SCORPIO
/MOTOSECURE/

SR-i900 Series

V9.3

Table of Contents

Installation

Components

TRS-9
Transceiver

AC
Adapter

GEN-1

MCM-9

RFID
antenna

ACC-1

HAR-1

Planning the Installation

☐ Check that your motorcycle battery is fully charged.
☐ Check the layout of the motorcycle for placement of components.
☐ Verify that no moving parts interfere with the components or their wires.
☐ Verify that chosen location is not near extreme heat.

Grey Wire ----- Turn Signal (+)
Grey Wire ----- Turn Signal (+)
Orange Wire ----- Tail light (+)
Black Wire ----- Ground (-)

To Battery (+)

Optional

SN-5

Perimeter Sensor

Dust Cap

Generic Connector Kit
(GEN-1)

Optional

Accessory
Harness
(ACC-1)

Main
Harness
(HAR-1)

Ignition
Disable

RID-5

Factory Conector Kit

To cut wire on bike *

Antenna

RFID Antenna

Main Control Module (MCM-9)

4
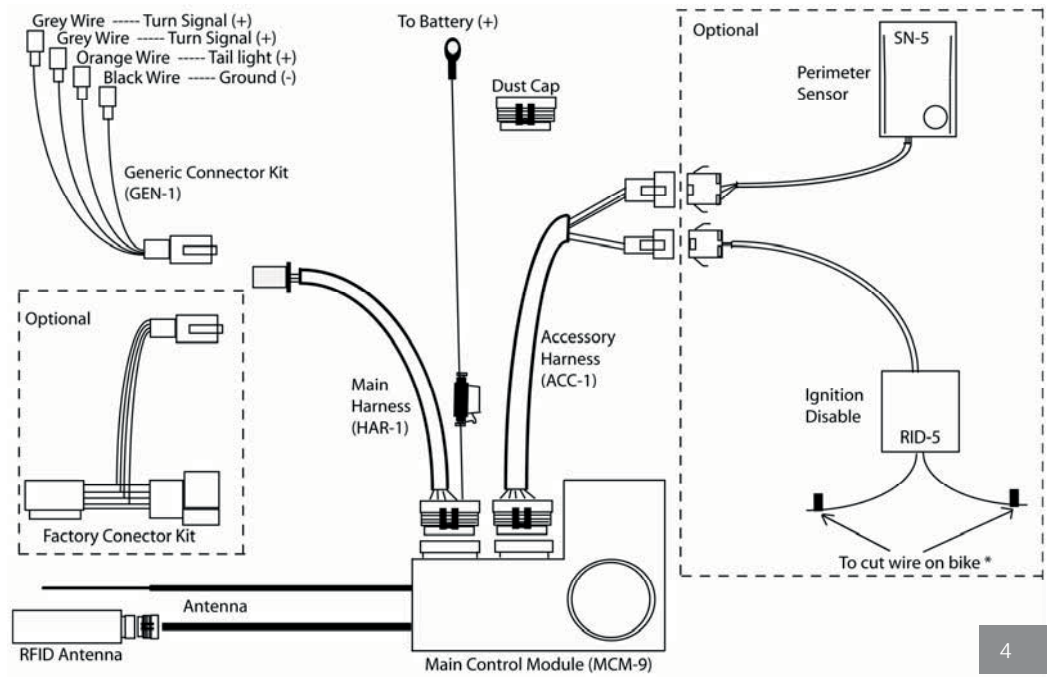
Installation Warnings and Notes

⚠️ : Connect the (HAR-1) harness to the MCM only after installation is completed. Make sure remote is closed to bike to avoid a trigger.

Note: When the main harness (HAR-1) is plugged in, the siren should chirp. If the siren does not chirp; check the alarm inline fuse, connection to battery (+),and connection to ground (-).

⚠️ : If the battery is to be removed, disconnect HAR-1 connector first. Reconnect only after battery terminals are reconnected.

