Manuals+ — User Manuals Simplified.

idataLINK ADS-ALCA Remote Starter and Interface Module Installation Guide

Contents [hide

idataLINK ADS-ALCA Remote Starter and Interface Module

FIRMWARE
OEM-AL(RS)-CH8-[ADS-ALCA]

HARDWARE
ADS-ALCA

ACCESSORIES
ADS-USB (REQUIRED)

TERMS OF USE

Automotive Data Solutions Inc. ("ADS") products are strictly intended for installation by Certified Technicians who are employed by a registered business specialized in the installation of auto- motive aftermarket electronics products. Prior to beginning installation of an ADS product in a vehicle, it is the Certified Technician's responsibility to review the most current Product Guide, Install Guide and vehicle-specific notes available in Weblink®.

ADS is not responsible for any damages whatsoever, including but not limited to any consequential damages, incidental damages, damages for loss of time, loss of earnings, loss of profit, commercial loss, loss of economic opportunity and the like that may or may not have resulted from the use, misuse, improper installation or operation of its products. ADS reserves itself the right to suspend any Weblink® account without notice and decline to offer technical support to non-Certified Technicians, non-compliant Certified Technicians or end users.

BEFORE INSTALLATION

**WARNING:**

1. Connect module to computer

2. Login to Weblink account

3. Flash firmware to module (module is not preloaded with firmware)

4. Use accessories accordingly (accessories are sold separately)

MAKE	MODEL	YEAR	INSTALLTYPE	FEATURES														
				DATAIMMOBILIZERBYPASS	3XLOCKSTART/STANDALONEMOD.	DOORLOCK	DOORUNLOCK	ARMOEMALARM	DISARMOEMALARM	TRUNK/HATCHRELEASE	DOORSTATUSOUTPUT	TRUNKSTATUSOUTPUT	BRAKEPEDALSTATUSOUTPUT	TACHOMETEROUTPUT	SECURETAKEOVER	GLOWPLUGSSTATUS	RAPSHUTDOWNCTRL
	1500 / 2500 / 3500 STD key (Tip-Start) AT	13-17	2	•	•	•	•	•	•		•		•	•	•		•
	1500 / 2500 / 3500 STD key (Tip-Start) AT	18	3	•	•	•	•	•	•		•		•	•	•		•

	Vehicle	Year	#												
R A M	1500 Classic STD key (Tip-Start) AT	19-21	3	•	•	•	•	•	•		•		•	•	•	•
	1500 / 2500 / 3500 Diesel STD key (Tip-Start) AT	14-17	2	•	•	•	•	•	•		•		•	•	•	•	•
	1500 / 2500 / 3500 Diesel STD key (Tip-Start) AT	18	3	•	•	•	•	•	•		•		•	•	•	•	•
	1500 Classic Diesel STD key (Tip-Start) AT	19-21	3	•	•	•	•	•	•		•		•	•	•	•	•

BOX CONTENTS

MODULE
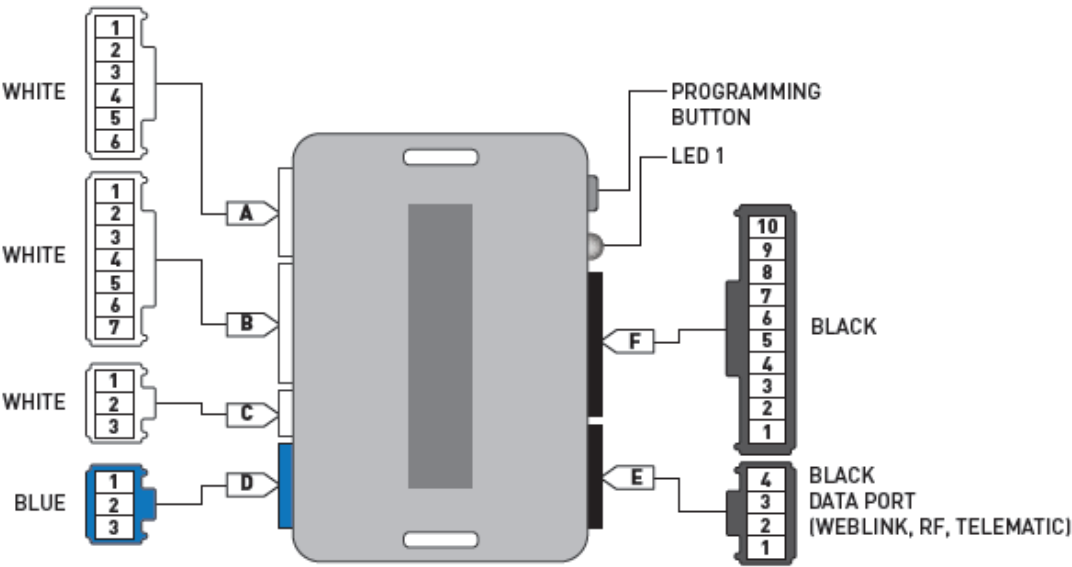
6 PIN WHITE CONNECTOR
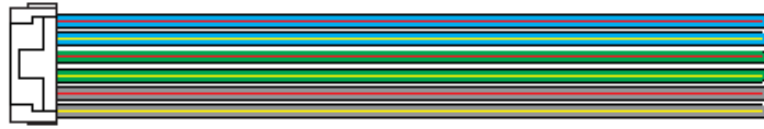
7 PIN WHITE CONNECTOR
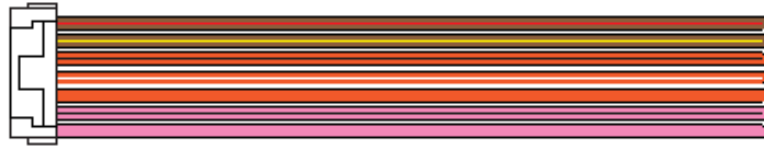
3 PIN WHITE CONNECTOR

