

NANOCAM+[®]



USER MANUAL

5.0" Reversing Camera Kit with Analogue
High Definition Monitor and Camera



Your Safety. Our Priority.

NCP-DRM50HD

CONTENTS

1.0	INTRODUCTION	6
2.0	IN THE BOX	7
3.0	SPECIFICATIONS	9
4.0	WIRING DIAGRAM	10
5.0	GETTING STARTED	11
5.1	Licence Plate Mounting	11
5.2	Standalone Mount	13
6.0	MONITOR INSTALLATION	14
6.1	Inserting the Bracket	14
6.2	Installing the Windscreen Suction Mount	14
6.3	Installing the 3M Dash Mount Base	15

7.0	OPERATING INSTRUCTIONS.....	15
7.1	Menu	15
7.2	Settings Adjustments.....	16
7.3	Installation Diagram	17
8.0	TROUBLESHOOTING.....	18
9.0	MAINTENANCE	18
10.0	POWER ON/OFF	19
11.0	BUTTON FUNCTIONS.....	19
12.0	MONITOR ON/OFF	20
13.0	WARRANTY TERMS AND CONDITIONS.....	24
14.0	NOTES	30

1.0 INTRODUCTION

Thank you for purchasing the NCP-DRM50HD 5.0" Reversing Camera Kit. We are certain that our product will give you trouble-free operation while providing you with a safety feature that enhances your driving experience. Our products, like most after-market safety enhanced devices, are designed to assist and aid the driver, not to replace the manual function of the person operating the vehicle.

For the latest manual and product updates, please visit our website at **www.nanocamplus.com.au** or **www.nanocamplus.co.nz**.

DISCLAIMER

The Nanocam Plus NCP-DRM50HD 5.0" Reversing Camera Kit is designed as a driver assistance device. Although this is a visual aid and will allow you to view what is behind the vehicle, it does not remove the responsibility of driving the vehicle from the driver. The legal responsibility and safe driving practice remains with the driver at all times. You have purchased this product with the understanding that its use is as an aid only. We highly recommend that you have this product professionally installed to ensure that it will provide the functions it is set out to perform.

2.0 IN THE BOX



1. Reversing Camera with License Plate Mount x1
2. 5" AHD Monitor x1
3. 8m Extension Cable x1

4. Power Cables x2
5. Suction Cup Mount x1
6. 3M Tape Dash Mount Base x1
7. Butterfly Rear Mount x1

IMPORTANT NOTICE

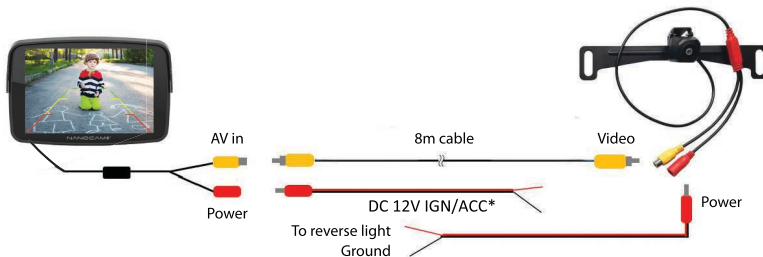
1. Please read this manual carefully before using the product.
2. This unit is for vehicles with 12V DC only.
3. 12V IGN/ACC power wiring connections **MUST** be made to a 12V ignition feed.
(Refer to Wiring Diagram on Page 4)
4. Route wiring harness away from heat sources and electrical components.
5. Wire connection points should be insulated.
6. Please ensure that the unit is professionally installed.
7. Please perform tests after finishing the installation.
8. Specifications subject to change without prior notice.

3.0 SPECIFICATIONS

MONITOR			
LCD Display Screen Size		5-inch (AHD Digital) 16:9 diagonal length	
Power	≤ 3W	Power supply	9–16V DC
Compatibility	PAL / NTSC	Resolution	800 x 480
Input	1 AV		

CAMERA			
Resolution		420 TV Lines	
Effective pixels	PAL = 1280 x 720	Power supply	9–16V DC
Compatibility	PAL / NTSC	Resolution	800 x 480
Operating temperature		-20° to +70°C	
Waterproof rating		IP67	
Minimum illumination		0.1 Lux	

4.0 WIRING DIAGRAM



***Please Note:** This DC 12V IGN/ACC cable MUST be directly connected to a 12V ignition feed.

Front view option: NCP-DRM50HD functions as a rear view camera and also supports front view application. For front view application, you can select non-reverse in the menu.

Guidelines option: NCP-DRM50HD comes with parking guidelines. To remove the guidelines application, you can turn it off in the menu.

