Many user-friendly features...



### 1. Modularity. Easy user expandable per channel.

N-Trophy is available in a wide variety of configurations, between 0 and 64 channel strips, which gives you up to 136 inputs at mixdown. You can start with a small system and add another 8-channel section later. All sections can be joined in any order you like. The console will grow with your studio when you need it. That's because you can freely order single channels and fill them into an empty frame, expanding recording / mixing capabilities. No more necessity of buying expensive consoles with the fixed configuration you cannot



### 2. One console for all recording, mixing and mastering tasks? Yes, it is finally possible.

You are completely free to order even Center Section alone, which is fully functional and can be great for stem summing up to 16 inputs, and for demanding monitoring / mastering tasks, integrating your existing equipment.

All these features are in a width of less than 65 cm!



Besides very rich features in channels, N-Trophy's Center Section also offers you plenty of mastering quality tools. Some of them are:

- Passive relay switched monitoring with 256 steps (4 pairs of monitors, and Main Phones).
- Advanced M/S Matrix chain on MAIN MIX, with freely assignable M/S Encoder/Decoder.
- Insert Matrix with 3 external inserts and Dry/Wet Blending knob.
- Tube Optical Master Compressor with internal or external sidechain.
- 6 band Passive Master Eq.
- MAIN MIX processing order (Insert Matrix, Compressor, EQ).
- Our unique Stereo Width modules on 4 stereo Groups, and MAIN MIX, similar to that found in our LAAL (Look Ahead Analog Mastering Limiter).
- 4 stereo Group Busses (stems) with Auxes, Inserts (with Dry/Wet Blend), and Stereo Width. Additional XLR inputs for summing external sources.
- 8 Mono Aux Sends in each Group.
- 8 Aux Returns, (with Volume & Pan) for summing additional signals.
- 8 Aux Masters with LPF / HPF filters to control global Aux sends level.

Master Compressor is based on NOS Mullards, perceived as the bestsounding tubes of all time. Many functions in Master Section, Groups, Mix Bus and Channels use easily recallable rotary switches. Thanks to it they are all perfectly matched and calibrated for multichannel work.

All routing in N-Trophy is based on relays and switches with gold-plated contacts. It's the best possible way to ensure the highest sound quality and reliability.



#### 3. Easy installation, expansion and service maintenance.

The design of the N-Trophy console is carefully thought out from the user's point of view.

You do not need to have any technical experience, or to hire a technician, which can significantly reduce the costs of installation.

N-Trophy is also very easy to service. In most cases, you can do it yourself. If the module needs to be replaced - it is very simple, even for the inexperienced user. For example, putting a new channel requires only screwing the 4 screws and connecting two connectors. Everything is conveniently available from the top of the console. It is impossible to make any kind of mistake.

Unlike most large format consoles, N-Trophy does not use a central bottom mainboard with slot connectors, what is the best solution in terms of internal connection reliability.



### 4. Wide installation options.

It is possible to split N-Trophy's frame into separate bays and install each of them anywhere in your control room. It can be very important in some situations, for example when you have a very small or less typical control room to fit a full-size console, or for larger versions of the N-Trophy, which can have up to 64 channel strips. In such a case, you can order custom connections between the bays of your console.

#### 5. Well-thought-out and simple studio integration with onboard or remote patchbay.

As standard, N-Trophy can have integrated a full-size patchbay based on XLR combo sockets. It is best in terms of electrical contacts, and easy to connect to your existing studio installation, cables, and instruments - with ZERO additional cost. That's great because typical large format Bantam TT console patchbays and cables can easily raise the total console price by 10-15%. In the case of the N-Trophy - you can save a lot of money. Better to spend saved money on instruments, acoustic design, or other necessary equipment. In case when you need a patchbay mounted remotely, for example on the wall or in studio furniture - it is an extremely easy task with minimal additional cost. Patchbay consists of 2U rack units, which you can easily unscrew from the console frame and put in the required place, connecting to the N-Trophy via special custom cables supplied by HUM Audio Devices. That's all. Simple, effective and easy to change patchbay location at any required moment. Of course, it all depends on your choice, so you can still order N-Trophy with Bantam TT patchbay if you wish (requires surcharge).

### 6. Moving Fader automation, controllable by DAW.

Very simple and straightforward to use, by drawing fader automation curves directly onto DAW tracks. No complicated menus or software in the console itself to learn. Simplicity and effectiveness is the most important goal. You can choose a maximum of 32 faders to be automated (channels and/or Groups). In DAW Mode you can control your DAW mixer faders from N-Trophy's faders. SOLO, PFL and MUTE buttons also control adequate buttons in DAW. N-Trophy uses a standard HUI protocol.

