

CompuStar SHF 2W AS

USER'S GUIDE

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This device complies with Part 15 of the FCC Rules.
Operation is subject to the following two conditions:
(1) This device may not cause harmful interference,
and (2) this device must accept any interference
received, including interference that may cause
undesired operation.

CAUTION: Changes or modifications not expressly
approved by the party responsible for compliance could
void the users's authority to operate this device.

INTRODUCTION

Thank you very much for purchasing far advanced LIQUID CRYSTAL BOTH
DIRECTION REMOTE CAR ALARM START(CompuStar SHF2AS) of Firstech, Inc.

We are constantly researching and developing in order to meet satisfaction for the requirements of progressive clients.

1. This product is automatic reservation type for manual vehicle.
In case of manual vehicle, after parking with pulling the key out the engine does not stop running until closing the door after getting off.
 2. If the all operation of the vehicle does not accord with this user's guide,
consult us or installation agency.
 3. We make it a rule to deal with this product at agencies appointed to handle
MAGICAR products. in case of other salesperson, be sure to get identification.
Refer to regional MAGICAR direct agencies.
 4. Because it is an electronic product, so avoid strong impact or permitting water.
 5. When the vehicle is not automatic, be sure not to choose automatic option(dip-switch no.1 in system).
('Automatic(vehicle)'means the car starts always P and N position.)
- Problems due to ignorance above things, installation fault or user's fault, we
are not responsible them.

----- MAJOR FUNCTIONS -----

|
|
| This product is 3 dimensional far advanced auto controller with viewing
through |
| remote controller screen and adopting inter-communication between vehicle
and |
| remote controller.

|
|
| When the vehicle is located at the place where can not be seen or heard
the |
| speaker sound, you can get the confirmation through screen and sound of
the |
| remote controller.

|
| Automatic start reservation type for manual vehicle.

|
| Without remote controller, functions can be cleared(Valet mode) with
only key. |
| Maintain the code memory against cut-off the power(vehicle battery
discharge |
| or battery exchange).

|

Will be settled additional remote controller immediately.

High efficiency and subminiature rod antenna.

Perfect operating between -20 C and +50 C

CMOS micro chip / crystal oscillator.

CAR CALL(Car paging) function.

Can keep silent at the car when the vehicle gotten sudden impact or
stolen. |

Remote controller provides screen and emergency sound.

every 24 hours start mode.

For turbo-engine function.

Clients can change various auto-function of door and all options with
remote |

controller.

Start(Engine) kill function at panic state.

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BUTTONS FUNCTION

+-----+-----+-----+-----+			
+-----+			
	BUTTON	PRESS	FUNCTION
DESCRIP.			
+-----+-----+-----+-----+			
6 p	I	one touch	door lock(arming)/unlock(disarm)
+-----+-----+-----+-----+			
8 p	I -	2 sec.	speaker sound and emergency light for
			30 sec.stat(engine) is killed until
			disarmed
+-----+-----+-----+-----+			
11 p	II-	2 sec.	remote starting on/off
+-----+-----+-----+-----+			
12 p	III-	2 sec.	trunk open
+-----+-----+-----+-----+			
13 p	IV	one touch	query the state of vehicle
+-----+-----+-----+-----+			
14 p	I+II	one touch	mute mode approach/reinstate
		at the same time	
+-----+-----+-----+-----+			
+-----+			

15 p	I+III	one touch	valet mode approach/reinstate
		at the same time	
+-----+-----+-----+-----+			
17 p	I+IV	one touch	change door automatic option
		at the same time	
+-----+-----+-----+-----+			
18 p	II+III	one touch	paging approach/reinstate
		at the same time	
+-----+-----+-----+-----+			
19 p	II+IV	one touch	24H-START approach/reinstate
		at the same time	
+-----+-----+-----+-----+			
20 p	III+IV	one touch	turbo function approach/reinstate
		at the same time	
+-----+-----+-----+-----+			
18 p	CAR-CALL	receive	belling at remocon for call the owner
+-----+-----+-----+-----+			
18 p	PANIC	receive	report to owner car impact or stolen
			and start(engine) is killed.
+-----+-----+-----+-----+			

+----- LOCK THE DOOR(ARMING) -----+

| At the state of closing the door and unlocking the door lock, touch the
 | button I, |
 | then the door will be locked and armed.
 |
 |
 |

VEHICLE

Locked the doorlock

Chirp once

Blinker once

- Remote controller screen : Blink 5 times at the arrowed portion.

