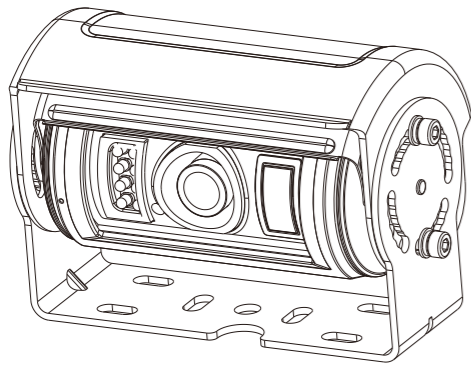


ControLaser RSE-3000C HD Owner's Manual



- 1 COMPOSITION
- 2 INSTALLATION
- 3 CONNECTION WIRING
- 4 CAMERA INPUT CONNECTOR PIN DESCRIPTION
- 5 LENS SPECIFICATION
- 6 FEATURES
- 7 SPECIFICATIONS

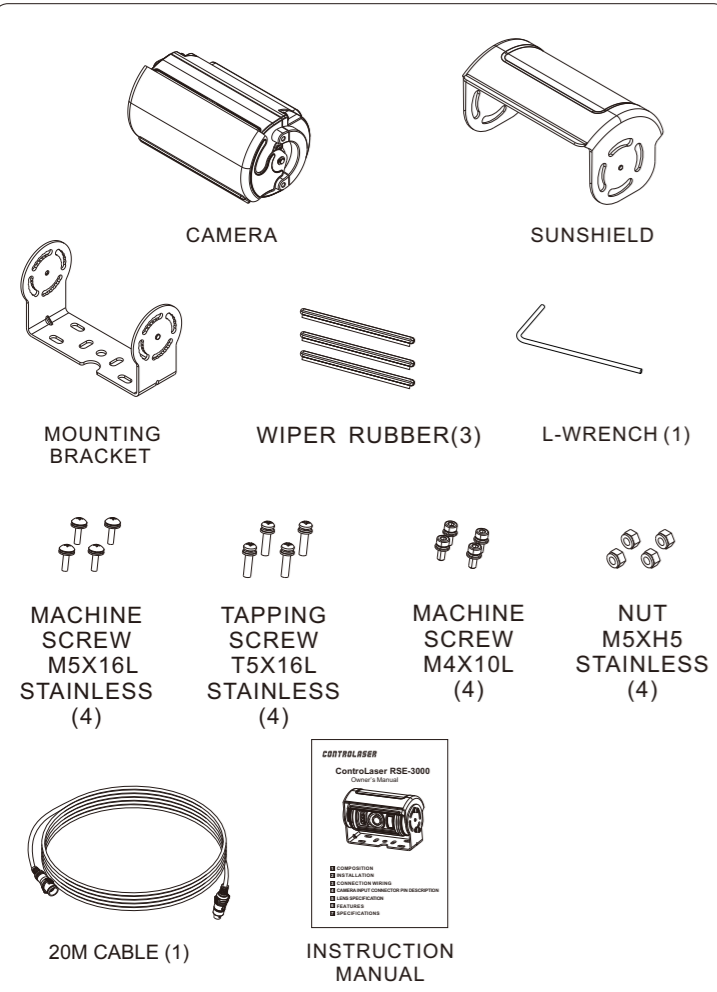
CAUTION BEFORE USAGE

1. PLEASE USE PRODUCTS AFTER READING MANUAL CAREFULLY FOR SAFE USAGE.
2. ASK EXPERIENCED TECHNICIAN FOR PRODUCTS INSTALLATION.
3. DO NOT OPEN OR MODIFY THE PRODUCTS. IT CAUSES PRODUCTS PROBLEM, AN ELECTRIC SHOCK & FIRE. ALSO, IT CAUSES WATERPROOF PROBLEM IN CASE OF WATERPROOF PRODUCTS. ASK YOUR DEALER FOR A/S IF YOU NEED REPAIRING.
4. DO NOT DROP OR GIVE EXTERNAL SHOCK TO THE PRODUCTS. IT CAUSES PRODUCT'S DISPLAY, FEATURE, MALFUNCTION OR COMPONENTS PROBLEM.
5. USE REGULATED VOLTAGE. MANUFACTURER DISCLAIM ALL THE RESPONSIBILITY FOR OVER VOLTAGE.
6. CONNECT MAIN POWER AFTER INSTALLATION.
7. USE SUPPLIED ACCESSORY & COMPONENTS. OTHERWISE, MANUFACTURER DISCLAIM ALL THE RESPONSIBILITY.
8. THE PRODUCTS IS DESIGNED FOR NORMAL CONDITION USAGE. PLEASE ASK OR DISCUSS WITH YOUR DEALER IF YOU USE THE PRODUCTS IN SPECIAL CONDITION. OTHERWISE, IT CAUSES PRODUCTS PROBLEMS IN ABNORMAL CONDITION USAGE.

