

PBS-M

Marine Push Button Start

INSTALLATION & USER GUIDE



PBS-M CONTENTS

The following list of components are included in this system:

- | | |
|-------------------------------------|----------------------|
| 1 – Push Button Start & RFID Reader | 1 – PBS Harness Pack |
| 1 – RFID Antenna | 1 – RFID Floaty |
| 1- RFID Customer Card | 1 – Start Button |

WARNING AND SAFETY INFORMATION

PRODUCT SAFETY AND LEGAL DISCLAIMER

- This product shall be installed by a certified technician therefore a certain level of competence and knowledge are therefore assumed when reading this guide.
- This guide is provided as a GENERAL installation manual, some boats may require additional steps.
- Exercise due-diligence when installing this product. The manufacturer and distributors of this product will not accept any responsibility for vehicle damage or personal injury resulting from the installation of this product. Installation of this product is acceptance of this statement and releases the Manufacturer/Distributors of this product from any direct or indirect liabilities.
- Once installation is complete, please return this guide along with other documentation included in this product back to the customer for future reference. The manufacturer/distributors of this product do not guarantee this particular version will be available at a later date.

PRE-INSTALLATION CONSIDERATIONS

- Carefully read and understand the Installation Guide
- Install in a well-lit, Prepare all tools required for the installation.
- Verify the boats existing Ignition works properly and does not have any outstanding electrical/functional issues prior to installation.
- To avoid a short circuit, it is recommended to pull-out main power fuses before installation and put them back when installation is complete.
- Only locate necessary wires related to the installation (Typically they are best accessed directly behind the existing Key Switch) and connect them to the unit according to the wiring diagram. Use a Multimeter to verify and confirm wire's function and polarity before connecting or disconnecting.
- Begin function tests on the system after verifying and ensuring all wires have been connected correctly and insulated properly.



DO NOT power up the module before it is properly grounded. Should the unit be powered before being grounded, serious damage to internal components could occur.

CONNECTIONS - HARNESS

Push Button Start Module Main Power Harness Wiring Descriptions

Main Power Harness 8-Pin (14-16 Gauge Wires)

| | | | | |
|-------------|--|---|--|-----------------|
| Pink | | - | | NOT USED |
|-------------|--|---|--|-----------------|

NOT USED

| | | | | |
|--------------|--------|---|-----|----------------|
| White | OUTPUT | + | 30A | STARTER |
|--------------|--------|---|-----|----------------|

Connect this output to the Boats Starter input at the ignition switch.

IMPORTANT: Ensure that the ignition current is not rated for more than 30A. Connect to external relay with higher current rating if required.

| | | | | |
|------------|-------|---|-----|---------------------|
| Red | INPUT | + | 30A | Battery +12V |
|------------|-------|---|-----|---------------------|

Connect to a constant +12V supply wire at the ignition switch. Ensure that the OEM input power wire is fused for no more than 30A.

Note: When no suitable +12V source available, connect to vehicle's power supply at the fuse junction box or connect directly to the Positive + terminal on the battery.

| | | | | |
|--------------|--------|---|-----|--------------|
| Green | OUTPUT | + | 30A | IGN 1 |
|--------------|--------|---|-----|--------------|

Connect this output wire to the vehicle's primary ignition (ON) input at the ignition switch.

| | | | | |
|-------------|--------|---|-----|--------------|
| Blue | OUTPUT | + | 30A | ACC 1 |
|-------------|--------|---|-----|--------------|

If applicable, connect this output wire to the vehicle's Accessory (ACC 1) input at the ignition switch. This output will be +12V in ON and RUN state and **OFF** while cranking.

| | | | | |
|--------------|-------|---|--|---------------|
| Black | INPUT | - | | Ground |
|--------------|-------|---|--|---------------|

Connect to bare, unpainted metal on chassis. It is recommended to use a factory ground bolt rather than a self-tapping screw. Screws tend to get loose or rusted over time and lead to erratic electrical problems.

| | | | | |
|------------|-------|---|-----|---------------------|
| Red | INPUT | + | 30A | Battery +12V |
|------------|-------|---|-----|---------------------|

Connect to a constant +12V supply wire at the ignition switch. Ensure that the OEM input power wire is fused for no more than 30A.

Note: When no suitable +12V source available, connect to vehicle's power supply at the fuse junction box or connect directly to the Positive + terminal on the battery.

| | | | | |
|---------------|--------|---|-----|--------------|
| Yellow | OUTPUT | + | 30A | ACC 2 |
|---------------|--------|---|-----|--------------|

Use this output to power any accessories you would like to energize without Starting the motor. (Example: A Radio or Aux Lighting) This output power up with the will be **OFF** while cranking.

