URES

Universal Remote Engine Starter

XEQOUZ

INSTRUCTION MANUAL
URES-3-T

Instruction Manual
3rd Edition (Revised #3)
26.11.2003

IMPORTANT! PLS READ BEFORE BEGINNING

This unit is designed for use in 12VDC **auto-transmission** vehicle with a negative ground. The ignition switch (or car operating key-shaft) of this vehicle must be of +12VDC operation type (i.e. for Accessories, Ignition and/or Starter to operate, a +12VDC is switched to the respective line at the ignition switch harness).

A

FOREWORD

Thank you for purchasing the Xeqouz Universal Remote Engine Starter.
We hope that it will be a valued addition to your car and alarm system.
Be sure to read this Instruction Manual carefully before installing and operating the new device.
In it you will find all the information you need to install and use the device.
After reading, please retain this Instruction Manual in a convenient location in the car for reference.
Please include this manual with the unit when selling.
If you have any query that is not answered by the manual, please contact your dealer.

INTRODUCTION

The Xeqouz Universal Remote Engine Starter (URES) utilises the existing car alarm system's RF transmission capability to start/stop the car engine. No modify of the existing alarm module or the remote control is involved, except the tapping of some wires from the car ignition switch harness and the alarm module wire harness. The URES is a hidden device (with only an exposed red superbright LED indicator) that comes with a TurboTimer and PitStop feature. All settings will be done only via the brake pedal and the car key whenever required by the user.

FEATURES

Main functions and features of the URES.

- Suitable for car alarm systems with or without Auxiliary Output
- Remote engine start
- Remote engine stop
- Red superbright LED indication
- Recordable engine starting sequence (i.e. ignition delay & cranking delay)
- Presetable delay of 5 – 30 secs before Accessories(aircon, radio, etc.) enabling after remote engine start
- TurboTimer selectable to On/Off
- TurboTimer presetable from 5 secs onwards
- TurboTimer disables Accessories(aircon, radio, etc.) 3 secs before shutting down engine
- Presetable 5, 10, 15 or 20 mins timer to engine auto-stop after remote engine start and PitStop feature
- All settings automatically stored in memory even with car battery removed
- PitStop feature (Carkey removable and car able to arm/lock while engine still running)
- Compact dimensions L.66 W.59 H.23 Wt.85g
- On/Off Power Switch for the URES

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⚠ IMPORTANT PRECAUTIONS

- Installations are to be carried out only by qualified car electricians experienced in this field.
- Always connect the wiring exactly as shown in this Instruction Manual.
- Only use this product for the intended purposes listed within this manual.
- Always make sure that the vehicle does not have an engaged gear before operating.
- Do not hang the unit loosely. Securely mount this unit away from any area that may affect driving.
- Do not mount this unit in the engine compartment. It is recommendeded to be stowed with the alarm unit under the driver's side dash or behind the kick panel.
- This unit is designed only for used in 12VDC vehicle with a negative ground.
- Improper installation may cause product or other electrical/electronic devices within the car to fail/malfunction or may even cause fire due to short-circuit or current overload.
- Discontinue use of this product immediately if there is abnormal sound, smoke or smell. Contact your dealer immediately.
- Never attempt to repair or modify the unit. Return faulty unit to your dealer.
- Never attempt to modify or replace the LED indicator with other form of indication. Use only the LED indicator supplied in this package.
- Do not turn off the On/Off Power Switch while the URES is in operation (i.e. when the LED indicator is lighted up).

TABLE OF CONTENTS

PACKAGE CONTENTS

You will find the following items in this package.

The Universal Remote Engine Starter	x 1
Wire Harness with Connector (10 pins), On/Off Power Switch and Grounding Terminal Lug	x 1
Red Superbright LED with Wire and Connector (2 pins)	x 1
Instruction Manual (This Booklet)	x 1

Pls contact your dealer immediately if any of these items is missing.