SAFETY & CAUTION DURING THE USAGE

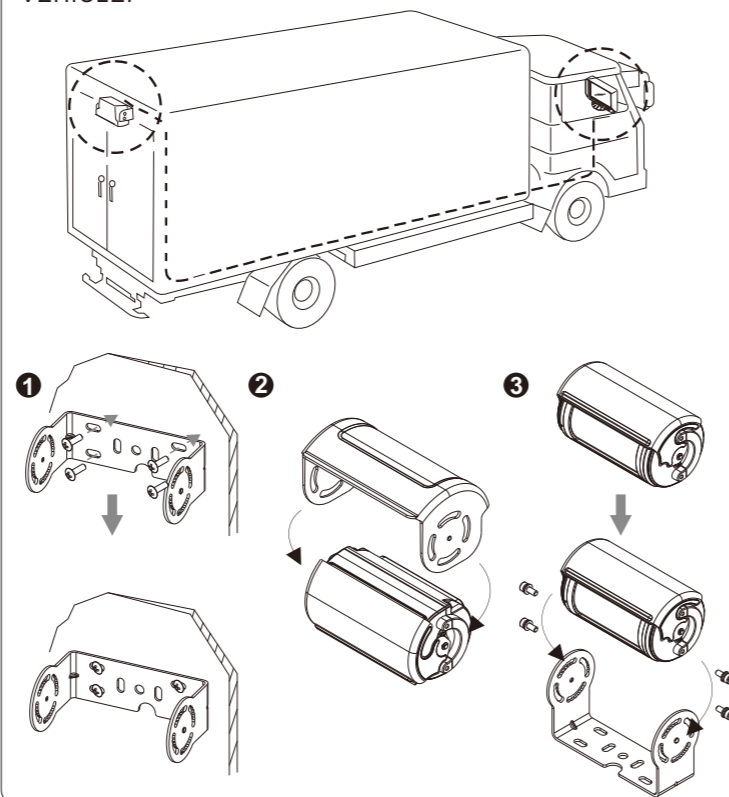
1. CHECK THE STATUS OF FIXED BRACKET BEFORE DRIVING. IT CAUSES PRODUCTS PROBLEM WHILE DRIVING. MANUFACTURER DISCLAIM ALL THE RESPONSIBILITY FOR USER'S FAULT.
2. DO NOT USE THE PRODUCTS IMMEDIATELY AFTER LEAVING IT ALONE FOR LONG PERIOD IN SUMMER OR WINTER.
3. DO NOT USE AND ASK YOUR DEALER IMMEDIATELY IN CASE OF BURNING SMELL OR OVER HEATING AT PRODUCTS.
4. DO NOT CUT THE CABLE, CUTTING CABLE CAUSES PRODUCTS MALFUNCTION OR WATERPROOF FUNCTION DEFECTS. OTHERWISE, MANUFACTURER DISCLAIM ALL THE RESPONSIBILITY.
5. MAKE SURE TO CONNECT POWER CABLE & CAMERA CABLE IN RIGHT DIRECTION. IT CAUSES A DAMAGE TO THE PRODUCTS IN CASE OF THE WRONG WIRE CONNECTION.
6. TIGHTEN CONNECTORS IN CASE OF CONNECTING EXTENSION CABLE. OTHERWISE, IT CAUSES CONNECTION PROBLEM OR WATERPROOF FUNCTION DEFECT ON PRODUCTS.
7. DO NOT WRAP THE PRODUCTS WHILE OPERATING. IT CAUSES PRODUCTS PROBLEM OR FIRE
8. AVOID THE PRODUCTS IN ELECTROSTATIC CONDITION. IT CAUSES WRONG OPERATION.
9. DO NOT PILE UP HEAVY STUFF ON PRODUCTS. IT CAUSES PRODUCTS PROBLEM OR DAMAGE.
10. ASK YOUR DEALER AFTER DISCONNECTING POWER CABLE IN CASE OF FINDING ANY DEBRIS INSIDE OF PRODUCTS. IT CAUSES PRODUCTS PROBLEM OR AN ELECTRIC SHOCK.
11. DO NOT USE STRONG SOLVENTS SUCH AS THINNER OR BENZINE AS THEY MIGHT DAMAGE THE FINISH OF PRODUCTS OR PRODUCTS PROBLEM.

