

MANUAL FOR INSTALLATION
AND OPERATING INSTRUCTION

THORN 99

REMOTE CONTROLLED CAR STARTER ALARM SYSTEM

OWNER'S GUIDE

This device complies with part 15 of F.C.C rules. Operation of this device is subject to the following two conditions. 1. This device may not cause harmful interference. 2. This device must accept any interference that may cause undesired operation. NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

FEATURES

- MICRO SIZED CPU
 - TWO COMPACT REMOTE TRANSMITTERS
 - REMOTE RANGE UPTO 600M
 - 127dB HIGHT POWER WEATHER PROOF SIREN(1 TONE/6 TONES)
 - REMOTE ARMING AND DISARMING
 - REMOTE PANIC OPERATION
 - PASSIVE OR ACTIVE ARMING SELECTABLE BY TRANSMITTER
 - PASSIVE ARMING AND DOOR LOCK
- : AUTOMATICALLY 20 SECONDS AFTER LAST DOOR IS CLOSED
- AUTO REARMING
 - REMOTE POWER DOOR LOCK/UNLOCK OPERATION
 - REMOTE TRUNK RELEASE OPERATION
 - ALARM MEMORY
 - FLASHING PARKING LIGHT CONFIRMATION
 - L.E.D. STATUS INDICATOR
 - VALET OVERRIDE SWITCH
 - START INTERRUPT OPERATION
 - 30 SECONDS SIREN DURATION WITH AUTO RESET
 - INSTANT TRIGGER OF ALL CONNECTED ENTRY POINTS
 - PLUG IN UNDERDASH SHOCK SENSOR
 - AUTOMATIC REMOTE ENGINE START OPERATION (AUTO CAR)
 - AUTOMATIC REMOTE ENGINE START OPERATION WITH RESERVATION(MAMUAL CAR)
 - AUTOMATIC ENGINE WARMING OPERATION
 - ENGINE START CONFIRMATION AT LONG DISTANCE
 - AUTOMATIC AIRCON/HEATER OPERATION
 - REMOTE ENGINE START TIME EXTENSION
 - REMOTE START MOTOR OPERATION PERIOD ADJUSTMENT
 - OPTIONAL TIMER FOR ENGINE START RESERVATION

SELF CODE LEARNING SYSTEM

THIS SYSTEM HAS ON UNIQUE AND COMPUTERIZED SECURITY CODE SYSTEM.

THIS FEATURE CON MEMORIZE THE CODE NUMBER FOR YOUR SYSTEM SIMPLY AND IT'S VERY EASY TO CHANGE WITH ANOTHER REMOTE CONTROL UNIT.

SELF CODE LEARNING

WHEN YOU HOOK UP THE MAIN UNIT TO MAIN POWER, IT WILL CHIRP TWICE. AND PRESS THE TRANSMITTER BUTTON #1 FOR A SECOND THEN IT WILL CHIRP TWICE WITH FLASHING PARKING LIGHT AND YOUR TRANSMITTER CODE NUMBER IS REGISTERED TO YOUR MAIN UNIT.

VALET MODE CODE LEARNING

- 1) YOUR HOOK UP THE MAIN UNIT TO MAIN POWER
- 2) TURN ON THE IGNITION "ON" POSITION
- 3) PRESS THE TRANSMITTER BUTTON #1 FOR 5 SECONDS THEN IT AND SAME TIME PUSH DOOR PIN SWITCH 3 TIMES THEN IT WILL CHIRP TWICE AND YOUR TRANSMITTER CODE NUMBER IS REGISTERED TO YOUR MAIN UNIT.

ARMING AND DISARMING OF SYSTEM (REMOTE BUTTON #1)

1. AUTO ARMING (PASSIVE ARMING)

THE LAST DOOR IS CLOSED THEN SYSTEM WILL CHIRP ONCE AFTER 3 SECONDS

AS PRELIMINARY SIGNAL. THEN AFTER 20 SECONDS, THE SYSTEM WILL BE

ARMED AND DOOR WILL BE LOCKED AUTOMATICALLY WITH ONE CHIRP SOUND

AND FLASHING PARKING LIGHT.

2. DIRECT ARMING (ACTIVE ARMING)

THE LAST DOOR IS CLOSED THEN PRESS THE BUTTON #1 ON THE TRANSMITTER

THEN THE SYSTEM WILL BE ARMED AND DOOR WILL BE LOCKED IMMEDIATELY

WITH ONE CHIRP SOUND.