Mounting the Components

Select a suitable location underneath the seat or in a side cover. Mount components using velcro or cable ties. Make sure that the components are not exposed or accessible.
o Place MCM as flat as possible to achieve best performance.
o Place RFID antenna under seat or tail section, do not chose a location that is covered with metal.

Routing the Antenna Wire

For best performance the last 6″ of the antenna should:
o Be as vertical as possible.
o Be away from metal as much as possible.

Antenna 6″

Extension 12″

Making Connections

The necessary connector or wires are found under the seat or in the tail section of the bike. Removal of the tail section plastics or side cover might be necessary.
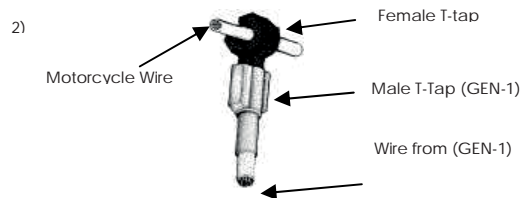
Color Codes: (Color codes are not always valid. Always verify before making connections)

	Ground (-)	Tail Light	Left Turn Signal	Right Turn Signal
Honda	Green	Brown	Orange	Blue
Kawasaki	Black	Red	Green	Grey
Suzuki	Black/White	Brown	Green or Black	Grey
Yamaha	Black	Blue	Green	Brown
Harley Davidson	Black	Blue	Brown	Purple
Ducati	Black	Yellow	White/Black	White/Green

Using the T-tap Connectors and GEN-1 Connector

1) Place the female T-tap connector over wire, close and squeeze until it snaps.
2) Slip male T-tap connector over hinged end of the female connector to make a connection.

1) Motorcycle Wire — Female T-tap

2) Female T-tap — Motorcycle Wire — Male T-Tap (GEN-1) — Wire from (GEN-1)

Alert Type Aud/Vibr

Range Indicator

Button 1

Reset Button

Shock Trigger

Button 2

Audible/Silent Alert Indicator

24 hour Clock / Text display

System Status

Battery

Tilt Trigger

Ignition Trigger

Perimeter Trigger

Back up Power Trigger

Charger Input

FM 2WAY   RFID

SHOCK   TILT   IGN

BK UP   PER OFF

6:53

SCORPIO

Charging Instructions

We recommend that the transceiver be charged for up to 12 hours to insure full life of the battery.

1. Plug in provided charger into the transceiver.
2. While the transceiver is charging the icon will scroll from empty to full.
3. When the transceiver is fully charged the icon will no longer scroll.

It's recommended to recharge the transceiver every day to maintain full function.

Remote Battery Status

The LCD will display 3 different icons to show the transceiver battery status.

Motorcycle Battery Status

Every time the alarm is activated or deactivated, the LCD will display a text message with the current battery voltage.

bAtt: 12_4

If motorcycle battery drops below 11 volts the screen will display CyCLE bAtt LO.

Transceiver Back light

From the main screen pres button 1or 2, the screen back light will turn on for 2 seconds.

The SR-i900, by default, will be in auto arm mode and will activate with the perimeter sensor off and the siren on, five seconds after turning the ignition key off.

Auto Arm

Turn ignition key off. Walk away from bike

Siren:
Chirp 3 Times

Turn Signals:
Flash 1 Time

PER OFF

10:58

Activate perimeter sensor

Press and hold button 1 and 2

Siren:
Chirp 4 Times

Turn Signals:
Flash 1 Time

10:58

Panic / Stop Trigger (when system is armed)

Press and hold button 1

Siren:
Chirp 6 Times

Turn Signals:
Flash 1 Time

Auto Disarm

Walk next to bike. Turn ignition key on

Siren:
Chirp 1 Time

Turn Signals:
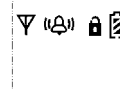Flash 1 Time

Manual Disarm

Press and hold button 2

Siren:
Chirp 1 Time

Turn Signals:
Flash 1 Time

Note: If the system is manually disarmed it will stay in disarmed mode. At this mode the system will not auto arm upon turning ignition key off.