5.0 GETTING STARTED

5.1 LICENCE PLATE MOUNTING

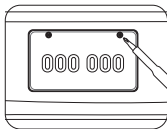


FIG 1

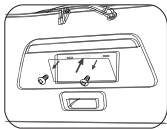


FIG 2

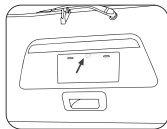


FIG 3

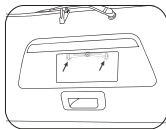


FIG 4



FIG 5

1. Remove the rear licence plate from the vehicle (**FIG 1 and 2**) by undoing the bolts/screws.
2. With the licence plate off, check if there is a pre-existing hole through which the cables from the camera can be passed through to the boot of the vehicle as in (**FIG 3**). If there are no pre-existing holes, carefully drill a hole of sufficient diameter to allow the cables to be passed into the interior of the vehicle (through a rubber grommet) and seal the hole with silicone to avoid water leakage.

3. Carefully align the bracket arms so that the top edge of the arms align to the top edge of where the licence plate would sit and hold it in place making sure that 2 holes in the mounting bracket align with the mounting holes of the licence plate **(FIG 4)**.
4. Refit the licence plate over the camera bracket using the original bolts/screw **(FIG 5)**.
5. You can adjust the angle of the camera by moving the camera up and down. Loosen and tighten the screws to fix the desired angle **(FIG 6 and 7)**.

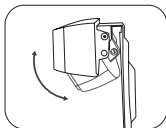


FIG 6

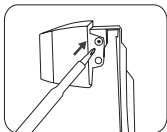
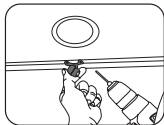
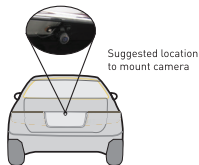


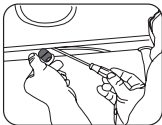
FIG 7

5.2 STANDALONE MOUNT

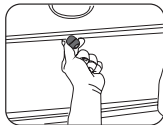
1. Remove the camera from the licence plate mount using a screwdriver (not provided).
2. Attach the removed camera to the standalone mount using the screws removed from the licence plate mount.
3. Select a flat and centred location near the licence plate lamp at the rear of the vehicle to mount the camera.



1. Attach tape to the bracket of the camera, and drill a small hole for the first screw.



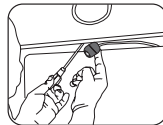
2. Use a screwdriver to fix the first screw, but do not fully tighten it yet.



3. Insert the camera wire through the newly drilled hole and mount it securely in place.



4. Mark the position suitable for the second screw and drill a small hole for it.



5. Fix the second screw and tighten both screws.

6.0 MONITOR INSTALLATION

6.1 INSERTING THE BRACKET

1. Insert the bracket pegs into the rear of the monitor.
2. Slide the monitor down to lock the bracket in place.

6.2 INSTALLING THE WINDSCREEN SUCTION MOUNT

1. Clean the intended installation point on the interior of your windscreen and ensure that there is no dirt or dust present.
2. Remove the protective film from the suction cap.
3. With the lock clip of the suction mount in the **UP** position, place the suction mount on the interior of the windscreen and ensure that the monitor will not block the driver's view whilst driving.
4. Firmly hold the suction cup against the window while switching the lock clip **DOWN** into the locked position.

6.3 INSTALLING THE 3M DASH MOUNT BASE

1. Clean a suitable flat position on the dashboard and ensure that there is no dust or dirt on the intended installation position.
2. Remove the protective film from the adhesive sticker.
3. Find a suitable place to stick the dash mount base on the dashboard.
4. Attach the suction mount to the dash mount base.
5. Fix the monitor to the suction mount.
6. Firmly press the base onto the desired position for one minute to ensure that the adhesive is making full contact with the intended installation position.

7.0 OPERATING INSTRUCTIONS

7.1 MENU

The menu button at the rear of the monitor can be used to update the display settings.

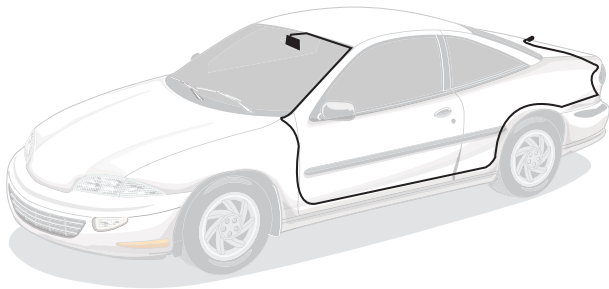
To access the menu the monitor needs to be active. Please follow the directions in the section named **"How to Test"** for instructions on how to activate the monitor so that it is ready to adjust the settings.

