

MULTI-PLATFORM STEREO REPLACEMENT WITH STEERING WHEEL CONTROL INTERFACE FOR CHRYSLER, GM, FORD & TOYOTA JBL

The cutting edge **S3-1** interface from Scosche allows you to replace your factory OEM stereo while retaining all necessary safety & warning features as well as retaining your original steering wheels controls (if vehicle is equipped).

STEERING WHEEL CONTROLS

NO Steering wheel programming is required! The **S3-1** Interface has built-in protocols for popular aftermarket stereos including:

| | | |
|---------|---------|------|
| ALPINE | CLARION | JVC |
| KENWOOD | PIONEER | SONY |

S3-1 INSTALLATION HARNESSES*

A vehicle-specific harness is required for installing the **S3-1** interface (*sold separately). Verify your vehicle's compatability by checking the list included with vehicle-specific harness.

| | |
|----------------|--|
| S3CR02 | 2005-10 Select Chrysler S3-1 harness |
| S3CR04 | 2007-UP Select Chrysler S3-1 harness |
| S3FD23 | 2005-UP Select Ford, Linc, Merc S3-1 harness |
| S3GMCL2 | 2003-UP Select GM Class II S3-1 harness |
| S3GM11C | 2004-UP Select GM LAN11 24Pin S3-1 harness |
| S3GM11L | 2006-UP Select GM LAN11 14/16Pin S3-1 harness |
| S3GMLAN | 2006-UP Select GM LAN29 14/16 Pin S3-1 harness |
| S3TA03 | 2004-UP Select Toyota JBL S3-1 harness |

PRELIMINARY

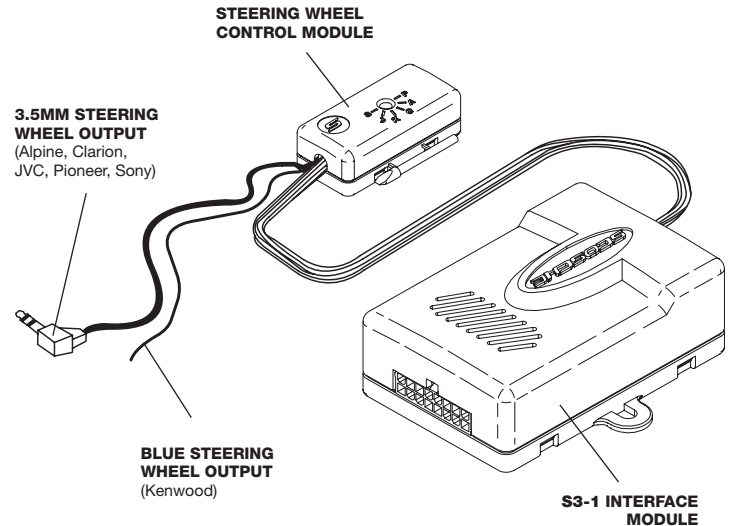
S3-1 FUNCTIONALITY BY VEHICLE PLATFORM:

| Make | ACC/R.A.P. Power | Steering Wheel Controls | Warning Chimes | Premium Sound Activation | Fade F/R |
|-------------|------------------|-------------------------|----------------|--------------------------|----------|
| Chrysler | ✓ | ✓ | Not required | ✓ | No |
| Ford | ✓ | ✓ | Not required | ✓ | No |
| GM LAN | ✓ | ✓ | ✓ | Std. Bose only | ✓ |
| GM Class II | ✓ | ✓ | ✓ | Std. Bose only | ✓ |
| Toyota | Not required | ✓ | Not required | JBL Sys only | No |