3 PIN BLUE CONNECTOR

4 PIN BLACK CONNECTOR

10 PIN BLACK CONNECTOR
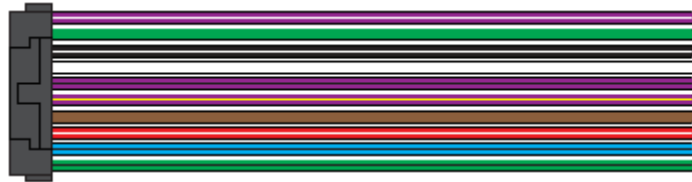
DATA CABLE 1

DATA CABLE 2

WEBLINK CABLE

WEBLINK CABLE

(required accessory sold separately)
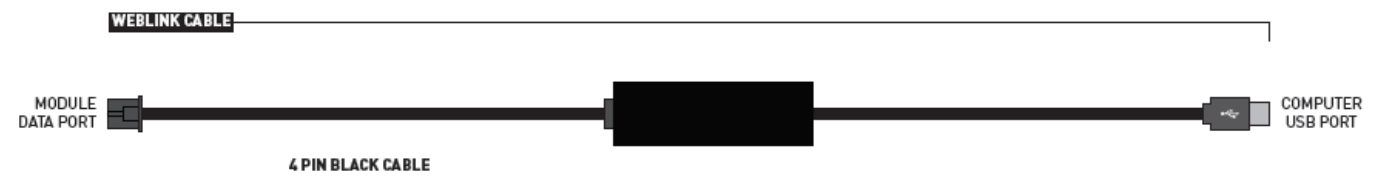
WEBLINK CABLE

MODULE
DATA PORT

4 PIN BLACK CABLE

COMPUTER
USB PORT

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
RAM	1500 / 1500 Diesel STD key AT	13-17	12V	D2664A	Black	06 pin	06	Red	(+)	Ignition connector	F
			Ground	D2664A	Black	06 pin	03	Black	(-)	Ignition connector	F
			Key position	D2664A	Black	06 pin	04	Purple/Brown	(MUX)	Ignition connector	F
			Imo Lin	D2664A	Black	06 pin	05	White/Green	(DATA)	Ignition connector	F
			CanH	D7405A	Black	16 pin	06	Gray/White	(DATA)	OBDII connector	~
			CanL	D7405A	Black	16 pin	14	Yellow	(DATA)	OBDII connector	~
			Parking Light	D2242A	Black	10 pin	01	White/Brown	(MUX)	Parking light switch	A
			Driver door pin	~	~	~	~	Purple	(-)	Harness in driver kick panel	~
	2500 / 2500 Diesel / 3500 / 3500 Diesel / STD key AT	13-17	12V	D2664A	Black	06 pin	06	Red	(+)	Ignition connector	F
			Ground	D2664A	Black	06 pin	03	Black	(-)	Ignition connector	F
			Key position	D2664A	Black	06 pin	04	Purple/Brown	(MUX)	Ignition connector	F
			Imo Lin	D2664A	Black	06 pin	05	White/Green	(DATA)	Ignition connector	F
			CanH	D7405A	Black	16 pin	06	Gray/White	(DATA)	OBDII connector	~
			CanL	D7405A	Black	16 pin	14	Yellow	(DATA)	OBDII connector	~
			Parking Light	D2242A	Black	10 pin	01	White/Brown	(MUX)	Parking light switch	A
			Driver door pin	~	~	~	~	Purple	(-)	Harness in driver kick panel	~

