



rosco
VISION

DV6

User Manual



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1. FCC and IC Compliance Notice

This device complies with part 15 of the FCC Rules and with Industry Canada license-exempt RSS standard(s). 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.

Note: Changes or modifications to the device are not permitted and will void device compliance.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or other communication device reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reposition other device antennas.
- Increase separation of the antenna and the offending equipment causing interference.
- Check device power connections to ensure power is stable.

2. Safety Precautions

2.1 Installation

- All positive wires connected to the vehicle should be fused and replaced with the appropriately rated fuse below.
 - **Power Input:** 5A Mini Fuse **OR** diagnostic connector 7.5A
 - **Ignition Input:** 2A Mini Fuse (Applicable if the device is installed with IGN wire)
- All wires carrying a positive voltage **must** be safely routed.
 - **ALWAYS** secure harnesses or wires with provided zip-ties to prevent damage and shorting over the life of the product. Additional zip-ties may be used if needed.
 - **NEVER** route harnesses or wires across sharp metal surfaces, this might damage the wire and cause a short.
 - **NEVER** route harnesses or wires through metal holes without rubber grommets or loom.
 - **DO NOT** route harnesses or wires with or without zip ties in front of any airbags.
 - **DO NOT** zip ties harnesses or wires to the actual airbag.

2.2 Usage

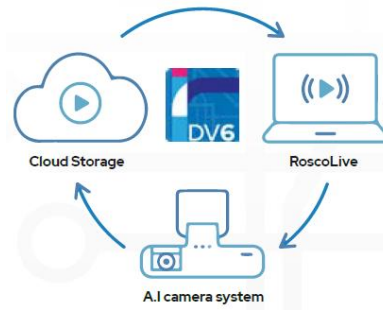
The DV6 is intended to function as a driver aid and is **NOT** a replacement for a safe, attentive, well-trained driver.

- The DV6 cannot counteract a driver who is impaired due to drowsiness, distraction, fatigue, drugs, or alcohol. It is the driver's responsibility to ensure the vehicle is being operated in a safe manner and failure to do so can result in severe personal injury, property damage or death.
- Keep both camera lenses free of obstruction to ensure optimal performance at all times. Failure to prevent obstruction may result in unintended operation and might inhibit driver safety features.
- Certain in-cabin conditions can negatively affect device performance such as: low visibility, unique lighting, driver positioning, lens obstruction or smudging. This can result in false warnings, no warnings or less than normal warnings.