Manual Arm (system has to be manually disarmed first)
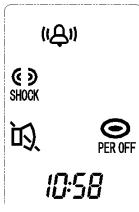
Press and hold button 1

Siren:
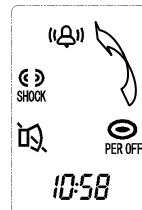Chirp 3 Times

Turn Signals:
Flash 1 Time

PER OFF

10:58

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Entering Programming Mode

1) Press button 2 Twice quickly to enter programming mode

Programmable options will be displayed. The selected icon will flash

2) Press button 2 again to scroll through programmable options

3) Press button 1 to select icon and to begin programming

Note.   Remote will time-out of programming mode after 20 seconds. No changes will be saved.

Note.   To exit programming mode scroll through all icons once.

Selecting Perimeter Sensor Default

Enter programming mode. The ⊖ PER OFF icon will begin to flash, press button 1 to enter the perimeter sensor menu. The LCD will display the current setting. To program follow these steps:

Press button 1 to scroll between the options
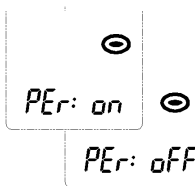
PEr: on ⊖

PEr: oFF

Press button 2 to save and exit

PEr: on – Perimeter sensor will be enabled every time alarm is armed

PEr: oFF – Perimeter sensor will be disabled every time alarm is armed

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Selecting Transceiver Alert Type (Audible/Silent/Vibrate)

Enter programming mode. Scroll to the the ((◔)) icon, press button 1 to select. The LCD will display the current settings. To program follow these steps:
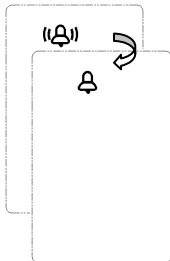
Press button 1 to scroll between the options

Press button 2 to save and exit

((◔)) – Transceiver will vibrate and sound when a trigger occurs

ALL oFF – Transceiver will only flash backlight when a trigger occurs

◔ – Transceiver will only sound when a trigger occurs

(( )) – Transceiver will only vibrate when a trigger occurs

Adjusting the Accelerometer (Shock/Tilt) Sensor (proximity to MCM required)

Enter the programming mode. Scroll to the SHOCK icon and press button 1 to select. The screen will display the current shock setting, and the siren will chirp 1-5 times to confirm sensitivity level. To program follow these steps:

Press button 1 to scroll between the options
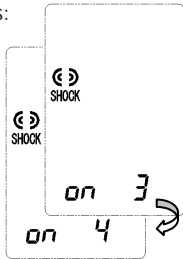
Press button 2 to save and exit

on 3

on 4

Off – Sensor turned off

1 – Least sensitive

5 – Most sensitive

Enter programming mode. Scroll to the 🔊 icon and press button 1 to enter the siren menu. The LCD will display the current setting. To program follow these steps:

Press button 1 to scroll between the options →
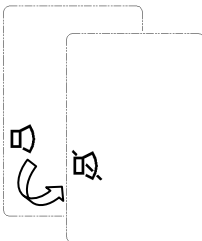
Press button 2 to save and exit →

🔊 – Siren will sound and turn signals will flash every time alarm is triggered

🔊 – Siren will not sound and turn signals will not flash every time alarm is triggered

Setting the Clock

Enter the programming mode. Scroll to the time and press button 1 to select. The screen will display time with the hour flashing. To program follow these steps:

Press button 2 to toggle between digits →

8:55

Press button 1 to adjust each digit →
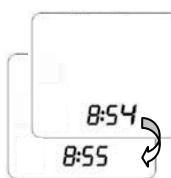
Press button 2 pass last digit to save →

8:54
8:55

Note.   Clock only displays in 24 hour format (Military time)

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Note: The transceivers are programmed from the factory. Encoding is only necessary should the transceiver lose its code and will not arm or disarm the security system or if a second or replacement remote is obtained.