TYPE 2 – WIRING DIAGRAM – 1 OF 1

Module M pinout (left side):

M1
M2 M6
M3
M4 M5 DATA

M1
01 GRAY/YELLOW (NC)
02 GRAY/RED (NC)
03 GREEN/YELLOW (NC)
04 GREEN/RED - RAP SHUTDOWN (-) OUTPUT
05 BLUE/YELLOW (NC)
06 BLUE/RED (NC)

M2
01 PINK - KEY POSITION (MUX) INPUT
02 PINK/BLACK (NC)
03 ORANGE - KEY POSITION (MUX) OUTPUT
04 ORANGE/WHITE (NC)
05 ORANGE/BLACK - IMO LIN
06 BROWN/YELLOW - CANL
07 BROWN/RED - CANH

M3
01 YELLOW - PARKING LIGHT (MUX) OUTPUT
02 YELLOW/RED (NC)
03 YELLOW/BLACK (NC)

M4
01 WHITE (NC)
02 WHITE/RED - LIN CUT VEHICLE SIDE
03 WHITE/BLACK - LIN CUT CONNECTOR SIDE

M5
01 BLUE/WHITE (NC)
02 WHITE (NC)
03 BLACK - GROUND
04 RED - 12V (+)

WITHOUT A COMPATIBLE ACCESSORY
OR
WITH A COMPATIBLE ACCESSORY. IMPORTANT: SEE THE COMPATIBLE ACCESSORIES PAGE FOR DETAILS.

M5
DATA CABLE — COMPATIBLE ACCESSORY

M6
01 GREEN/BLACK- HOOD STATUS (-) INPUT
02 BLUE/BLACK (NC)
03 RED/WHITE (NC)
04 BROWN (NC)
05 PURPLE/YELLOW (NC)
06 PURPLE/BLACK (NC)
07 WHITE (NC)
08 BLACK/WHITE (NC)
09 GREEN (NC)
10 PURPLE/WHITE (NC)

Right side signals:
GROUND (-) - 03
KEY POSITION (MUX) - 04
IMO LIN - 05
12V (+) - 06
CANL - 14
CANH - 06
PARKING LIGHT (MUX) - 01
DRIVER DOOR PIN (-)
HOOD SWITCH

INSTALL THE SUPPLIED HOOD SWITCH IF THE VEHICLE IS NOT EQUIPPED WITH ONE.

IGNITION SWITCH
OBD II CONNECTOR
PARKING LIGHT SWITCH
BLACK
DRIVER KICK PANEL
HARNESS

MAKE	MODEL	YEAR	WIRE DESCRIPTION	CONNECTOR NAME	CONNECTOR COLOR	CONNECTOR TYPE	POSITION	WIRE COLOR	POLARITY	MODULE LOCATION	COMPONENT LOCATOR
			12V	D2664A	Black	06 pin	06	Red	(+)	Ignition connector	~
			Ground	D2664A	Black	06 pin	03	Black	(-)	Ignition connector	~
			Key position	D2664A	Black	06 pin	04	Purple/Brown	(MUX)	Ignition connector	~
			Imo Lin	D2664A	Black	06 pin	05	White/Green	(DATA)	Ignition connector	~
			CanH	~	Gray	10 pin	02	Orange	(DATA)	Trailer module, right of steering column	~
	1500 / 2500 / 3500 STD key AT	18	CanL	~	Gray	10 pin	01	Yellow	(DATA)	Trailer module, right of steering column	~
			Parking Light	D2242A	Black	10 pin	01	White/Brown	(MUX)	Parking light switch	~

