

## ATM Camera



ATMN58KTS  
CAM690ATM  
CAM690ATM-28

## IMPORTANT SAFEGUARDS

1. Read Instructions - All the safety and operating instructions should be read before the unit is operated.
2. Retain Instructions - The safety and operating instructions should be retained for future reference.
3. Heed Warnings - All warnings on the unit and in the operating instructions should be adhered to.
4. Follow Instructions - All operating and use instructions should be followed.
5. Cleaning - Unplug the unit from the outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
6. Attachments - Do not use attachments not recommended by the product manufacturer as they may cause hazards.
7. Accessories - Do not place this unit on an unstable stand, tripod, bracket, or mount. The unit may fall, causing serious injury to a person and serious damage to the unit. Use only with a stand, tripod, bracket, or mount recommended by the manufacturer, or sold with the product. Any mounting of the unit should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.  
 An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
8. Ventilation - Openings in the enclosure, if any, are provided for ventilation and to ensure reliable operation of the unit and to protect it from overheating. These openings must not be blocked or covered. This unit should not be placed in a built-in installation unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
9. Power Sources - This unit should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply you plan to use, consult your appliance dealer or local power company. For units intended to operate from battery power, or other sources, refer to the operating instructions.
10. Grounding or Polarization - This unit may be equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.  
Alternately, this unit may be equipped with a 3-wire grounding-type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.
11. Power-Cord Protection - Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles, and the point where they exit from the appliance.
12. Power Lines - An outdoor system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outdoor system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal. U.S.A. models only - refer to the National Electrical Code Article 820 regarding installation of CATV systems.
13. Overloading - Do not overload outlets and extension cords as this can result in a risk of fire or electric shock.
14. Object and Liquid Entry - Never push objects of any kind into this unit through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the unit.
15. Servicing - Do not attempt to service this unit yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
16. Damage Requiring Service - Unplug the unit from the outlet and refer servicing to qualified service personnel under the following conditions:
  - a. When the power-supply cord or plug is damaged.
  - b. If liquid has been spilled, or objects have fallen into the unit.
  - c. If the unit has been exposed to rain or water.
  - d. If the unit does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions, as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the unit to its normal operation.
  - e. If the unit has been dropped or the cabinet has been damaged.
  - f. When the unit exhibits a distinct change in performance--this indicates a need for service.
17. Replacement Parts - When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.
18. Safety Check - Upon completion of any service or repairs to this unit, ask the service technician to perform safety checks to determine that the unit is in proper operating condition.
19. Coax Grounding - If an outside cable system is connected to the unit, be sure the cable system is grounded. U.S.A. models only--Section 810 of the National Electrical Code, ANSI/NFPA No.70-1981, provides information with respect to proper grounding of the mount and supporting structure, grounding of the coax to a discharge unit, size of grounding conductors, location of discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.
20. Lightning - For added protection of this unit during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the cable system. This will prevent damage to the unit due to lightning and power-line surges.

## FCC & ICES INFORMATION (U.S.A. and Canadian Models Only)

**WARNING** - This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules and ICES-003 of Industry Canada. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. Intentional or unintentional changes or modifications not expressly approved by the party responsible for compliance shall not be made. Any such changes or modifications could void the user's authority to operate the equipment.

If necessary, the user should consult the dealer or an experienced radio/television technician for corrective action. The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No.004-000-00345-4.

**Warning:** This is a Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

### Unpacking

Unpack carefully. This is electromechanical equipment and should be handled with care. If an item appears to have been damaged in shipment, replace it properly in its carton and notify the shipper. If any items are missing, notify Linear LLC. The shipping carton is the safest container in which the unit may be transported. Save it for possible future use.

### Service

If the unit ever needs repair service, the customer should contact Linear LLC for a return product authorization (RPA) and shipping instructions.

### Care and Maintenance

Clean the lens as needed with a soft cloth or Kimtech™ Kim Wipe delicate task wipes. Use a mild detergent solution or water.

### Model Designation

CAM690ATM	ATM Camera, 690TVL, Pixim Seawolf, 3.6mm lens, generic mounting bracket, 12VDC
CAM690ATM-28	ATM Camera, 690TVL, Pixim Seawolf, 2.8mm lens, generic mounting bracket, 12VDC
ATM58KTS	ATM Camera Kit, 690TVL, Pixim Seawolf, 2.8mm lens, mount bracket for NCR™ 5800 Series ATM's, 12VDC

### Description

The ATM Camera series features Pixim™ DPS imaging technology in a compact design. A wide angle lens is used with an adjustable mounting bracket to provide a wide range of installation options. A mounting bracket specific to certain NCR™ ATM's is included with the camera in model # ATM58KTS.

### Installation Note

Installation of this device should be performed by a licensed professional where required and should conform to the National Electrical Code (NEC) and all applicable local codes.