7.2 SETTINGS ADJUSTMENTS

1. With the monitor on, press the Menu button at the rear of the monitor to cycle through the following settings:
 - Value
 - Reversing Guidelines
 - Setting
2. To adjust any of these settings use the **UP** and **DOWN** button at the rear of the monitor.
3. To save the settings, press the **MENU** button to confirm your choice, or wait 3 seconds until the menu disappears.

7.3 INSTALLATION DIAGRAM

REAR CAMERA TESTING



HOW TO TEST:

1. Apply the parking brakes.
2. Turn on the ignition. **(Please do not start vehicle)**
3. Shift into reverse gear.
4. Image should appear on the monitor.

8.0 TROUBLESHOOTING

PROBLEM	SOLUTION
"No Signal" appears while reversing.	Check video input connections.
	Check camera power connections.
Video image is not sharp.	Check camera lens for debris.

9.0 MAINTENANCE

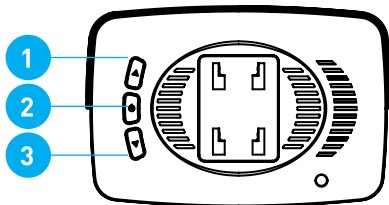
Always keep the camera clear of dirt and mud. Clean the camera with a soft moist cloth.

10.0 POWER ON/OFF

After powering on the unit, the monitor will start up automatically. A logo will appear on the monitor screen followed by a rear camera view of the car. The reversing guidelines will also appear at the same time.




11.0 BUTTON FUNCTIONS

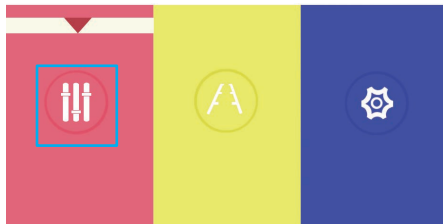


1. Δ Next / Up button
(add value)
2. ⏻ Menu / OK button
3. ∇ Last / Down button
(reduce value)


12.0 MONITOR ON/OFF


STEP 1:



Press  to enter the menu. You will see 3 items: Picture / Reversing Guidelines / Settings as shown below:

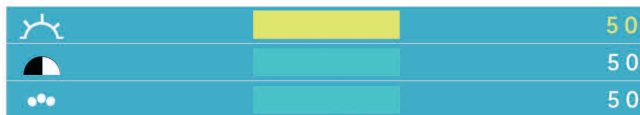


STEP 2:

Press  to select the desired items. There are 3 items Brightness / White Balance / Colour.

Press  again to choose one for adjustment. Press several times to return to the menu.

Press  or  to adjust its value.



STEP 3:

In the menu, press ▾ or ▲ to select the second item Reversing Guidelines.





STEP 4:


And press ⏻ key to turn on / off the Reversing Guidelines.

Press ▾ or ▲ to confirm your choice. Press ⏻ several times to return to the menu.



STEP 5:

In the menu, press  to select the last item setting and press  again enter into settings.

Press  to choose the one you want to change.

Press  or  to adjust the display ratio. (16:9 / 4:3)



STEP 6:

If no button is pressed after 3 to 4 seconds, the menu will exit automatically.

13.0 WARRANTY TERMS AND CONDITIONS

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

This warranty is provided in addition to your rights under the Australian Consumer Law. Directed Electronics Australia Pty Ltd (Directed Electronics) warrants that this product is free from defects in material and workmanship for a period of 12 months from the date of purchase or for the period stated on the packaging. This warranty is only valid where you have used the product in accordance with any recommendations or instructions provided by Directed Electronics.

This warranty excludes defects resulting from alterations of the product, accident, misuse, abuse or neglect. In order to claim the warranty, you must return the product to the retailer from which it was purchased or if that retailer is part of a national network, a store within that chain, along with satisfactory proof of purchase. The retailer will then return the goods to Directed Electronics.

Directed Electronics will repair, replace or refurbish the product at its discretion. The retailer will contact you when the product is ready for collection. All costs involved in claiming this warranty, including the cost of the retailer sending the product to Directed Electronics, will be borne by you.

Email: info@nanocamplus.com.au

Ph: +61 03 8331 4800

INDEMNITY

You agree to defend, indemnify and hold harmless Nanocam Plus and its subsidiaries and affiliates from and against any and all claims, proceedings, injuries, liabilities, losses, costs and expenses (including reasonable legal fees), including but not limited to, claims alleging negligence, invasion of privacy, copyright infringement and/or trademark infringement against Nanocam Plus and its subsidiaries and affiliates, relating to or arising out of your breach of any provision of these terms, your misuse of Nanocam Plus products or its services, or your unauthorised modification or alteration of products or software.