Red Superbright LED Indicator with Wire and Connector (2 pins)

Wire Harness with Connector (10 pins), On/Off Power Switch and Grounding Terminal Lug

pin 1

pin 10
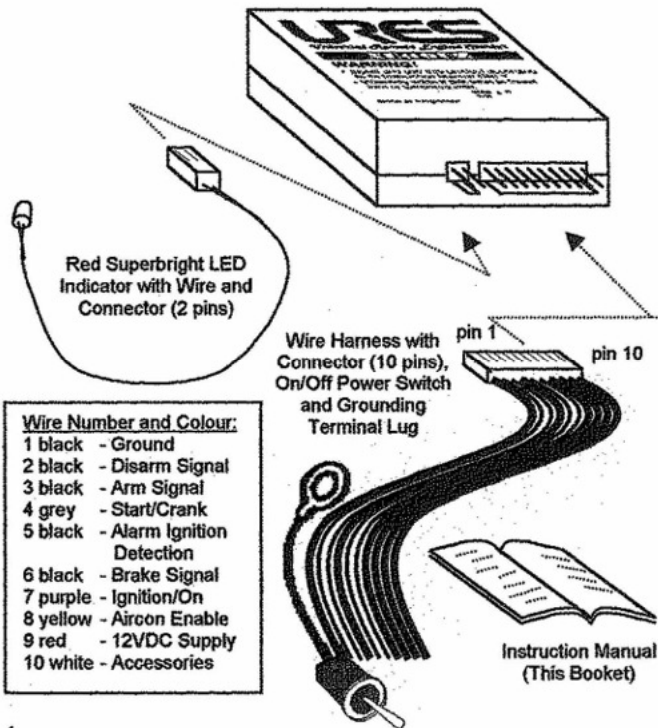
Wire Number and Colour:
1 black - Ground
2 black - Disarm Signal
3 black - Arm Signal
4 grey - Start/Crank
5 black - Alarm Ignition Detection
6 black - Brake Signal
7 purple - Ignition/On
8 yellow - Aircon Enable
9 red - 12VDC Supply
10 white - Accessories
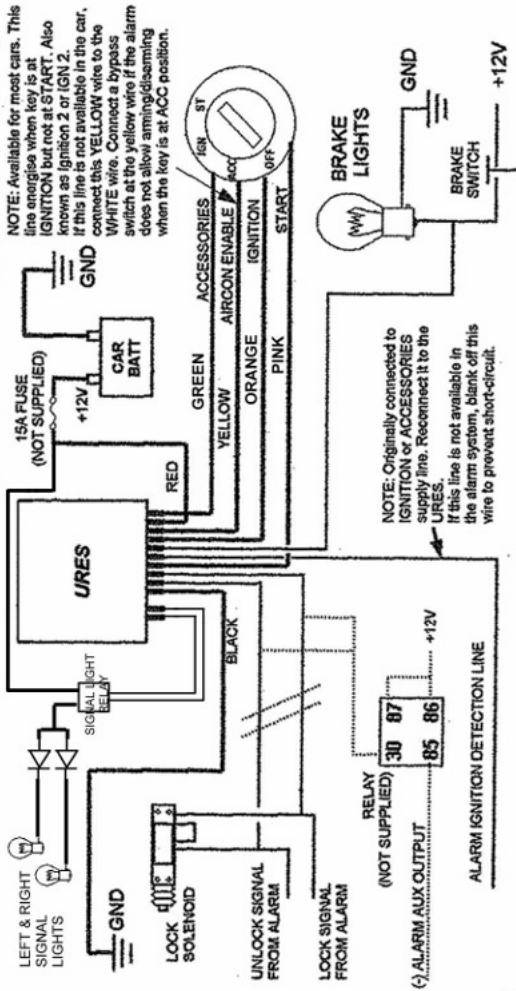
Instruction Manual (This Booket)

Wiring Instructions and Diagram

All wires of the 10-pin wire harness must be connected before completion.
Any unused wiring is to be terminated or blanked off properly to prevent short-circuit with other conductors.
Battery should be connected back and all connections are to be checked for correct connections via a voltmeter before hooking up the wire harness and the LED indicator to the URES.
DO NOT TAP FROM THE LOCK SOLENOID IF USING ALARM AUX OUTPUT LINE. (See dotted lines below)

NOTE: Available for most cars. This line energise when key is at IGNITION but not at START. Also known as Ignition 2 or IGN 2.
If this line is not available in the car, connect this YELLOW wire to the WHITE wire. Connect a bypass switch at the yellow wire if the alarm does not allow arming/disarming when the key is at ACC position.

