Dart: Getting Started

Introduction

The Dart is Digital Matter's new compact 2G or 3G tracking device. It is designed to provide extremely cost effective tracking with all the quality and support of a Digital Matter product. It includes the latest GPS and cellular technology to give excellent performance at an entry level price. See the product page on www.digitalmatter.com for more specifications. This article will help you get up and running to test the Dart.

In the box

You'll get a compact box containing the Dart and a 12 wire harness. Note that OBDII and Cigarette Lighter harnesses will be options in future.

SIM, battery and sealing

Insert the SIM

Notes for inserting the SIM:

1. Unlock the SIM holder by sliding it towards the harness end of the device. Tilt the holder up on its hinge.
2. Insert the SIM with the contacts down and the champhered corner pointing away from the harness end of the device
3. Put the holder back down on the PCB and slide it away from the harness end of the device to lock it in place.

To easily get up and running:

1. The SIM should not have a PIN on it, unless you use the device specific PIN.
2. The SIM should have credit or airtime
3. The SIM should use one of the APN's built into the firmware. Otherwise contact DM about APN setup. It is possible to set APN's by SMS.

Insert the battery

The Dart should come with a 400mAh battery.

1. Leave the battery in the position it is stuck down, away from the antennas
2. Plug the battery into the socket shown in the image
3. The LED should start to flash.

Online

The battery should come pre-charged. Once you insert it, the internal LED will come on and flash. If the SIM card works and there is sufficient charge in the battery, the device will connect to the OEM Server. Go to www.oemserver.com and search for the serial number. Confirm that it has connected recently.

The LED will flash slowly at first. When it opens a connection to the server, it will flash fast. Once data is sent, it will go solid briefly, and revert to flashing fast. When the device goes to sleep, the LED will switch off.

If the battery is too low, use the harness to provide external power.

If the LED flashes but the Dart does not connect, check the SIM is in the holder correctly and check that the SIM is working.

Closing and opening the housing

The housing clips together and does not need screws. To close the housing, line up the top and bottom parts. Push the housing together firmly.

To open the housing, insert a flat screw driver into the opening highlighted above. Carefully lever the two halves apart. A wider screw driver works better.

Harness diagram

Number	Colour	Function	Notes
1	Red	Voltage Input	7 – 36 Volts DC External Power
2	Black	Ground	Grounds are interchangeable
3	Purple	System Rail Out	Pin 3 of 4 way Molex. Powers peripherals
4	Green	TTL Receive	Pin 2 of 4 way Molex. TTL communication with peripherals
5	Pink	Digital Input 1	0 – 48 Volts DC
6	Black	Ground	Grounds are interchangeable
7	Black	Ground	Grounds are interchangeable
8	White	Ignition	0 – 48 Volts DC
9	Black	Ground	Pin 1 of 4 way Molex. Ground for peripherals
10	Brown	TTL Transmit	Pin 4 of 4 way Molex. TTL communication with peripherals
11	Blue	Digital Input 2	0 – 48 Volts DC
12	Yellow	Switched Ground 1	Use with a relay, LED, or buzzer.

Default settings

The Dart will operate with default settings out of the box. These can be changed using the OEM Admin interface. The defaults include:

- **Hourly Heartbeats**: the device will log a heartbeat record, connect to the server, and refresh it's GPS data every 60 minutes.
- **Wired AND Emulated Ignition**: by default the Dart will track a trip if either the ignition wire is pulled high or movement is detected. The setting can be changed to do one or the other, or continue to use both.
- **Inputs**: inputs are pulled up internally and are active low. This means you can connect pull to ground switches or contacts. The bias can be set to pull up, down or neither. They can be set to active high or low and the debounce can be changed.
- **Output**: the output is not used by default.

Software Platform

The device will work with Telematics Guru or a number of other 3rd Party platforms. Telematics Guru will provide some enhanced features such as Driver Lists, Trip Trimming and On Device Geofences.

Select the platform using the connectors on the OEM Admin Interface. Use TCP_TG_Flexi_Live to send data to Telematics Guru.

Ordering

Contact ken@digmat.com.au in Australia or pierre@dmem.co.za in South Africa.

Specify whether you would like a 2G or 3G variant. Also note the price difference between a Dart on Telematics Guru and other 3rd party platforms.