### Hardware Kit

CAM690ATM-xx	1 x Cable Tie 1 x ¼-20 Thumb Screw 1 x ¼" Fender Washer 1 x ATM Bracket 1 x Camera Bracket 1 x #10-32 x 3/8" Screw 1 x #10 Washer 1 x Power Adapter 3 x #4-40 Screws
ATMN58KTS	1 x Cable Tie 1 x ¼-20 Thumb Screw 1 x ¼" Fender Washer 1 x Bracket 1 x Power Adapter

### Installation – ATM58KTS

1. This unit ships pre-assembled, ready to install in an ATM.
2. Refer to installation manual 100 0234 001 AIG for instructions on installing this camera in a NCR 5800 Series ATM's.
3. Skip to Appendix A for information on camera settings.

### Installation – CAM690ATM-xx

This camera ships with a pre-installed plastic & metal base for wall or ceiling- mount installations. If installing the unit in an ATM, remove the base and attach the generic ATM bracket.

1. Remove the two screws in the bracket arms (see Figure 1). Two gaskets surround each screw. Do not discard these gaskets.
2. If installing the unit using the plastic/metal bracket, continue to the next section.
3. If installing the unit using the generic metal ATM bracket, skip to the section titled "Installing Camera Using ATM Bracket".



Figure 1 - ATM Camera with Plastic/Metal Bracket

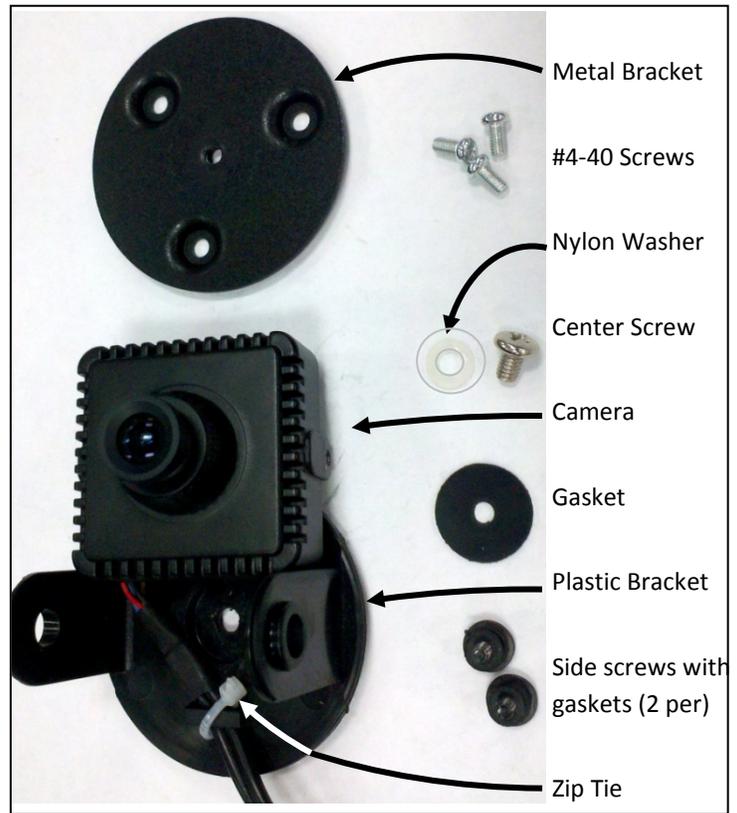


Figure 2 - Disassembled Camera Bracket

*Installing Camera Using the Plastic/Metal Bracket:*

4. Remove the center screw to separate the metal bracket from the plastic one.
5. Figure 2 shows the parts referenced in this section.
6. Use the camera's metal bracket as a template to mark the hole pattern in the mounting surface.
7. Attach the metal bracket to the mounting surface using the three #4-40 screws included in the hardware kit, or other appropriate customer-supplied fasteners.
8. To attach the plastic bracket to the metal bracket, place the center screw through the center hole in the plastic bracket, with the nylon washer under the head of the screw.
9. On the opposite side, place the gasket over the threads of the screw. The gasket should hold the screw/washer in place.
10. Align the center screw with the hole in the metal bracket and tighten the screw.

11. Orient the camera with the "Pixim" logo facing down (towards the ground). This will ensure the image is not upside down on screen.
12. Reattach the camera to the plastic bracket using the two screws and gaskets.
13. Run power and coax to the site. Terminate the coax cable with a BNC plug.
14. Provide strain relief for the power connection, if needed.
15. Supply power to the camera.
16. Use a test monitor to ensure the camera is in focus and pointing in the desired direction.
17. If the camera is out of focus, loosen the nut surrounding the lens, twist the lens right or left until the image is in focus, then tighten the nut to secure the lens in place.

### Installing Camera Using ATM Bracket

4. Cut the zip tie strain relief being careful not to cut the power or video wire. Damaged cables are not covered under this product's warranty.