			Signal	Connector	Color	Pins	Pin	Wire	Type	Location	
R A M			Driver door pin	~	~	~	~	Purple	(-)	Harness in driver kick panel	~
	1500 Classic STD key AT	19-21	12V	D2664A	Black	06 pin	06	Red	(+)	Ignition connector	~
			Ground	D2664A	Black	06 pin	03	Black	(-)	Ignition connector	~
			Key position	D2664A	Black	06 pin	04	Purple/Brown	(MUX)	Ignition connector	~
			Imo Lin	D2664A	Black	06 pin	05	White/Green	(DATA)	Ignition connector	~
			CanH	~	Gray	10 pin	02	Orange	(DATA)	Trailer module, right of steering column	~
			CanL	~	Gray	10 pin	01	Yellow	(DATA)	Trailer module, right of steering column	~
			Parking Light	D2242A	Black	10 pin	01	White/Brown	(MUX)	Parking light switch	~
			Driver door pin	~	~	~	~	Purple	(-)	Harness in driver kick panel	~
	1500 Diesel / 2500 Diesel / 3500 Diesel STD key AT	18	12V	D2664A	Black	06 pin	06	Red	(+)	Ignition connector	~
			Ground	D2664A	Black	06 pin	03	Black	(-)	Ignition connector	~
			Key position	D2664A	Black	06 pin	04	Purple/Brown	(MUX)	Ignition connector	~
			Imo Lin	D2664A	Black	06 pin	05	White/Green	(DATA)	Ignition connector	~
			CanH	~	Gray	10 pin	02	Orange	(DATA)	Trailer module, right of steering column	~
			CanL	~	Gray	10 pin	01	Yellow	(DATA)	Trailer module, right of steering column	~
			Parking Light	D2242A	Black	10 pin	01	White/Brown	(MUX)	Parking light switch	~
			Driver door pin	~	~	~	~	Purple	(-)	Harness in driver kick panel	~
			12V	D2664A	Black	06 pin	06	Red	(+)	Ignition connector	~
			Ground	D2664A	Black	06 pin	03	Black	(-)	Ignition connector	~
			Key position	D2664A	Black	06 pin	04	Purple/Brown	(MUX)	Ignition connector	~
			Imo Lin	D2664A	Black	06 pin	05	White/Green	(DATA)	Ignition connector	~

1500 Classic Diesel STD key AT	19-21	CanH	~	Gray	10 pin	02	Orange	(DATA)	Trailer module, right of steering column	~
		CanL	~	Gray	10 pin	01	Yellow	(DATA)	Trailer module, right of steering column	~
		Parking Light	D2242A	Black	10 pin	01	White/Brown	(MUX)	Parking light switch	~
		Driver door pin	~	~	~	~	Purple	(-)	Harness in driver kick panel	~