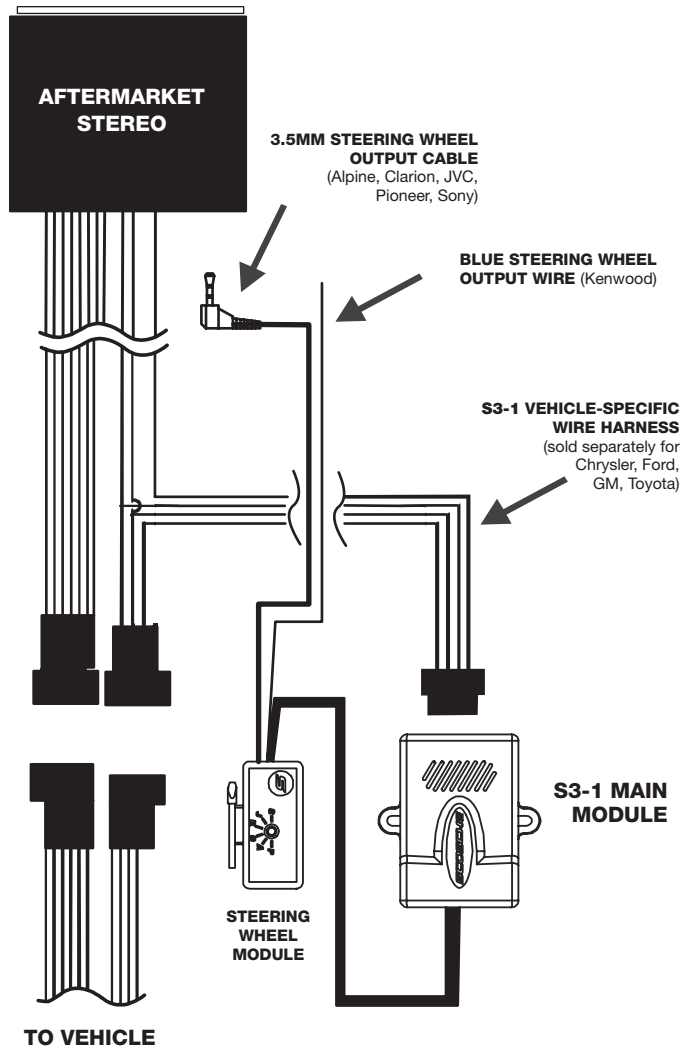
! BEFORE BEGINNING: READ THIS INSTRUCTION MANUAL

Disconnect the negative battery terminal to avoid short circuits. Read ALL vehicle manufacturer's warnings regarding airbags and electrical systems. We recommend **ONLY** a volt/ohm meter when checking/testing vehicle wiring. A test light (grounded probe type) can damage a vehicle's computer and/or electronics systems.

COMPONENT OVERVIEW



INSTALLATION OVERVIEW



WIRE COLOR CODES

| | | | |
|--------------------|-------------------------------|---------------------|---|
| White | = Left Front Positive (LF+) | Gray | = Right Front Positive (RF+) |
| White/Black | = Left Front Negative (LF-) | Gray/Black | = Right Front Negative (RF-) |
| Green | = Left Rear Positive (LR+) | Violet | = Right Rear Positive (RR+) |
| Green/Black | = Left Rear Negative (LR-) | Violet/Black | = Right Rear Negative (RR-) |
| Black | = Chassis Ground | Orange | = Illumination |
| Yellow | = +12V Constant Power | Blue/White | = +12 Remote Output (Amp, radio on signal) |
| Red | = +12V Accessory/R.A.P output | | |
| Blue | = +12V Power Antenna | | |

NAVIGATION CONNECTIONS:

| | |
|---------------------|--|
| Violet/White | = VSS Vehicle speed pulse signal |
| Red/White | = Reverse light trigger (+12V when in reverse gear) |
| Yellow/Black | = Parking brake trigger (-12V when park brake ON) |
| Orange/White | = Auto illumination (Data controlled lighting output on some GM LAN applications with AUTO headlights enabled) |

NOTE: The RED Accessory output wire from the **S3-1** interface is rated at 10A Max output for most aftermarket head unit demands. We do NOT recommend connecting additional +12V switched accessories to this output source as it may cause damage to the **S3-1** module itself. If 10A output is not sufficient, then a relay is needed (Relay not included).

