Dakota Micro, Inc.

Users Manual

InnoPro[®] HD Industrial Ruggedized IP Camera Part Number: DMIP-RC



MORE Capable Profitable Reliable

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Always read the manual prior to operating this equipment. Also, please follow all safety signs and precautions. See the Dakota Micro, Inc. website for installation training videos at <u>www.dakotamicro.com</u>.

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Thank you for purchasing the InnoPro® Camera from Dakota Micro. The InnoPro camera is a ruggedized IP camera that can survive just about anything the world has to throw at it. Don't expect the InnoPro to be a "fast and easy" way to view a camera from your smart phone. If this camera was easy to access from the outside world then anyone would be able to log in and see what it sees. The InnoPro® is a high security, high durability IP camera.

I. INCLUDED INNOPRO CAMERA KIT COMPONENTS (PER KIT PART NUMBER: DMIP-RC)

Description	Item Picture
InnoPro® Camera Qty 1 - InnoPro® Camera Qty 1 - InnoPro® Camera Bracket Qty 2 - Nylon Washers Qty 2 - ¼ 20 bracket bolts Qty 1 - ¼ 20 Allen wrench	
InnoPro® camera pigtail	
AC Power Adaptor > 2000mA	
InnoPro [®] Software CD	Innöpro

II. STANDARD INNOPRO® CAMERA FEATURES

- IP69 Waterproof, shockproof, and suitable for nearly any use.
- NTSC/PAL Switchable
- 6061 Anodized Aluminum Billet Camera Body
- Minimum focal distance of 5".
- Built-in, high quality CCD camera with high performance infrared (IR) illuminator modules.
- IR has effective range of 45'+ in complete darkness.
- Built-in CDS light-source sensor automatically turns the IR's on/off by detecting the light intensity of the environment.
- Standard lens features 78° field of view (4.2mm).
- Removable/replaceable camera tail.



III. CAMERA MOUNTING

Once the camera is securely mounted, plug the camera pigtail into rear of InnoPro[®] camera. You can now plug the remaining end of the pigtail into your CAT5 w/ RJ45 and power supply. Make sure all connections points are securely attached.

IV. VIEWING INNOPRO CAMERA VIA CAT5 w/ RJ45

Items that are required but are not included:

- ✓ Networking Knowledge
- ✓ Open Ethernet Connection (available on your Router, Switch, hub, etc)
- ✓ Ethernet cable (Cat5 or greater) with RJ45 connections
- ✓ Viewing Device: options you can utilize are:
 - Computer (Windows 7 or later)
 - NVR (Network Video Recorder, not sold by Dakota Micro)
 - Tablet or Smart Phone Dakota Micro does not provide an app for viewing the InnoPro camera. There are many free apps available for all platforms (we have had success with "OnViffer", "IP Camera Viewer Lite" and "Tiny Cam"). Use the "scan Camera" function when you add a camera to the app to find your InnoPro camera. Dakota Micro does not provide support for this function. If you are not an advanced network user, consult a network provider for assistance.
 - Default InnoPro Camera Username: Admin
 - Default InnoPro Camera Password: 123456

A. Hookup Your Components and plug in your power adaptor to a wall plug



NOTE: Camera Takes approximately 90 seconds to fully boot.

B. Install Your Software

1 2 3 2	 Insert the Included Software CD into the computer CD Rom Select "Open Folder to view files" Double Click the InnoPro[®] Icon Follow the on-screen set-up prompts 	
5	Once the software has completed installation process, open the InnoPro [®] Application by double clicking the "InnoPro" icon on your desktop	11.
6	5. The "InnoPro [®] Authentication" box will appear asking that you set your Admin Password. If you would like, you can assign a password now. If you leave the boxes empty, you will be able to log into the software in the future without entering a password. You have the ability to add or change your password at any time in the future.	InnoPro



V. InnoPro[®] Software General Controls/Menu Bar Options

lcon	Title	Description
	Playback Recorded Video	Opens folder where recorded videos are stored Double click files to play back Right click file name to delete Once video is playing, right click video for menu options or use menu toolbar on top of screen Click icon in upper left corner to return to live view
•	Add Camera Manually	Allows users to manually add new camera. Requires user to input IP Address & Port
Q	Search Devices	Allows users to search for new devices on network
K X K X	Full screen	Brings selected camera to full screen. Click on the 🗮 icon to return to minimized view.
4 文 x 2 文	Multi window view	Allows users to tile all cameras in a selectable grid. Alternatively (click again) it will display user adjustable windows, the below icon (Tile Sub windows) only appears in the alternate view.
Ħ	Tile Sub windows	Automatically tiles cameras into a grid using all available space.