3. Product Overview

3.1 Device Description

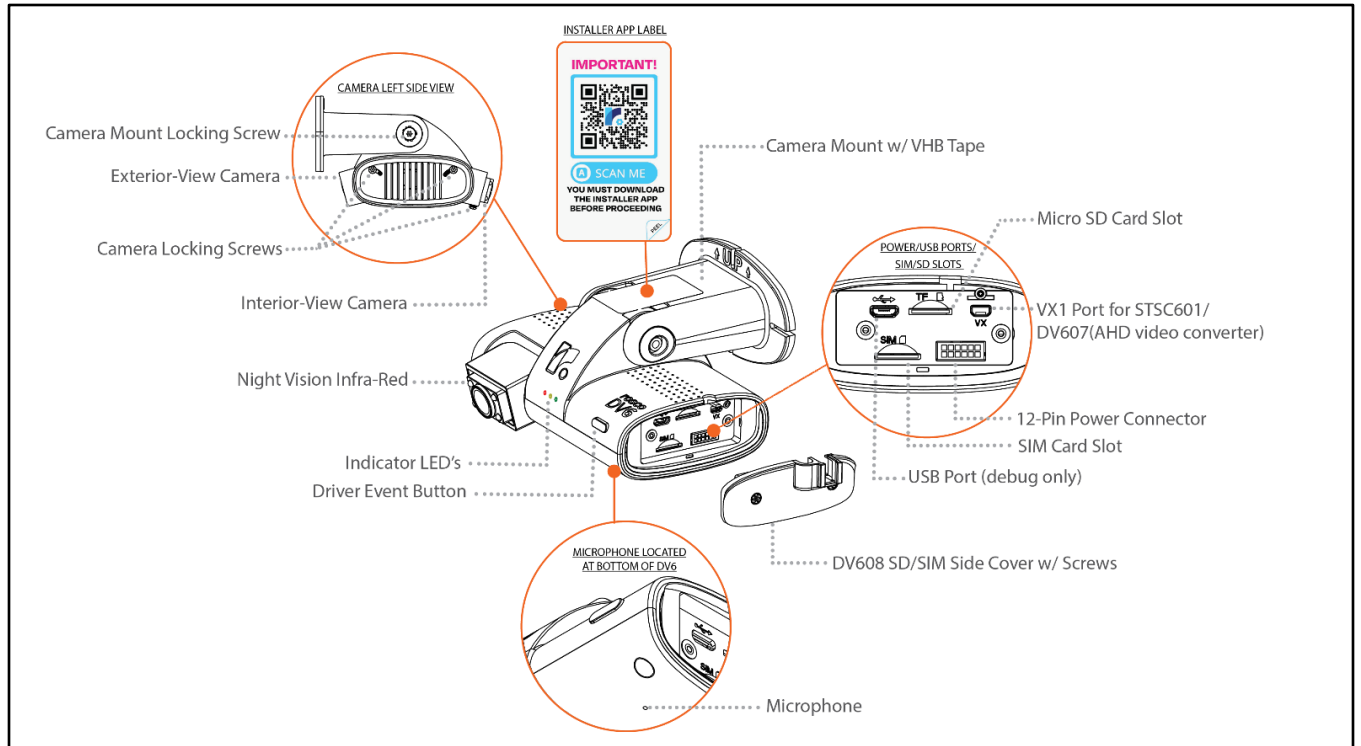
The Rosco DV6 is an AI-Enhanced dual-channel commercial grade drive-recorder built for fleet management through RoscoLive.