NOTE: Illumination & auto illumination outputs are designed for head unit connections only.

S3-1 SPEAKER / AUDIO CONNECTIONS

- **GM Bose**
(Excludes Prem. Bose)
- **Ford Premium Sound**
- **Toyota JBL/Lexus**

RCA LOW LEVEL



- **Chrysler**
- **Ford (Non-Premium)****
- **GM Bose (Non-Bose)**

SPEAKER WIRE (Cut-off RCAs)



****ATTN:** All Ford Harness RCA cutting must be performed on vehicle side of the circuit board.

BASIC WIRING INSTRUCTIONS

The following steps are provided as a general guide. For specific information for your vehicle, consult the instructions supplied with your vehicle-specific **S3-1** harness (sold separately).

1. Disconnect the negative battery cable from the battery to avoid short circuits.
2. Remove and unplug factory stereo.
3. Match and connect the Power/ground wires from the **S3-1** Vehicle specific harness to the wires provided with your stereo. The color codes on the Scosche harness are designed to match most aftermarket stereos.
 - Take note that some of the wires for your new stereo come from the **S3-1** interface box itself and not the vehicle connectors.
- 4a. The **S3-1** speaker connections are pre-terminated with RCA jacks for installations requiring Line input: Toyota JBL, GM Standard Bose and Ford Premium sound.
- 4b. If your vehicle does not have a Bose or Premium system, cut off the RCAs and wire the speaker leads directly to the speaker wires from the new stereo.
- 4c. All FORD harnesses must have RCAs cut on vehicle side of circuit board.
5. Tape any unused wiring to prevent short circuit.
7. Reconnect the negative battery cable**.
 - ** For GM vehicles, alternate power up (initialization steps) are required. See General Motors specific notes section.
8. As you install your new stereo, place the **S3-1** module(s) and harnesses in the rear of the dash cavity behind the stereo.

OPTIONAL: Cable ties or double-sided tape can be used to secure the module, but are not included.

CHRYSLER & TOYOTA INSTALLATION NOTES

CHRYSLER: PREMIUM ALPINE, BOSTON & INFINITY SYSTEMS

These factory amplified sound systems are driven and digitally controlled by a single set of left/right input channels only. The aftermarket radio does not have the ability to control fade or balance adjustments on these types of systems. There is NO front/rear fader control. The balance and fader are set to center by interface control software.

TOYOTA JBL / LEXUS PREMIUM SYSTEMS

These factory amplified sound systems are driven and digitally controlled by a single set of left/right input channels only. The aftermarket radio does not have the ability to control fader on these types of systems. There is NO front/rear fader control. The fader is set to center by interface control software.

GENERAL MOTORS INSTALLATION NOTES

HOW TO TEST FOR “PREMIUM BOSE” SYSTEMS

There are two types of Bose systems available in some models of GM vehicles. The **S3-1** interface is not compatible with the Digital Premium BOSE (y91/z75 systems) To test for digital Bose systems, turn the factory radio volume up and down rapidly. If the sound system reacts immediately then the system is a Standard Bose, not a Premium Bose. If there's a slight delay in the system as you turn it up and down quickly, then this vehicle may have Premium BOSE. **Note:** you may also check the service parts code sticker usually located in the glove box for “y91” or “z75” equipment codes.

S3-1 GENERAL MOTORS INTEGRATED SAFETY & WARNING CHIMES

When replacing the factory stereo in your GM vehicle, the **S3-1** interface will replace portions of your vehicle's audible SAFETY and WARNING CHIME systems. If the stereo is removed without the proper accessory these functions of your vehicle will be LOST including: Your vehicle's ECM (Electronics Control Module) will also store an error code if operated without the factory radio installed and you may experience difficulty in having the vehicle serviced at the dealership. The Scosche **S3-1** will send the proper data commands to your vehicle's ECM (Electronics Control Module) to indicate a “healthy” status for diagnostic purposes.