1 COMPOSITION



2 INSTALLATION

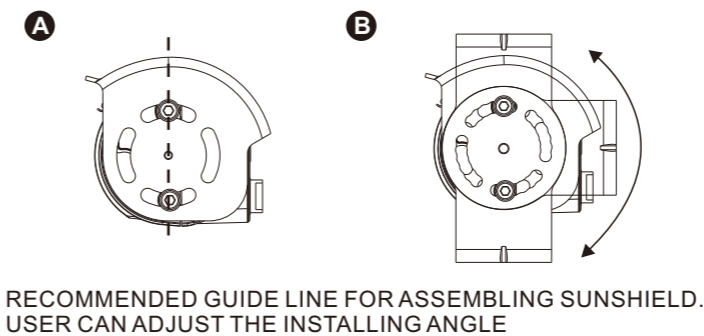
INSTALL CAMERA FIRMLY AT THE ADEQUATE POSITION OF VEHICLE AFTER CHECKING CAMERA'S FIELD OF VIEW. CAMERAS CAN BE INSTALLED AT SUITABLE POSITION OF VEHICLE'S REAR SIDE ACCORDING TO USER'S CONVENIENCE. ASK YOUR DEALER OR EXPERIENCED TECHNICIAN HOW TO INSTALL CAMERA & MONITOR DUE TO DIFFERENT TYPE OF VEHICLE.



- 2-1. FIX THE SUPPLIED MOUNTING BRACKET TO THE VEHICLE.
- 2-2. ADJUST ANGLE OF THE CAMERA.
- 2-3. ADJUST ANGLE OF SUNSHIELD AND FIX IT TO CAMERA. FASTEN THE SCREW FIRMLY AFTER ADJUSTING CAMERA & SUNSHIELD.

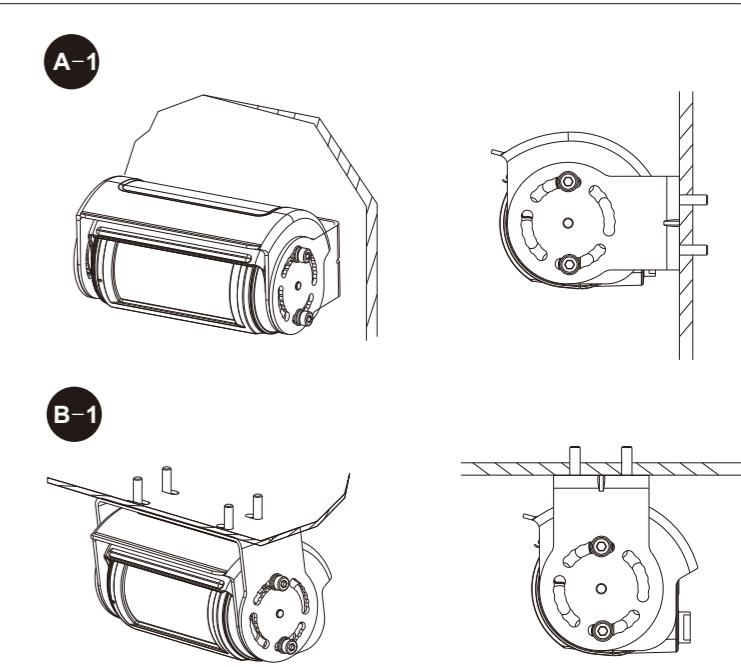
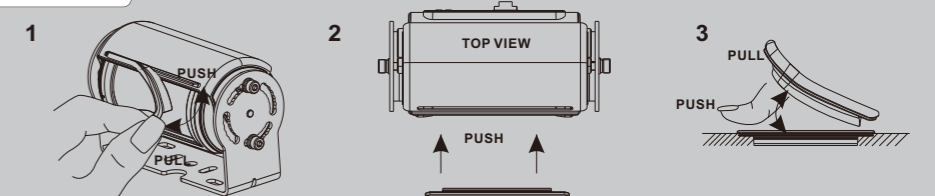
* ADJUST SUNSHIELD ANGLE TO AVOID LENS FIELD OF VIEW & SUN LIGHT.
* FASTEN THE SCREW FIRMLY TO AVOID PRODUCT'S DAMAGE OR OPERATION.

