

## CTW Automation - News and info

February 2021

**CTW Automation** ended the year with one of the biggest months in our history for sales and service and then surpassed it in January as the phone kept ringing and the RFQ's kept coming. It would seem sectors of the automotive and racing world awoke from the pandemic. Life goes on and it is going on as the people in these industries drive forward facing the demands that just do not seem to stop.

In talking with our friends around the world, some have slowed and even stopped while others have never been more busy. The forced-idle home time caused a flourish of opportunity if one could seize on the DIY interest stirred from the couch of Covid. CTW closed 2020 with its best year of its 5 year history and the plan and view from January is for a new record to be set in 2021 our 6<sup>th</sup> year and growing.

### New employees

To help keep up, CTW added two more people to the work force in Lexington while the Software team added a fresh face out in Wyoming.

- *Scott Morin* has been added to help in the electrical as well as mechanical build and manufacturing areas of CTW. It is hoped he can free up the time of the design and electrical departments so that CTW can continue to move forward. Scott comes to CTW with a long list of abilities derived from years in racing and more specifically in the R&D and test team capacities. This background helped develop his skills in testing, asking questions and finding ways to solve problems. Additionally, his time working in a "real world" wind tunnel (literally) bring a very unique view of collecting data, measuring and moving forward to make the vehicle faster and better.



CTW Automation / 100 Lexington Parkway / Lexington NC 27295  
336-542-5252  
[www.CTWAutomation.com](http://www.CTWAutomation.com)

## CTW Automation - *News and info*

- *Rita Treichler* comes to CTW to help in ways that seem so simple yet task the best of us to get done in a busy day. From answering the phones to organizing and handling office projects she will allow the rest of us to concentrate on what we are good at while she handles the day to day office experience. Of course, because of her skills, this has expanded into many other areas that need attending which include marketing, shipping and the occasional batch of cookies. Office help, yes, but so much more.



2021 should see a further expansion of products, software and services available.

### **Machines**

For actual machines, CTW will expand its line of RD, rotational dyno, machines. With a huge demand for a true motorcycle dyno, CTW is finishing the design of a large stroke, high velocity, low force machine ideal for motorcycle and bicycle dampers and forks. We will make an official announcement with specifications in the coming weeks but it will have the following features:

- Motorcycle damper and fork testing machine
  - Various strokes up to a peak of 160 mm
  - Variable speeds with peak velocity on 160 mm stroke in the 3.0 M/sec range
  - Various fixtures and mounts for forks and dampers thanks to our partners
    - SDi
    - Race Tech
  - True sine wave input for proper industry standard accel / decel testing

## CTW Automation - *News and info*

- Production machines with more power

CTW will expand its RD machines in the area of HP, horsepower. CTW has designs and is working on a RFQ to fulfill a RD20 and RD30 HP test stand. While different from the motorcycle design in power and strength they will allow for the ATV and side-by-side work that is growing across the board. These machines will increase the available power to the customer so they can expand into larger dampers. The larger stroke capability will also carry over to greatly increase your testing envelope.

The **RD20** and **RD30** will be coming to a factory or service center soon.

While our line of testing machines will expand, our line of offerings in the software, controls and signal conditioning and delivery will also grow in 2021.

### **Software, hardware and signals in and out**

The ability to collect 8 additional analog channels has already been added to the LA systems. This has been enhanced by CTW's own signal conditioning interface to further help provide more capability built into the system. While some customers already have a good signal(s) and simply needed it collected, other customers want custom interfaces with regulated supply voltage and signal conditioning built into each additional channel. CTW has that now. Each channel has its own board that can be used, switched and changed to accommodate a wide variety of sensors. Whether it is pressure, accelerometers, side loading and even additional load cells, the versatility built into this "little blue box" will unlock more data for your testing needs. Keep an eye out for an informational specification sheet in the coming months.