WARNING & SAFETY CHIMES LIST:

- Parking assist
- Lights left on reminder
- Turn signal click
- Low fuel
- Seatbelt warning chime
- Check engine/service indicator
- Key left in ignition reminder

POWER UP (Initialization procedure)

In order to ensure the proper functionality of the **S3-1**'s +12V RED Accessory wire, we recommend that the following procedure be followed; in sequence.

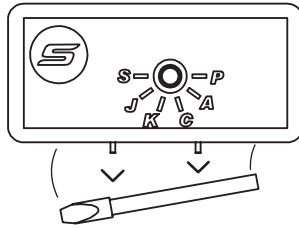
1. Disconnect the Scosche Interface from the vehicle radio harness.
2. Close all doors and hood, Turn off all lights and remove the keys from the ignition.
3. Wait 3 to 4 minutes (without opening a door, turning on a light, inserting keys,etc.).
4. Connect the Scosche Interface to the vehicle's radio harness and start vehicle.
5. Test interface for functionality.

STEERING WHEEL MODULE

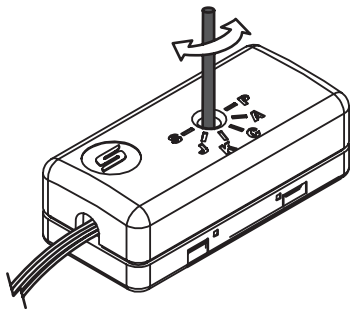
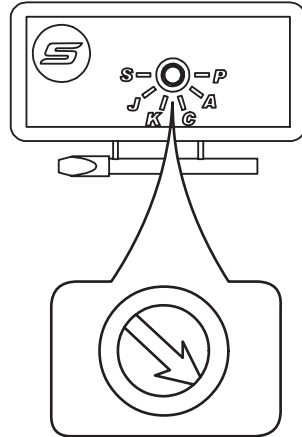
STEERING WHEEL MODULE SETUP

The Scosche **S3-1** offers “plug and play” steering wheel control setup. No complicated learning, programming or splicing wires is required. Setup can be completed in just seconds! (Tool is provided by Scosche.)

1. Break off the small flat blade adjustment driver from the side of the steering wheel module housing as shown in illustration.



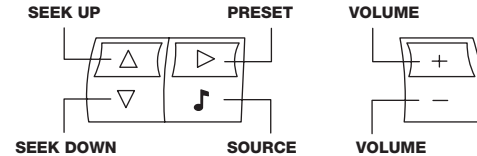
2. Carefully click the selector (arrow) dial to the correct letter that corresponds with the brand of aftermarket stereo you are installing: A=ALPINE, C=CLARION, J=JVC, K=KENWOOD, P=PIONEER, S=SONY



3. Connect the steering wheel control module harness to the Main **S3-1** interface via the 10-Pin connector. (This step not shown)
4. Plug the 3.5mm connector into the “Remote” jack on the back of your aftermarket stereo. For Kenwood, connect the Blue wire to the remote control input wire of the radio. (This step not shown)

STEERING WHEEL CONTROLS: CHRYSLER

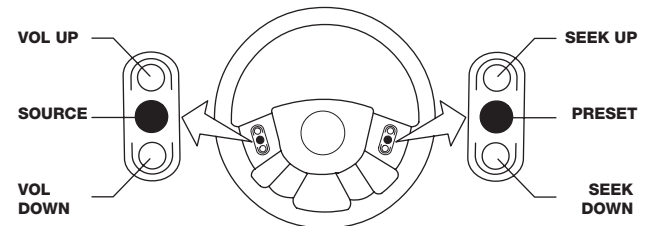
CHRYSLER / DODGE / JEEP Version 1 STEERING WHEEL LEGEND 2005-08