*HINT: Slide the zip tie off the plastic arm before cutting the zip tie.*

5. Attach the camera bracket to the camera using the screws and gaskets from step 1. Orient the camera as needed. The Pixim logo on the camera should point towards the floor, or the image will be upside down on screen.
6. Attach the camera bracket to the ATM bracket (see Figure 3) using the #10 washer and #10-32 screw from the hardware kit. Adjust the camera bracket up/down as needed before tightening the screw.
7. Drill a mounting hole in the mounting surface that will accept a 1/4" fastener.
8. Position the bracket under the mounting hole and attach the camera assembly to the mounting surface using the thumb screw.
9. Position the camera as needed, then securely tighten all fasteners.
10. Provide strain relief to the camera cable using the zip tie from the hardware kit.
11. Supply power to the camera.
12. Use a test monitor to ensure the camera is in focus and pointing in the desired direction.
13. If the camera is out of focus, loosen the nut surrounding the lens, twist the lens right or left until the image is in focus, then tighten the nut to secure the lens in place.

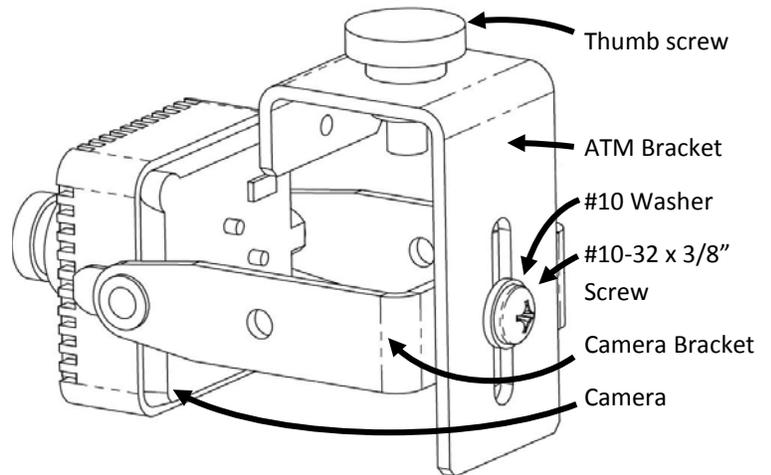


Figure 3 - Completed Assembly Using ATM Bracket

### Camera Configuration

The camera's on-screen display (OSD) controls are located on the back of the camera (see Figure 1).

Use the controls to navigate the OSD menu. Features and options are shown in Appendix A. OSD controls include Up, Down, Left, Right, and Select (center button).

Hold down Select to enter the menu.

## APPENDIX A – OSD Features and Settings

To enter the OSD (On-Screen Display) menu, locate the OSD Menu Control shown in Figure 1. Push and hold the select button to enter the menu. Press Up/Down to navigate between menu items, and press Left/Right to adjust settings. When exiting, highlight Save&Exit and click the select button to save changes. Highlight Default and press select to reset the camera to factory defaults.

Feature/Function	Default Value	Description
WDR Control	Medium	Wide Dynamic Range (WDR) is a feature that measures light levels on a pixel-by-pixel basis so that areas of the image that are too bright are toned down, and underexposed areas are amplified. This provides more usable footage in difficult lighting scenarios. Setting the menu option to “High” indicates the video is being highly processed to evenly distribute the light levels. A “Low” setting indicates the video is not altered much from its original state.
BLC (cont’d)	Off	Select the BLC Level (off/low/mid/high) then change the size of the target region. BLC stands for Backlight Compensation. Use this feature when the image routinely involves a bright background, a darker foreground, and the area of interest in the foreground (i.e. entrance to a store). In normal operation, the camera takes an average light level to determine the overall screen brightness. This may cause a dark area in the foreground (i.e. a face) to be too dark to recognize. The user could use BLC to target where the faces generally appear. The camera will ignore brighter parts of the image and make sure the target area is bright enough. The background may appear washed out at times when the target region is relatively dark.
AGC (Auto Gain Control)	Normal	Select low/normal/high. This feature determines how much the AGC chip will increase the brightness of incoming light. If the image is too dark, set the AGC chip increases the signal to provide a brighter image. A “High” AGC setting means the camera measures the light more often and adjusts quicker to changing light levels.
Lens Select	DC	This menu item refers to the type of iris used in the camera lens. This camera uses a Manual Iris lens (i.e. fixed iris).
Flourescent	Off	Certain types of fluorescent lighting can interfere with the camera’s imager and cause distortion. If the camera is flickering or displaying wavy lines, switch this menu item from Off to CRR.
Day & Night	n/a	This camera can produce a color image during the day and a black/white image at night to improve low-light sensitivity. The switch from color to black/white can be done automatically based on the input light levels(AUTO), it can be switched using an external trigger (GPIO, n/a for this unit) or it can be set to color mode only (Off)
Language	English	Select the language for the OSD screen. If your camera is stuck in the wrong language, exit the menu, hold the center button for 2 seconds, press Up twice, then the left/right buttons will change languages.