NOTE: Originally connected to IGNITION or ACCESSORIES supply line. Reconnect it to the URES.
If this line is not available in the alarm system, blank off this wire to prevent short-circuit.

GND

BRAKE LIGHTS

+12V

BRAKE SWITCH

IGN   ST
ACC
OFF

ACCESSORIES
AIRCON ENABLE
IGNITION
START

GREEN
YELLOW
ORANGE
PINK

RED

15A FUSE (NOT SUPPLIED)
+12V
CAR BATT
GND

URES

SIGNAL LIGHT RELAY

BLACK

LEFT & RIGHT SIGNAL LIGHTS

GND

LOCK SOLENOID

UNLOCK SIGNAL FROM ALARM

LOCK SIGNAL FROM ALARM

RELAY (NOT SUPPLIED)
30 87
85 86
+12V

(-) ALARM AUX OUTPUT

ALARM IGNITION DETECTION LINE

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FACTORY PRESET

The URES is factory preset with the following parameters.

- For use with 1-Button Arm/Disarm Toggle Type Remote.
- 10 mins to engine auto-shutoff after remote start or PitStop activation.
- 5 secs engine check delay before 0.8 secs start/crank delay.
- 5 secs to Accessories(i.e. aircon, radio, etc.) enable after remote start.
- TurboTimer enabled with 10 secs delay.

DETERMINING SETTINGS PREFERENCE

It is advisable to know the capability of the URES and determine the desired new setting parameters before beginning the setting up process in the next section (**Setting Up The URES**) to avoid missing out any steps or confusion while setting up.

The rest of this section will cover all the available settings purposes and specifications.

Identify the type of alarm remote that you are using

There are basically 3 types of remotes in car alarm systems. The URES can be configured to be used with these 3 types of remotes. Ignore this part if the URES was installed to be activated via the Alarm's Auxiliary Output Button.

- If there is only one button in the remote that you can press to toggle the alarm between arm and disarm, it is known as a <u>1-Button Arm/Disarm Toggle Type Remote</u>.
- If there are separate arm and disarm button in the remote, and if the lock solenoid energise for every press on the arm button, it is known as a <u>2-Button Separate Arm/Disarm Type Remote</u>. Please take note that some alarm system will not energise the lock solenoid when the arm button is pressed in armed state, in this case, the URES has to be configured to 1-Button Arm/Disarm Toggle Type configuration.

Arm/Disarm button → ← Panic button
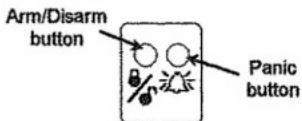
Example of a 1-Button Arm/Disarm Toggle Type Remote

Arm button → Disarm button ←
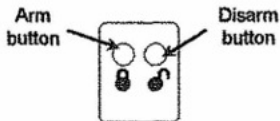
Example of a 2-Button Separate Arm/Disarm Type Remote

- Additionally if the alarm does have an Auxiliary Output for remote engine start or trunk release add-on feature, it can be utilised to remote start/stop the engine. Remote of this type of alarm system is known as <u>Remote with Auxiliary Output Button</u>.

Arm button
Disarm button
Aux Output button
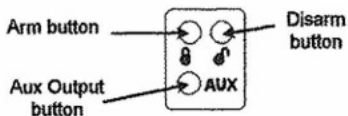
Example of a Remote with Auxiliary Output Button

<u>Timer to engine auto-shutoff after remote start or PitStop activation</u>

This feature ensures that the engine will not run forever after remotely started or PitStop activation.
- This timer is presetable to 5, 10, 15 or 20 mins.
- This timer will start counting down upon remote engine start activation or PitStop activation.
- The Accessories will cutoff when the countdown completes, follow by the engine 3 secs after.

