Virtins Multi-Instruments Pro (MI Pro) Group Buy (GB)

Bottom Line Up Front (BLUF): This is a Group Buy (GB) announcement to purchase Virtins Multi-Instruments Pro version software at a discounted price that will have a custom built API designed to remote control the internal RTX6001 attenuators / gains thereby allowing the RTX6001 to perform like a professional audio grade analyzer, e.g., Audio Precision, etc. The latter software audio analyzer specific API remote control *give the RTX6001 true autoranging and autoscaling capabilities*, (something not possible without a customized API, i.e., no other 3rd party audio analyzer software can achieve this type of functionality). This GB is open to all diyaudio and non-diyaudio alike from the date of this posting to the end of July 2018 at which point this GB will officially close. *Note: Non-RTX6001 owners (soundcard MI Pro users) will want to skip paragraph # 1 below and go straight to paragraph # 2 below instead).* GB ends on July 31, 2018 so please be sure to sign up before this date to take advantage of this GB pricing / offer (see paragraph 4 of this document for details).

There are two primary groups this GB is targeted to:

1. If you're currently an RTX6001 owner, the aforementioned custom API allows for the remote control of the RTX6001's internal attenuators and gain settings thereby allowing true autoranging and autoscaling is a no brainer (from this poster's perspective). I am part of the original RTX6001 GB and I wanted this particular feature so I facilitated this custom API idea between Jens and Virtins. I am not employed nor am I a consultant to either RTX nor Virtins, but I have been acting in the role of facilitator for this project. Shown below is further information on this type of worthwhile feature:

   a. With respect to the autoranging and autoscaling, as Jens has pointed out, many users might prefer manual selections of the input voltage range and AC/DC coupling from the software. If the input signal is stable, then they can also press the "Auto" button at the upper right corner of MI Pro to let the software select both the Sampling Rate and Input Voltage Range automatically. For output, the software will always do auto-ranging. That is, if the user select an amplitude of 2V, then the software will set the output range to +/-10V; if the user select an amplitude of 0.5V, then the software will set the output range to +/- 1V, and so on. Once the software starts, the manual control knobs and switches on the RTX-6001 front panel will be disabled until the software exits. So there may be relay switching during the handover of the control.

   b. https://bit.ly/2sitGNZ. This is a well written post IMO, but please pay particular attention to this part of the post: *"...Another huge difference is the analog scalar front-end in AP. The controller in the analyzer is constantly monitoring input levels and scales them to the most ideal range for its ADC. This allows the internal ADC to work at its most linear and optimized level. In addition, the same logic allows measurements of high voltage inputs up to something like 150 volts! This is necessary for measurements of amplifier that can output such high voltages. If you connected an amp to a sound card input it would blow it up in an instant..."*

   c. https://bit.ly/2IYhbNA. Note where this poster (same poster as in 1.a. directly above) writes: *"...Had not seen that one before [i.e., RTX6001]. Nice to see very high voltage input capability. But does it not have autoscaling? I see those presets in front and worry that you are one wrong click away from damaging in the inputs..."* Note that once the MI Pro GB goes through and the custom API is written to remote control the RTX6001's internal attenuators / gains that the knobs on the front of the RTX6001 are no longer used / needed, i.e., part of the beauty of the custom API is the autoscaling functionality it will bring to RTX6001 end users. Please note however that the RTX6001 does have internal protection though, so even without autoscaling the inputs wouldn't be damaged as

this poster alludes to (since the poster doesn't own an RTX6001, he may not have been aware of that feature).

2. Even if you are not an RTX6001 owner, this MI Pro GB is probably something many will be interested in. The reason I state this is simply due to the fact that 99.9% of all audio analyzers on the market can measure the old fashioned distortion methods (e.g., THD and IMD) and MI Pro also does these latter two as well. However, the HUGE difference is that MI Pro is the only audio analyzer in the world, regardless of cost, that can also measure:

   a. Dr. Earl Geddes's psychoacoustically based "GedLee" Gm distortion. Please see the many AES and related papers at Dr. Gedde's website for further clarification: https://bit.ly/2J1YE3i. To see the GedLee Metric (Gm distortion) in action, please download the MI Pro PDF manual @ https://bit.ly/2LaJZ6xa and see page 234.

   b. Non-coherent distortion + noise (NCD+N). For details please download this AES PDF document https://bit.ly/2ITRmCG and watch this AES YouTube presentation https://bit.ly/2IZvDFe. Interested parties should also obtain this AES paper on the same topic https://bit.ly/2LIhOgc. To see NCD+N in action, please download the MI Pro PDF manual @ https://bit.ly/2LaJZ6x and see page # 187, (the latter is the "Total" NCD+N).

