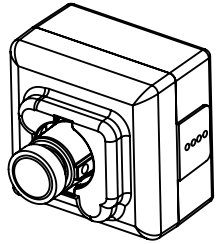# VIEW

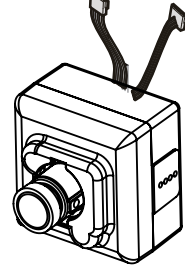## Wide Dynamic Range
## ATM Surveillance Camera Sheet

V531-KA005-200
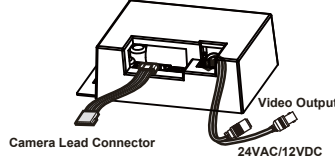Ver:08/2014

**700TVL High Resolution**

## ATM Surveillance Camera Parts and Descriptions
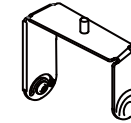
OSD Control Connector

Camera Lead Connector

**OSD Control Board**

**Short Bracket**

**ATM Surveillance Camera**

Camera Lead Connector

Video Output

24VAC/12VDC

**Dual Power Board**
* Supplied with Dual Power model only
** 12VDC only model cannot connect to dual power board

**OSD Control Board Cable**

**Long Bracket**

**Extended Arms**

*2 Knurling Knobs

*4 Black Screws

*4 Silver Shoulder Screws

*1 Top Thumb Screw
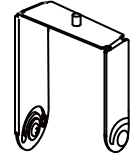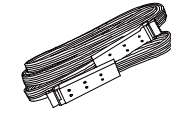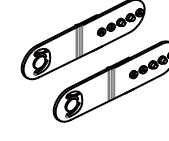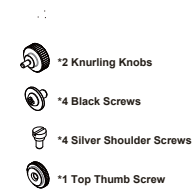
**Screw Accessories**

**Wire-ended Power Adaptor Lead**

Video Output
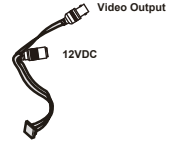
12VDC

**Camera Lead Connector**
* Supplied with 12VDC model only
** 12VDC: connect directly to camera

## Camera Installation and Connection

### Installation

Choose an appropriate bracket from the two included (Short or Long).

To change the bracket, remove the screws on each side of the camera, remove the current installed bracket and then replace it with a new version. Reinstall the attaching screws to secure the bracket to the camera.

For specific locations, there are two extended arms which will allow the camera to be positioned forward.
1. Remove the bracket by loosening the securing screws and axis screws on both sides.
2. Place the two extended arms and secure the supplied axis screws to the camera. Then set the positioning screws back onto the camera.
   Note: slightly tighten the axis screw and make sure the extended arms are still rotatable.
3. Use the axis screws to install the bracket onto the extended arms and then secure the positioning screws. Adjust the position required and tighten the positioning screws so as to fix the camera to the desired view angle.

**Note:** Some installations require the bracket to be installed in the ATM machine before attaching to the camera.

In the accessory bag you have securing screws or thumb knobs that can be used to secure the camera. Choose which works best for the installation. Once the camera is mounted and positioned, secure the camera by tightening screws.

### Connection

Dual Voltage Version
Mount dual power board in desired location then attach the camera lead. Next use the wire ended barrel plug to attach the appropriate power source and plug into the mating connector coming off the dual power board. Attach video cable and installation is complete.

12VDC Version
Attach the camera lead then use the wire ended barrel plug to attach the appropriate power source and plug into the mating connector in the wire harness. Attach video cable and installation is complete.

Make sure power is off before any connection is made.

