Automotive Electronic Control Systems

July 2016



AECS

Training, Equipment and Data for Automotive Diagnostic Specialists

Technical Newsletter



The Launch products have been sold in NZ since early 2000. The automotive industry has seen many changes in the last 20 years or so.

The complexity of electronics in modern vehicles make it impossible to do even the simplest oil change without the need of advanced equipment. The increase of electronics has automatically increased the occurrence of electronic faults. Fault finding by just swapping parts is in most case not possible anymore.

Launch has nicely kept up with these advances and in many cases has been at the forefront of these changes with their manufacturing of electronic components for very large (European) vehicle manufacturers.

This has put them in a unique world leadership position. The size of the factory and R&D teams in those factories is unparalleled. No matter what fancy ads say of our opposition, there is no one tool with this kind of background. This is why Launch, in most countries around the world, is the most sold scan tool.

History

The days of the original X431 Master, a great piece of



equipment which we still find in action in a number of workshops around NZ, are well behind us.

X431 Master

Launch NZ. Changes for the better.



- Android 5.1.1 OS, 10.1" Touch Screen Lenovo TB2 tablet, 4 Core Processor with 32Gb storage
- Wireless Bluetooth communication and diagnostics with over 81 vehicle brands
- Limited time: 3 years free upgrades and GoLo included
- One Touch software upgrades via Wi-Fi. Continuously evolving software with daily updates
- Take screen shots, record and play back live data, and post on support forum.
- Individual or Multiple Combined live data Graphing
- Automatic vehicle recognition (late models only)

Tool ready set up with software, tech support link and personalised. Ready to go straight out of the box !

- Full day's work worth of battery life (7000mAh)
 AECS tech support
- optional
- Special Functions including Injector re-coding, throttle re-learn, remote key reprogramming plus repairing, 12v battery coding, G-Sensor Zero point calibration + more.

"AECS, official Launch dealer"

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The Master (and GX3) have been in production for many years is several forms and generations. This tool had a cable connection between the tool and the car. The tool relied solely on the vehicle's power supply to run. In its early years, the coverage was patchy at best, but towards the end of its production it had a wider coverage compared to most other tools in the market. This is where Launch made its mark and gained momentum. It has served the industry very well.

Launch' innovative approach to go wireless and to smaller more modern looking equipment, resulted in the Diagun series tools.

Diagun 1

The Diagun 1 with its revolutionary wireless technology is still used and being supported with updates today, although this is slowly coming to an end.



Diagun 3

The Diagun 3 was the next new revolution. The size of the wireless dongle was greatly reduced and was made much more stable.



AECS Technology Knowledge update Seminars for 2016

AED - Automotive Electronic Diagnostics 19th & 20th Sept 2016 - Auckland - 2 places left! 21st & 22nd Sept 2016 - Hamilton

DMS1-3—Diesel management Systems (common rail)

6th & 7th Sept 2016 - Wanganui 19th & 20th Sept 2016 - Auckland

EMS1-1 - Engine Management Systems 1-1

14th & 15th Sept 2016 - Auckland - Limited spaces! 17th & 18th October 2016 - Christchurch

EMS1-3 - Engine Management Systems 1-3 (cam timing , variable lift and direct injection petrol) 8th & 9th September 2016 - Wellington

EMS1-5 - Engine Management Systems 1-5 (immobiliser) 1st & 2nd November 2016 - Auckland

ECAC1-1 - Air-conditioning 1-1

1st & 2nd November 2016 - Auckland

CANBus - Can Bus Data Systems

16th Sept 2016 - Taupo— (9am –1pm)

SCAN1-1 - Scan tool 1-1

3rd & 4th November 2016 - Auckland

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The Diagun 3 also had a handy little compartment where the dongle could be stored.



DBScar Bluetooth connector

The coverage had been greatly improved at this stage; as it became a strong world player. Not one scan tool had such a coverage in brands and models (width) and coverage in on board systems (depth).