HOW TO ADJUST CAMERA SUNSHIELD & ANGLE



HOW TO REPLACE WIPER RUBBER

1. Remove the wiper rubber as above picture shown.
2. Put on supplied wiper rubber on the wiper hole.
3. Fix the rubber into the hole by pushing with your finger.

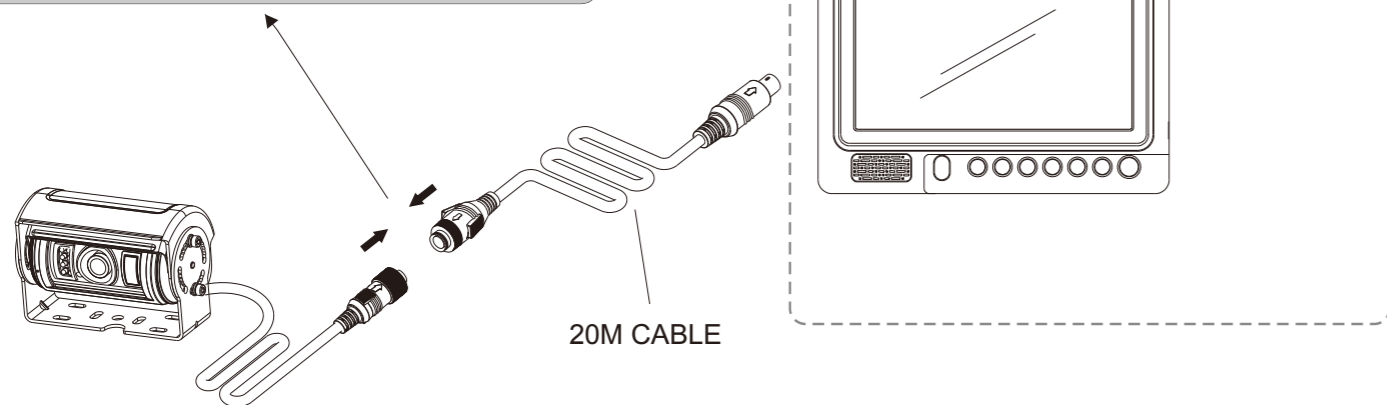


3 CONNECTION WIRING

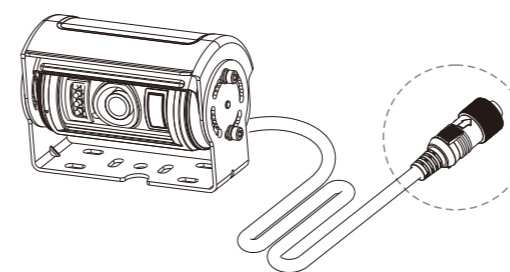
CONNECT CAMERA & MONITOR AFTER CHECKING SPECIFICATION OF MONITOR & EXTENSION CABLE. CONNECT POWER & GROUND WIRE OF MONITOR TO FUSE BOX OF VEHICLE WHEN YOU CONNECT MONITOR POWER.

* POWER CONNECTION SHOULD BE CHOSEN BY USER ACCORDING TO POWER SUPPLY CONDITIONS. CONNECT CAMERA BACK CABLE WITH EXTENSION CABLE AND THEN CONNECT EXTENSION CABLE WITH MONITOR.

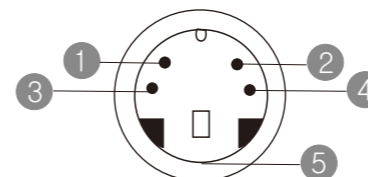
* USE ACID FREE VASELINE OR GREASE INSIDE OF CONNECTOR BEFORE FIXATION FOR A GUARANTEED LONG LIFETIME. CONNECT CAMERA BACK CABLE WITH EXTENSION CABLE FIRMLY AFTER CHECKING MALE & FEMALE CONNECTOR. OTHERWISE, IT CAUSES PRODUCTS PROBLEM.