VI. InnoPro[®] Software Camera Specific Controls/Menu Bar Options – Applicable ONLY to selected camera *Also available by right clicking on live camera image or selecting "Camera" drop down*

lcon	Title	Function
*	Settings	Allows access to advanced Camera settings (see pg. 7 for further details).
-2	Toggle Sub stream	Toggles video stream between high and low stream (Users have the ability to set stream in Camera settings).
• , ■	Start/stop record Video	Allows users to record live video feed
0	Take Snapshot	Allows users to take a snapshot of live video feed
	Open Snapshot Folder	Allows users access to snapshot library
()	Zoom In	Allows users to zoom in on video
0	Restore Zoom	Restores original full screen video view
Q	Zoom Out	Allow users to zoom out of video (when zoomed in)
(¹)	Toggle Zoom/Move Tool	Allows users to "rubber band" and zoom into a specific section of video .

VII. INNOPRO SOFTWARE DROP DOWN MENU OPTIONS

Function
Allows users to manually add new camera. Requires user to input IP Address & Port
Allows users to search for new devices on network
Allows users to Export custom software configuration
Allows users to import custom software configuration
 Allows users to set administrator password and to choose whether program will require password on quit Allows users to set record storage location as well as storage recording space limitations and recording duration Allows users to set RTSP Stream Performance (advanced users only) Allows users to select whether program icon appears in system tray Allows users the the option to auto toggle video stream to be main stream
when displayed in full screen, but sub stream when in windowed mode Allows users to shut down program

View

VIEW Drop Down Menu	Function
Playback Recorded Video	Opens folder where recorded videos are stored Double click files to play back Right click file name to delete Once video is playing, right click video for menu options or use menu toolbar on top of screen Click icon in upper left corner to return to live view
Devices List	Allows users to view ONLY cameras (removes device tree on left hand side of screen)
Touch Interface	Allows application to be suitable for touch screen applications
4 🕏 x 2 🖨 Multi window View	Allows users to tile all cameras in a selectable grid. Alternatively (click again) it will display user adjustable windows, the below icon (Tile Sub windows) only appears in the alternate view.
Tile Sub Windows	Automatically tiles cameras into a grid using all available space.

CAMERA Drop Down Menu	Function
Settings	Allows access to advanced Camera settings (see pg. 7 for further details).
Toggle Sub stream	Toggles video stream between high and low stream (Users have the ability to set stream in Camera settings).
Start/stop record Video	Allows users to record live video feed
Take Snapshot	Allows users to take a snapshot of live video feed
Open Snapshot Folder	Allows users access to snapshot library
E Zoom In	Allows users to zoom in on video
Restore Zoom	Restores original full screen video view
Q Zoom Out	Allow users to zoom out of video (when zoomed in)
🕐 / 🦳 Toggle Zoom/Move Tool	Allows users to "rubber band" and zoom into a specific section of video .
Change Camera Name	Allows users to change camera title/name
X Remove Camera	Allows users to remove camera from devices list

Help

HELP Drop Down Menu	Function
Check for Updates	Allows users to check for software updates
About	Provides users with software details including version and build date.

VIII. INNOPRO® ADVANCED CAMERA SETTINGS – ADVANCED NETWORK USERS ONLY

- a. Remote Settings
 - 1. **NETWORK** tab allows for manual adjustment of:
 - i. IP Address
 - ii. Gateway
 - iii. Netmask
 - iv. DNS1 & DNS2
 - v. Port
 - vi. RTSP Media Port
 - 2. DATE AND TIME
 - i. Update Mode
 - ii. Time Zone (including daylight saving time option)
 - iii. Time (including synchronize with local time)
 - 3. VIDEO ENCODE tab allows for Main and Sub Stream video adjustment of:
 - i. Resolution
 - Main Stream: 1920x1080, 1280x960 and 1280x720
 - Sub Stream: 640x480, 640x360, 480x360, 480x270, 352x288, 320x240, 352x192, 320x192, 288x192 and 256x192
 - ii. I Frame Interval: 1-200
 - iii. Bitrate
 - Main Stream: 1-8,000
 - Sub Stream: 1-2,000
 - iv. Frame Rate: 1-30
 - 4. OSD (On Screen Display)
 - i. Show Date & Date Position
 - ii. Show Title, Title Position & Title Text
 - 5. System
 - i. Camera Serial Number
 - ii. Firmware Version
 - iii. Manufacturer
 - iv. Hardware ID
 - v. Direct URL Link to advanced camera settings
- b. Record Schedule
 - 1. Click on the schedule times you would like for recording to occur and choose your settings
- c. Stream Access
 - 1. Camera Name
 - 2. Connection Type: RTSP or JPEG
 - 3. Quality: High (Main Sream) or Low (Sub Stream): allows users to select primary feed
 - 4. FPS: Allows users to view FPS in lower left corner of live video feed