1. Unplug HAR-1 from the MCM-9 and plug it back in, the siren will chirp 2 times and the lights will flash 2 times.
2. Within 6 seconds of plugging in the HAR-1 turn ignition switch "ON" and "OFF" 3 times.
3. If step 2 is done correctly and within the time allowed , the siren will chirp 2 times and the lights will flash an additional 2 times to confirm that the system is in "Learn Mode".
4. Press and hold button 1 until the system chirps 2 times and the lights flash 2 times to indicate that the MCM has learned the code. The transceiver echoes 4 chirps and the LCD displays [**LErn donE**] to confirm that the transceiver is encoded.
5. If you are encoding a second transceiver repeat step number 4 for the second transceiver before continuing to step number six.
6. Turn ignition "ON" and "OFF" to exit "Learn Mode".

Button 1

Main Harness (HAR-1)

Additional Information

Sensor Memory Display

When the system is disarmed the turn signals will flash to indicate if there has been an alarm trigger. The lights will flash once to indicate that the system has been disarmed, additional flashes indicate that the following trigger has occurred:

> 1 flash then 1 additional flash = Shock Trigger
> 1 flash then 2 additional flashes = Tilt Trigger
> 1 flash then 3 additional flashes = Perimeter Sensor Trigger
> 1 flash then 4 additional flashes = Back-Up battery Trigger
> 1 flash then 5 additional flashes = Ignition Trigger

Motorcycle Battery Safeguard with "sleep mode"

- If the optional perimeter sensor is being used and the alarm is armed for more then 10 days the system will automatically disable the perimeter sensor.
- If the alarm is armed for more than 30 days, the system will automatically shutdown its RF capabilities. In this mode the transceiver will no longer be able to operate the system but the system is still armed and protecting the bike.
- To disarm, trigger the alarm, and press button 2.

Manual Override Procedure

A personal override code will be a sequence of left – right - left turn signal flashes that can be used if the remote is lost to disable the alarm:

Enter programming Mode

1. Manually disarm system
2. Turn ignition on – off – on – off – on. The siren will chirp one time to confirm.
3. Press and hold button 1 and 2 at the same time for a few seconds until alarm chirps 3 times and flashes lights 3 times to confirm.

Select number of flashes for Code

The code will be a combination of left-right-left-right turn signal count.

1. Turn on left turn signal to desired number of flashes. (up to 9)
2. Turn on right turn signal to desired number of flashes. (up to 9)
3. Turn on left turn signal to desired number of flashes. (up to 9)
4. Turn on right turn signal once to exit mode. (Will only register one flash)
5. When done, the remote will display the sequence on the screen until a button is pressed or for up to 30 seconds.
6. The bike will flash the code in the same sequence entered.

CodE:2641

(LCD screen will confirm code)

Using code in case of lost remote

1. Turn ignition key to on position. Let alarm go thru a full cycle until the turn signal lights stop flashing. (If siren is turned off, you do not need to wait for a full cycle)
2. Enter code as originally entered.
3. When correct code is entered the alarm will deactivate

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Transceiver Information

When the system is triggered, the siren will sound and the turn signal lights will flash. The transceiver's LCD will display the following messages:

1. If bike is bumped, the LCD will display 🔊 SHOCK icon. The siren on the bike will sound for 5 seconds and the lights will flash. This cycle will repeat twice.

2. If the perimeter sensor triggers a full alarm cycle, the LCD will display ◎ PER icon. The siren on the bike will sound for 5 seconds. This cycle will repeat twice
   (Note: The turn signal lights will not flash for a perimeter sensor trigger).

3. If the bike is tilted, the LCD will display ↻ TILT icon. The siren on the bike will sound for 30 seconds and the lights will flash. This cycle will repeat six times.

4. If the ignition switch is turned on or tampered with, the LCD will display ➥ IGN Icon. The siren on the bike will sound for 30 seconds and the lights will flash. This cycle will repeat six times.