TYPE 3 – WIRING DIAGRAM – 1 OF 1
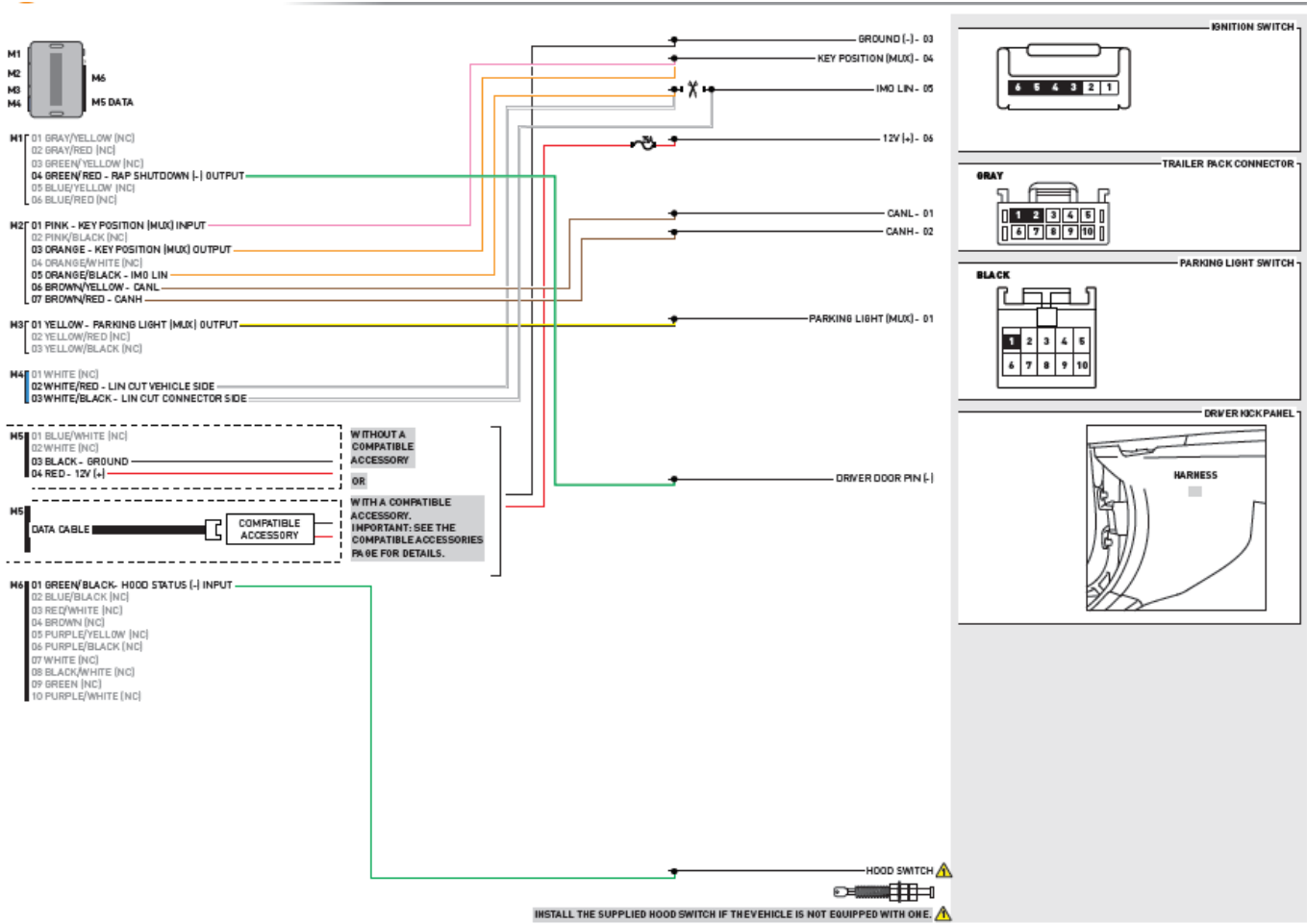
MODULE PROGRAMMING PROCEDURE – 1 OF 2

01 Close driver door. Re-open driver door to wake up data bus.

02 Press Unlock on OEM remote. If the vehicle is not equipped with an OEM remote, press the module programming button.

03 Wait, LED will flash GREEN once [1x]. If LED does not flash GREEN, press Unlock on OEM remote again.

04 Turn key to ON position.

05 Wait, LED will turn solid RED.

06 Turn key to OFF position.

07 Remove key.

08 Insert key into ignition.

09 Turn key to ON position.

10 Wait, LED will flash GREEN.

11 Turn key to OFF position.

12 WARNING: Disconnect power last. Disconnect module from vehicle.

13 Connect module to computer and proceed with extended programming.

14 WARNING: Do not press module programming button. Connect power first. Connect module to vehicle.

15 Turn key to ON position.

16 Wait, LED will turn solid GREEN for 2 seconds.

17 Turn key to OFF position.

18 Turn key to START position.

19 Turn key to OFF position.

20 Module Programming Procedure completed.

VALET MODE PROGRAMMING PROCEDURE – 1 OF 1

>> NOTE: In Valet Mode, the Remote starter is not functional. Keyless entry, Lock and Unlock will remain functional. See RF kit user manual for alternate valet mode programming.

>> To exit valet mode: repeat steps 1 to 5.

01 Time restriction. Complete next step within 7 seconds.

02 Cycle ignition ON five times (5x OFF/ON) rapidly.

03 Wait, LED 1 will turn solid RED for 2 seconds.

04 Set ignition to OFF position.

05 Valet Mode Programming Procedure completed.

MODULE NAVIGATION PROCEDURE – 1 OF 1

WARNING:

It is mandatory to exit the Module Navigation at the end of this procedure. Failure to exit the Module Navigation will drain vehicle battery. To exit the Module Navigation at any time: Follow STEP 13.

Module must be programmed to the vehicle.

Use the Module Navigation Chart on the next page.

1. Set ignition to OFF position.
2. TO ACCESS THE MENUS: Press and hold programming button until LED 1 turns solid GREEN.
3. IN THE MENUS: Press the programming button as many times as the menu number indicates. LED 1 will fl ash GREEN an equal amount of times continuously.
4. TO ACCESS THE OPTIONS: Press and hold programming button until LED 1 turns solid RED.
5. IN THE OPTIONS: Press the programming button as many times as the option number indicates. LED 1 will fl ash RED an equal amount of times continuously.