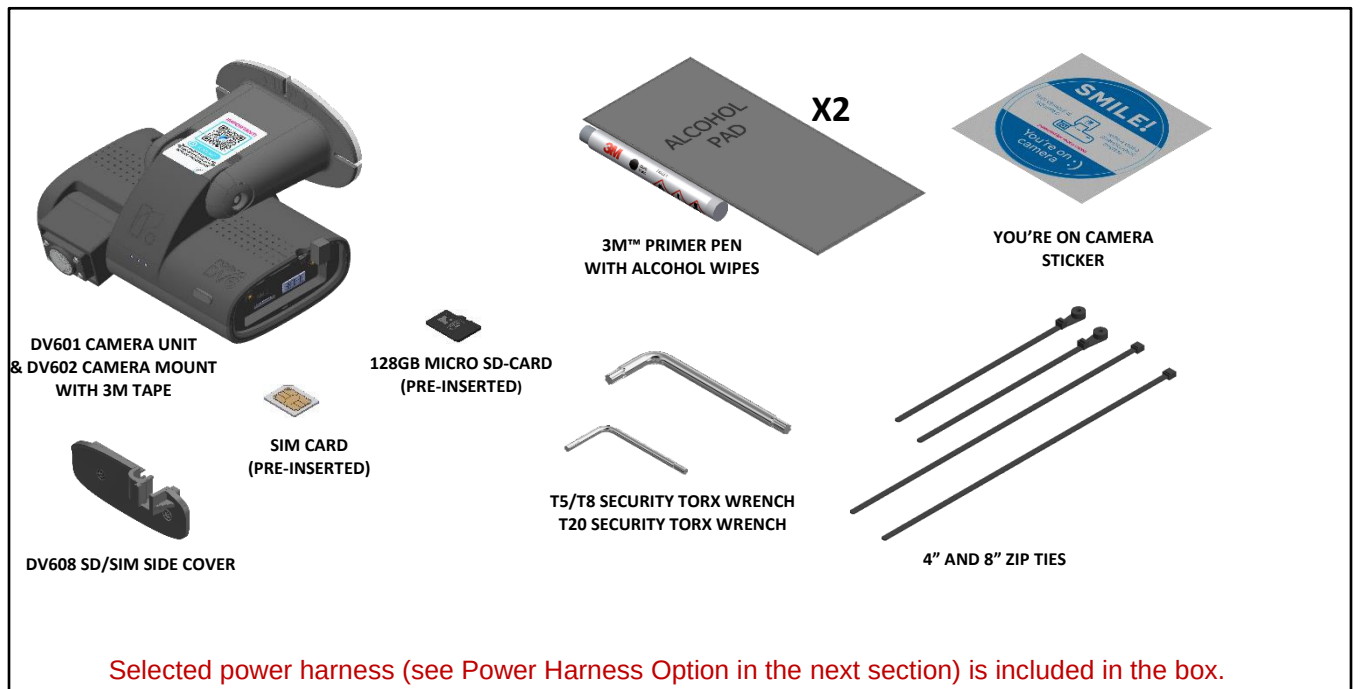
3.2 Key Features

- 2 Channels, 1080p FHD Resolution
- Optional Third Camera (STSC601), 1080p FHD Resolution
- Optional Aux Cameras (up to 4 standard analog) through HD Multiplexer (STSS1200) or 4 HD inputs via HD converter (DV609) for 1080p output
- Adjustable Video Quality
- AI based Driver Distraction Monitoring w/audible alerts.
 - **Distraction:** Detects events when the driver is distracted turning his head to his left or right.
 - **Yawning:** Detects events when driver yawns repeatedly.
 - **Drowsiness/Head Down:** Detects event when driver's eyes are closed for a period OR when they are looking down to text.
 - **Phone Use/Hand to Head:** Detects event when driver is holding phone on up to either side of his/her head.
 - **Smoking:** Detects event when driver smokes for a period.
 - **Seatbelt :** Detects events when driver unfastens the seatbelt at certain speed.
 - **Camera Block/Obstruction Detection:** Detects if the driver facing camera lens is covered or blocked by any obstruction.
- AI based ADAS Features
 - **Forward Collision Warning**
 - **Headway Monitoring**
 - **Tailgating**
- Driver ID detection with DMS (Driver Monitoring System)
- Unsafe Driving Behavior
- Speeding
- Driver Event Button
- Vehicle Idling
- Advanced Vehicle Voltage Detection
- Sleep Mode Wake-up
- Light sensor & IR LEDs for night vision
- Parking mode recording
- Camera Health Reports
- Advanced CAN Vehicle Maintenance Features
- Built-in Microphone
- Built-in G-Sensor
- Built-in GPS
- Industrial Grade 128GB or higher Micro SD-card
- Industrial Grade SIM card
- On-board 4G LTE Modem
- On-board Wi-Fi 802.11g/n/ac / Bluetooth v4.2
- RoscoLive Cloud Connectivity
- Supports CAN for OBD-II and J1939
- Certified FCC/IC
- Certified PTCRB
- Certified IoT device for Major Carriers in US/Canada

4. DV6 Components



5. Package Contents



IMPORTANT NOTE ON SD-CARD MAINTENANCE :

SD cards should be formatted every 6 months to maintain optimal performance regardless of the card's capacity, work cycle, environment, and other factors. A properly maintained SD card's lifespan will vary based on these same factors, but to ensure the card's dependable lifespan is not exceeded, it is recommended it be replaced with a new card after 24 months.

6. DV6 Power Harness Option

1) OBD II vehicle connection.

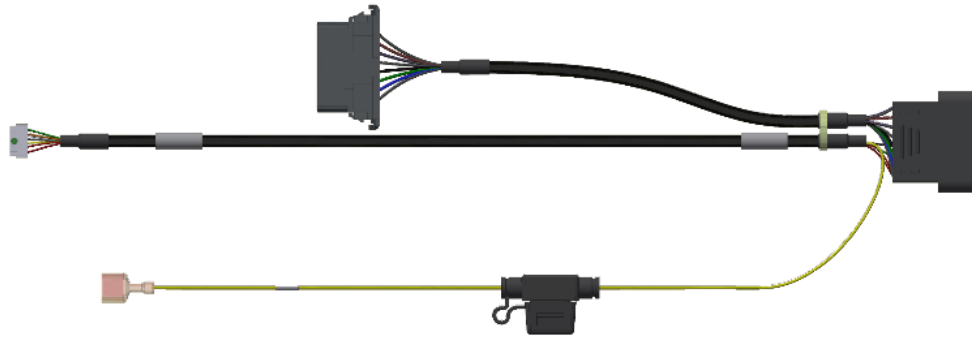


Fig: DV665 Harness

2) J1939 Vehicle Connection



Fig: DV672 Harness

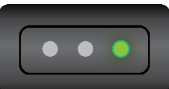
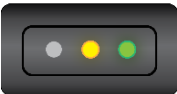
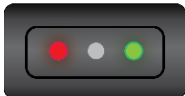
3) Direct Vehicle Wiring Connection