## Installation

❶ **Remove the bracket from the camera**

❷ **Set up the extended arms**

❸ **Secure the bracket and the extended arms onto the camera**

❹ **Bracket Adjustments**

90°

90°

**Short Bracket**

**Long Bracket**

90°

90°

90°

90°

**Short Bracket with Extended Arms**

**Long Bracket with Extended Arms**
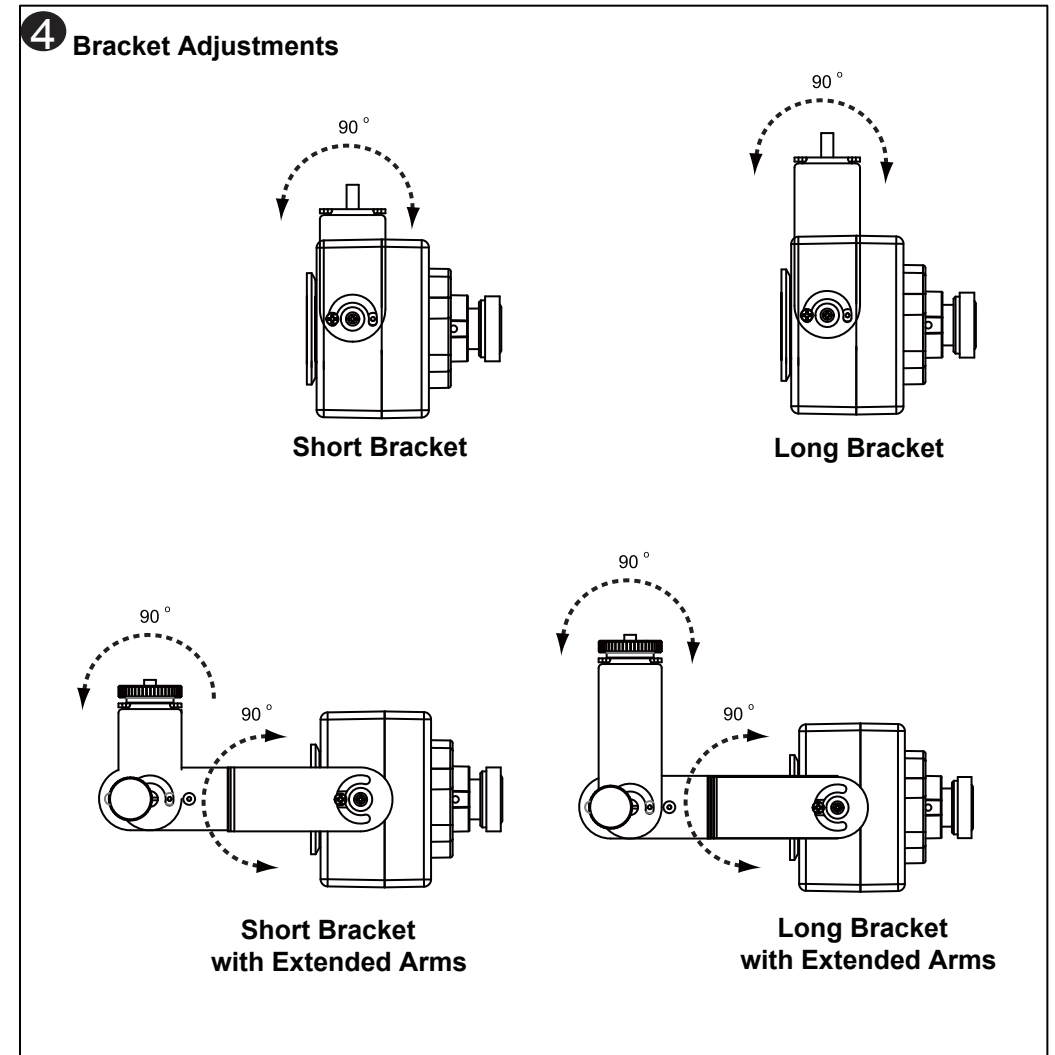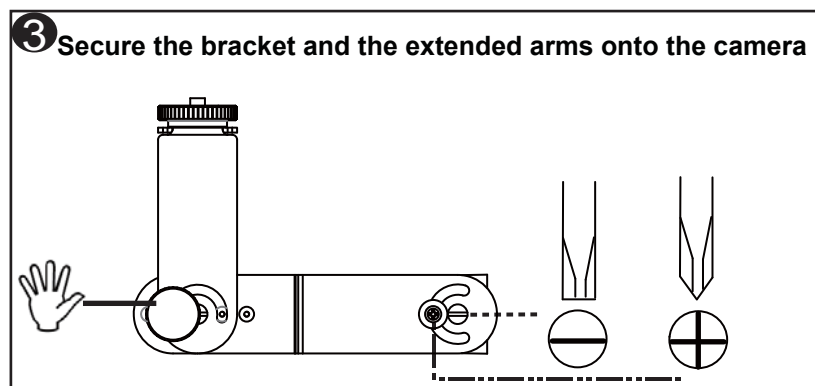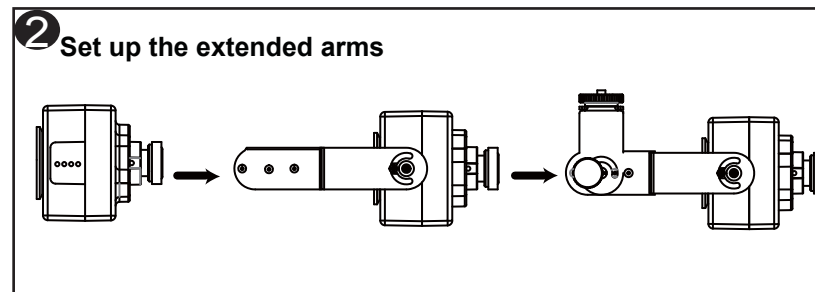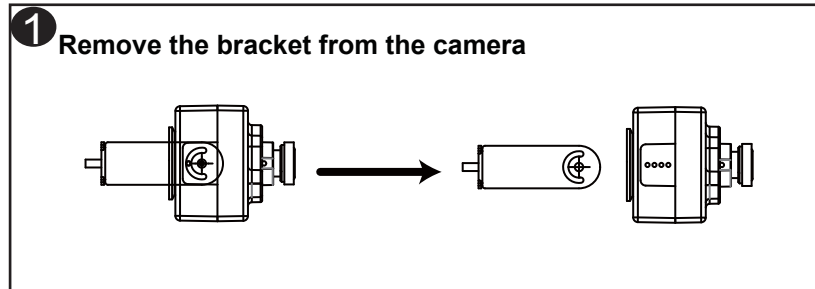
**Note:** There are multiple mounting positions on the extended arms which provide flexible mountings to different ATM machines.