- Remote controller sound : Beep once

L.E.D. in the CAR-CALL sticker starts blinking after 3 seconds from locking the unlocked door.

- Stolen(panic) watch : When the system's L.E.D blinks, it always watches the door(vehicle stolen).

- Impact watch : After 30 seconds from locking the door, it acts every sudden impact.

- Car call (call owner) : Operates after 30 seconds from locking the door, and after sending once the message to owner, can be reused after 1 minute.(Remote controller can accept this at only stand-by state with page approached)

Doorlock can be applied during the engine's turning on by remote controller.

And, this locking means the arming of the vehicle and in this state system does not watch impact but opening door(stolen) because of engine vibration.

+----- UNLOCK THE DOOR(DISARMING) -----+

| At the state of closing the door and locking the doorlock(arming
state), touch the |
| button I, then the door lock will be unlocked(disarmed) and start(engine) is
be abled|
| if killed.

VEHICLE

Unlocked the doorlock	Chirp twice	Blinker twice
	/three times	/three times
	/four times	/four times

- Remote controller screen : Blink 5 times at the arrowed portion.

- Remote controller sound : Beep twice/three times/four times

| Twice : There was not any unusual thing when parking(arming).
| three times : Got sudden impact when parking(arming).(Blinking hammer-
icon) |
| four times : Door open(panic) when parking(arming).(Blinking door-icon)
| Off the L.E.D in the CAR CALL sticker with unlocking the locked door.
| (Meaning the state of vehicle disarmed)
| In case of vehicle adopted auto/manul arming function,if the door is not
opened |
| during 30 seconds, the vehicle is automatically reapproached arming
state. |

addtt

VEHICLE

- Remote controller sound : Mute

```
|      In case of self-emergency,unconditionally the doorlock will be locked and
the  |
|      start(engine) is killed.
```


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+----- ENGINE STARTING RESERVATION -----+

| (ONLY MANUAL VEHICLE) |
| In case manual vehicle option(dip-switch option no.1) is selected, if you
don't act|
| this reservation procedure you can't turn on the engine(remote start, 24h-
start). |
|
| Method 1 : After driving, the cab maintains the running with unlocking the
doorlock |
| when the KEY pulled out. This running will be remained for 2
minutes and |
| within this time if the door opened and closed, starting
reservation will |
| be completed with stopping running.
|
| Method 2 : If the button II is pressed for 2 seconds before pulling the key
out, |
| blinker and speaker act once and will remain the running without
the key. |
| This running will be remained for 2 minutes and within this time
if the |
| door opened and closed, starting reservation will be completed
with |
| stopping running.
|
|
| Automatic vehicle starts when the lever placed only P or N position. So in
automa- |
| tic vehicle, these procedure(above mentioned) is not needed. If in manual
vehicle, |
| auto vehicle option(dip-switch) is adopted by clients or installer very
dangerous |
| because there is no reservation procedure. If use wrong option, we are not
respon- |
| sible for any problems occurred from adopting remote control starting
automatic |
| option. We recommend clients confirm this.

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+----- CANCEL ENGINE START RESERVATION -----+
| (ONLY MANUAL VEHICLE) |

| After parking, when the key is pulled out, there is an engine start reservation |
| proceeding. At this point, press the button II for 2 seconds then engine stops and |
| the reservation will be canceled. When parking the vehicle at the declining |
| area, be sure to apply this way.

| After completing the engine start reservation, if the door opened during turning |
| off state, reservation will be canceled. That means the door should be opened or |
| closed in the state of disablement to apply gear. As long as the door is not |
| opened with the engine stop state, the reservation will not be canceled.

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+----- REMOTE ENGINE STARTING -----+
| (BEING SET RESERVATION FOR MANUAL VEHICLE) |

| When press the button II for 2 seconds, the engine will start through pre-heat for |
| the vehicle in question.(gasoline:3seconds / diesel:10seconds)

VEHICLE

- Remote controller screen : Blink 5 times at the arrowed portion.

- Remote controller sound : Beep once (meaning the vehicle accept the message)
- After success of engine start : Beep.---. Confirming sound for engine turn on)

Will be maintained engine start for 15(gasoline)/25(diesel) minutes. And 2 minutes|

later airc.or heater will be turned on. During this, If the button II pressed for |
2 seconds, the engine stops(maintain the reservation state).

If open the door in remote start on,the car will be turned off in 30 seconds, |
so to maintain the engine start state place the key ON in the key box at the |
vehicle within 30 seconds.