| | S Sony | J JVC | K Kenwood | C Clarion | A Alpine | P Pioneer |
|------------|------------------|--------------|----------------|----------------------|------------------|------------------|
| Vol Up + | Vol + | Vol + | Vol + | Vol + | Vol + | Vol + |
| Vol Down - | Vol - | Vol - | Vol - | Vol - | Vol - | Vol - |
| Source | Source | Source | Source | Source | Source | Source |
| Preset | FM Presets | FM Presets | Seek Up/Trk Up | FM Preset/Disc Trk 1 | FM Presets | FM Presets |
| Seek Up | Seek Up/Track Up | Sk Up/Trk Up | Seek Up/Trk Up | FM Preset Up/Trk Up | Seek Up/Track Up | Seek Up/Track Up |
| Seek Down | Seek Dn/Track Dn | Sk Dn/Trk Dn | Seek Dn/Trk Dn | FM Preset Dn/Trk Dn | Seek Dn/Track Dn | Seek Dn/Track Dn |

CHRYSLER / DODGE / JEEP Version 2 STEERING WHEEL LEGEND 2009-UP

(Uses controls on BACK of Steering wheel ONLY)

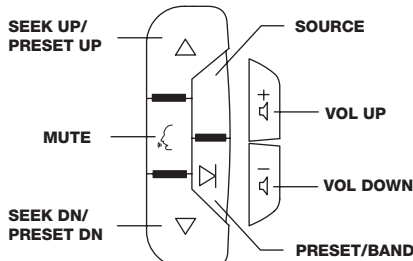


| | S Sony | J JVC | K Kenwood | C Clarion | A Alpine | P Pioneer |
|------------|------------------|--------------|----------------|-----------------------|------------------|------------------|
| Vol Up + | Vol Up | Vol Up | Vol Up | Vol Up | Vol Up | Vol Up |
| Vol Down - | Vol Dwn | Vol Dwn | Vol Dwn | Vol Dwn | Vol Dwn | Vol Dwn |
| Source | Source | Source | Source | Source | Source | Source |
| Seek Up | Seek Up/Track Up | Sk Up/Trk Up | Seek Up/Trk Up | FM Preset Up/Trk Up | FM Presets | Seek Up/Track Up |
| Seek Down | Seek Dn/Track Dn | Sk Dn/Trk Dn | Seek Dn/Trk Dn | FM Preset Dn/Trk Dn | Seek Up/Track Up | Seek Dn/Track Dn |
| Preset | Next FM Preset | Preset Up | Seek Up/Trk Up | FM Preset /Disk Trk 1 | Next FM Preset | Next FM Preset |

Volume control note:

Press once: up/down (one increment); Press and hold: up/down (continuous)

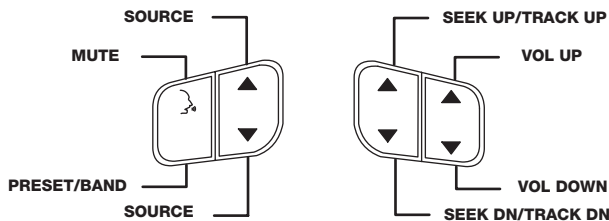
STEERING WHEEL CONTROLS: GM



GENERAL MOTORS LAN STEERING WHEEL LEGEND 2006-UP

| | S | J | K | C | A | P |
|-------------|---------------|-----------|------------|-------------------|-----------------|------------------|
| | Sony | JVC | Kenwood | Clarion | Alpine | Pioneer |
| Vol Up | Vol Up | Vol Up | Vol Up | Vol Up | Vol Up | Vol Up |
| Vol Down | Vol Down | Vol Down | Vol Down | Vol Down | Vol Down | Vol Down |
| Source | Source | Source | Source | Source | Source | Source |
| Speak Icon | Mute | Mute | Mute | Mute | Mute | Mute |
| Preset/Band | Preset Up | Band | Seek Up | Band | Preset Up | Preset Up |
| Seek Up | Seek/Track Up | Seek Up | Track Up | Preset/Track Up | Preset Up | Seek/Track Up |
| Seek Down | Seek/Track Dn | Seek Down | Track Down | Preset/Track Down | Seek/Track Down | Seek /Track Down |