## The OSD Control Board and Programming

Connect the OSD Control Board Cable to the OSD Control Board (see image below)



OSD Control Board

OSD Control Board Cable

Connect the OSD Control Board to the Camera (see image below)



OSD Control Connector

Camera Lead Connector

ATM Surveillance Camera

OSD Control Board with Cable

With power applied to the camera and a video monitor connected, press and hold the [ENTER] key for three seconds to access the OSD top level menu. A map of the setup menu options will be shown as the right of this sheet presented.

To navigate through the menus, use the arrow keys on the control board and use the [ENTER] key to select the menu field desired.



UP
LEFT
ENTER
RIGHT
DOWN

**IMPORTANT:**
When any changes made to the camera configuration, use the "SAVE SETTINGS" option in the "SAVE/RESTORE" menu to save. Otherwise any changes made will be lost when the camera is next reset or has its power cycled.

## Control Menu Map

Press the [ENTER] key on the control board for three seconds to view the menu.

PAGE1

```
SCENE SELECT ···· FULL AUTO ···· SHUTTER/ ···· AUTO ········ AE LEVEL ······· 001 ~ 250
                  INDOOR           AGC                        AGC MAX ········· 6.0DB ~ 44.8DB
                  OUTDOOR                                      SENS UP ·········· AUTO / OFF
                  BACKLIGHT                    MANUAL ······· SHUTTER ········· 256FLD ~ 1/10000
                  ITS                                          AGC MAX ········· 6.0DB ~ 44.8DB
                  CUSTOM                       FIX ··········· SHUTTER ········· 256FLD ~ 1/10000
                                                               AGC MAX ········· 6.0DB ~ 44.8DB
                  WHITE BAL ···· ATW(*1) ····· SPEED ········· 000 ~ 255
                                               DELAY CNT ····· 001 ~ 255
                                               ATW FRAME ····· 001 ~ 255
                                               ENVIRONMENT ··· INDOOR / SUNNY / SHADE / AUTO
                                 PUSH
                                 USER1 ········ RGAIN ········· 000 ~ 255
                                               BGAIN ········· 000 ~ 255
                                 USER2 ········ RGAIN ········· 000 ~ 255
                                               BGAIN ········· 000 ~ 255
                                 MANUAL ······· LEVEL ········· 00 ~ 63
                                 PUSH LOCK
                  HLC/BLC ······ OFF
                                 HLC ··········· CLIP LEVEL ···· 000 ~ 255
                                 BLC(*2)
                  WDR/ ········· OFF
                  ATR-EX(*3)     ATR-EX ······· CONTRAST ······ LOW / MID / HIGH(*4)
                                               CLEAR FACE ···· LOW / MID / HIGH / OFF
                                 WDR ·········· CONTRAST ······ LOW /MID / HIGH
                                               CLEAR FACE ···· OFF / LOW / MID / HIGH
                  DNR ··········· LEVEL ········· 0 ~ 6
                  DAY/NIGHT ····· DAY
                                 NIGHT ········· BURST ········· ON/OFF
                                 AUTO ·········· BURST ········· ON/OFF
                                               CNTL SIGNAL ··· INT/EXT1/EXT2
                                               DELAY CNT
                                               DAY->NIGHT
                                               NIGHT->DAY
                  IR OPTIMZER ··· OFF
                                 ON ··········· MODE ·········· AUTO
                                                               CENTER
                                               IR AREA ········ TOP ··········· 0~ 6
                                                               BOTTOM ········ 0~ 6
                                                               LEFT ·········· 0 ~ 8
                                                               RIGHT ········· 0 ~ 8
                                                               WEIGHT ········ 00~ 15
                                               LEVEL ········· 0-12
                                               IR LED ········· OFF