<u>Engine starting sequence</u>

The URES can be programmed to start the engine exactly the way the user wants it to start i.e. pausing for a specific period of time at the IGN position and crank for a specific period of time.
- At Ignition/On position, minimum 0 sec to maximum 20 secs.

<u>Delay to Accessories enable after start</u>

This feature allows the engine to run for awhile before enabling the power supply to the Accessories (aircon, radio, etc.).
- This delay is presetable to 5, 10, 15, 20, 25 or 30 secs.

<u>TurboTimer delay</u>

TurboTimer allows the engine to run for a short preset period of time automatically after the key is being removed.
- Minumum 5 secs to > 30 mins! (Don't be crazy).
- TurboTimer will start counting down when the key is turn anti-clockwise from the IGN position.
- The Accessories will cutoff when the countdown completes, follow by the engine 3 secs after. (E.g. when it is set to 3 secs, Accessories cutoff at 3rd sec and engine shutoff at 6th sec.)

<u>TurboTimer On/Off</u>

This option allows the user to set TurboTimer to Off when either there is already a TurboTimer unit installed to the car or the user just simply prefers this function to be Off.
- On/Off

SETTING UP THE URES

This section covers the 5 main procedures for setting up the URES to user preferences. When in doubt or confusion during setting up, turn the key to OFF position to end and start all over again. Contact your dealer if still in doubt.

To start setting up, the following procedure must be carried out to get into the Setting Mode.

For 1-Button Arm/Disarm Toggle Type Remote,

1. Turn the key to ACC(Accessories) position.
2. Make sure that the brake pedal is **not** stepped on.
3. On the alarm remote, press the Arm/Disarm button to arm the car
   (LED flash once)
   and press the Arm/Disarm button again to disarm.
   (LED flash twice).

arm, then disarm
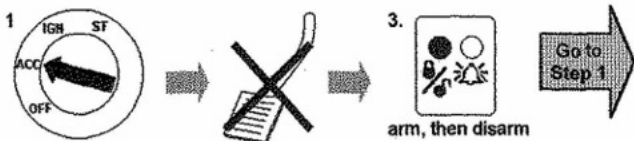
For 2-Button Separate Arm/Disarm Type Remote,

1. Turn the key to ACC(Accessories) position.
2. Step and hold on the brake pedal.
3. On the alarm remote, press the Arm button
   (LED flash once)
   follow by the Disarm button
   (LED flash twice).
4. Release brake pedal.

arm, then disarm
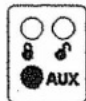
step & hold
brake pedal
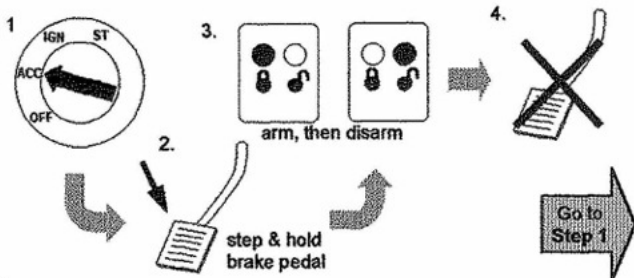
<u>For Remote with Auxiliary Output Button,</u>

1. Turn the key to ACC(Accessories) position.
2. On the alarm remote, press the Auxiliary Output Button.
   (LED flash three times)
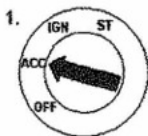
After the above procedures had been performed, the device is now in the setting mode. Proceed to Step 1 (below). After changes to the settings have been made (if any), it is compulsory to end the setting session to put the device back to normal operation.

To end at anytime during Setting Mode,
    simply turn the key to OFF position at any time to end setting mode.
        (LED flash twice)
    Any setting done will be saved. Any setting skipped will not change.