6. TO ACCESS THE SETTINGS: Press and hold programming button until LED 1 turns solid GREEN.

7. LED 1 will flash GREEN as many times as the current (or default) setting number, continuously.

8. IN THE SETTINGS: Press the programming button as many times as necessary to access your setting. LED 1 will fl ash GREEN an equal amount of times continuously.

9. **WARNING: To return to the MENUS: exit the Module Navigation and redo the Module Navigation Procedure.**

10. To save and return to the OPTIONS: Press and hold programming button until LED 1 turns solid RED.

11. LED 1 will fl ash RED as many times as the current option number continuously.

12. Configure every other setting and proceed to step 13.

13. MANDATORY: EXIT MODULE NAVIGATION. Press and hold programming button for 7 seconds. LED 1 will fl ash RED rapidly. Release programming button. LED 1 will turn OFF.

14. Module navigation completed.

15. Failure to exit the Module Navigation will drain vehicle battery.
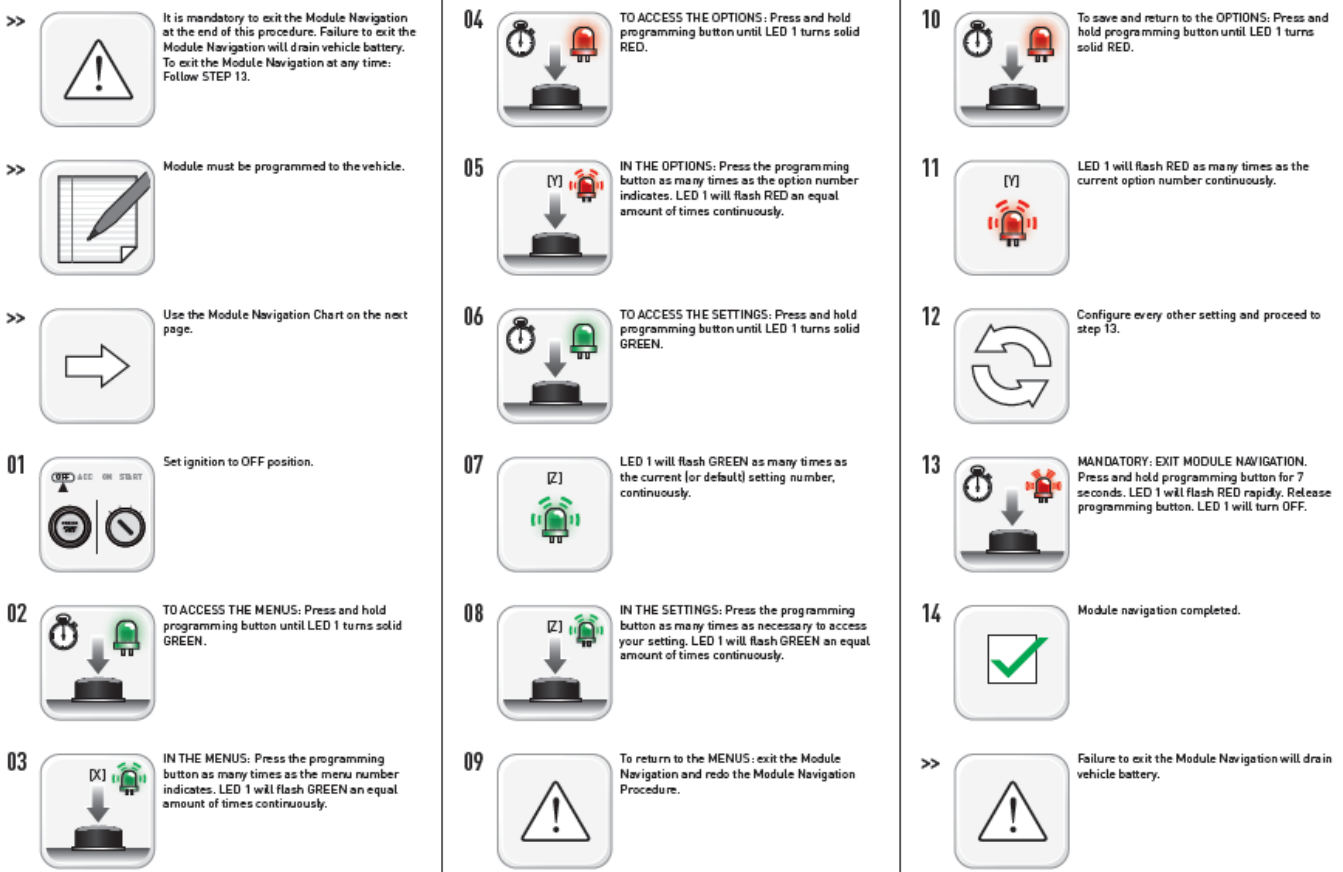
	It is mandatory to exit the Module Navigation at the end of this procedure. Failure to exit the Module Navigation will drain vehicle battery. To exit the Module Navigation at any time: Follow STEP 13.	04	TO ACCESS THE OPTIONS: Press and hold programming button until LED 1 turns solid RED.	10	To save and return to the OPTIONS: Press and hold programming button until LED 1 turns solid RED.
>>	Module must be programmed to the vehicle.	05	IN THE OPTIONS: Press the programming button as many times as the option number indicates. LED 1 will flash RED an equal amount of times continuously.	11	LED 1 will flash RED as many times as the current option number continuously.
>>	Use the Module Navigation Chart on the next page.	06	TO ACCESS THE SETTINGS: Press and hold programming button until LED 1 turns solid GREEN.	12	Configure every other setting and proceed to step 13.
01	Set ignition to OFF position.	07	LED 1 will flash GREEN as many times as the current (or default) setting number, continuously.	13	MANDATORY: EXIT MODULE NAVIGATION. Press and hold programming button for 7 seconds. LED 1 will flash RED rapidly. Release programming button. LED 1 will turn OFF.
02	TO ACCESS THE MENUS: Press and hold programming button until LED 1 turns solid GREEN.	08	IN THE SETTINGS: Press the programming button as many times as necessary to access your setting. LED 1 will flash GREEN an equal amount of times continuously.	14	Module navigation completed.
03	IN THE MENUS: Press the programming button as many times as the menu number indicates. LED 1 will flash GREEN an equal amount of times continuously.	09	To return to the MENUS: exit the Module Navigation and redo the Module Navigation Procedure.	>>	Failure to exit the Module Navigation will drain vehicle battery.