GENERAL MOTORS CLASS II STEERING WHEEL LEGEND



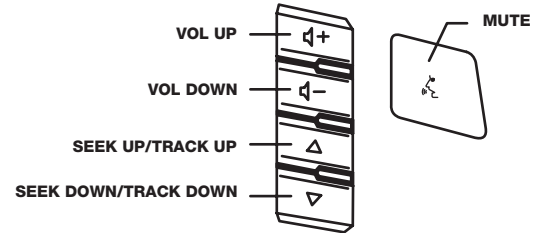
| | S | J | K | C | A | P |
|-------------|------------------|-----------|------------|-----------------|---------------|---------------|
| | Sony | JVC | Kenwood | Clarion | Alpine | Pioneer |
| Vol Up + | Vol Up | Vol Up | Vol Up | Vol Up | Vol Up | Vol Up |
| Vol Down - | Vol Dwn | Vol Down | Vol Down | Vol Down | Vol Dwn | Vol Down |
| Source Up | Source | Source | Source | Source | Source | Source |
| Source Down | Source | Source | Source | Source | Source | Source |
| Seek Up | Seek/Track Up | Seek Up | Track Up | Preset/Track Up | Seek/Track Up | Seek/Track Up |
| Seek Down | Seek /Track Down | Seek Down | Track Down | Preset/Track Dn | Seek/Track Dn | Seek/Track Dn |
| Speak Icon | Mute | Mute | Mute | Mute | Mute | Mute |
| Program | Preset Up | Band | Seek Up | Band | Preset Up | Preset Up |

Volume control note:

Press once: up/down (one increment); Press and hold: up/down (continuous)

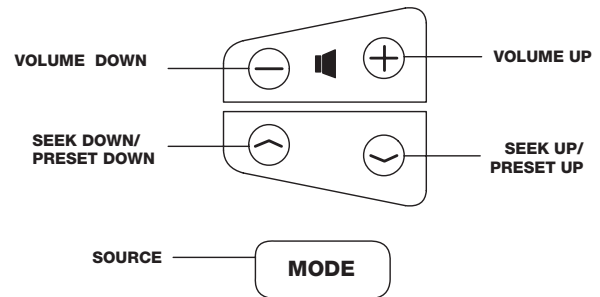
STEERING WHEEL CONTROLS: GM

GENERAL MOTORS GM LAN 11 BIT STEERING WHEEL LEGEND



| | S | J | K | C | A | P |
|------------|-----------------|-------------|-------------|-----------------|-----------------|------------------|
| | Sony | JVC | Kenwood | Clarion | Alpine | Pioneer |
| Vol Up+ | Vol Up | Vol Up | Vol Up | Vol Up | Vol Up | Vol Up |
| Vol Down- | Vol Down | Vol Down | Vol Down | Vol Down | Vol Down | Vol Down |
| Seek Up | Seek/Track Up | Seek/Trk Up | Seek/Trk Up | Seek/Track Up | Seek/Track Up | Seek/Track Up |
| Seek Down | Seek/Track Down | Seek/Trk Dn | Seek/Trk Dn | Seek/Track Down | Seek/Track Down | Seek /Track Down |
| Speak Icon | Mute | Mute | Mute | Mute | Mute | Mute |