Step 1 <u>Setting the timer to engine auto-shutoff after remote start or PitStop activation</u>
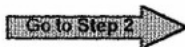
To set,
    the first tap (step & release) on the brake pedal will set timer to 5 mins.
        (LED flash once)
    Subsequent taps on the brake pedal for 5 mins increments.
        (LED flash once every tap)
    Maximum of 20 mins can be set.
   (LED flash twice at max)

1 tap = +5 mins
(maximum 20 mins)

To skip to Step 2 (Setting the engine starting sequence),
    simply ignore this step. Previously set will not be changed.

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Step 2 Setting the engine starting sequence

To set,
turn the key to IGN/ON(Ignition) position and START(Crank) position to start the engine.
(LED flashes at IGN and stop flashing at START).

wait for
ENGINE CHECK
light to extinguish
(if any)
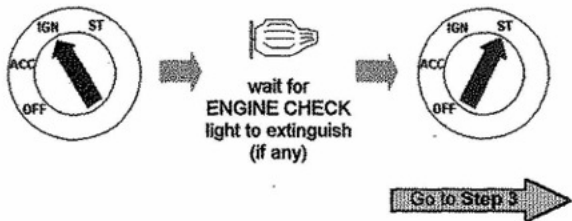
Go to Step 3

To skip to Step 3 (Setting the delay to Accessories enable after start),
turn the key to IGN/ON(Ignition) position and tap the brake pedal once.
This tap on the brake pedal will be considered the first tap for Step 3.
(LED flashes at IGN and stop flashing upon BRAKE)

tap
once

To skip to Step 4 (Setting the TurboTimer delay),
turn the key to IGN/ON(Ignition) position and turn back to
ACC(Accessories) position
(LED flashes at IGN and stop flashing at ACC)

Step 3 <u>Setting the delay to Accessories enable after start</u>

To set,
the first tap on the brake pedal will set the delay to 5 secs.
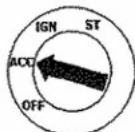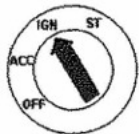(LED flash once)
Subsequent tap on the brake pedal for 5 secs increment.
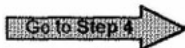(LED flash once every tap)
Maximum of 30 secs can be set.
(LED flash twice at max)
Turn the key to ACC(Accessories) position when done.

1 tap = +5 secs
(maximum 6 taps)

Go to Step 4

To skip to Step 4 (Setting the TurboTimer delay),
turn the key to ACC(Accessories) position.
(LED extinguishes)

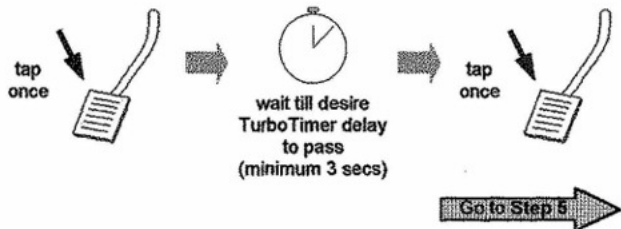# Step 4 <u>Setting the TurboTimer delay</u>

To set,
tap the brake pedal to start timing.
(LED starts to flash twice every 2 secs)
Wait for the desire TurboTimer delay time to pass.
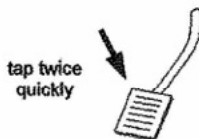Tap the brake pedal again to stop timing.
(LED extinguishes)

tap
once

wait till desire
TurboTimer delay
to pass
(minimum 3 secs)

tap
once

Go to Step 5

To skip to Step 5 (Setting the TurboTimer On/Off),
tap the brake pedal twice within 2 secs.
(LED flash 4 times rapidly)

tap twice
quickly

Step 5 <u>Setting the TurboTimer On/Off</u>

To set,
> the first tap on the brake pedal set the TurboTimer to On.
> (LED flash once)
> The next tap on the brake pedal will set the TurboTimer to Off.
> (LED flash twice)
> Subsequent tap on the brake pedal will toggle between On and Off.
> (LED flash once and twice respectively)