                                                               FIX ··········· LEVEL ········· 000 ~ 255
                                                               DAY/NIGHT ····· LEVEL MIN ····· 001 ~ 255
                                                                               LEVEL MAX ···· 001 ~ 255
                                               COLOR NIGHT ···· OFF
                                                               ON ··········· COLOR GAIN ···· LOW / MID / HIGH
                                               IR SHADE COMP ··· OFF
                                                               ON ··········· PATTERN ······ SET1 / SET2 / SET3
                                                                               POSH ········· 000 ~ 959
                                                                               POSV ········· 000 ~ 490
                                                                               LEVEL ········· OFF / LOW / MID / HIGH
                  LENS SHD COMP ··· OFF
                                   ON ··········· PATTERN ······ SET1 / SET2 / SET3
                                                 POSH ········· 000 ~ 959
                                                 POSV ········· 000 ~ 490
                  DEFOG(*5) ····· OFF
                                 ON ··········· LEVEL ········· LOW / MID / HIGH
                  FLK LESS ······ OFF
                                 AUTO ·········· MODE ·········· SHUTTER FIX
                                                               GAIN CNTL
                                 ON ··········· MODE ·········· GAIN CNTL
                                                               SHUTTER FIX
                  ANTI CR ······· AUTO/OFF/ON

PICT ADJUST ········· BRIGHTNESS
                      CONTRAST
                      SHARPNESS
                      HUE
                      COLOR GAIN
DIS ················· ON/OFF
EZOOM ··············· OFF
                      ON ··· MAG/PAN/TILT
PRIVACY MASK ········· AREA SEL ····· 1~15
                      DISPLAY ······ OFF / ON
                      POSITION
                      COLOR ········ WHITE / BLACK / RED /GREEN / BLUE /
                                     YELLOW / CYAN / MAGENTA
                      TRANSP ······· 0.00 / 0.50 / 0.75 / 1.00
                      MOSAIC ······· OFF / ON
MOTION DET ··········· OFF
                      ON ··········· DETECT SENSE
                                    INTERVAL
                                    BLOCK DISP
                                    MASK AREA ···· AREA SEL ····· 1~4
                                    MOTION AREA ··· MODE
                                                   TOP
                                                   BOTTOM
                                                   LEFT
                                                   RIGHT
SYS SETTING ········· SYNC MODE ···· INT/LL(*6)
                     LENS ········· MANUAL
                                    AUTO ·········· TYPE
                                                   MODE
                                                   ADJUST
                                                   SPEED
                     FLIP ········· OFF/V/H/VH
                     LCD/CRT
                     COMMNUNICATION ···· PROTOCOL
                                        ADDRESS
                                        BAUDRATE
                                        DATABIT
                                        PARITY
                                        STOPBIT
                     CAMERA ID ···· OFF
                                   ON ··· POS
EXIT

PAGE2
LANGUAGE ···· ENGLISH/中文/ESPANOL/PORTUGUES/PYCCKNN/FRANCAIS/DEUTSCH/日本語
VERSION
MAINTENANCE ···· W.PIX MASK ···· MANUAL ···· REGISTRATION
                 CAMERA RESET               REG.POINT
                                            CURSOR COLOR
                                            BLINK
                                            REG.NUMBER
                                AUTO ···· RUN
                                         BACK
                                         DATA CLEAR
EXIT ··· SAVE
         NOT SAVE
         CANCEL
         BACK
```