3. CONFIRMATION OF ALARM ON/OFF

ON : ONE CHIRP SOUND/FLASHING PARKING LIGHT ONCE

OFF : TWO CHIRP SOUND/FLASHING PARKING LIGHTS TWICE

4. ALARM INDICATOR

ON : RED/GREEN L.E.D. LAMP FLASHING SOLWLY

OFF : RED/GREEN L.E.D. LARM FLASHING RAPIDLY (PASSIVE)

RED/GREEN L.E.D. LAMP OFF (ACTIVE)

5. INTRUSION MEMORY FEATURE

WHEN PRESS THE BUTTON #1 ON TRANSMITTER FOR DISARM THE ALARM SYSTEM,

SYSTEM WILL CHIRP 4 TIMES FOR NOTICE OF INTRUSION.

6. REMOTE DOOR LOCK/UNLOCK

ARM : DOOR LOCK
DISARM : DOOR UNLOCK

7. AUTO REARMING

WHEN THE SYSTEM IS ARMED, UNAUTHORIZED ENTRY ATTEMPTS OR IMPACTS

TO THE VEHICLE WILL INSTANTLY TRIGGER THE SIREN FOR 30 SECONDS AND

PARKING LIGHT WILL FLASH ALSO THEN AFTER SYSTEM WILL BE RESET

AUTOMATICALLY.

8. REMOTE PANIC OPERATION

WHEN THE CAR IS RUNNING OR PARKING, THE SYSTEM CAN SOUND EMERGENCY

SIREN WITH FLASHING PARKING LIGHT BY PRESSING THE TRANSMITTER BUTTON

#1 FOR 3 SECONDS TO SHUT PANIC OFF. PRESS THE TRANSMITTER BUTTON

#1 AGAIN THEN THE SIREN WILL STOP

9. REMOTE DOOR LOCKING WHEN THE CAR RUNNING

BY PRESSING THE TRANSMITTER BUTTON #1 FOR A SECOND DOOR WILL BE

LOCKED AND DOOR WILL BE UNLOCKED AUTOMATICALLY WHEN THE IGNITION

KEY OFF FOR PARKING

10. VALET OVERRIDE SWITCH

TO PREVENT ALARM SYSTEM FROM ARMING DURING EXTENDED STOPOVERS

(SERVICE STATION, CAR WASH VALET PARKING ETC.) SIMPLY PUT THE PUSH

SWITCH TO THE VALET POSITION. THIS MUST BE DONE ONLY WHILE THE

IGNITION OR ENGINE IS ON. WHEN THE VALET MODE THE ALARM SYSTEM WILL

NOT ARM. HOWEVER THE KEYLESS ENTRY FEATURE OF THE SYSTEM IS STILL

OPERATIONAL. THE REMOTE TRANSMITTER CAN BE USED TO LOCK AND UNLOCK

THE POWER DOOR LOCKS. L.E.D. RED LAMP LIGHT ON CONTINUOUSLY AT VALET

MODE ON POSITION.

11. VALET OVERRIDE SWITCH

REFER ATTACHED BLOCK DIAGRAM OF RELAY CONNECTION.

REMOTE START SYSTEM (TRANSMITTER BUTTON #2)

1. START ON/OFF

PRESS THE TRANSMITTER BUTTON #2 FOR A SECOND, THEN THE ENGINE WILL

BE STARTED WITH ONE CHIRP SOUND AND FLASHING PARKING LIGHT. FOR

THE NOTICE OF ENGINE START, SYSTEM WILL CHIRP (PARKING LIGHT)

3 TIMES. IF THE ENGINE FAILS TO START, SYSTEM WILL AUTOMATICALLY

TRY UP TO 3 TIMES UNTIL THE ENGINE HAS STARTED. TO CUT OFF THE

ENGINE START, PRESS THE TRANSMITTER BUTTON #1 TWICE.

2. AIR-CONDITION/HEATER OPERATION

FIRST OFF ALL MAKE THE AIR-CONDITION/HEATER SWITCH “ON” POSITION

AND ENGINE IS STARTED; THEY WILL OPERATE AFTER 30 SECONDS.

3. LIMITED ENGINE START BY TRANSMITTER

SYSTEM WILL SHUT OFF AUTOMATICALLY AFTER 15 MINUTES.

4. ARMING WHILE ENGINE START BY TRANSMITTER

SYSTEM TRIGGERED BY DOOR THEN THE ENGINE WILL SHUT OFF AND THEN SIREN WILL SOUND.

5. START RESERVATION FOR MANUAL TRANSMISSION CAR

- 1) PRESS THE TRANSMITTER BUTTON #2 ONCE AT IGNITION “ON” POSITION THEN SYSTEM WILL CHIRP ONCE TO COME START RESERVATION MODE. (IF YOU DON’T WANT THE START RESERVATION MODE, PRESS THE BUTTON #2 AGAIN THEN SYSTEM WILL CHIRP TWICE TO RELEASE START RESERVATION MODE.)