1st tap = On
2nd tap = Off
3rd tap = On

To end,
> turn the key to off. (LED flash twice)

EXAMPLES OF SETTING UP AND SKIPPING STEPS

Going straight to Setting the delay to Accessories enable after start to 10 secs

1. Turn key to ACC(Accessories) position.
2. Press Arm.   - LED flash once
3. Press Disarm.   - LED flash twice
    << Setting Mode Starts >>
4. Turn key to IGN/ON(Ignition) position.   - LED flashes
5. Tap the brake pedal once.   - LED extinguishes
    << 5 secs Set >>
6. Tap the brake pedal again.   - LED flash once
    << 10 secs Set >>
7. Continue...

Going straight to Setting the TurboTimer delay to 12 secs

1. Turn key to ACC(Accessories) position.
2. Press Arm.   - LED flash once
3. Press Disarm.   - LED flash twice
    << Setting Mode Starts >>
4. Turn key to IGN/ON(Ignition) position.   - LED flashes
5. Turn key back to ACC position.   - LED extinguishes
6. Tap the brake pedal once.   - LED lights up
    << Timer Starts >>
7. Wait for 12 – 3 = 9 secs.
8. Tap the brake pedal again.   - LED extinguishes
    << 12 secs Set >>
9. Continue...

Going straight to Setting the TurboTimer Off

1. Turn key to ACC(Accessories) position.
2. Press Arm.   - LED flash once
3. Press Disarm.   - LED flash twice
    << Setting Mode Starts >>
4. Turn key to IGN/ON(Ignition) position.   - LED flashes
5. Turn key back to ACC position.   - LED extinguishes
6. Tap the brake pedal twice within 2 secs.   - LED flash 4 times
7. Tap the brake pedal once.   - LED flash once
    << TurboTimer On >>
8. Tap the brake pedal again.   - LED flash twice
   << TurboTimer Off >>
9. Turn key to OFF position.   - LED flash twice
    << Setting Mode Ends >>

REMOTE ENGINE START

- This feature allows the user to start the engine using the existing alarm remote. The Accessories(i.e. aircon, radio, etc.) will be powered up 5, 10, 15, 20, 25 or 30 secs (depending on preset) later after engine start.

- The car will be in either armed or disarmed state after start, depending on what was last pressed. Afterwhich the car can be disarmed for access.

- To take over from the URES, insert the key and turn to IGN/ON(Ignition) position.

⚠ CAUTION!!! DO NOT TURN THE KEY TO START(CRANK) POSITION.
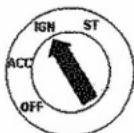
- Tap once on the brake pedal once before moving off. The URES will handover to the key 3 secs later upon brake pedal released.
  Note: The URES will not handover to the key until the brake pedal is released for 3 secs. (LED will extinguish when the URES had handed over completely to the key)

⚠ CAUTION!!! DO NOT DRIVE OFF WHEN THE LED IS STILL LIGHTED IN CASE THE KEY IS NOT AT THE CORRECT POSITION

To Trigger Remote Start for Remote with Auxiliary Output Button

- Activate the Auxiliary Output in accordance with the alarm's manual.
  << Car Started >>

To Trigger Remote Engine Start for 1-Button Arm/Disarm Toggle Type Remote

While the car is in armed state.
- Press the Arm/Disarm button twice within 5 secs.
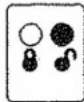   - << **Car Started and Armed** >>

 x 2 times

To Trigger Remote Engine Start for 2-Button Separate Arm/Disarm Type Remote

While the car is in armed state.
- Press the Arm button twice within 5 secs;
    - << **Car Started and Armed** >>
- Press the Disarm button twice within 5 secs, or;
    - << **Car Started and Disarmed** >>
- Press the Arm button follow by the Disarm button within 5 secs.
    - << **Car Started and Disarmed** >>

 x 2 times

 x 2 times

arm, then disarm

While the car is in disarmed state.
- Press the Disarm button twice within 5 secs
   - << **Car Started and Disarmed** >>

 x 2 times

PITSTOP FEATURE

This feature allows the user to keep the engine and the Accessories(i.e. aircon, radio, etc.) running while removing the key. Afterwhich the car can be armed/disarmed. The engine can also be remotely stopped using the existing alarm remote (see next section on **Remote Engine Stop**)