CTW Automation / 100 Lexington Parkway / Lexington NC 27295  
336-542-5252  
[www.CTWAutomation.com](http://www.CTWAutomation.com)

## CTW Automation - News and info

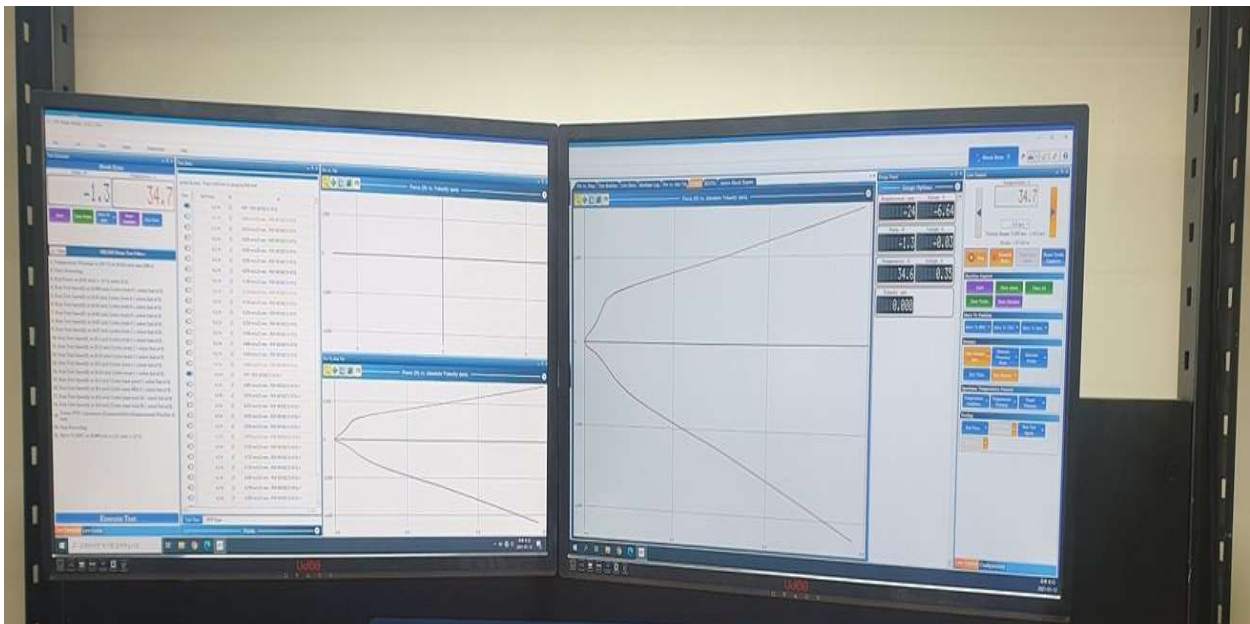
### CTW Probe

There is a new release of CTW Probe, officially Version 21.1.27

It helps expand working through a network and using online interface and storage. It also begins Custom Wave forms for the LA systems as well as other background mods and fixes make it faster.

Additionally, for those people that have computers online, CTW is able to gather simple information packets about what is being used most often and other features when activated so that we can better understand where to place our attentions. A future release will allow users to sign-up with an e-mail so that when a problem happens, we can be notified and help. For now, we can see the monthly number of Probe users and when they are using it. Which not surprisingly is often on the weekends. More to learn and develop this “active” help and monitor system to get our customers the best platform and experience.

Probe itself continues to expand and add features and additions to allow you to get more information and quicker. We have seen customers using the many features and sharing throughout the world on Instagram and FB. The ability to move windows and screen across a dual-monitor setup means you can be viewing graphs and data while the Test is running on the other screen. And if you are really experienced, you can view the data Live while the Test is running to make sure all is well.



CTW Probe with Dual Monitor setup

## CTW Automation - News and info

Using the many fields in combinations allows the User to get the information posted for each run to have at their fingertips.