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----- TRUNK OPEN -----
(WITH DISARMING) |

When the button III pressed for 2 seconds, trunk be opened.(But,not lever type trunk)|

VEHICLE

- Remote controller screen : Blink 5 times at the arrowed portion.

- Remote controller sound : Beep twice.

The trunk opened.(and if armed, unlocked the doorlock and disarmed)

with | But, in case of choosing automatic or manual arming option, the arming
| locking the doorlock will be approached in 30 seconds.

manual | If the work will be done for a long time at the trunk(in automatic or
| arming option-ed vehicle), it is better to use VALLET by remote
controller. |

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+----- QUERY THE STATE OF VEHICLE -----+

| If the button IV touched, the state of vehicle will be reported to remote
controller |
| through screen(ex. arming/disarming, door open/close, engine on/off) and
beeps. |

- Vehicle : Blink 5 times

- Remote controller screen : Blink 5 times at the arrowed portion.

|
 |
 |
 |
 |
 |
 |
 |
 |
 | - Remote controller sound : Beepbeep-beepbeep-beepbeep (In arming , engine
 on) |
 | Beep- beep- beep (In arming , engine
 off) |
 | Beepbeep-beepbeep (In disarming ,
 engine on) |
 | Beep- beep (In disarming ,
 engine off) |

|
 | Check occasionally or when it is nessary.

| Can be reported about impact, stolen and CAR-CALL within the
 communicating |
 | available distance.

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+----- MUTE MODE -----

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 |
 |
 | In any state, if the button I and II touched at the same time, car-speaker
 will not |
 | make sound at all after this.

VEHICLE

|
 |
 |
 | - Remote controller screen : Blinking
 once(approached)/twice(reinstatement) |
 | at the arrowed portion.

- Remote controller sound : Beep once(approached)/twice(reinstatement)

The vehicle does not make any sound at all but light.

And the state of vehicle is also reported to the remote controller.

If the button I and II touched at the same time again, speaker and
blinker | will be operated twice and return the original sound mode(for vehicle).

SPK : Meaning the vehicle's speaker makes sound.

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+----- VALLET FUNCTION (1) -----+
(BY REMOTE CONTROLLER) |

In any state, if the button I and III touched at the same time, all function
of the warning of system will be stopped(VALLET mode). The vehicle only acts
lock/unlock by remote controller's button I.

VEHICLE

- Remote controller screen : Appear arrowed portion

- Remote controller sound : Beep once(approached)/twice(reinstatement)

In case of entrusting the vehicle to car washing place, service center, parking lot or other person, apply this function to get rid of any trouble.

If the button I and III touched at the same time again, full function will be returned to original state.

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+----- VALLET FUNCTION (2) -----+
(BY VEHICLE KEY)

Even if there is no remote controller but vehicle key, you can use VALLET function.

- key box.
- (1) Put the key in the key hole and place to 1st step(ACC) in the
 - (2) Once place the 2nd step(ON) and return to 1st step(ACC).
- (Apply this more then 3 times within 3 seconds)

| (3) Blink once after finishing this key reciprocation. After 3
seconds, |
| all function will be ceased with blinking twice(approach
VALLET). |
| Later, function can be returned by remote controller.
|
| Touch the button I and III at the same time : speaker and blinker operate
twice. |
|
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+-----+ OPTION -----+
---+
| (AUTO-FUNCTION OF DOORLOCK) |
| Locking while driving |
| open the door | auto
locked |
| to get on |
| Remote start | set the key ON |
|
|-----+-----+
--+ | 30 seconds | 30 seconds |
| |
|-----+
--+ |
| Key start |
| |
| auto
locked |
| If the door opened even one moment within last 30 seconds, auto-lock is
canceled. |
| Unlock after driving : When the key pulled out after running over 30
seconds, |
| the door unlocked |
|
| Door lock after complete start reservation(only manual vehicle) : After
parking, |
| pulled the key out and door opened and closed, the door will be locked
automat- |
| ically as engine stops. |
|

| 30 seconds pre-arming : When the door locked (approached arming), actual
 acting |
 | of watching is 30 seconds(3 seconds for watching door open) later after
 this. |
 | Of course, the same at CAR-CALL.
 |
 | Automatic arming : When unlocked by remote controller or the door opened
 and closed, |
 | speaker makes chirp sound every 10 seconds, and after 3 decades it will be
 locked |
 | automatically to go arming state.
 |
 | Manual arming : When unlocked by remote controller speaker makes chirp
 sound every |
 | 10 seconds, and after 3 decades it will be locked automatically to go
 arming state. |
 | but,if the door is opened and closed, the arming state is approached by
 only remote |
 | controller.
 |
 | Simple arming : Be sure to lock with remote controller. There is not any
 way to |
 | approach the arming automatically.