## Menu Description

**SETUP MENU**
**SCENE SELECT** – The six modes can be selected.
 **CUSTOM** – This mode turns off the auto scene recognition. All functions canbe set and adjusted manually
 **FULL AUTO** – This mode supports various shooting scenes. It is not specialized to any particular scene, so it allows average shooting in any situation.
 **INDOOR** – This mode is specialized to indoor scenes, such as indoor shop surveillance. It allows natural shooting with high contrast.
 **OUTDOOR** – This mode is specialized to outdoor scenes, Such as outdoor plaza surveillance. It allows natural shooting with high contrast.
 **BACKLIGHT** – This mode is specialized to scenes that mix indoor and outdoor conditions, such as entranceway surveillance.
 **ITS** – Monitoring and optimizing model of road.

**PICT ADJUST** – This Camera system provide functions that enable users to easily adjust the image quality to suit the image output device used.
 **Brightness** – Adjusts the brightness.
 **Contrast** – Adjusts the image contrast (light and shade differences).
 **Sharpness** – Adjusts the sharpness.
 **Hue** – Adjusts the hue.
 **Color Gain** – Adjust the color gain.
**EZOOM** – Adjust the digital zoom
 **EZoom** – ON / OFF.
 **MAG** – Magnification rate = ZOOM (0~255)
 **PAN** – Horizontal position settings.
 **TILT** – Vertical position settings.
**DIS** – Digital Image Stabilizer.
**PRIVACY MASK** – The mask function hides one or more areas which the user does not want to be displayed on the screen.
 **AREA SEL** – Select mask area (1-15).
 **DISPLAY** – Mask to ON or OFF.
 **POSITION** – Privacy regional choice
 **COLOR** – Sets the color blend: RED/ GREEN/ BLUE/ YELLOW/ CYAN/ MAGENTA/ WHITE/ BLACK
 **TRANSP** – Sets the brightness blend ratio: 0%, /50%/75%/100%
 **MOSAIC** – Open or close the mosaic function
**MOTION DET** – By using the motion detection function, it is possible to create surveillance cameras which are capable of detecting moving objects.
 **DETECT SENSE** – Select mask area (1-15).
 **INTERVAL** – Sets the MD detection interval. Subjects are detected when an interval exceeding the set number of fields has elapsed from the previous motion detection.
 **BLOCK DISP** – Motion detection result frame display selection. Outputs the results of the motion detected in each block.
 **MASK AREA** – MD (Motion Detection) setting menu, for setting the no-detection area.
 **MONITOR AREA** – Sets the position of the monitoring frames in pixel or line increments.
**SYS SETTING**
 **SYNC MODE** – External synchronization is a function with synchronization of the phase between an output video signal and an external reference signal. Use line lock mode to minimize color rolling.
 **LENS** – Set the lens type.
 **FLIP** – Select digital Flip / Rotate state OFF / V(Top / bottom reversal) / H(Left / right reversal) / HV(Rotation by 180 degrees)
 **LCD / CRT** – Set the monitor type LCD or CRT.
 **COMMUNICATION (OPTION)** – Sets the position of the monitoring frames in pixel or line increments.
 **CAMERA ID** – Sets the camera ID to ON or OFF.
**EXIT-MENU**
 **SAVE** – Save the settings (settings are saved).
 **NOT SAVE** – Exit menu without saving.
 **CANCEL** – Changes (restore settings to those selected when the menu was displayed).
 **BACK** – Return to previous menu.
 **RETURN** – Return to page on the hierarchical level immediately before.
**LANGUAGE** – LANGUAGE select between: English, ChineseSpanish, Russian, Portuguese, German, French, Japanese.