4 CAMERA INPUT CONNECTOR PIN DESCRIPTION

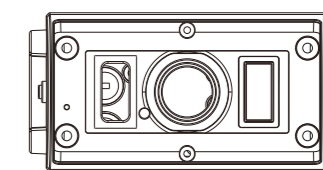


4P IP CONNECTER



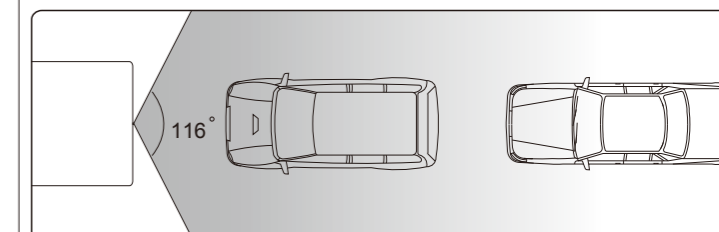
Pin No.	Description
1	Shutter / Heating
2	Audio
3	Video
4	Power
5	Ground

5 LENS SPECIFICATION

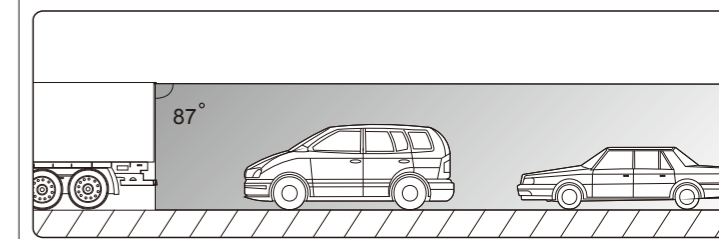


DIAGONAL ANGLE : 145 DEGREE
HORIZONTAL ANGLE : 116 DEGREE
VERTICAL ANGLE : 87 DEGREE

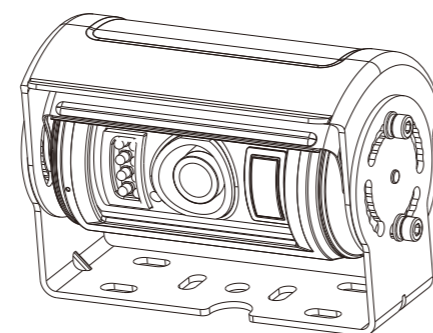
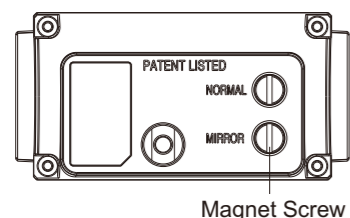
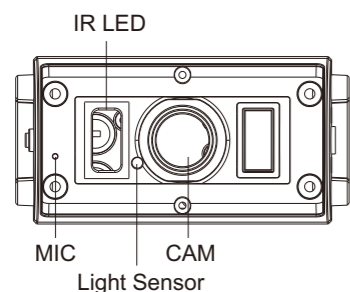
HORIZONTAL FIELD OF VIEW



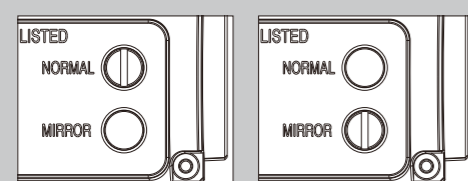
VERTICAL FIELD OF VIEW



6 FEATURES



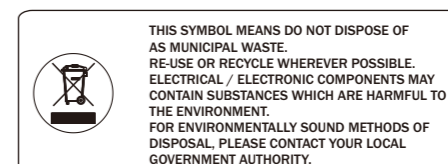
- Motorized Shutter Camera
- 1/3.2" Color Sony CMOS
- Automatic electronic iris
- Ultra low light performance Extra-wide field of view
- Input voltage DC 12V from monitor
- Automatic cleaning function
- Automatic shutter / heating function
- Normal / Mirror image switching
- Vandal resistant
- Water-proof (IP69K)



• **HOW TO CHANGE MIRROR & NORMAL IMAGE**
CHANGE MAGNET SCREW POSITION, MIR OR NOR USING DRIVER.

7 SPECIFICATIONS

Model No.	ControLaser RSE-3000C HD
Image Picture Element	Interline transfer type CMOS PAL: 1,23 Mega pixels
Image Size Lens	1/3.2 Inch Diagonal Angle : 145 degree Horizontal Angle : 116 degree Vertical Angle : 87 degree
Synchronization	Internal
Horizontal Resolution	PAL: More than 700TV lines (CVBS)
Min. Illumination	Lux.(IR LED ON)
Signal To Noise Ratio	Better than 50dB(at AGC off) DC
Power Supply	12V
Power Consumption	Max. 3.0W
Vibration	10G
Impact	100G
IP Factor	IP 69K
Operation Temp.	-40~85 degree Window: Curved
Case Material	Glass Body: Aluminum Approx. 480g
Weight	104(W) X 55(H) X 62(D)mm
Dimensions	Sunshield
Supplied Accessories	Mounting Bracket Screw Kits Wiper Rubber, 20M Cable Instruction Manual



* Design and specifications are subject to change without notice.
* Patent registered.