HDLPCAM 4-in-1 Full HD 1080p License Plate Capture Camera
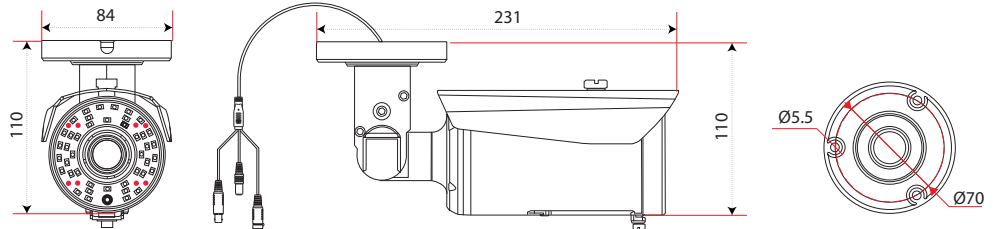
Northern HD-ANALOG ★

OSD, True D/N - DWDR, IP66, Motorized 9~22mm Lens

PRODUCT FEATURES

- Multi Format (TVI, CVI, AHD, 960H)
- Full HD 1080p Resolution
- Motorized 9~22mm Auto Iris IR Lens
- 42 IR LED's
- 50' Plate Capture Range
- 44 MPH Plate Capture Speed
- Digital Wide Dynamic Range
- True Day/Night Mechanical IR Cut Filter
- UTC Controllable OSD & Joystick
- Sense-up / Slow Shutter Speed
- 12VDC/24VAC Dual Voltage Power
- 3D Digital Noise Reduction
- 1/2.9" Sony CMOS Sensor
- 3-Axis Cable Management Mount
- IP66 Weatherproof

CAMERA DIMENSIONS / LINE ART

CAMERA COMPONENT DESCRIPTIONS

Mounting Base

Sun Shield

Vertical Angle Adjustment

IR Adjustment Access

SPECIFICATIONS

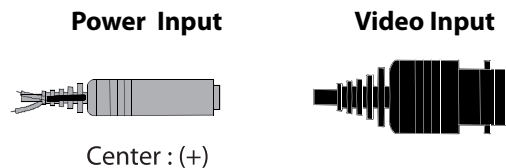| Model No.	HDLPCAM
Image Sensor	1-2/9" Sony CMOS Sensor
Total Pixels	1984 x 1225
Active Pixels	1920 x 1080
Resolution	1920 x 1080 (1080p)
Scanning System	Progressive Scan
OSD (On Screen Display)	Dual OSD Access: Cable Mounted Joystick Controlled / UTC Controlled (coaxial control)
Digital WDR (Wide Dynamic Range)	Auto / Off / On (0 ~8 Adjustable)
DNR (Digital Noise Reduction)	2D & 3D (Off / Low / Middle / High)
Video Output	BNC Video Connector
Lens Type - True Day Night	Motorized 9 ~ 22mm Varifocal Auto Iris IR Lens
Sense-up	Off / x2 ~ x30
Shutter Speed	Auto, FLK, 1/30 ~ 1/50,000, x2 ~ x30
IR Cut Filter	Built in Mechanical
Minimum Illumination	0.0 Lux IR LED On
IR LED Count / Range	42 IR LED's / 50' Range / 850nM
Plate Capture Viewing Angle	14° ~ 32° Vertical / 8° ~ 35° Horizontal
Plate Capture Speed	44 MPH
Plate Capture Range	Up to 50'
S/N Ratio	More than 52dB
Automatic Gain Control	0 ~15 Adjustable
Sync System	Internal
Gamma Characteristics	y = 0.45 typ.
White Balance	ATW / AWC->Set / Indoor / Outdoor / Manual
Back Light Compensation	Off / BLC / HSBLC
HBLC (High Back Light Compensation)	On / Off 4-Zone, Level & Mode Adjustable
Day/Night	EXT / Auto / Color / B/W
Mirror	Mirror / V-Flip / Rotate / Off
Languages	English, French, Spanish, German, Italian (see OSD Menu for more)
Brightness	0 ~ 100 Adjustable
Motion Detection	On/Off (4 Zone Selectable)
Privacy Mask	On/Off (4 Zone Selectable)
Power Input	12VDC/24VAC +/- 10% Dual Voltage Power
Power Requirement	400mA / 900mA IR LED ON
Overall Camera Dimensions	9.1" x 3.3" x 4.3" (231mm x 84mm x 110mm)
Housing / Color	Aluminum - White
Weight	1.6 Lb.
Operating Temperature	-22°F ~ 122°F
Weatherproof Rating	IP66

* All specifications subject to change without notice for quality improvement

CAMERA CABLE CONNECTION

Insert power lead into power connector:
be sure proper voltage is supplied and observe polarity.