   c. Those of you who visit the excellent InnerFidelity website will note that a lot of changes are going on, i.e., Tyll's recently announced retirement, change of ownership, etc. At this URL https://bit.ly/2xsQ5gl you'll see that the new InnerFidelity measurement guru (Keith Howard) is now moving beyond THD and will be measuring using the GedLee Metric Gm and NCD measurements as well (a huge step in the right direction insofar as using modern scientifically based perceptual distortion models over that of the old fashioned and non-psychoacoustically relevant THD and IMD).

   d. Please note there are other unique measurement features that no other audio analyzer sold on the market has, all of which are currently in the works for MI Pro in the future as well. Just as with the GedLee Metric (Gm distortion) and the NCD+N which make MI Pro the only such audio analyzer in the world that does such distortion measurements, regardless of cost, there are more such unique features planned for MI Pro in the future, but I can't divulge more information on them at this point in time, (some related to distortion measurements and some completely unrelated to distortion but other important audio objective measurements). Related to this, please see page # 6 of this document, paragraph 11.d. concerning the **FREE upgrades for the same license level for life** that equates to a no-cost benefit to use as an MI Pro end user.

3. I do not want to get bogged down into a debate about the merits of the above, if you're not interested in this GB, that is totally your choice to make, but I do respectfully request that others do not criticize the above mentioned features for argument's sake. I do not want to invest the time going down various rabbit holes trying to justify to others on an Internet forum why I personally believe the merits of the above make perfect sense (to me). If the above is not something you personally are interested in, please feel free to pass up this GB and allow others to engage without side tracking the conversation. Thank you for your understanding in this request.

4. Here is how the MI Pro GB will work:

   a. In order to get the custom API we have to have at least 42 MI Pro orders as part of this GB (so please DO NOT go now to Virtin's website to order MI Pro, otherwise you'll pay full price for it (not the discounted GB price) and we will not get the RTX6001 custom API to allow for autoranging / autoscaling). Instead, sign up for this GB and Virtins will setup a special website at the end of this GB offer, i.e., GB ends on July 31, 2018, so special Virtins MI Pro GB website will setup by Virtins in the first week of Aug 2018. You will be directed on where to purchase from Virtins directly at that point, (I am not involved directly in the sale of MI Pro, only in running this GB offer).

   b. It is important for everyone to understand how Virtins licenses MI, so a quick explanation is given below:

Multi-Instrument	Multi-Instrument Add-on Modules	Multi-Instrument License Upgrade	USB Hardkey for Multi-Instrument Series
Full Package $499.95 USD	Spectrum 3D Plot $99.95 USD ▾	SC Oscilloscope -> Lite $25.00 USD ▾	US$39.95 Free Express Shipping
SC Oscilloscope $24.95 USD	Add to Cart	Add to Cart	Add to Cart
SC Spectrum Analyzer $39.95 USD			
SC Signal Generator $24.95 USD			It does not need a driver to run and thus is hassle free. It will be initialized to the license level purchased. With this option, you can run the software on the registered computer with the softkey, and on any computer with the hardkey.
Lite $49.95 USD			
Standard $99.95 USD		The license information in the softkey, hardkey and VT hardware are all remotely upgradable.	
Pro $199.95 USD			
Full Package $499.95 USD			

Full Package = Pro + all add-on modules, FREE upgrade for the same license level for life!
License Options: 1) Softkey activated license (locks to the registered computer)   2)VT hardware activated license (locks to the purchased VT hardware)
Optionally, a USB hardkey (locks to the hardkey) can be purchased per softkey or VT hardware activated license

   (1) Please note that this GB is for the MI Pro version (normal price $199 USD) and not the others MI versions as depicted in the screenshot above. Note too that the custom API for the RTX6001 as well as the NCD+N and the GedLee Gm distortion only reside in MI Pro and above, i.e., not in the MI Lite or MI Standard versions.

   (2) Also note, this GB is for MI Pro *plus* the USB hardware dongle (unlock) key for it, not the MI Pro software license version. As the above screenshot shows, the cost of the USB dongle cost an additional $39.95 (but it is included with in the sale of MI Pro on this GB). This GB does not allow for anyone to purchase MI Pro with a software only license, only with a USB hardware license. This has the major advantage to the end user that MI Pro can be easily moved from PC to PC as well as the advantage that if ones' PC were to have a major hard drive crash and/or become infect with malware that could not be removed, the MI Pro license of the end user is still safe (just don't lose your MI Pro USB dongle ☺).