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d. Open settings in IE – <u>VERY ADVANCED USERS ONLY</u> – allows for direct camera access
 If, while using this section the camera settings become inaccessible or "Messed up", remove the camera from your device group and re-search for it. Default username: admin default password: 123456

Click on CONFIG button in upper right hand corner

- i. Network
 - Network Status
 - Ethernet Setup
 - ADSL Setup
 - DDNS Setup
 - Cloudhost Config
 - FTPA Account Setup
 - SMTP Account Setup
 - Media Stream Setup
 - Platform Setup
 - PPTP Setup
- ii. Media
 - Video Capture
 - a. IR Cut mode
 - b. Keep color
 - c. Sensitivity
 - d. Start time of night
 - e. End time of night
 - f. Brightness
 - g. Saturation
 - h. Sharpness
 - i. Contrast
 - j. Backlight control
 - k. Video format
 - I. Day or night
 - m. White balance
 - n. Auto E W
 - o. Binning or Skip
 - p. Horizontal Flip
 - q. Vertical Flip
 - Time and Title
 - a. OSD (On Screen Display)
 - b. Overlap Information
 - c. Time Position
 - d. Time Format
 - e. Title Position
 - f. Title Message
 - Video Encode (both Main and Sub stream)
 - a. Encode Format
 - b. Resolution
 - c. Bitrate Control
 - d. I Frame Interval
 - e. Bitrate
 - f. Frame Rate

- g. Base Profile
- h. Private Data
- i. Default stream (main or sub)
- Capture Picture
 - a. Snap picture
 - b. Picture source (main or sub steam)
 - c. Picture quality (20-100)
 - d. Capture speed (1-2)
- Privacy Mask
 - a. Main Stream Area(1) 1-4
 - b. Sub Stream Area(s) 1-4
- Media Info (Info only)
 - a. Resolution
 - b. Encode Format
 - c. Bitrate Control
 - d. I Frame Interval
 - e. Bitrate
 - f. Frame Rate
- iii. Storage
 - Storage Manage
 - Storage Setting
 - a. Storage Setting
 - b. Motion Alarm Record
 - c. Motion Alarm Snap
 - d. Link Down Record
 - e. Link Down Capture
 - f. Schedule Record
 - Storage Device Information
- iv. Alarm
 - Motion Alarm
 - a. Motion Alarm
 - b. Sensitivity
 - c. Alarm Threshold
 - d. Block Count
 - e. Enable Night Time
 - f. Night Start Time
 - g. Night End Time
 - h. Night Sensitivity
 - i. Night Alarm Threshold
 - Motion Detect Alarm Schedule
 - a. Period
 - b. From To
 - Video Lost Alarm
- v. System
 - Account Manage
 - a. Add/Modify/Delete User Username
 - b. Add/Modify/Delete User Password
 - c. Add/Modify/Delete User User group
 - d. Add/Modify/Delete User Status
 - Time Setup

- a. Update Mode
- b. Time Zone
- c. Time
- d. Enable DST
- Log Setup
 - a. Output Log Type (Debug, Run, Error, Operation, Alarm, Statistic, Common, All)
 - b. Save Days (1-30)
 - c. Storage Media (Flash)
 - d. Storage Strategy (Overwrite when full or Stop when full)
 - e. Auto Backup (Enable/Disable)
 - f. Backup Type
- Log File Manage
- System Maintenance
 - a. Config File Manage
 - b. System Update
 - c. System Restore
- Regular Maintenance
- Devices Language
- Version Info

IX. <u>CAMERA WARNINGS</u>

- <u>NEVER RELY ON YOUR InnoPro® Camera AS A SAFETY FEATURE.</u> It is up to your discretion to keep your road travel and other operations safe. Your InnoPro® Camera will provide you with information only based on what it sees. Operation of machinery safety guidelines still apply.
- Keep in mind that the InnoPro camera is a digital camera that has a slight delay, resulting in a video feed that may not reflect real time events. (Small Delay also present at analog output)
- The InnoPro[®] Camera is equipped with an array of infrared light emitters which are invisible to the human eye. This feature will aid in low light conditions but has limitations. The effective range of the night vision feature is 1 to 45+ feet and will produce a monochrome image only.
- DO NOT ATTEMPT TO DRIVE MACHINERY USING THIS FEATURE.