To Activate PitStop

While the engine is running and the URES is at standby (LED off).
Step and hold the brake pedal, follow by turning the key to OFF position.
(LED flashes ONCE every 2 secs)

step & hold
brake pedal
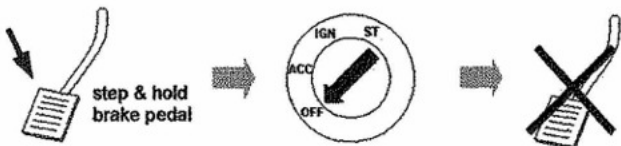
To De-Activate PitStop

To take over from the URES, insert the key and turn to IGN/ON(Ignition) position.

⚠ CAUTION!!! DO NOT TURN THE KEY TO START(CRANK) POSITION.

- Tap once on the brake pedal once before moving off. The URES will handover to the key 3 secs later upon brake pedal released.
  Note: The URES will not handover to the key until the brake pedal is released for 3 secs. (LED will extinguish when the URES had handed over completely to the key)

⚠ CAUTION!!! DO NOT DRIVE OFF WHEN THE LED IS STILL LIGHTED IN CASE THE KEY IS NOT AT THE CORRECT POSITION

REMOTE ENGINE STOP

This feature allows the user to stop the engine using the existing alarm remote only while the URES is running the engine without the key inserted (i.e. after remote engine start, during PitStop operation or during TurboTimer operation. The Accessories(i.e. aircon, radio, etc.) will cutoff immediately upon activation, and the engine will shutoff 3 secs later.

To Trigger Remote Engine Stop for Remote with Auxiliary Output Button

- Activate the Auxiliary Output in accordance with the alarm's manual.
    - << **Car Stopped** >>

To Trigger Remote Engine Stop for 1-Button Arm/Disarm Toggle Type Remote

While the car is in armed state.

- Press the Arm/Disarm button twice within 5 secs.
    - << **Car Stopped & Armed** >>

To Trigger Remote Engine Stop for 2-Button Separate Arm/Disarm Type Remote

While the car is in armed or disarmed state.

- Press the Disarm button follow by the Arm button within 5 secs.
    - << **Car Stopped & Armed** >>
- Press the Disarm button twice within 5 secs
    - << **Car Stopped and Disarmed** >>

disarm, then arm
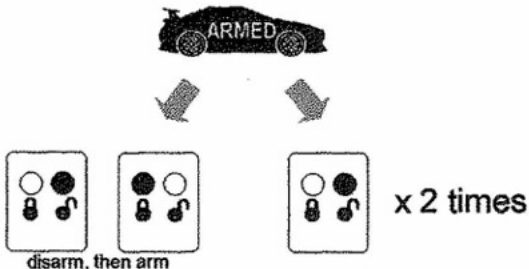
TURBOTIMER

This feature, when set to on, will allows the user to keep the engine and the Accessories (i.e. aircon, radio, etc.) running for a preset period while removing the key. Afterwhich the car can be armed/disarmed. The engine can also be remotely stopped using the existing alarm remote (see previous section on **Remote Engine Stop**)

To Activate TurboTimer

While the engine is running and the URES is at stangby (LED off).
Make sure that the brake pedal is not stepped on.
Turn the key to OFF position. (LED flasheS TWICE every 2 secs)

To Stop TurboTimer Operation

- While the TurboTimer is in operation, tapping the brake pedal once will cutoff the Accessories (i.e. aircon, radio, etc.) immediately and shut off the engine 3 secs later.
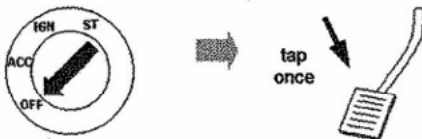
For 1-Button Arm/Disarm Toggle Type Remote

- Refer to **OPERATIONS** under **Remote Engine Stop** on page 18.