**VERSION** – Version Display

**MAINTENANCE** – Equipment maintenance
 **W.PIX MASK** – W.PIX Repair set

 **CAMERA RESET** – Reset the camera

**Note**
*1 This can not be changed from ATW except CUSTOM mode .
*2 BLC can be selected on CUSTOM mode.
*3 This can not be changed except CUSTOM mode.
*4 This is MID on FULL AUTO, OUTDOOR and ITS mode, LOW on INDOOR mode, HIGH on BACKLIGHT mode.
*5 This can not be changed except CUSTOM mode.
*6 The default SYNC Mode is set as INT. The SYNC Mode can be selected as LL on OSD menu but the actual mode is INT when the power is DC12V .
► This item has subsequent adjustment screens

## General Specifications

| TV System | NTSC | PAL |
|---|---|---|
| Image Sensor | Sony 1/3" Super HAD-II Wide Dynamic | |
| Effective Picture | 976(H) x 494(V) | 976(H) x 582(V) |
| Scanning Frequency | 60Hz | 50Hz |
| Resolution | 700 TVL | |
| Minimum Illumination | 0.3Lux(F1.2,50IRE,AGC ON) | |
| S/N Ratio | 50dB (100 IRE, F1.2) | |
| Video Output | Composite (75 Ω BNC unbalanced connector) | |
| Input Terminal | DC Jack with fly lead attached | |
| Power Source | 12 VDC ±10% / 24 VAC ±20% | |
| Power Consumption | 2.2W Max. | |
| Operating Temperature | -10°C ~ +50°C | |
| Storage Temperature | -20°C ~ +60°C | |

## Functional Specifications

| Sense Up | | ON / OFF | |
|---|---|---|---|
| Shutter Speed | AES | NTSC: 1/60 ~ 1/100000 | PAL: 1/50 ~ 1/100000 |
| | MES | 1/50 (1/60), 1/120 (1/100), 1/250, 1/500, 1/1K, 1/2K, 1/4K, 1/10K | |
| Wide Dynamic Range (WDR) | | OFF/ATR-EX/WDR | |
| High-Light Compensation (HLC) | | ON/OFF | |
| Backlight Compensation (BLC) | | Full Range | |
| AGC Gain Control | | 44.8 dB | |
| Day/Night | | SDN(AUTO ,COLOR ,NIGHT) | |
| White Balance Control | | ATW / Manual / Push / Push Lock / USER1,2 | |
| Auto White Balance Range | | Indoor: 1800K~10500K Outdoor: 6500K~10500K | |
| Mirror | | OFF/V-FLIP/H-FLIP/HV-FLIP | |
| Defog | | ON/OFF | |
| Sync System | | INT /LL | |
| Motion Detection | | 4 Areas | |
| Privacy Zone | | Up to 15 Masks | |
| Digital Noise Reduction | | 3D DNR | |
| Digital Zoom | | 255X Max | |
| DIS | | ON/OFF | |

## Lens Specifications

| Focal Length | | 2.8mm | 2.5mm |
|---|---|---|---|
| F-No. | | F1.8 | F2.5 |
| Iris Range | | Fixed Range | |
| Angle Of View : | Diagonal | 128.0º | 142.7º |
| | Horizontal | 98.0º | 113.4º |
| | Vertical | 81.5º | 85.9º |

## Regulatory Compliance

Emissions: - CE:
 --EN55022
 --EN55011
 - FCC:
 --47 CFR Part15 Subpart B
 --ANSI C63.4
 --ICES-003

Dual Power Module Only

Immunity: - CE:
 --EN55024
 --EN50130-4



CE RoHS FC

**FCC COMPLIANCE:**
This equipment complies with Part 15 of the FCC rules for intentional radiators and Class B digital devices when installed and used in accordance with the instruction manual. Following these rules provides reasonable protection against harmful interference from equipment operated in a commercial area. This equipment should not be installed in a residential area as it can radiate radio frequency energy that could interfere with radio communications, a situation the user would have to fix at their own expense.

**CISPR 22 WARNING:**
This is a Class B product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

**POWER SUPPLY REQUIREMENTS:**
For use with listed Audio/Video Product and only connected to 15W or less power supply. Power supply should be a NEC Class 2 / LPS Supply.

**EQUIPMENT MODIFICATION CAUTION:**
Any equipment changes or modifications not expressly approved by the seller could cause a hazardous condition and invalidate FCC compliance, thus voiding the users authority to operate the equipment.