Fig: DV673 Harness

7. LED Indicators

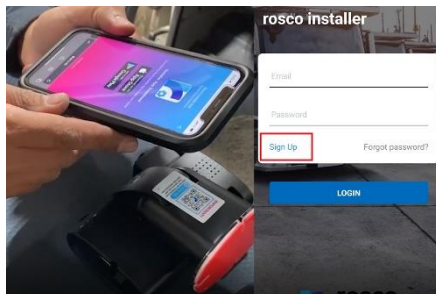
The DV6 is equipped with three status indicators. Upon powering up, the device should go from the “Device Bootup” state to the “Device Ready” state. After the installation, once the device is in the recording state, the device will attempt to connect to RoscoLive indicated by a flashing green LED and once connected, the green LED will turn solid. The red and yellow LEDs are used for diagnostic and troubleshooting purposes only.

LED STATUS	NOTES
DEVICE BOOTUP 	1. The device will flash the 3 LEDs several times during bootup. 2. Bootup should not take more than 30 seconds. 3. Device is "Waking up"
DEVICE READY 	1. Device shows 3 solid LED lights after the bootup, and the device is ready to be installed for the first time.
PAIRING MODE 	1. Flashing Yellow when the device is in pairing mode during the installation process.
CONNECTED AND RECORDING 	1. Normal recording status. 2. When solid, recording, and connected to RoscoLive. 3. Device is Online: Driving or Parking or in Awake modes.
RECORDING BUT NOT CONNECTED 	1. Normal recording status. 2. When flashing, recording but not connected to RoscoLive. 3. If the network connection is weak in areas of low/ no cell signal.
USER SERVICEABLE ERROR 	1. Error which can usually be resolved by user intervention. 2. Check if SD card is inserted. 3. Check if SD card is formatted to FAT32. 4. Check if the 3rd camera is enabled but not connected to VX port or to DV607. 5. Check if the 3rd camera is enabled but the Multiplexer is either powered off or not connected to DV607. 6. Check harness connection. 7. Contact Technical Support.
USER SERVICEABLE ERROR 	1. Error which can usually be resolved by user intervention. 2. Check if SIM card is inserted. 3. Check if the SIM card inserted is activated. 4. Check if the company the device installed in has the right APN added to the device based on the SIM card network type.
NON-SERVICEABLE ERROR 	1. Error that cannot be solved by user intervention. 2. Contact Rosco Technical Support. 3. Check Error code in device Status Log either in the SD card or download status logs via RoscoLive
UPGRADING FIRMWARE 	1. When device upgrade is in process, either RED or GREEN LED is flashing. 2. The process may take 1 – 2 minutes to complete. 3. Firmware upgrade may be initiated Over the Air (OTA) via RoscoLive OR on the SD Card.
SLEEP MODE 	1. Device is Offline or in Sleep mode.

8. Installation

Download “Installer Mobile App” and follow all installation instruction steps.

To successfully install the DV6, your cell phone must have the latest IOS/ Android “Rosco Installer” application (available in the Apple App Store and Google Play Store). To install, please scan the QR Code below, or scan the QR code label on the DV6.



Please refer to the link below for a tutorial video.