   (3) Additionally, once the list of individuals signed up for the GB is at least 42 or higher, all the MI Pro "add-on" licenses are eligible to be purchased at the same time as the GB MI Pro purchase, at a 10% discount. This GB discount offer will not be repeated in the future. That means if you want the special discounted GB pricing, plus the 10% discount on top of all of this for add-on software modules to MI Pro (not for any Virtins hardware) you'll want to sign up for this GB now and pay up once Virtins setups the special GB only website (I'll announce the latter order URL via email to all individuals who sign up for the GB per the below). Likewise, one can purchase the MI Full Package version which normally sells for $499.95 at a 10% discount only during this GB offer time as well. See below screenshot for

the various MI Pro add-on modules (they are not required to be purchased in order to get into this GB nor are they required for the custom API for the RTX6001 or the NCD+N or GedLee Gm distortion):

5. How GB pricing works. The GB pricing is basically depicted in the below table, (please note: free express shipping anywhere in the world via registered mail on all the below):

#	# of MI Pro Ordered	Price Paid per MI Pro	Price Paid Per MI Add-on	Price Paid for MI Full Package (all add-ons)
1.	Under 42	N/A (no GB offered)	N/A (no GB offered)	N/A (no GB offered)
2.	42	$239.90 USD	$89.95 (10% off)	$449.95 (10% off)
3.	52	$226 USD	Same as above	Same as above
4.	62	$216 USD	Same as above	Same as above
5.	72	$209 USD	Same as above	Same as above
6.	82	$204 USD	Same as above	Same as above
7.	92	$200 USD	Same as above	Same as above
8.	102	$196 USD	Same as above	Same as above
9.	112	$190 USD	Same as above	Same as above

6. There will be no further discounts offered off of the MI Pro price after an order of 112 or higher, i.e., a that will be about a 21% discounted price compared to the normal price of MI Pro, plus one has to factor in that they can purchase at the same time as the GB the 10% discount of MI add-on modules too.

7. Individuals are allowed to purchase as many GB MI Pro licenses or GB add-on modules <u>at the same time of the GB purchase</u> if they so choose.

8. To sign up for this GB please post to this diyaudio GB forum, the number of MI Pro licenses you desire to sign up to purchase as well as any MI add-on modules.

9. In addition to # 8 above, please send an email to <u>mi_pro@aol.com</u> with the following table filled out (please type it vs. printing it out and hand filing / scanning it in, i.e., I want to be able to read your writing ☺):

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Your first & last name	Your snail mail mailing address (where you'll want the MI USB license dongle mailed to)	Your email address	# of MI Pro GB Licenses Desired	# and Specific Names of MI Add-on Modules Desired (if any)	# of MI Full Package (includes ALL MI Add-on Modules)

10. I have arranged between Jens of RTX and my point of contact at Virtins for RTX to obtain MI Pro licenses and for Virtins to obtain one RTX6001 unit with both Mod # 1 and # 2 installed, (the latter has been done for a while now). Virtins has reported back to Jens and I that they can indeed remote control the RTX6001 hardware. Once we reach at least 42 sells of MI Pro (or higher) Virtins will finish up the development of MI Pro's custom API to remote control the RTX6001 and the beta testing will take place with Jens also being one of the main beta testers. The cost of making the API for any audio analyzer firm without having some type of guaranteed return on investment is simply too high to put the proverbial chart before the horse, i.e., the API won't be fully completed until after at least 42 GB MI Pro licenses are sold. However, Virtins has a LOT of experience in programming such API MI to audio analyzer hardware, (see PDF attached labeled "MI Pro Customization for RTX-6001.pdf" that I'm posting along with this posting to get a feel for how this will work insofar as integration).

11. If you want to read more about MI Pro, please see the following URL links:

    a. Brochure: http://www.virtins.com/Multi-Instrument-Brochure.pdf.

    b. Manual: http://www.virtins.com/Multi-Instrument-Manual.pdf . I suggest you user the "search" feature of your Adobe PDF reader program to make quick keyword searches, e.g., GedLee, NCD, etc.

    c. MI Pro Add-ons, please see para # 4.b.(3) on page # 3 of this document for details on GB discount pricing (i.e., 10% discount during this GB offer):

    (1) Spectrum 3D Plot: http://www.virtins.com/multi-instrument-spectrum-3D-plot.shtml

    (2) Data Logger: http://www.virtins.com/multi-instrument-data-logger.shtml

    (3) LCR Meter: http://www.virtins.com/multi-instrument-LCR-meter.shtml

    (4) Device Test Plan: http://www.virtins.com/multi-instrument-device-test-plan.shtml

   (5) Vibrometer: http://www.virtins.com/multi-instrument-vibrometer.shtml

  d. Unlike other audio analyzer software programs, it is important to note that with the purchase of MI Pro they get **FREE upgrades for the same license level for life!** That means all future updates, etc. you won't be charge a cent for all future maintenance upgrades, new features (within your same type of MI Pro or above license), etc.!

12. If there are questions concerning this posting, please feel free to contact me at the email address shown in para # 9 of this PDF document. I have also asked Jens to chime in when necessary (thank you in advance Jens). If need be, I will reach back to my point of contact at Virtins to request assistance in answering any specific questions as well.