5. If the main harness or battery power supply is disconnected (assuming optional Back-Up battery is installed), the LCD will display ⚡ BACKUP icon. The MCM-9 will still continue to sound and transmit from its internal power source. The siren on the bike will sound for 30 seconds. This cycle will repeat six times.

6. The transceiver will continue to flash the triggered icon until any button is pressed.

If the transceiver is within range of the MCM and the alarm is activated, the LCD will display ⍌ icon.

If the transceiver does not receive the RCS; the ⍌ icon will not appear.

Checking Violation Display with Time Stamp

If no alarm triggers in memory, all sensor icons will be displayed

If the system was triggered, the last triggered sensor will be displayed

Press button 1 twice quickly

⍌ (△) ➊ 🔋

(○) SHOCK   ⟳ TILT   ▬ IGN

🔇   BK UP   ⊘ PER OFF

0 oF 0

⍌ (△) ➊ 🔋

(○) SHOCK

🔇   PER OFF

1 oF 2

⍌ (△) ➊ 🔋

(○) SHOCK

🔇

12:58
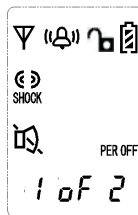
Trigger #   Total # of Triggers

Time of trigger

Press button 1 to scroll between triggers

Or, press and hold button 2 for two seconds to erase memory.

The receiver consists of two functions RFID functions and Two-way FM communication.

Low Battery Stages

It's recommended that the transceiver be charged daily. If the transceiver is not charged daily the following stages will occur.

Low Battery: When the battery is low the 🔋 icon will cycle from 3 bars to 2 bars to 1 bar. The transceiver should be charged as soon as possible.

Two-Way Off: If the transceiver is not charged, at some point (approximately 7 days) Two-way communication will shut off. At this mode the LCD displays [rFId onLy]. The RFID system will still operate and you will still be able to automatically and manually arm and disarm the system.

No Response: If the battery is not recharged and all power is drained. The transceiver will not respond. The transceiver has to be charged before it can operate the system again.

Optional Accessories:

Perimeter Sensor (SN-5)
Back-up Battery (BAT-5)
Ignition Disable (RID-5)

Mounting the SN-5

The Perimeter sensor uses high frequency microwave technology to detect mass density movement around the motorcycle. The signal can transmit through the seat, fiberglass, leather and plastic, but not metal. It is recommended to place this sensor under the seat as close as possible to the center of the motorcycle. With the provided Velcro, you can mount this sensor on top of the battery or any flat surface, making sure that the top side of the sensor is facing upwards. Place the perimeter sensor as faraway from the MCM as possible.

Adjusting the Sensor

Although the sensor is pre set from the factory it may be necessary to adjust the sensitivity to suit your needs. Remove the plastic cap and turn the adjustment screw.

To increase sensitivity, turn adjustment screw clockwise.
To decrease sensitivity, turn the adjustment screw counter clockwise.

Plastic Cap:
Remove to adjust sensitivity

Note: Do not turn sensitivity above half way. Doing so may cause false alarms.

To Accessory Harness on Main Control Module (MCM)

Back-up Battery (BAT-5)

The back-up battery provides the system the ability to transmit information and activate the siren when power is interrupted. If power is ever interrupted while the system is activated the back-up battery will be engaged. The transceiver will receive a ʙᴀᴄᴋᴜᴘ trigger and the siren will sound in 30 second increments. If power is not restored the alarm will continue to transmit and sound for six cycles.

> Note: The system has to be correctly installed for at least 12 hours before full function of the back-up battery can be used.

To check the status of the back-up battery, activate the system using button 1.
- If the system chirps 3 times the back-up battery is in good working condition
- If the system chirps 2 times the back-up battery is not fully charged or not installed.

> Note: If power is purposely being interrupted when the alarm is activated, turn ignition key on and off before disconnecting power to limit the back-up to two cycles instead of six.