[DV6 Install Video](#)

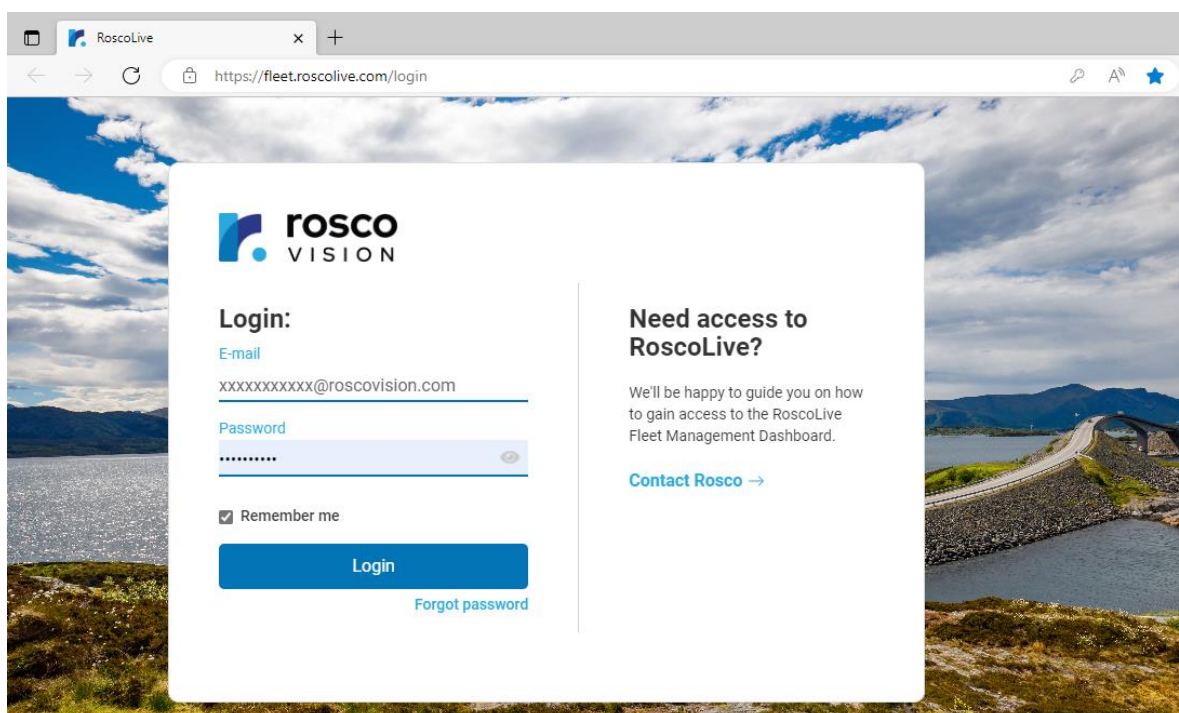
Note: Once Signed in, you will need to enter the “Company Key.” The Company Key must be provided by the Fleet Manager prior to the installation.

Please refer to the link below for the guide to find the Company Key on RoscoLive.

[Company Key for Camera Installation](#)

9. Fleet Management via RoscoLive®

To manage your vehicle, login to RoscoLive by visiting <https://fleet.roscolive.com/login> and entering your user login credentials where prompted. If you do not have user credentials, contact Rosco Technical Support.



10. Optional 3rd Camera

If there is a third camera (STSC601) that is required to be installed, mount the camera in the designated location. The following equipment is required for the installation of STSC601 with DV6:



For further information on mounting the camera with the optional L-bracket and to enable the camera on RoscoLive:

- See [STSC601 QSG](#) for reference.

11. Optional HD Video Converter and Multiplexer

If there is a requirement for the HD video converter (DV609) that is required to be installed for the HD output, mount the converter in the designated location.

- See [DV609 QSG](#) for reference.

For additional aux camera inputs, the HD multiplexer (STSS1200) needs to be used. The STSS1200 is an upgraded multiplexer allowing 4 additional camera views for DV6 and other products. This product comes equipped with a wireless remote to switch views from single, split, tri, and quad views.

The following are some of the features & Benefits with Multiplexer:

- 4 standard analog and HD inputs
- 1080p output for ultra-clear views
- Standard CVBS output for use with older monitors
- Wireless keypad to switch views easily
- Additional views can be added depending on fleet requirements such as:
 - Exterior side cameras (Left/Right, Front)
 - Backup camera
 - Additional interior camera (i.e., for long passenger buses)
 - Trailer camera
 - Interior cargo camera

For further details on how the multiplexer works and other integration of the camera/monitor combinations to use with the converter/multiplexer, refer to the [DV6 Brochure](#) on our website.