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+----- PAGING FUNCTION -----+
 | If the button II and III is touched at the same time, the paging mode is
 approached. |
 | If this function approached, remote controller will be stood by at any time.
 |
 | Can get the message due to occuring the body impact, stolen or CAR-CALL
 unexpectedly. |

|
 |
 | VEHICLE
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 |
 | - Remote controller screen : 6 times(impact) /27 times(stolen) blinking
 at the |
 | arrowed portion.

- Remote controller sound : Beep once(approached)/twice(reinstatement)

It is very convenient, when the owner wants to start engine at that time every day.

In case of manual vehicle, start reservation is should applied with this 24h reservation.

If the vehicle is in the unconditional state to engine start as it is door opened or in VALLET, the engine start will be retried again after 24 hours.

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+----- TURBO FUNCTION -----+

After parking with this function, the engine will be running for 2 minutes from the moment of pulling the key out. This can be approached when the button III and IV touched at the same time.

- Remote controller screen : Blinking once(approached)/twice(reinstatement) at the arrowed portion.

- Remote controller sound : Beep once(approached)/twice(reinstatement)

Even if the vehicle is not turbo vehicle, this function will be made up the excessiveness of very hot engine after long driving.

At this point, after parking, pull the key out and out of the cab with closing the door, the engine will still be running for 2 minutes. But the vehicle adopted locking after reservation function will be locked the door immediately.

If want to stop the engine in the middle of running, press the button II for 2 seconds.

If the turbo function is not necessary any more, touch the button III and IV at the same time like the same procedure of approaching.

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----- CLIENT CONTROL -----

CONTROL IMPACT SHARPNESS

It is necessary for clients to know where the impact sensor attached.

It is possible for clients to cope with the environment with controlling the sharpness of the impact sensor.

clockwise : sharpness
count clockwise : dullness

	SPEAKER VOLUME CONTROL	
maximum.		When delivered, the volume of the speaker is set to
of the		In order to turn the volume down, cut the jump wire
		speaker installed in the bonnet(engine room).

```

| CAR-CALL FUNCTION |
| When the remote controller rang for calling owner, touch the button IV. If
the |
| blinker in the cab blink 5 times, the person who knocked will know that the
owner |
| maybe get the message from him.

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+-----+ HOW TO CHANGE OPTION -----+
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|          AUTO-FUNCTION OF DOOR LOCK
```

(FOLLOW THE ORDER)

Button I , IV : Should be Touched II , III : Should be pressed for 2 seconds
(1) First of all, place the car key to ON (Not turn over the engine.) in the key box.

(2) Touch the button I and IV at the same time.
(one chirp sound)

(3) I , II , III , IV want. driving 	Touch(or Press) the button(only one) what you I=locked while driving/ II,III,orIV=unlocked while (two chirp sound)
(4) I , II , III , IV want. II, III, or IV=unlocked 	Touch(or Press) the button(only one) what you I=locked after running reservation/ after running reservation (three chirp sound)
(5) I , II , III , IV want. III, or IV=simple 	Touch(or Press) the button(only one) what you I=automatic arming/ II>manual arming/ arming (five chirp sound : approaching completed)
Be sure to procede above procedures step by step. When the speaker does not make sound 5 times(5 chirp sound), re-approach from at first. 	