WARRANTY AND WARRANTY DISCLAIMER

Nanocam Plus has a limited warranty on whereby Nanocam Plus warrants to you and only to you that this Nanocam Plus product will be free from defects in materials and workmanship for one (1) year from the date of your purchase (unless a longer warranty period is required by law). The specifics of this Nanocam Plus limited warranty are covered in this manual. To the extent possible under governing law, other than the above product warranty for the Nanocam Plus product, you understand and agree that the Nanocam Plus products and services are provided on an "as is" and "as available" basis. Nanocam Plus makes no warranty that the Nanocam Plus products and services will meet your requirements or that use of the Nanocam Plus products and services will be uninterrupted, timely, secure or error-free nor does Nanocam Plus make any warranty as to the accuracy or reliability of any information obtained through Nanocam Plus (including third party content), that any defects in Nanocam Plus products and services will be corrected or that Nanocam Plus products or services will be compatible with any other specific hardware or service. Further, Nanocam Plus does not warrant that Nanocam Plus products or services or Nanocam Plus servers will provide you with data and content are free of viruses or other harmful components. Nanocam Plus also assumes no responsibility for and shall not be liable for any damages caused by viruses that may infect your Nanocam Plus product or software. In the event of any loss, damage or injury, you will not look to Nanocam Plus to compensate you or anyone else. You release and waive for yourself and your insurer all subrogation and other rights to recover against Nanocam Plus

arising as a result of the payment of any claim for loss, damage or injury. Nanocam Plus equipment and services do not cause and cannot eliminate occurrences of certain events and Nanocam Plus makes no guarantee or warranty, including any implied warranty of merchantability or fitness for a particular purpose or that Nanocam Plus equipment and services provided will detect or avert such incidents or their consequences. Nanocam Plus does not undertake any risk that you or property, or the person or property of others, may be subject to injury or loss if such an event occurs. The allocation of such risks remains with you, not Nanocam Plus. Other than the above product warranty for Nanocam Plus products, its suppliers disclaim all warranties of any kind, whether express, implied, or statutory, regarding Nanocam Plus products and services, including any implied warranty of title, merchantability, fitness for a particular purpose, or non-infringement of third party rights. Because some jurisdictions do not permit the exclusion of implied warranties, the last sentence of this section may not apply to you. Nanocam Plus hereby further expressly disclaims all liability for claims for service failures that are due to normal product wear, product misuse, abuse, product modification, improper product selection or you noncompliance with all applicable federal, state or local laws.

This warranty and warranty disclaimer give you specific legal rights, and you may have other rights that vary by state, province or country. Other than as permitted by law, Nanocam Plus does not exclude, limit or suspend other rights you have, including those that may arise from the non-conformity of a sales contract. For a full understanding of your rights, you should consult the laws of your state, province, or country. For our Australian customers: please note that this warranty is in addition to any statutory rights in Australia in relation to your goods which, pursuant to the Australian Consumer Law, cannot be excluded.

LIMITATIONS OF NANOCAM PLUS LIABILITY

Under no circumstances will Nanocam Plus be liable in any way for any content, including, but not limited to, the loss of content, any errors or omissions in any content, or any loss or damage of any kind incurred in connection with use of or exposure to any content posted, emailed, accessed, transmitted, or otherwise made available via Nanocam Plus. Nanocam Plus liability for damages, especially for breach of duty or obligation, delay in performance, non-performance, or malperformance shall be precluded, except when these are due to negligent breaches of any significant contractual duty or obligation on the part of Nanocam Plus. Any liability for negligence is limited to direct losses usually and typically foreseeable in such case. Should the claim for damages be based on wilful or grossly negligent breach of contractual duty or obligation on the part of Nanocam Plus, the preclusion and limitation of liability mentioned in the preceding sentences will not apply. The preceding preclusion and

limitation of liability will also not apply to claims for damages arising out of loss of life, bodily injury or health impacts for which Pixbee may be liable, or for non-contractual liability.

Some states and countries do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Additionally, this provision is not intended to limit Nanocam Plus' liability in the event of Nanocam Plus' wilful or intentional misconduct.

14.0 NOTES

Your Safety. Our Priority.

www.nanocamplus.com.au | www.nanocamplus.co.nz



NANOCAM+

ANOTHER
DIRECTED
BRAND

All Images, Information and Content are Copyright © 2023
Directed Electronics Australia Pty Ltd. All Rights Reserved.

DIRECTED
AUSTRALIA & NZ

www.directed.com.au
www.directed.co.nz