Insert video lead into BNC connector:
push, then twist to lock BNC connector in place.

Power Input

Center : (+)

Video Input

OSD CONTROL

Press Up/Down to Zoom In/Out

Press Left/Right for Fine Focusing

Press in on the OSD button to access the OSD menu and sub-menus

While in the OSD menu - press up, down, left and right to navigate/change OSD settings
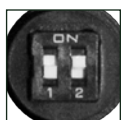
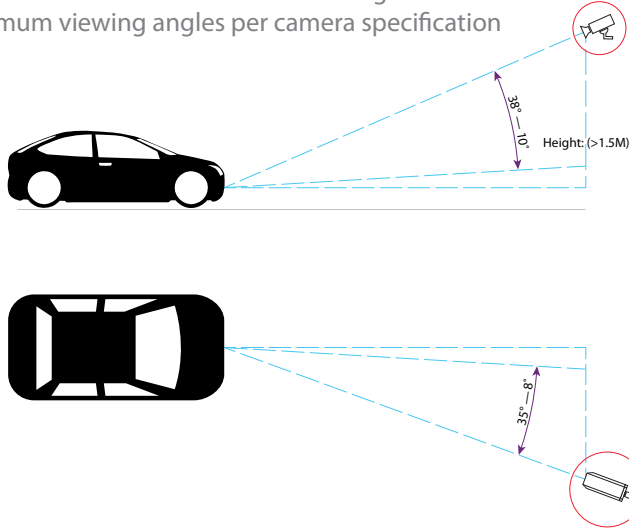**In-Line Cable Mounted OSD Control**

FORMAT SELECTOR SWITCH

TVI AHD CVBS CVI

Cable Mounted Dip Switch

PACKAGE CONTENTS

Mounting Hardware Packet, L-Style Wrench, Mounting Template

Northern ★ 2995 Foothills Blvd. Ste 200, Roseville, CA 95747 ◆ 855-388-7422 ◆ www.northernvideo.com

Rev. 091021

HDLPCAM 4-in-1 Full HD 1080p License Plate Capture Camera

OSD, True D/N - DWDR, IP66, Motorized 9~22mm Lens

PLATE CAPTURE VIEWING ANGLE

Camera must be installed within IR Range and Maximum viewing angles per camera specification

38° — 10°   Height: (>1.5M)
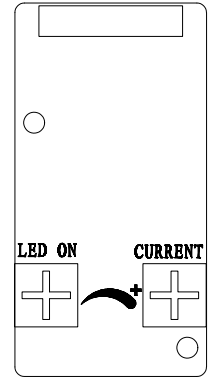
35° — 8°

IR ADJUSTMENT BOARD

"LED ON" :

Turn left and IR LED activate under darker conditions.

Turn right and IR LED activate under lighter conditions.

"CURRENT"

Turn left to Lower IR LED output.
Turn right to Increase IR LED output.

LED ON   CURRENT

OSD MENU TREE

MAIN MENU

MAIN MENU				
1. LENS	DC	1	LENS	MANUAL/DC#
2. EXPOSURE	↵	2	EXPOSURE	#
3. BACKLIGHT	OFF	3	BACKLIGHT	OFF/BLC#/HSBLC#
4. WHITE BAL	ATW	4	WHITE BAL	ATW/AWB/AWC-SET/INDOOR/OUTDOOR/MANUAL#
5. DAY&NIGHT	EXT ↵	5	DAY&NIGHT	AUTO#/COLOR/B/W#/EXT#
6. NR	↵	6	NR	#
7. SPECIAL	↵	7	SPECIAL	#
8. ADJUST	↵	8	ADJUST	#
9. AF	↵	9	AF	#
10. EXIT	SAVE&END ↵	10	EXIT	SAVE&END#/RESET#/NOT SAVE#