For 2-Button Arm/Disarm Toggle Type Remote

- Refer to **OPERATIONS** under **Remote Engine Stop** on page 18; or
- Press the Arm button once anytime after the car is armed.

- If you are having a problem with the URES, check this list for a possible solution before calling for service.
- If you cannot solve the problem from the hints given here, or the unit has been damaged, contact your dealer for service.

✶ Problem : None of the feature works.
   Solution 1 : Check that the On/Off Power Switch "On".
   Solution 2 : Check and replace fuse if blown. Check power and ground connections if fault persists.

✶ Problem : LED does not light up even though the feature works.
   Solution : Check LED connector for security. Contact dealer if fault persist, do not attempt to repair the unit or LED.

✶ Problem : Remote engine start does not activate when the Arm/Disarm button is pressed twice rapidly.
   Solution : The URES may be configured for use with a 2-Button Separate Arm/Disarm Type Remote. Refer to **Setting Up The URES** under <u>For 1-Button Arm/Disarm Toggle Type Remote</u> on page 8.

✶ Problem : The doors unlock automatically while driving.
   Solution : The URES may be mounted loosely causing it to hit other object while the vehicle is moving. Secure the unit properly.

✶ Problem : After activating remote engine start, the starter cranks but the engine does not not fire up. LED remains on.
   Solution 1 : Tap the brake pedal to reset. Check battery water (replace if necessary). Perform setting on the engine starting sequence again (refer to to **Setting Up The URES** under **Step 2** <u>Setting the engine starting sequence</u> on page 10).
   Solution 2 : If problem only happens when the engine is cool, Perform setting on the engine starting sequence first thing when the engine is cool.

PRODUCT SPECIFICATIONS

|	
Operational Voltage	10VDC ~ 15VDC
Operating temperature	-20°C ~ +55°C

DISCLAMERS

- This Instruction Manual is subject to change without prior notification.
- This unit has been designed for common Japanese specification vehicles. It may not work as well or properly in other types of vehicles.
- This product is designed to be professionally installed and used in an auto-transmission vehicle in which all systems and associated components are in perfect condition.
- The manufacturer and vendors of this product shall not be liable for any accident or injury caused by the use of this product.
- This product does not have any warranty expressed or implied outside of Singapore.
- Malfunction units should be returned to the dealer of purchase with proof of purchase. Warranty terms will be determined at the sole discretion of a trained product engineer after inspection. Inspection time may vary according to product and complexity of claim.
- Warranty voids if the unit shows signs of tampering or installation error.

URES UPGRADED SOFTWARE SUPPLEMENTARY NOTES

The On/Off Power Switch had been removed in this latest version of URES. Activation/Deactivation of the URES is as follows.

To Deactivate the URES

While the engine is running and the URES is at standby (LED off). Step and hold the brake pedal follow by turning the key to OFF position. (LED lights up)
Continue to hold the brake pedal till engine cease.

step & hold brake pedal

keep holding on to brake pedal
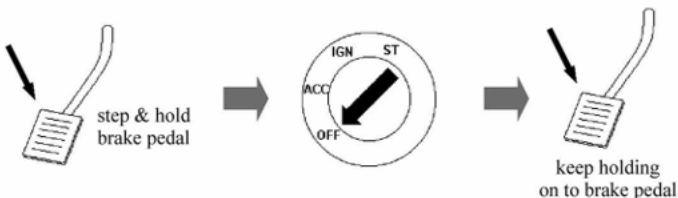
To Activate the URES

While the engine is at rest, follow steps in **Setting Up The URES** in page 8 according to the alarm's configuration to get into the Setting Mode.
Next, end the Setting Mode by turning the key back to OFF position. The URES is now activated.