#### 7. Power efficiency and silence.

Despite a completely uncompromising design, N-Trophy is as economical as possible in terms of power consumption. It is very important in today's circumstances. For example - you can turn off the tube compressors if they are currently not used. It will extend the life of the tubes as well. The 3U rack power supply is fully passively cooled, so you can install it anywhere you want. One 3U unit is enough for the console of up to 32 channel strips. For larger setups, you will need two units.







Top quality Sifam VU Meters with excellent ballistics.

A full range of metering points through the channel's signal path can be selected.

<u>Fully inline design with Mic/Line and Tape inputs for each channel</u>, swappable between main, and rotary faders.
 Tape Input has an additional 0/+6/+12dB Gain switch.

<u>High-end discrete Mic/Line/Instrument preamp</u> (0dB to +66dB) based on the legendary **Jensen JE990**, perceived as the best discrete opamp ever designed. N-Trophy's preamp design is also based on our **flagship RP-2 preamp**, which proved itself to be one of the best-sounding preamps you can find anywhere. Excellent, vital and musical sound with a lot of details and a sense of "space" for demanding instruments.

Switchable custom made HUM Audio Devices beautifully sounding input transformer.

Tweakable Saturation / THD stage with lots of creative sound shaping possibilities.

Choose type between ASYMMETRICAL (Germanium / Silicon) or SYMMETRICAL (Soft / Medium / Hard).

DRY / WET BLEND knob for channel insert allows for parallel signal processing.

Channel Direct Output with source selector and output level for recording processed, or unprocessed sound.

Channel processing ORDER rotary switch allows to set order of built-in EQ, Compressor and Insert.

Channel Meter Source rotary switch (Preamp Out, Tape In, Channel Out, EQ, Compressor, Gain Reduction).

### TUBE OPTICAL Compressor / Limiter:

Innovative detection and compression circuits.

 Variable transition between compression and limiting with a dedicated knob.

 You can switch off compression, but still drive the tube, or turn off the tube to save its life.

- BLEND knob for dry/wet processing.
- L/R stereo link between adjacent channels.
- Side Chain filter and external KEY input.
- AUX 7 & AUX 8 can serve as Compressor sidechain busses, for modern creative compression techniques.

Independently switchable passive Low Pass & High Pass filters.

<u>Passive EQ</u> with separate Boost and Cut frequency knobs. Total of 6 bands: HI, MID and LOW. HI and LOW bands can be switched between shelf / peak characteristics.

This is an original design of EQ, hard to find anywhere else, and with a special purpose. With gentle overlapping curves for fast and creative sound shaping with lots of musicality.

**EQ. HPF** and **LPF** filters use rotary switches, so their settings are easily recallable. Thanks to it multiple channel EQs are perfectly matched to have the same characteristics.

8 mono pre or post-fader AUX SENDS. Adjacent Auxes can be switched in pairs to be stereo sends. In such a situation, left send (1,3,5 & 7) becomes Aux Pan.

You have the possibility to independently assign all four pairs between A and B fader.

The Center Section is prepared also for outputting cue mix to 4 pairs of musician headphones using AUX sends.

<u>Aux 7 & Aux 8</u> can serve as global N-Trophy's sidechain busses, ideal for modern creative mixing techniques. <u>Sidechain busses are available for channel compressors</u>, as well as for the Master Compressor.

Rotary B Fader. Pan & Level pots, with fader flip ability, and SOLO / PFL switch. You can assign B fader to Group 1/2 for additional processing, or to the Main MIX Bus. PAN MODE SWITCH (L<PAN>R) allows you to pan each channel hard left/right or use the PAN knob. Panning hard that way gives you absolute stereo separation of chosen channels, which benefits in better sound space definition than using only traditional PAN knobs.

Fader A PAN with SOLO SAFE switch, which disables channel from soloing.
Routing to MIX Bus and 4 Group pairs.

Classic scribble strip for tracks description with a dry marker.

Highly reliable MUTE, SOLO, PFL, and DAW MODE buttons.
 channel, but in DAW MODE they control the virtual DAW mixer. In DAW MODE analog channel level is automatically set at 0dB (indicated by the yellow diode). SOLO SAFE indication diode for A fader in the channel.

100mm high precision stepped motorized fader, based on fixed resistors.

This is an absolutely unique HUM Audio Devices design of <u>ultra-precise</u>, <u>high-resolution stepped analog fader</u>.

Up to now, it was impossible to achieve this level of accuracy in analog consoles, using standard analog faders.

Our design ensures fader position settings are ideally matched and repeatable through all console channels.

It is a fantastic feature for precise stem summing and/or mastering applications.