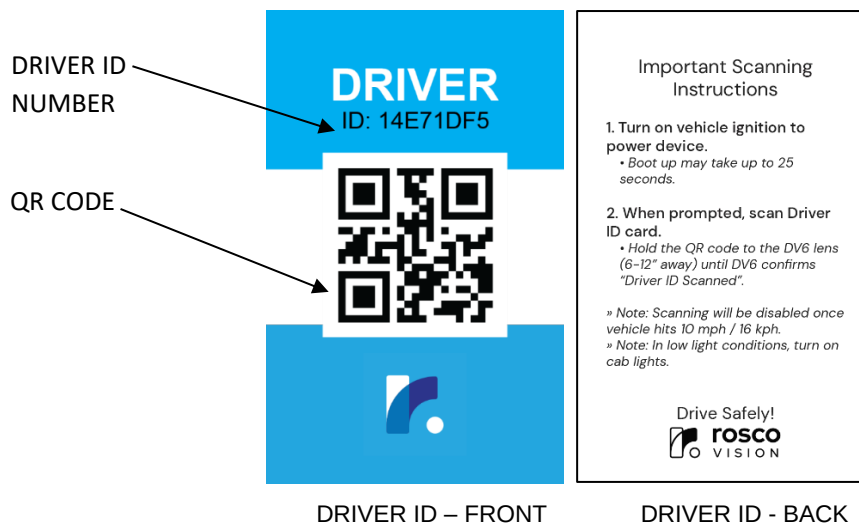
How the STSS1200 multiplexer works



If there is a requirement of the multiplexer with HD converter (DV609) that is required to be installed with DV6 unit, mount the multiplexer in the designated location.

- See for [STSS1200 QSG](#) reference.

12. Optional Driver ID Card



When DV6 is powered on and prompted “SCAN Driver ID CARD”

- Hold driver ID card with QR code facing DV6 lens 6-12” away as shown in FIG. 2 until DV6 confirms “Driver ID SCANNED”
- When scanning in low light conditions, turn on the dome/In-cab lights - FIG.1



FIG. 1



FIG. 2

With Driver Identification, you can link each driver with their own safety data. By linking drivers to their data, you can identify your best drivers and those that need more training. Set goals for individuals, teams, and even your entire fleet on [RoscoLive](#).

Note: Please refer to the [Drivers](#) page on RoscoLive for more information on the Driver ID Feature. The Driver's page on RoscoLive allows you to create and manage your company's drivers, review driver scores, monitor and set up driver coaching within your fleet.

13. Troubleshooting Guide

Symptom	Recommended Action
Device doesn't power on OR no LEDs.	Check vehicle ignition connection. Check OBD-II or J1939 fuse. Check ignition fuse. Check cable connection into camera and make sure it's inserted the correct way. Check the camera port for damage. Check harness for damage. Check harness connector(s) for damage.
Camera doesn't connect to RoscoLive.	Check SIM card insertion into camera. Check SIM card activation with RoscoLive. Check camera activation status. Check if the device is enabled on RoscoLive. Check if there is an APN associated with the SIM card and if that APN is correct based on the SIM carrier type requirement.
Camera has solid Yellow LED status	Check SIM card insertion. Check SIM card activation. Check SD card insertion. Check if the 3 rd camera is enabled but not connected to DV6/DV607. Check if the 3 rd camera is enabled but the Multiplexer is not connected to DV607. Check that SD card is formatted to FAT32.
Camera has solid Red LED status	Contact Rosco Technical Support
Camera has 3 flashing LEDs	Camera is booting- allow up to 30 seconds for the camera to boot. If continuous flashing, contact Rosco Technical Support.
Camera has 3 solid LEDs	Camera is ready to be paired and installed on RoscoLive.

Note: Check out Rosco's [Knowledge Base & Support Center](#) for more information on the products related to Dual-Vision Camera Systems.

For technical support:

Call: (718) 947-5363

Email: techsupport@roscovision.com



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A CENTURY OF AUTOMOTIVE VISION SAFETY

90-21 144th Place, Jamaica, New York 11435
Tel. - (718) 526-2601 • Toll Free - (800) 227-2095
techsupport@roscovision.com
www.roscovision.com