MODULE NAVIGATION CHART – 1 OF 1

MODULE NAVIGATION CHART: NOTES	[X] MENUS		[Y] OPTIONS		[Z] SETTINGS	
					0 1	OFF
			0	DISARM/UNLO		

				1	CK BEFORE START	0 2	ON
				0 2	RELOCK AFTER START	**0 1**	**OFF**
						0 2	ON
				0 3	RELOCK AFTER SHUTDOWN	**0 1**	**OFF**
						0 2	ON
				0 4	FORCE UNLOCK ALL ON FIRST PRESS	**0 1**	**OFF**
						0 2	ON
				0 5	TAKEOVER	**0 1**	**ENABLE**
						0 2	DISABLE*
				0 6	SECURE TAKEOVER DELAY	**0 1**	**45 SEC**
						0 2	90 SEC
						0 3	03 MIN
						0 4	04 MIN
				0 7	N/A	0 1	N/A
				0 8	MODULE RUN TIME	0 1	03 MIN
						0 2	05 MIN
						0 3	10 MIN
						0 4	15 MIN
						0 5	25 MIN
						0 6	30 MIN

I   Default settings are listed in bold.

II   Make sure the option is covered on the vehicle before attempting to change the setting.

	0 1	CONFIGURATI ON				0 7	35 MIN
						0 8	**15 MIN**
			0 9	WAIT TO STAR T DELAY		**0 1**	**02 SEC**
						0 2	05 SEC
						0 3	08 SEC
						0 4	10 SEC
						0 5	15 SEC
						0 6	20 SEC
						0 7	25 SEC
						0 8	30 SEC
			1 0 - 1 2	N/A		0 1	N/A
	0 2 - 0 7	Technical Suppo rt only	0 1	N/A		0 1	N/A

REMOTE STARTER ERROR CODES – 1 OF 1

REMOTE STARTER ERROR CODES: NOTES	[X] NUMBER OF PARKING LIGHT FLASHES	DIAGNOSTIC
I WARNING: The following applies only when the parking lights are connected and supported by the system. II After a remote starter failure, the parking lights will flash [X] number times to indicate an error code. See table.	03	Foot brake is ON.
	04	Hood is open.
	05	Engine tach signal is lost.
	06	System is in Valet Mode.
	07	Vehicle is moving (VSS).
	08	Glow plug timeout error.