LENS

DC LENS MODE				
1. MODE	INDOOR	1	MODE	INDOOR/OUTDOOR#
2. IRIS SPEED	8	2	IRIS SPEED	0-15
3. RETURN	RET↵	3	RETURN	RET#

EXPOSURE

EXPOSURE				
1. SHUTTER	AUTO	1	SHUTTER	AUTO/ 1/30 / 1/60 / FLK / 1/240 / 1/480 / 1/1000 / 1/2000 / 1/5000 / 1/10000 / 1/50000 / X2 / X4 / X6 / X8 / X10 / X15 / X20 / X25 / X30
2. AGC	7	2	AGC	0-15
3. SENS-UP	AUTO↵	3	SENS-UP	AUTO#
4. BRIGHTNESS	56	4	BRIGHTNESS	1-100
5. D-WDR	OFF	5	D-WDR	OFF/AUTO/ON#
6. DEFOG	OFF	6	DEFOG	OFF/AUTO#
7. RETURNL	RET ↵	7	RETURN	RET#

DEFOG

DEFOG				
1. POS/SIZE	↵	1	POS/SIZE	POSITION/SIZE/RET AGAIN
2. GRADATION	0	2	GRADATION	0-2
3. DEFAULT	↵	3	DEFAULT	#
4. RETURN	RET↵	4	RETURN	RET#

BACKLIGHT

BLC				
1. LEVEL	MIDDLE	1	LEVEL	MIDDLE/LOW/HIGH
2. AREA	↵	2	AREA	POSITION/SIZE/RET AGAIN
3. DEFAULT	↵	3	DEFAULT	#
4. RETURN	RET↵	4	RETURN	RET#

DAY&NIGHT

B/W				
1. BURST	OFF	1	BURST	OFF/ON
2. IR SMART	OFF	2	IR SMART	OFF/ON#
3. RETURN	RET↵	3	RETURN	RET#

D&N AUTO				
1. D--N (AGC)	18	1	D--N(AGC)	1-255
2. D--N (DELAY)	58	2	D--N(DELAY)	0-60
3. N--D (AGC)	6	3	N--D(AGC)	1-255
4. N--D (DELAY)	45	4	N--D(DELAY)	0-60
5. RETURN	RET↵	5	RETURN	RET#

NR

NR				
1. 2DNR	MIDDLE	1	2DNR	HIGH/MIDDLE/LOW/OFF
2. 3DNR	MIDDLE	2	3DNR	HIGH/MIDDLE/LOW/OFF
3. RETURN	RET ↵	3	RETURN	RET#

SPECIAL

SPECIAL				
1. CAM TITLE	ON ↵	1	CAM TITLE	OFF/ON#
2. D-EFFECT	↵	2	D-EFFECT	FREEZE/MIRROR/NEG.IMAGE/RETURN
3. MOTION	OFF	3	MOTION	OFF/ON#
4. PRIVACY	OFF	4	PRIVACY	OFF/ON#
5. LANGUAGE	ENG ↵	5	LANGUAGE	ENG#/CHN1#/CHN2#/GER#/FRA#/ITA#/SPA#/POL#/RUS#/POR#/NED#/TUR#/KOR#/JPN#/HEB#/ARB#
6. DEFECT	↵	6	DEFECT	#
7. RS485	↵	7	RS485	#
8. RETURN	RET↵	8	RETUTN	RET#

D-EFFECT				
1. FREEZE	ON	1	FREEZE	OFF/ON
2. MIRROR	OFF	2	MIRROR	OFF/MIRROR/V-FLIP/ROTATE
3. NEG. IMAGE	OFF	3	NEG.IMAGE	OFF/ON
4. RETURN	RET ↵	4	RETURN	RET#

DEFECT				
1. LIVE DPC	ON ↵	1	LIVE DPC	OFF/ON
2. WHITE DPC	ON ↵	2	WHITE DPC	OFF/MIRROR/V-FLIP/ROTATE
3. BLACK DPC	ON ↵	3	BLACK DPC	OFF/ON
4. RETURN	RET ↵	4	RETURN	RET#

ADJUST

ADJUST				
1. SHARPNESS	AUTO↵	1	SHARPNESS	OFF/AUTO#
2. MONITOR	LCD↵	2	MONITOR	LCD#/CRT#
3. LSC	ON	3	LSC	OFF/ON
4. VIDEO OUT	PAL	4	VIDEO OUT	NISC/PAL
5. RETURN	RET ↵	5	RETURN	RET#

AF

AF				
1. AF MODE	SEMI	1	AF MODE	SEMI/AUTO/MANUAL
2. ONE SHOT AF	↵	2	ONE SHOT AF	#
3. TDN AF	ON	3	TDN AF	OFF/ON
4. LENS INIT	↵	4	LENS INIT	#
5. RETURN	RET ↵	5	RETURN	RET#

EXIT

EXIT				
1. EXIT	RESET↵	1	EXIT	SAVE&END#/RESET#/NOT SAVE#

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