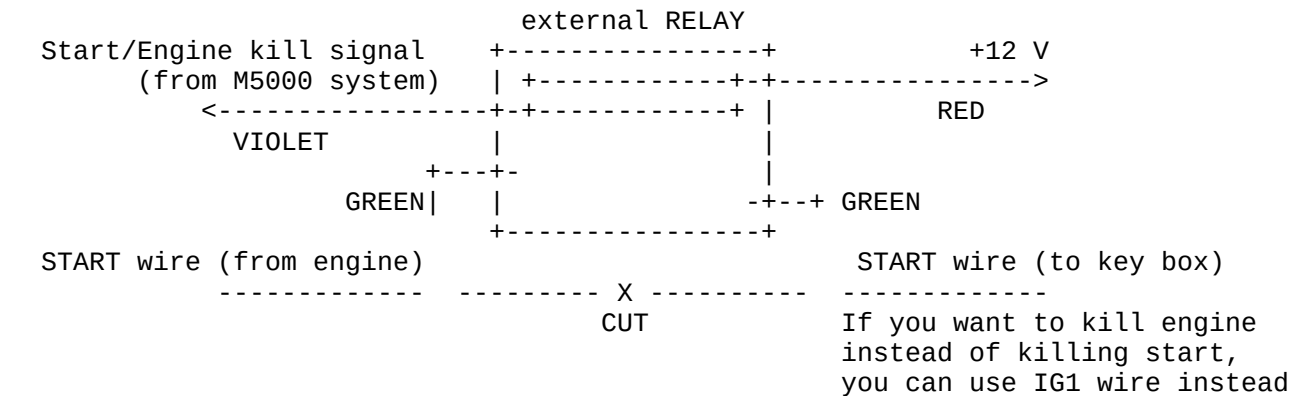
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WIRING DIAGRAM (MAGICAR 5000)

-----+	++	White(IG2) : heater,air cond. power
++-++-++		Green(IG1) : engine power
	++	Red(+12V) : battery
	++	Orange(Start) : start motor power
		Black(Body ground)
	++	Violet(Start/Engine Kill signal) : need external RELAY to
switch		
	++	START or ENGINE (only need to kill start(engine) in
panic)		
	+-	blinker(right or left)
	+-	blinker(left or right)
	+-	unlock (in case of using actuator of vehicle) --+
	+-	lock (") select
	+-	unlock (in case of installing external actuator) one pair
	+-	lock (")-+
	+-	speaker
	+-	trunk
	++	

				++		
				+-	engine on sense(positive trigger)	
				+-	door open sense(negative trigger)	-+ select one
				+-	door open sense(positive trigger)	-+
				++		
				++		
				+-		
				+-	impact sensor	
				+-		
-+						DIP SWITCH option
				++		+-----+-----+-----+-----
						1 2 3 4
-+				++		+-----+-----+-----+-----
				+-		OFF manual gasoline cab's-
actuator OFF				+-	car-call sensor/L.E.D	+-----+-----+-----+-----
-+				+-		ON auto diesel ext.-actuator
ON				+-		+-----+-----+-----+-----
-+				++		
				++		
				++	antenna	
				++		
+---+---+---+				++		
-				+		



of START

+----- CODE INJECTION METHOD -----+

|

| Our company's goods("MagiCar") don't have any fixed remote controllr. Their

code |

| should be injected(registerd) to use. They can have three different

|

| coded remote controllers by code injection method. And by this method, in
case of |
| loosing remote controller the user can let system go into "valet".

| The injection method is as follows

| Button I , IV : Should be Touched II , III : Should be pressed for 2
seconds |

| (1) Complish installing system in the car

| (2) Prepare remote controllers(up to three ones) to be used

| (3) Put the key in the key hole and place to 1st step(ACC)
| in the key box.

| (4) Once place the 2nd step(ON) and return to 1st step(ACC).

| (Apply this more then 3 times within 3 seconds)

| ----> just after this the light(direction-light)will blink once.

| (5) Touch(or Press) the prepared remote controller button I,II,III,orIV

| ----> just after this the light(direction-light)will blink once.

| At this time the button number is related with system option

| The option is classified as follows by button number

| Button I,II ; General vehicles

| Button III ; Vehicles that automatically unlock doorlock just after
"engine off" |

| Button IV ; Vehicles that use air lock/unlock system(The system's
lock/unlock |

| time is 4 second

| (6) Touch(or Press) another remote controller button. Don't care button
number. |

| ----> just after this the light(direction-light)will blink once.

| (7) Touch(or Press) the other remote controller button. Don't care button
number. |

| ----> just after this the light(direction-light)will blink twice.

| : Injection end

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| During these steps, after step(4) the key should be located at "ACC"

| and after injection you can use remote controllers (used in injection)

| The number of remote controllers used in "Step(5)(6)(7)" are registered
in the |
| system and so you can use these remote controllers. Even if you would
like to use |
| only one or two remote controllers, you should act "Step(6)(7)" by one or
two |
| remote controllers because of erasing other code.
|
| If you don't press any button of the remote controller at Step(5) in 3
seconds the|
| system will go into "VALLET". So you can approuch this VALLET func.
without remote|
| controllers.
|
| Whenever you would like to want exchange or get more your remote
controller, you |
| can do these procedure.
|

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