- 2) THE VEHICLE KEEPS THE IGNITION “ON” POSITION EVEN TAKE OUT THE KEY FROM KEY BOX. THEN AFTER OPEN AND CLOSE THE VEHICLE DOOR AND MAKE THE SYSTEM TO ARMING POSITION.
 - PASSIVE MODE : AUTOMATICALLY AFTWER 20 SECONDS.
 - ACTIVE MODE : BY PRESSING THE BUTTON #1 ONCE.
- 3) NOW THE SYSTEM IS UNDER THE START RESERVATION MODE.
- 4) UNDER THE START RESERVATION MODE THE SYSTEM CANNOT RELEASE THE START RESERVATION MODE IN ANY CASE OF PRESSING THE TRANSMITTER BUTTON #1 OR #2.
- 5) THE START RESERVATION MODE CAN BE RELEASED IN CASE OF OPENING THE VEHICLE DOOR.

L.E.D. INDICATOR STATUS

ARMING : RED/GREEN FLASHING SLOWLY

DISARMING/TRIGGERED : RED/GREEN FLASHING RAPIDLY

SYSTEMS OF REMOTE TRANSMITTER

■ ARM

PRESS THE BUTTON #1 ONCE (ONE CHIRP SOUND, THE PARKING LIGHTS FLASH ONCE)

■ DISARM

PRESS THE BUTTON #1 ONCE AGAIN (TWO CHIRPS SOUND, THE PARKING LIGHTS FLASH TWICE)

■ PANIC

PRESS THE BUTTON #1 FOR 3 SECONDS. SIREN & PARKING LIGHT WILL BE ACTIVATING TOGETHER (CAN BE USED EVEN THE CAR RUNNING)

■ TRUNK RELEASE

PRESS THE BUTTON #1 & #2 SIMULTANEOUSLY FOR 2SECONDS.

■ CONFIRMATION OF DOOR OPEN & TRUNK OPEN AT LONG DISTANCE

PRESS BUTTON #1 ONCE WHILE SYSTEM IS ARMED (3 CHIRP SOUND)

■ CONFIRMATION OF UNAUTHORIZED ENTRY ATTEMPTS OR IMPACTS

PRESS BUTTON #1 WHILE THE SYSTEM IS ARMED (4 CHIRP SOUND)

■ REMOTE START ON

PRESS BUTTON #2 FOR A SECOND (CHIRP SOUNDS 3 TIMES)

■ **REMOTE START OFF**

PRESS BUTTON #1 TWICE

■ **PASSIVE/ACTIVE SELECTION**

PRESS THE BUTTON #1 & 2 SIMULTANEOUSLY FOR 10 SECONDS AT VALET MODE

“ON” POSITION.

ONE CHIRP SOUND : ACTIVE MODE

TWO CHIRP SOUND : PASSIVE MODE

■ **REMOTE START ON EXTENSION(UNDER REMOTE START ON POSITION)**

1) PRESS THE BUTTON #2 FOR 5 SECONDS THEN START ON TIME WILL BE EXTEND

TO 25 MINUTES FROM BASIC 15 MINUTES AT ONE CHIRP SOUND

2) PRESS THE BUTTON #2 FOR 5 SECONDS AGAIN THEN START ON TIME WILL BE REDUCED TO BASIC 15 MINUTES AT TWO CHIRPS SOUND.

■ **REMOTE START MOTOR OPERATION PERIOD ADJUSTMENT**

PRESS THE BUTTON #1 & #2 SIMULTANEOUSLY FOR 5 SECONDS

ONE CHIRP SOUND : SHORT START TIME (0.7 SEC)

TWO CHIRP SOUND : STANDARD START TIME (1.0 SEC)

PRESS THE BUTTON #1 & #2 SIMULTANEOUSLY FOR 10 SECONDS

THREE CHIRP SOUND : LONG START TIME (1.3 SEC)

FOUR CHIRP SOUND : ULTRA LONG START TIME (1.5 SEC)

■ **CONFIRMATION OF CHIRP SOUND DELETE (SILENT MODE)**

MAKE THE VALET MODE “ON” (VALET S/W “ON” + ACC “ON”)

THEN THE ACC S/W OFF, PRESS THE BUTTON #2 FOR 10 SECONDS

ONE CHIRP SOUND : CHIRP SOUND OFF

TWO CHIRP SOUND : CHIRP SOUND ON

**ADJUSTMENT THE STAND-BY TIME OF THE START ENGINE FOR
GASOLINE OR
DIESEL VEHICLE**

MAKE THE VALET MODE “ON” (VALET S/W “ON” + ACC “ON”, THEN OPEN
AND CLOESE

A DOOR 5 TIMES REPEATLY WITHIN 10 SEC.

ONE CHIRP - FOR DIESEL VEHICLE

TWO CHIRPS - FOR GASOLINE VEHICLE

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- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC ID : HH8-DY6P20-TX

Caution:

Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.