<u>Classic Flying Fader design</u> is the best-quality solution. We do not use any VCA, which could degrade sound quality. High resolution of DAW automation. N-Trophy's fader scale exactly matches the Pro Tools scale for user convenience.

Unlike many other analog large format consoles, N-Trophy's channel strip is 7cm wide, with larger solid machined aluminium knobs and custom-designed fader caps, for the best user experience.





## **Group Channels:**



N-Trophy has 8 mono Group Busses, which is more useful than ordinary stereo ones. By hard panning Left / Right, you have perfectly matched stereo groups.

All groups are the same quality as the Main MIX Bus and are based on our proprietary design of Summing Matrix, with discrete Jensen JE990 opamps.

Groups have also external XLR inputs straight to the fader, so you can use them for summing external sources, instead of routing signals from channels.

8 mono AUX RETURNS with Pan pot and routing to MAIN Mix or to Groups 7-8.

Each Return is equipped with a PAN MODE switch (L<PAN>R) similar to that available in all channels, allowing for perfect stereo separation when needed. All **AUX Returns** have identical quality like input channels, so they are perfect for stem

summing / mastering applications when you order N-Trophy in a form of a Center Section alone. SOLO SAFE switch protects AUX RETURN from muting, similar to the channel's SOLO PROTECT.

8 mono AUX MASTERS.

Each is equipped with HPF and LPF filters, identical to filters found in channel strips. You can independently switch on / off each AUX MASTER.

8 mono pre or post-fader AUX SENDS for each mono Group bus. This feature is unusual in analog studio consoles but opens many new possibilities.

When you use AUX 7 or AUX 8 as internal sidechain busses, you can also send key signals from groups. You can even freely mix different portions of keying signals from different groups and channels for unlimited creative compression. Each N-Trophy's compressor has access to these sidechain signals.

- Group inserts with Dry / Wet Blend feature. Blending is done using rotary switches. It is easily recallable and ensures perfect stereo matching of adjacent groups.
- Group PAN knobs with PAN MODE switches, similar to that found in channels and AUX RETURNS.
- Stereo WIDTH adjustment on each stereo group, with fantastic results. It is our proprietary design module, that works in a different way than the typical width adjustment found in some studio processors. It preserves low-end energy and has no influence on the centre of the stereo image when adding dimension to tracks. It is a similar design to one found in our LAAL - Analog Look Ahead Mastering Limiter.
- Space for the current standard full-size wireless MAC or PC keyboard. For PC users we recommend using Logitech MX wireless keys.

Classic scribble strip for group tracks and earphone outs description with a dry marker.

Highly reliable MUTE and 0dB buttons.

0 dB button for bypassing fader, and setting channel output level at fader unity gain for straight summing purposes. Fader itself can control the DAW fader level if this option is selected in Center Section's Automation Setup.

100mm high precision stepped motorized faders based on fixed resistors.

This is an absolutely unique HUM Audio Devices design of <u>ultra-precise, high-resolution stepped analog fader.</u> Up to now, it was impossible to achieve this level of accuracy in analog consoles, using standard analog faders. Our design ensures fader position settings are ideally matched and repeatable through all console channels. It is a fantastic feature for precise stem summing and/or mastering applications.

Classic Flying Fader design is the best quality solution. We do not use any VCA, which could lead to sound loss. High resolution of DAW automation. N-Trophy's fader scale exactly matches the Pro Tools fader scale, for user convenience.











(B)

### Master Channel:



Designed with special care for mastering quality work,

and with tools which exist only in mastering consoles. Due to the quality and features, it is possible to finish your work together with advanced analog mastering in a single mixing pass, not even leaving N-Trophy's environment. Easily integrate your existing external equipment with the Master Channel processing chain. Freely change the order of EQ, Compressor, and MIX Insert Matrix and put built-in M/S encoder and decoder between them wherever you like. You can mix M/S and Stereo processing modes. Use our exceptional LAAL analog brickwall limiter for completing your work with the best sound reachable in analog domain. Ideal solution for today's artists / producers who more and more often master their work on their own. When quality and fast creative work is a key, our N-Trophy console is the go-to solution.

### TUBE OPTICAL Master Compressor / Limiter:

Based on NOS Mullards, considered the best-sounding tubes ever. Works in L/R on M/S modes according to the M/S chain setting. All compressor settings are on easily recallable rotary switches.

- Innovative detection and compression circuits.
- Variable transition between compression and limiting with a dedicated knob.
- You can switch off compression, but still use tube sound, or turn off the tube as well.
- BLEND knob for dry/wet processing.
- L/R link for both channels.
- Side Chain filter and external KEY input.
- AUX 7 & AUX 8 can serve as Compressor sidechain buses, for modern creative compression techniques.