> Note: If the system chirps only 2 times and it has been correctly connected for more the 12 hours, the battery needs replacement. (Contact Aritronix for replacement options)

Ignition Disable / Anti-hijack Module (RID-5)

Installation

1. Cut the Ignition / Engine control wire (refer to options on page 22)
2. Attempt to start bike to test if correct wire is selected. If bike starts the wrong wire is selected. (contact Aritronix for assistance) If bike does not start, correct wire was selected continue to step 3.
3. When packaged the RID-5 wire ends have been treated with clear silicon to protect the ends from fraying. Make sure they are stripped bare of this before continuing.
4. Connect one end of the cut wire to one of the blue tabbed wires in RID-5 with provided butt connector or any other solid connection option.
5. Connect second end of the cut wire to second blue tabbed wire in RID-5 with provided butt connector or any other solid connection option.
6. Test connections to insure that they are as solid as possible. *
7. Plug the RID-5 connector into the matching connector on the Accessory Harness.
8. Test RID-5 by activating alarm (without perimeter sensor) and try to start bike. If bike starts, please contact Aritronix for assistance.

* Failure to test for a loose wire could cause an accidental engine cut off.

Ignition / Engine Control Wire Options:

Option #1:   Positive lead wire on fuel pump
Option #2:   Positive lead wire on fuel injection system
Option #3:   Positive wire that goes to the ignition fuse in fuse box. This should be either a 10 or
             15 amp fuse labeled IGN. (Carbureted Bikes Only)
Option #4:   Ground wire from ignition module
Option #5:   Positive wire from ignition module to ignition coil

Operating the Anti-Hijack Feature

While the engine is running, press and hold the transceiver's button 1 and button 2 at the same time for 3 seconds. The siren will begin to chirp confirming that the Anti-Hijack feature has been activated. 15 seconds later, the siren will go off continuously, and the engine will shut down. To disarm, turn off the ignition switch and press button 2.

To Accessory Harness on Main
Control Module (MCM)

To CUT wire on motorcycle
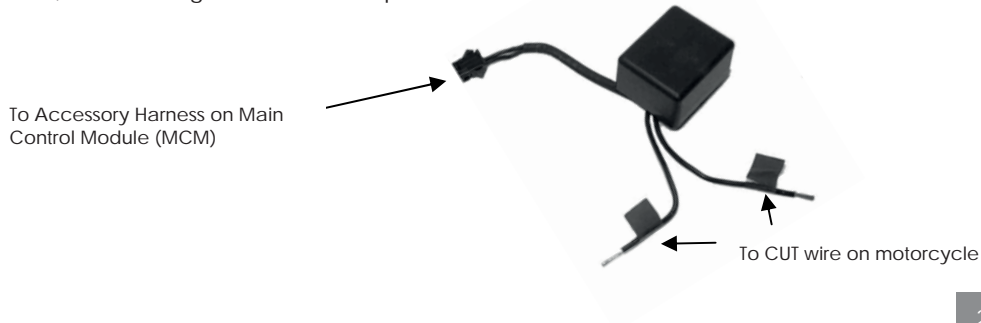
Appendix

Troubleshooting guide

Problem	Possible Cause	Solution
Will not arm	RFID antenna not connected	Verify connection from MCM to RFID antenna
	Power or ground not connected	Verify connection to power lead and ground connection
	Orange wire not connected	Verify connection to 12 volt wire with key on. (tail light on most bikes)
Turn signals will not flash	Grey wires from GEN-1 not connected or connected to wrong wires	Test wires and change connections to correct wires
Perimeter Sensor not working	Sensor not connected	Check connections
	System set on default with sensor off	Enter Programming mode and change default
Ignition Disable does not work	Orange wire from GEN-1 not connected	Connect orange wire from GEN-1 to 12 volt (+) with ignition key on. In most bikes that is the tail light wire
	Ignition disable not connected to correct wire on bike	Refer to options on the ignition disable instruction page. Test selected wire before reconnecting RID-5 wires.

a1

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