In many cases the coverage was identical to the factory tool coverage in models and control unit access.

Both the Diaguns were working with Windows CE running in the background.

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GDS

During this period the GDS was distributed to provide a stable non wireless 24 V platform.

The GDS had as a feature, not only a great car coverage but it had a Truck Kit that could be added.

Pad1

When the demand for larger tablet size wireless scan tools became overwhelming the Pad1 was designed.

The pad was still based on the Windows operating system.



It had the same Bluetooth wireless DBScar connector platform as the Diagun2.

The Windows operating system had too many hold backs for modern tools, so a shift to the Android operating system took place.

Pro and Pro3

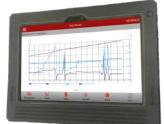
At this stage the professional range series scan tools were designed, the 7 inch Pro and the 10.1 Inch Pro3.

The 7" Pro (2)



The 10.1" Pro3 1st generation

The Pro series tools used for the first time the Android operating system which transformed the tool com-



pared to the Windows based tools and gave the tool a far more professional look and feel.

The protective case (ABS plastic surrounded by moulded rubber) made it a strong and sturdy workshop tool.



This truly became a best seller in NZ and worldwide. The software advances were huge, combined with the ease of use, and the drop in pricing (there is strength in numbers), it left all other scan tool

a full day of hard work.

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manufactures scratching their heads.

When once other brands were world leaders, now even by merging their business they still could not compete with this tool.

Scanpad and V+

Also at this time the Scan pad was released for the American market, and the V+ for the Asian market, both with the same tablet, but with a few cosmetic differences. The software has differences as the American and Asian market is different to the Australia and NZ market to adapt to each country's individual needs, yet at the same time to curb parallel importing.



Pro3 derivative, called the Scan Pad (excuses for the picture quality)

Pad2

At the same time as the first generation Pro3 the Pad2 was developed as an upgrade to the Pad1.

The Pad 2 came out with the Android operating system and with the exact same functions and software depth and width as the Pro series scan tools and had the same DBScar Bluetooth connector.



Pad2

The big feature of the Pad2 is the water/dust resistant IP65 rating, to satisfy customers in high humidity (tropical) areas, and areas where dust and grit are a massive concern. Areas where a normal tablet or smart phone would not survive.

The IP65 rating also made it necessary to use a docking station as the mini USB connector on for example phones and the Pro series tools are not water proof.



Gen 2 Pro3

Following on from the 1st generation Pro3 the Launch factory made the second generation Pro3 with a Lenovo tablet, which had much higher processing power and memory, just purely to be able to handle the higher

demand the latest developed diagnostic software placed on the tool.



The 10.1" Pro3 2nd generation

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At this stage the Launch software made a whole next leap.

Short cut menus were made for easy access to the sometimes hard to find maintenance reset functions, like service intervals, steering angle sensor relearn, gearbox relearn, key coding and much more.

They even added some key code generators!



Pin code Generator for Nissan

Latest state of technology; PRO 3V2

At the beginning of 2016 the newest upgrade of the professional tool the Pro3v2 was released.



The biggest change in the Pro3v2 from the second generation Pro3 is the OBD Bluetooth wireless connector. The new (bigger) DBScar2 connector is able to communicate with the latest brand new vehicles where changes in the communication protocol have taken place. This is purely done to future proof the tool.

We have not seen any big changes in the software yet, however we have been informed that there will be big changes happening soon.

We call this progress! Always keeping up with the latest technology makes Launch the market leader it is.

The Launch motto is *"You only need one tool to do all your passenger vehicle work"*.

The days of buying several scanners in one workshop, as "some are good for this" and "some are good for that", are truly behind us.

Older cars

It's all good and well to have the latest vehicles in your tool, but a question we get from many garages is what to do with older cars of which we see a lot in our workshops?

All of the Launch tools, (even the latest Pro3) always had the ability to connect to older style diagnostic connectors with a large range of diagnostic adapters to go between the DBScar connector and the vehicle.

