G4X

ATOMX

QUICK START GUIDE

This is only a quick start guide.
A full wiring and installation manual is included in **PCLink**.

LINK
ENGINE MANAGEMENT

linkecu.com

INSTALLER I/O TABLE

Wire Description	Installer Connection	Typical Application
+14V	Power Wire	
Ground		Wire these seperately. Typically both to engine.
Ground		
Trigger 1	Crank Angle Sensor	Reluctor, Proximity, Optical or Hall.
Trigger 2	Cam Angle Sensor	
Shield/Gnd		Trigger Signal Shield.
Analogue Temp Input 1		Thermistor Sensors only. 1KΩ Internal Pullup.
Analogue Temp Input 2		
Analogue Volt 1		0–5V Input from Sensor or External Controller.
Analogue Volt 2		
Analogue Volt 3		
+5V Out	TPS and MAP sensor power	+5V Power OUT.
Gnd Out	TPS and MAP sensor ground	For Sensor Grounds.
Ignition 1		Ignition Amplifier Drivers. Use spare Ignition Channels for Auxiliary Outputs.
Ignition 2		
Ignition 3		
Ignition 4		
Injection 1		Spare Injection Channels unavailable for switching.
Injection 2		
Injection 3		
Injection 4		
Auxilary Output 1		PWM or General Switching Functions. Flywheeled, Low Side Drives.
Auxilary Output 2		
Auxilary Output 3		
Auxilary Output 4		
Knock*		Knock Sensor
Digital Input 1		Frequency Input, Switch Input.
Digital Input 2		
CAN L		CAN Bus.
CAN H		

** Version 3 or newer G4X AtomX ECUs support Knock Control which is fed into the ECU through pin 6. Versions prior to 3.0 do not have knock control hardware.*

WIRING INFORMATION

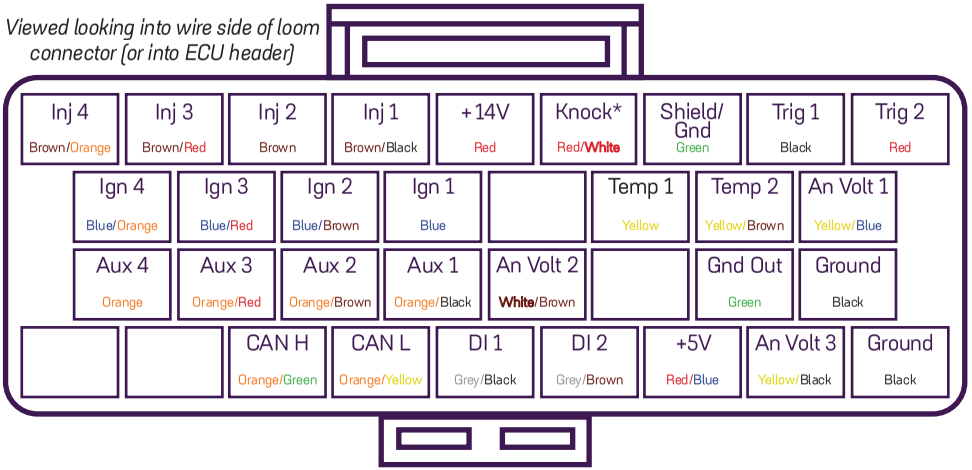
It is recommended that your Link G4X AtomX ECU is installed by a trained professional. Incorrect installation can result in damage to the ECU or the vehicle — extreme care must be taken.

The following pin diagram shows the inputs and outputs available with the G4X AtomX ECU. Application wiring examples are provided in the full Wiring and Installation Manual available in PCLink.

It is recommended that the installer fills out the *Installer I/O Table* as a reference to keep with the ECU. This table is provided on the previous page.

A LOOM

Viewed looking into wire side of loom connector (or into ECU header)



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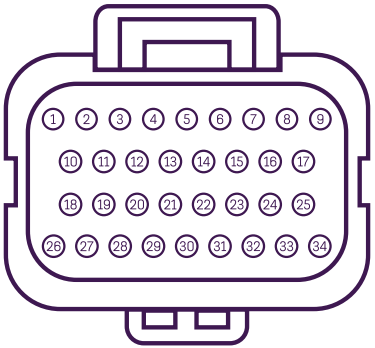
G4X PIN NUMBERING

Wire side of loom



IMPORTANT INFORMATION

G4X ECUS ARE SHIPPED LOCKED

G4X ECUs are shipped as locked and must be enabled before they are used. The ECU can be installed and configured using PCLink, but will not read engine RPM or run the engine until unlocked. Contact your ECU supplier to obtain an unlock code.

SUPPORT OPTIONS

PCLink G4X help — press F1 while running PCLink. Includes help on wiring, PCLink G4X and ECU functions

- Contact your nearest Link dealer. A Link dealer list is available on linkecu.com
- Link website: linkecu.com
- Technical Support email: tech@linkecu.com
- Online Discussion Forum: linkecu.com/forums

Most questions received by the technical support team are answered in the PCLink G4X Help Section. Please consult the manuals to make sure that your question has not already been answered.

PCLINK G4X

All Link G4X ECUs are tuned and configured by our PCLink software package. Connection to the ECU is established through on–board USB.

The latest version of PCLink can be downloaded from linkecu.com. Included with PCLink are the USB drivers for connecting to the ECU.

IMPORTANT

Before connecting the ECU to your PC, the correct USB drivers must be installed.

Failure to install the drivers on your PC first may result in Windows assigning incorrect drivers. These drivers will not work with the ECU and are difficult to uninstall.

After installation, consult PCLink G4X Help (press F1) for instructions on connecting to the ECU.

Once you have the ECU connected to PCLink, check the ECU firmware and upgrade to the latest version if it is not already.

GENERAL ECU MOUNTING GUIDELINES

The following requirements should be taken into account during the installation of the ECU:

- The ECU should be fitted inside the vehicle cabin in a location that avoids exposure to excessive temperatures and the risk of water ingress. The location of the ECU should also be physically separated from the ignition components or any other components that may cause interference.
- Allow enough room at the end of the ECU for the main wiring harness and tuning cables to be connected.
- The mounting bracket provided should be installed on a flat surface, with the ECU firmly fitted to the bracket. Alternative brackets should not be used and under no circumstances should holes be drilled in the ECU case. Any modifications to the case will render the warranty invalid and may cause internal damage.
- It is recommended that the ECU is rubber mounted in order to isolate the ECU from vibration.
- For motorsport applications, the ECU should be located in a position that minimises the risk of physical damage in the event of the vehicle being involved in a crash. ECUs used for speedway applications should be mounted securely within the cockpit area, protected from the elements, isolated from vibration and utilise an additional retention strap for protection from high impacts.

Please refer to the Wiring Information section in PCLink G4X help for additional information.