TOYOTA STEERING WHEEL LEGEND



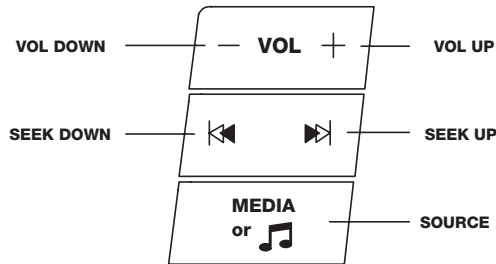
| | S | J | K | C | A | P |
|------------|------------------|----------------|----------------|----------------------|------------------|------------------|
| | Sony | JVC | Kenwood | Clarion | Alpine | Pioneer |
| Vol Up + | Vol + | Vol + | Vol + | Vol + | Vol + | Vol + |
| Vol Down - | Vol - | Vol - | Vol - | Vol - | Vol - | Vol - |
| Mode | Source | Source | Source | Source | Source | Source |
| Seek Up | FM Presets | FM Presets | Seek Up/Trk Up | FM Preset/Disk Trk 1 | FM Presets | FM Presets |
| Seek Up | Seek Up/Track Up | Seek Up/Trk Up | Seek Up/Trk Up | FM Preset Up/Trk Up | Seek Up/Track Up | Seek Up/Track Up |
| Seek Down | Seek Dn/Track Dn | Seek Dn/Trk Dn | Seek Dn/Trk Dn | FM Preset Dn/Trk Dn | Seek Dn/Track Dn | Seek Dn/Track Dn |

Volume control note:

Press once: up/down (one increment); Press and hold: up/down (continuous)

STEERING WHEEL CONTROLS

FORD STEERING WHEEL LEGEND



| | S | J | K | C | A | P |
|------------------|------------------|--------------|----------------|---------------------|------------------|------------------|
| | Sony | JVC | Kenwood | Clarion | Alpine | Pioneer |
| Vol Up+ | Vol Up | Vol Up | Vol Up | Vol Up | Vol Up | Vol Up |
| Vol Down- | Vol Down | Vol Down | Vol Down | Vol Down | Vol Down | Vol Down |
| Media/Music Note | Source | Source | Source | Source | Source | Source |
| Seek Up | Seek Up/Track Up | Sk Up/Trk Up | Seek Up/Trk Up | FM Preset Up/Trk Up | Seek Up/Track Up | Seek Up/Track Up |
| Seek Down | Seek Dn/Track Dn | Sk Dn/Trk Dn | Seek Dn/Trk Dn | FM Preset Dn/Trk Dn | Seek Dn/Track Dn | Mute |

Volume control note:

Press once: up/down (one increment); Press and hold: up/down (continuous)

STEERING WHEEL NOTES & TROUBLESHOOTING

STEERING WHEEL CONTROL NOTES & EXCEPTIONS

The illustrations of steering wheel controls and buttons in this manual are "typical". The actual controls and placement of the controls varies between each make, model, trim level, and/or options package. The overall operation and characteristics are similar between makes.

For Volume UP/DOWN operation, pressing either button once will increase or decrease ONE small increment. Press and hold for continuous UP or DOWN volume adjustment.

For CD Seek UP/DOWN operation, pressing either button once will skip UP or DOWN tracks. Press and hold for manual track FWD/RR.

The radio seek UP/DOWN operation varies between stereo brands. In some cases pressing the seek UP/DOWN button once will skip UP or DOWN to the next strong radio station. In other cases, this button will select through Memory preset stations on the stereo. Consult the steering wheel control pages for your particular brand and configuration.

TROUBLESHOOTING

Stereo will not respond to Factory steering controls:

Verify vehicle compatibility. Check the S3-1 harness instruction for your particular vehicle listing.

Verify / Check installation:

1. Check connections at **S3-1** module, verify power, ground is present.
2. Check to determine if steering wheel control module is properly connected to main **S3-1** module.
3. Check to determine if steering wheel OUTPUT wire or 3.5mm cable is connected to the correct steering wheel INPUT at the back of the aftermarket stereo.
4. Check to determine that steering wheel selection potentiometer is set to matching brand of aftermarket radio i.e. A: Alpine, C: Clarion, J: JVC, K: Kenwood, P: Pioneer, S: Sony (see page 3)