Passive Master EQ with separate Boost and Cut frequency knobs. Total of 6 bands: HI, MID and LOW. HI and LOW bands can be switched between shelf / peak characteristics. Works in L/R or M/S modes. This is an original design of EQ, impossible to find anywhere else, and with a special purpose. With gentle overlapping curves for fast and creative sound shaping with a lot of musicality.

**EQ**, **HPF**, and **LPF** filters use rotary switches, so they are easily recallable, and multiple channels are perfectly matched to have the same characteristics.

Both EQ and Tube Compressor are additionally available on N-Trophy's patchbay for external use. It is selectable by toggle switch independently for each one of them - INT(MIX) / EXT(XLR).

- Switchable M/S BALANCE knob. Useful when M/S MATRIX is switched on (50/50 is full stereo).
- Channel processing order for three processors: Compressor / Equalizer / Insert Matrix.
- Setting the M/S Encoder and Decoder position in the processing chain.
- Stereo WIDTH adjustment, similar to that found in Group Busses and in our LAAL analog mastering limiter.
- Automation Setup switch for choosing which 32 N-Trophy's faders will be DAW automated.
- Talkback sends switches for stereo AUX pairs. PFL Level knob.
- MONITOR SOURCE selection rotary switches for two pairs of Sifam Meters in the Center Section meter bridge.

### Mastering quality monitoring section:

- Passive relay switched volume control for Monitor Outputs, as well as for Main Phones, with independent mute switches. 256 steps for ultra-precise control. You can connect up to 4 pairs of monitors.
- Global PFL and SOLO reset switches.
- Highly reliable Momentary and Latching TALKBACK switches.

4 pairs of musician's headphones with routing, powered with discrete class A amps.

All amps have enough power to feed headphones of any available impedance.
Independent source selection for each of the phones. You can use AUX busses to feed live monitoring mix for musicians.

These headphone outputs are additionally available on patchbay, for feeding up connections to other required places.

- Space for wireless MAC / PC mouse.
  - MAIN PHONES output socket for mixing / mastering engineer.
     Mastering quality passive relay switched volume control. 256 steps for ultra-precise control.

Group faders and mouse place are user-swappable between left and right positions in the console frame. This feature is provided especially for left-handed artists.



### Main Mix faders

with inserts matrix:



Main Inserts with blending rotary switches, and 3 external inserts matrix. These inserts are included in Master Channel's processing chain. You can work in M/S mode, change order and freely integrate external mastering equipment into the chain, like in advanced mastering consoles. Global On/Off switch for whole MIX processing.

Main Mix faders on rotary switches with mastering grade level and trim settings. Precisely calibrated for the exact stereo match.

### **Master Section Monitoring:**



4 Sifam VU - Meters with assignable source for each pair. Top-quality ballistics.

TC Clarity M Stereo Analyzer (available as standard).

- Selectable source (Analog/Digital)
- Selectable Analog source: (VU 1/2 or VU 3/4).
- Selectable Analog input level: (-20dB / -10dB / 0dB).

In the OFF source switch position, you can use it also as a virtual analyzer (via USB).

Sifam VU - Meters for the Master Compressor.

- Setting options for TC Clarity M.
- Talkback level with Microphone.
- Trimmers for group VU Meters.
- Cable channel slot for Lexicon LARC or other controller cables.

### Connections:



N-Trophy provides discrete connections for all channels, as well as for the Master Section. All of them are also available on patchbay. N-Trophy is the in-line console with independent MIC/Line and Tape inputs. Channel's sockets are:

- Mic In (XLR)
- Tape In (XLR)
- Line In (XLR/Jack)
- Insert Send (XLR)
- Insert Return (XLR)
- Direct Out (XLR)

In Master Section, you have additional XLR line inputs straight to all Group faders. All tools in Group Channels are at your disposal, so you can use **Inserts**, **Aux Sends** / **Returns** and **Stereo Width**. Thanks to external XLR Group Inputs you can connect external sources for increasing the number of tracks during the mix.

This feature is designed especially for stem mastering or summing, so if you have Master Section alone, you can sum up to 16 line inputs.

## From the top:

N-Trophy's meter bridge is 19cm deep, allowing for the placement of nearfield monitors.







### To sum everything up:

Our goals were to reach the best possible sound quality, together with exceptional creativity, musicality and practical functionality. We are sure we reached this goal with full success.

Feel free and happy, as a true Unhindered Maker!

Create your next masterpiece without compromise, with vital and full-of-life sound. Together with your new N-Trophy All Discrete Analog Console.

Your hard work deserves that.

Your HUM Audio Devices team.



For more info and demoing please contact us or our authorized distributors. Check the distributors list on our website.

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