Distribution

The Launch range of scan tools has been distributed through NZ through a variety of different channels over the years.

The import of the all Launch tools has been with MTS/ Sinopec in Auckland since 2010, they have done some direct sales but refrain from this because of the technical expertise needed to sell such a high ability tool. They found that they simply lacked the technical know-how needed to support such tools as the Launch Pro and Pad series tools.

They sought partners to take care of the distribution and the technical support of the equipment.

They contracted AECS and Launch tech as their technical partners for the past 7 or so years.

Technical support and training for any diagnostic tool in any workshop is what makes the difference between a tool being successful or it just being a drain on resources.

A few years ago the role of MTS has changed in that AECS is stocking the diagnostic tools as soon as they come into the country, rather than MTS. This allows MTS/Sinopec to concentrate more on the high volume oil distribution.

Some of the high bulk equipment like Launch Hoists etc. are still stored at MTS.

The Scan Pad range of tools is being sold through the Repco and Appco stores, directly from the home of Repco, GPC (Genuine Parts Company) in the USA. The tools are not supposed to be advertised as being Launch by agreement and because they are not targeted to our NZ market. However, everybody knows they are made by Launch.

The identical V+ range of tools are made for the Asian market and are only finding its way into NZ via internet sales. These tools are bought through the backdoor from the Launch factory and are not allowed by the factory to be sold in the country/area they were not made for.

The worry about those tools is that the software updating process identifies from which country you

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are trying to update. As soon as the source of the converted updates dries up you need to purchase the software directly from Launch or one of their agents. At that point the tool will become unusable. The Launch NZ partners do not sell the software for the V+ series tools as we know that the tool will shut down, shifting the problem into their laps.

There is also evidence that tools looking like the V+ and Scan Pad have entered the country, which were never made by Launch.

Value of local agent

What is the value of buying through a local NZ agent? While internet sales are cheap, a local agent is able to support you with the tool whenever you need to talk to someone. The quality of that local support depends on the experience and technical ability of the local agent. What you also get when buying through a local agent is a tool which has been already set up with all the experience of best settings on that tool included. These tools have the ability to be personalised with your logo etc. so that it is a pleasure to use from the moment you pick up the tool, increasing care from staff using the tool. Also preset links can be added to the tool to have easy access to for example technical support.

The work from local agents makes for a tool which is ready to work hard straight from the box, as opposed to just a box with a sticker on it, arriving from a nameless outfit which still needs registering, setting up and updating before you can use it.

Future

A bright future lays ahead for the Launch brand as the momentum they have gained by being dominant in the

diagnostic market. Their sales numbers are so that they employ around 10,000 people. That momentum is not taken away lightly by much smaller companies, whom inevitably need to maintain higher pricing for their tools.



The GoLo remote diagnostics and telemetry is another beautiful technical innovation from Launch which is making great inroads. It is the cheapest way to track vehicles and the simplest way to perform remote diagnostics on your customer's vehicles.

Article courtesy of MTS Ltd and AECS Ltd

Did you know ..?

Latest 2016 model Pro3 - A special shipment of scan tools is about to arrive. Benefit off the special deal Launch has for you! \$3500 + gst 3 years updates included, for the latest 2016 model Pro3



Jaltest Marine

AECS are delighted to announce the release of the all new Jaltest Marine Scan tool.

We are very excited that we were one of the first distributors in the world to receive the new Jaltest Marine Diagnostic tool.

With coverage across Inboard, Outboard and Jetski and the ability to pick and choose which software package you actually need there is something for every type of Marine workshop. Complete Wiring Diagrams, Technical Engine Data along with System and Service Data are just some of the features you can expect to enjoy.

Jaltest have become a world leader in **commercial vehicle diagnostics** and this advanced technology has now been carried over into the new marine kit. If you would like to know more about Jaltest Marine, please contact us for further information or to arrange a demonstration.

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