The screenshot displays the CTW Automation software interface. The main window is titled "Test Data" and shows a table of test results for "PVP MULTI SEAL A (6 items)". The table columns are Gas Pressure, Rod Diameter, Rod Force, Seal Drag, and Speed. A callout box points to the "Fields selector" in the top right, stating: "Using the Fields selector, the User can generate a Test Data 'Legend: area with all the data they need.'" Below this, a list of fields is shown: Gas Pressure, Rod Force, Seal Drag, Multi-Point graph, and Speeds.

Below the test data table, there is a "Fields" selector panel with a list of fields and checkboxes. The "Multi-Point Rod Force" field is expanded, showing a detailed table of data points and a corresponding graph. The graph plots Force (lbs) on the y-axis (ranging from -200 to 132) against Displacement (in) on the x-axis (ranging from -0.8 to 0.8). A callout box points to this expanded view, stating: "Multi-Point Rod Force expanded for viewing the information and generated graph".

	Displacement	Force
1	-0.816 in	129.8 lbs
2	-0.014 in	128.6 lbs
3	0.808 in	134.8 lbs

Multi-Point Rod Force	128.7 lbs
Rod Force Constant	129.2 lbs
Rod Diameter Constant	0.625 in
Gas Pressure Constant	421.0 PSI



## CTW Automation - *News and info*

Progress continues on the LA48-HV linear actuator. We are about to put power to this unique machine and see what it can do. 10 M/sec is one of the targets.



LA48 with optional High Velocity secondary actuator

CTW Automation / 100 Lexington Parkway / Lexington NC 27295  
336-542-5252  
[www.CTWAutomation.com](http://www.CTWAutomation.com)

## CTW Automation - *News and info*

### Sales

Direct Sales: [sales@ctwautomation.com](mailto:sales@ctwautomation.com)

[Scott@ctwautomation.com](mailto:Scott@ctwautomation.com)

[Michael@ctwautomation.com](mailto:Michael@ctwautomation.com)

Leasing options through our partner ACG and Chris Pfreim ( [chrispfriem@1acg.com](mailto:chrispfriem@1acg.com) )

CTW Direct Leasing portal: [CTW Automation – Finance Our Equipment](#)

Support and Service: [support@ctwautomation.com](mailto:support@ctwautomation.com)

### Current authorized dealers for CTW Products

#### *Australia -*

##### **Performance Wholesale Australia**

6 Cronulla Court

Slacks Creek, QLD 4127

Ph: +61 7 38081986

Email: [sales@pwa-au.com.au](mailto:sales@pwa-au.com.au)

Website: <https://www.performancewholesale.com.au/>

##### **Queensland Speedway Spares**

2 Cronulla Court

Slacks Creek, QLD 4127

Ph: +61 7 38084333

Email: [gss@pwa-qss.com](mailto:gss@pwa-qss.com)

Website: <https://www.speedwayspares.com.au/>

#### *Japan -*

##### **Enable-apg**

224-1 Haneo, Odawara, Kanagawa 256-0804

Contact sales: Shingo Sobu

Ph: +81-465-46-7408

Email: [info@enable-apg.jp](mailto:info@enable-apg.jp)

Website: <https://www.enable-apg.jp/>

CTW Automation / 100 Lexington Parkway / Lexington NC 27295

336-542-5252

[www.CTWAutomation.com](http://www.CTWAutomation.com)

## CTW Automation - *News and info*

### Places to find CTW Automation....

Website: [www.CTWAutomation.com](http://www.CTWAutomation.com)

Facebook: [fb - CTW Automation](#)

Facebook CTW Group: [CTW Automation – Shock and Damper Dyno Group](#)

- For the advanced user and common questions

YouTube: [CTW YouTube](#)

- Home for training videos
- Demonstrations and teaching

Instagram: [ctw\\_automation](#)

Sales: [sales@ctwautomation.com](mailto:sales@ctwautomation.com)

Support: [support@ctwautomation.com](mailto:support@ctwautomation.com)

Leasing: [CTW Automation – Finance Our Equipment](#)