

Device Produced for Electric Vehicles.

## DIAGNOSTIC TEST TOOL DTT



- Colour LCD
- Multi-functional hand held device
- Intuitive to use
- Live programming
- Troubleshooting
- Live feedback
- File transfer
- File storage
- Field upgradeable
- Compact and robust
- Multiple PG applications

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### Product Codes

Diagnostic Test Tool-D50966  
R-net Programming Cable DTT - SA79174  
Neutrix Programming Cable DTT - SA70175  
4-way Molex Programming Cable DTT - SA79176

Operating voltage +12V to +60V  
Operating temperature: -10°C to +50°C  
Storage temperature: -20°C to +65°C

### Dimensions



## DIAGNOSTIC TEST TOOL - DTT

### HANDHELD PROGRAMMING AND DIAGNOSTIC TOOL





## The Most Powerful Handheld Programming and Diagnostic Device Produced for Electric Vehicles.

## Live Programming and File Transfer with Powerful Remote Diagnostics for Multiple Controllers



The Diagnostic Test tool has been designed to allow live programming and diagnostics of applications that use PGDT's motor controllers. The compact and robust design ensures damage though general use is minimised.

### SIMPLE PROGRAMMING

The DTT provides comprehensive, yet simple and intuitive programming for a whole range of PGDT products, including R-net and most other mobility control systems, as well as many of our industrial products such as Trio +, I-Drive and X-Drive.

### FILE SAVING AND TRANSFER

In addition to being a powerful programming tool, the DTT provides convenient transfer of programming files between different vehicles and to and from PCs.

- Files can be read from the controller and saved to the DTT's local memory.
- Files can be read from a controller to a memory stick via the DTT's built in USB port.
- Files can be created on a PC and transferred to the DTT via a direct link with the PC.
- Files already saved to a Memory stick can be transferred to the DTT via its built in USB connections.

When the DTT is connected to a PC it appears as a disk drive called DTT. Files and directories can be created, renamed, modified or deleted in a familiar Windows™ environment. The DTT simply reads the directory structure created by the PC.



PG DRIVES TECHNOLOGY

Forward				
	Pr1	Pr2	Pr3	Pr4
Acc▲	30	30	30	30
Acc▼	20	20	20	20
Dec▲	40	40	40	40
Dec▼	30	30	30	30
Spd▲	70	70	70	70
Spd▼	20	20	20	20

Controls	
Global Controls	>
Profiled Controls	>
Joystick	>
Standby	>

Global Controls	
Steer Correct	0
Sounder Volume	10
Actuator Bleep	No
Actuator Entry Axis	Last
Change profile in Drive	No
-----	
Momentary Screens	Yes
Reverse Driving Alarm	No
Emergency Stop	Yes
Lock Function Enable	Both
Yes	

### PROGRAMMING

The DTT is equally suitable for programming medical mobility vehicles or industrial type vehicles. Consequently, the user-interface has been designed to cater for a wide range of disciplines, including therapists, DME providers, sales professionals and service engineers. The large color display, along with simple navigation and adjustment keys, allows multiple programming changes to be made at one time. Any values that have been adjusted are clearly highlighted, thereby allowing the amendments to be tracked.

### LANGUAGES

When used with certain products, the DTT can display the programming menus in the language determined by the controller. Additionally, the command text can be set to match.

### FILE MANAGEMENT AND DATA STORAGE

As well as being a conventional programming tool, the DTT is an effective storage device, meaning programming files can be easily transferred from vehicle to vehicle, or onto a PC for further editing or emailing back to a service center.

The benefits are numerous. For example, if it is required to set-up a fleet of vehicles with an identical program, the DTT can be simply connected to each in turn. Further if an OEM wishes to make remote, but secure, programming changes, they can transfer files to a DTT for use by external personnel. The DTT can then write that file to a controller, but there would be no access to any sensitive parameters.

My Files	
AX06120057.R.net	Read
AX06120057a.R.net	
AX06120059.R.net	
AX06110021.R.net	

My Files	
AX06120057.R.net	
AX06120057a.R.net	
 Do you want to write file AX06120057.R.net	
No	Yes



System Tests	
Enter Seating Mode	
CH 6 Current	0.0 A
Axis 1 Control	Stop
Axis 2 Control	Stop
Axis 3 Control	Stop
Axis 4 Control	Stop
Axis 5 Control	Stop
Axis 5 Control	Stop
Axis 7 Control	Stop

System Tests	
Enter Drive Mode	
Communications	OK
Battery Gauge	100 %
Battery Voltage	28.2 V
Battery Current	0.0 A
Voltage M1	0.0 V
Current M1	0.0 A
Voltage M2	0.0 V

System Tests	
Enter Drive Mode	
Communications	OK
Horn	Off
Left Indicator	Off
Right Indicator	Off
Hazard Lights	Off
Brake Lights	Off
Lights	Off
Speed Setting	1
On	

### PROGRAMMING AND DIAGNOSTICS

The DTT is equally suitable for programming medical mobility vehicles or industrial type vehicles. Consequently, the user-interface has been designed to cater for a wide range of disciplines, including therapists, DME providers, sales professionals and service engineers. The large color display, along with simple navigation and adjustment keys, allows multiple programming changes to be made at one time. Any values that have been adjusted are clearly highlighted, thereby allowing the amendments to be tracked.

### TEST AND MONITOR

A series of test menus allow system properties, such as voltages and currents, to be monitored in real-time. This facility is invaluable in determining whether a vehicle is functioning as expected. It is also possible to check the system inputs, E.g. Joysticks, push buttons or throttles, are operating correctly. Some system outputs can be driven directly from the DTT itself. For example, the DTT can be used to drive seat actuators on a powered Wheelchair. This gives therapists and patient real time feedback on what are comfortable seat movements and positions.

### FUTURE PROOF

As new products and features become available PG can provide software upgrades to the DTT. The simple upgrade procedure carried out via a PC, eliminates the need to procure a different programming and diagnostic device each time a new controller comes to the market.

System Log	
Software Version	1.85
Serial Number	AX06080072
Trip	Ocurrences
2F01:	2
Center Joystick	

My Logs	
AX06120057.R.net	
AX06120057a.rnsi	
 Do you want to delete file AX06120057.rnsi	
No	Yes



PG DRIVES TECHNOLOGY