TEST MODULE		LED 1 STATUS	DIAGNOSTIC
I	DURING PROGRAMMING	Flashing RED	Missing/wrong information from firmware or vehicle.
		Solid RED	Module waiting for more vehicle information.
		Flashing GREEN	Additional steps required to complete module programming.
		Solid GREEN then OFF	Module correctly programmed.
		OFF	No activity or module already programmed.
II	DURING REMOTE START	Flashing RED	Module incorrectly programmed.
		Solid RED	Module incorrectly programmed.
		Flashing GREEN	Module correctly programmed and operational.
		Solid GREEN then OFF	Reset in progress.
		OFF	Invalid ground when running status from remote starter.
III	WITH IGNITION OFF	Flashing RED	Module incorrectly programmed or connected.
		Solid RED	Module not programmed. Waiting for more vehicle information.
		Flashing GREEN	False ground when running status from remote starter.
		Solid GREEN then OFF	Reset in progress.
		OFF	Module at rest and ready for a remote start sequence.

MODULE RESET PROCEDURE – 1 OF 1

01 Disconnect all connectors from module except the BLACK 4-PIN connector.

02 Disconnect the BLACK 4-PIN connector.

03 PRESS AND HOLD programming button while connecting the BLACK 4-PIN connector.

04 Wait, LED 1 will flash RED. RELEASE programming button.

05 LED 1 will turn RED for 2 seconds.

06 Module RESET completed.

07 Reconnect all connectors.

08 Repeat programming procedure.

>> Failure to follow procedure may result with a DTC or a CHECK ENGINE error message.

TAKEOVER PROCEDURE – 1 OF 1

| | All vehicle doors must be closed and locked prior to remote start sequence. | | | Press and release BRAKE pedal. |

>> All vehicle doors must be closed and locked prior to remote start sequence.

01 Time restriction. Complete steps 2 to 6 within 45 seconds.

02 Press unlock on OEM or aftermarket remote.

03 Open driver door and enter vehicle.

04 Close driver door.

05 Turn key to ON position.

06 Press and release BRAKE pedal.

07 Take over procedure completed.

>> Failure to follow procedure will result in vehicle engine shutdown.

INSTALLATION CHECKLIST – 1 OF 1

CHECKLIST	
1	WARNING: Vehicle engine will start many times. Test in a well ventilated area.
2	Close all vehicle doors, hood and trunk.
3	Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	Question 1: Does the vehicle remote start?
¨	YES: Go to next step.
¨	NO: The module doesn't detect OEM remote lock button from the vehicle communication network. Check all connections, repeat the test and call technical support, if the problem persists.
4	Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down vehicle.
	Question 2: Does the vehicle shut down?

	¨	YES: Go to next step.
	¨	NO: Repeat step. If the problem persists, press on the brake pedal once [1x] to shut down the vehicle and call technical support.
5		RAP Shutdown test
	¨	**Question 3:** Did the radio, interior controls, and headlights turn off within 60 seconds after remote start shutdown?
	¨	YES: Go to next step.
	¨	NO: Verify the RAP SHUTDOWN connections as illustrated in the wiring diagram. Repeat the test and call technical support, if the problem persists.
6		Open hood.
7		If not already installed, affix the mandatory orange warning sticker under the hood and proceed to next step.
8		Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
	¨	**Question 4:** Does the vehicle remote start?
	¨	YES: The vehicle is not equipped with a factory hood pin. Install a mandatory aftermarket hood switch, then repeat the test.
		NO: Go to next step.
9		Close hood.
10		Enter vehicle and close the doors.
11		Press LOCK button three times [3x] rapidly on the OEM keyfob to remote start vehicle.
12		Wait for the vehicle to start.
13		Press brake pedal.
		Question 5: Does the vehicle shut down?
	¨	YES: Go to next step.
	¨	NO: The module does NOT detect the brake pedal signal. Press LOCK button three times [3x] rapidly on the OEM keyfob to shut down, check the brake connection as illustrated in the wiring diagram, if applicable, and call technical support.
14		Exit vehicle.
15		Installation checklist completed.

www.idatalink.com

Documents / Resources

	idataLINK ADS-ALCA Remote Starter and Interface Module [pdf] Installation Guide OEM-AL RS -CH8- ADS-ALCA -EN, ADS-ALCA Remote Starter and Interface Module, ADS-AL CA, Remote Starter and Interface Module, 77776, 20211115
	idatalink ADS-ALCA Remote Starter and Interface Module [pdf] Installation Guide ADS-ALCA, Remote Starter and Interface Module

References

- ⓘ **iDatalink - Home**