Ignition Output Table:

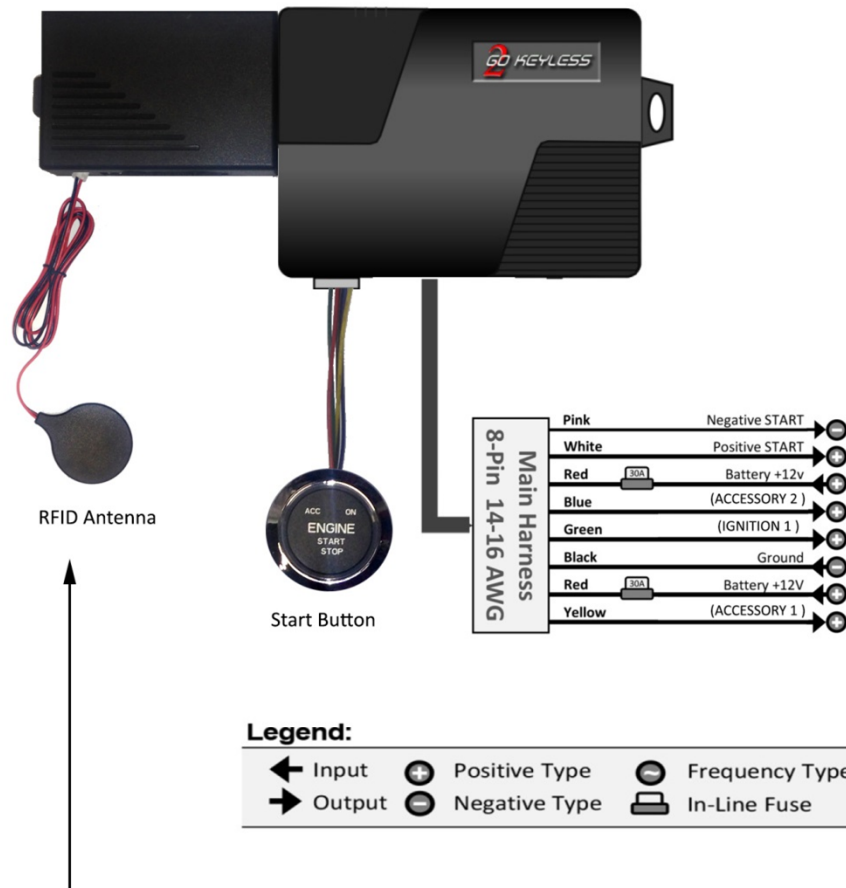
Following table shows state of the ignition outputs when system is in ACC, ON, START and RUN mode:

Note* This table show LED colors for Lexus and Lexus Slim Line Buttons only

| System State | Button Status LED | ACC 2 | IGN 1 | ACC 1 | START |
|---------------|-------------------|-------|-------|-------|-------|
| OFF | All Off | - | - | - | - |
| Ready | Amber | - | - | - | - |
| ACC | Green | 12v | - | - | - |
| ON | Red | 12v | 12v | 12v | - |
| START (Crank) | All Off | - | 12v | - | 12v |
| RUN (ON) | Backlight Only | 12v | 12v | 12v | - |

Connections for DGD-PBS - M

PUSH BUTTON START MODULE WIRING DIAGRAM



The RFID Antenna may be mounted behind most any material other than metal.

Use the dual sided tape to mount the antenna in the location you prefer.

To authorize the system you simply hold either the RFID Floaty or Customer Card within 2" of the antenna.

PUSH BUTTON START OPERATION

To operate the system:

1. Hold the RFID Floaty or RFID Customer Card within 2” of the antenna.

Point end of RFID
Floaty at antenna



The systems Start Button will light up and you will hear a “Beep” to let you know the RFID Floaty has authorized the system

2. To START the Engine

Press press-and-hold the start button for 2 seconds to engage the starter, release the button after the engine is started.

Note* If the system fails to start, the system will enter RUN mode. You must walk the unit through a OFF sequence (exit the RUN mode) before attempting to restart the engine.

3. To TURN-OFF the Engine

- press and hold the button for 3 seconds to turn the ignition OFF.

Switching between the Ignition modes (All LED colors relate to Lexus style buttons)

- The AMBER status light is on after the RFID Fob is identified (The Ignition is enabled and system is ready).
- Push the start button once quickly to turn on the ACC 2 circuit and the status light turns solid GREEN.
- Push the start button a second time to turn on the IGNITION + ACC circuits, the status light turns on solid RED.
- Push the start button a third time to switch the unit into OFF mode, the status light turns solid AMBER.
- The over all sequence is: OFF > ACC 2 > IGN + ACC 1 & 2 > OFF.