X. SPECIFICATIONS

A. Camera	
Video System	NTSC / PAL switchable via web browser settings section
Effective Picture Elements	1,228,800
Image Pick-up Device	1.3 Megapixel CMOS sensor, progressive scan
Horizontal Resolution	960
Minimum Illumination	0 LUX @ F2.0 / Auto Day-Night / Passive IR
S/N Ration	More than 48dB
Auto Electronic Shutter	1/60s~1/100,000s, ON/OFF Switch-able
Auto White Balance	Color Temperature: 2500K~9500K
Auto Gain Control	High/Low Switch-able
Auto Iris Control	Software
Scanning System	Progressive
Gamma Characteristic	0.45 adjustable
Lenses Furnished	Board Lens 4.2mm/F2.0, fixed board lens
Camera Front Glass	Triple Hardened Glass lens
Back Light Compensation	On/Off Switch-able
Video Output	1 Vp-p/75 Ohms. analog/RTPS/JPG Stream
Construction	Anodized 6061 Aluminum Case
Waterproofing criteria	IP 69
Dimensions	53x58 (L) mm (Body Only)
Environmental Rating	IP69+
Operating Temp	-45°F~150°F (-42°C~66°C)
Ethernet	RJ45, 10/100
Stream	RTSP, H264, MJPG,
Control	Onvif Compatible
Power	12V 800mA (10 - 15 V Min/Max)

XI. WARNINGS

- When selecting a camera system from Dakota Micro, be sure to utilize the appropriate system for your use. InnoPro, AgCam and EnduraCam cameras are designed for high impact, moisture, vibration and a variety of other rough conditions. OverView cameras and kit components are designed for light use, low vibration and low moisture. OverView equipment is not warranted when used in situations outside of the above mentioned parameters. We always request that customers keep in mind that our less expensive OverView product line is cheaper because it does not feature the reliability and durability of our InnoPro, AgCam and EnduraCam lines. The warranty available on these products reflects that durability.
- To avoid electrical shock and maintain optimal functionality, do not open the enclosures. High voltage may be present and there are no user serviceable parts inside. All warranties will be void should any enclosures be tampered with in any way.
- Do not use any harsh chemical solvents, cleaning agents or corrosive detergent to clean away dirt on the surface of the screen or lens.
- On AgCam and EnduraCam products, the photo-chromic camera lenses have been made impact-resistant and have been drop-ball tested according to Sec. 3.84,21 CRF BUT ARE NOT UNBREAKABLE. Because they have been hardened chemically, they show no stress pattern. Inspect your lenses frequently. Chipped or scratched surfaces will reduce protection. Such lenses should be replaced only by the manufacturer.
- Power to cameras is not interrupted by turning off monitor; 12v power source must be terminated when not in use to avoid battery drain. To avoid this problem be sure when hard wiring a unit, use a fused circuit.
- Do not use your Dakota Micro camera system for anything other than legal surveillance and observation uses. Dakota Micro, Inc. is not liable for any illegal or nefarious usage.

XII. PRODUCT WARRANTY/REPAIR PROCESS

- 1. For Technical Support call 1 701-538-4403 OR email techsupport@dakotamicro.com
- 2. Technician will assist in troubleshooting product malfunction.
- 3. If product malfunction cannot be remedied and a repair is deemed necessary, Technician will issue a Repair Authorization (RA) number.

IMPORTANT NOTE:

The Technician will note on the RA form if the repair APPEARS to be a warranty or non-warranty issue based on customer description of the issues at hand. No final determination can be made until inspection and testing of the equipment is completed at the factory.

- 4. To ensure fast and effective repairs, customer is required to send:
 - Dakota Micro Product that Technician has requested/deemed necessary in the proper diagnosis and repair of malfunction. This may include some or all components of the kit.
 - Original/Copy of purchase receipt.
 - For serialized items ONLY; If a copy of the original purchase receipt cannot be provided, then DAKOTA MICRO will use the product manufacture date.
 - Customer information, including return address & phone number. If the phone number is not included, the customer will be sent a letter requesting the needed information.
 - RA Number provided by Dakota Micro Technical Support
 - Shipping and associated costs to ship product to DM factory to be borne by the customer unless otherwise specified.
- 5. Customer should mail product to:

Dakota Micro, Inc. RA # XXXXX 8659 148th Ave. SE Cayuga, ND 58013

- 6. Upon receipt and evaluation of product at Dakota Micro Factory, it will be established if the repair is warranty or nonwarranty. If requested, customer will be called and notified of any applicable charges.
- 7. If the repairs are deemed non-warranty, and require a service/repair fee of any kind, a credit card number will be requested by Order Processing after the repair is completed.
- 8. If customer is unable to be contacted over the course of 3 weeks regarding required non-warranty repairs, product will be returned, unrepaired, to the customer.
- 9. Any product returned without proper documentation may be returned at customer's expense.
- 10. Product returned with unconfirmed problems will be assessed a \$60 evaluation fee per unit
- 11. Return shipping costs will be borne by the party at fault; in other words, if Dakota Micro determines that the defective product was covered under warranty, Dakota Micro pays the shipping charges. If Dakota Micro determines that it was the customer caused, the customer will pay shipping charges. If a particular circumstance cannot be determined than the cost of shipping charges will be decided on a discretionary basis depending on the situation at hand.

XIII. CONSUMER LIMITED WARRANTY

LIMITED WARRANTY

Subject to the disclaimer, limitations and other directions stated hereafter, Dakota Micro, Inc. warrants that the Product will be free from defects in material and workmanship for periods as stated hereafter from the date of original purchase. THIS WARRANTY IS EXPRESSLY MADE IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS. THE EXCLUSIVE REMEDY OF THE BUYER IS LIMITED TO REPAIR OR REPLACEMENT OF THE PRODUCT. EXCEPT AS STATED IN THIS WARRANTY, DAKOTA MICRO SHALL NOT BE LIABLE FOR ANY LOSS, INCONVENIENCE, OR DAMAGE, INCLUDING DIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, RESULTING FROM THE USE OR INABILITY TO USE THE PRODUCT, WHETHER RESULTING FROM BREACH OF WARRANTY, NEGLIGENCE, STRICT LIABILITY OF ANY OTHER LEGAL THEORY. Any oral statements or representations made by anyone which are contrary to or at variance with the terms stated in this LIMITED WARRANTY are void.

Dakota Micro will, at its option, either repair the defect or replace the defective Product or part thereof with a new or remanufactured equivalent at no charge to the purchaser for parts or labor for the period of three (3) years for AgCam[®] /EnduraCam[®] and InnoPro[®] cameras; two (2) years for AgCam[®] / EnduraCam[®] monitors, and Wireless components; Twelve Months (12) for all Overview Cameras & Monitors, cables and all other accessories.

The Dakota Micro limited warranty periods outlined above apply throughout the United States and Canada only. A one (1) year maximum limited warranty for all Products applies to all other geographic locations unless otherwise stated in writing by Dakota Micro.

This limited warranty does not apply to any issues connected with appearance that have no relation to the performance of the Product nor to any Product the exterior of which has been damaged or defaced, which has been subjected to improper voltage or other misuse, abnormal service or handling, or which has been altered or modified in design or construction.

In order to enforce the rights under this limited warranty, the purchaser should follow the steps set forth in the complete Dakota Micro "Product Warranty & Repair Process" listed on page 15 - section XIII , and provide proof of purchase to Dakota Micro.

Neither the sales personnel of Dakota Micro nor any dealer or any other person is authorized to make any warranties other than those described herein, or to extend the duration of any warranties beyond the time periods described herein.

The warranties described herein shall be the sole and exclusive warranties and remedies provided by Dakota Micro. Correction of defects, in the manner and for the period of time described herein, shall constitute complete fulfillment of all liabilities and responsibilities of Dakota Micro to the purchaser with respect to the Product, and shall constitute full satisfaction of all claims. In no event shall Dakota Micro be liable or in any way responsible for any damages or defects in the Product which were caused by repairs or attempted repairs performed by anyone other than Dakota Micro.

Some states do not allow the limitation or exclusion of incidental or consequential damages, so said limitation may not apply to you.

Any action at law, suit in equity, or other judicial proceeding for the enforcement of any right provided for herein or otherwise, or with respect to any claim that a purchaser may have against Dakota Micro shall be instituted only in the Courts of the State of North Dakota, either in the state district court located in Wahpeton, North Dakota or in Federal District Court location in Fargo, North Dakota. Without regard to conflicts of law principles, the laws of the state of North Dakota shall govern the interpretation and enforcement of the terms of this Limited Warranty and all aspects of the relationship between Dakota Micro and the purchaser.

This warranty gives you specific legal rights and you may also have other rights, which may vary from state to state.

XIV. DISCLAIMER

Dakota Micro Inc. products, specifications, pricing and programs are subject to change without prior notice. Dakota Micro Inc. reserves the right to make design changes at any time without obligation to retroactively install them on previously sold units.

XV. CONTACT US

Dakota Micro, Inc.

8659 148th Ave. SE. Cayuga, ND 58013 Management System Registered to ISO 9001

www.dakotamicro.com