

ALM-2002-9 2.4 GHz Wireless Video/Mic. Pen Camera & Receiver

Master units: 1pc Wireless PecCam, 1pc Receiver, 1pc DC12V adapter, 1pc A/V Cable, 5pcs x 3sets GPA76 batteries.
Accessories: 1pc 9V battery adapter, 1pc 9V alkaline battery, 1pc 9V battery snap, 1pc brass outer body.

SPECIFICATION:

Pen Camera:

Frequency:	4 Channels in 2.4 GHz frequency band
RF output power:	EC-R&TTE compliant
Transmitting range:	100M in L-O-S
Built-in Mic.:	30 dB High sensitive Mic.
Power supply:	Type 1): DC6V – 7.5V (5pc internal GPA76 batteries) Type 2): DC9V (1pc 9V auxiliary alkaline battery)
Power consumption:	65 mA
Lens:	f=3.7mm / view angle: 70 degrees
Size:	145 mm (L) x 20 mm (W) x 14.5 mm (Dia.)
Weight:	35 Grams
Battery operating time:	Type 1): Using 5pcs internal GPA76 batteries is about 50 minutes Type 2): Using 1pc 9V auxiliary alkaline battery is about 6 hours

Receiver:

Frequency: (4 channels)	2400 – 2483.5 MHz
Video input/output:	1Vp-p/75 ohm
Audio input/output:	0.8V/600 ohm
Antenna:	Built-in directional antenna.
Audio bandwidth:	50 –17000 Hz
Operating power:	DC12V
Power consumption:	180mA
Size:	150x88x40mm

OPERATING MANUAL OF THE PEN CAMERA:

(一) Power Source “Type 1”: Using 5pcs GPA76 Batteries:

(1) Inserting or Changing the Batteries:

- Step 1: Turn the pen head (5) to the far right.
Step 2: Take off the pen head (5), rotary tube (6), and metal outer body (7)
Step 3: Take off the cover of the battery cell and insert 5pcs GPA76 batteries,
negative is downward and positive (w/words) is upward.

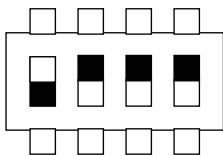
(2) Switching the Different Channels:

Follow same step 1 and step 2 indicated above

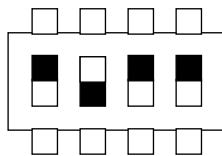
- Step 3: Below the battery cell, there is square cell. It is the channel switch.

Using a sharp unit like toothpick to adjust the dip switch in choosing the channel.

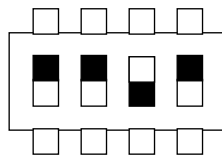
(When changing to different channel, in avoiding damage to the delicate channel switcher,
please hold the Ink Cartridge to steady the channels PCB first.)



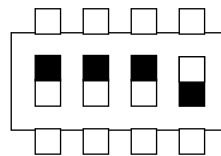
Channel: 1 (2412MHZ)



Channel: 2 (2452MHz)



Channel: 3 (2472MHz)



Channel: 4 (2432 MHz)

(3) Assemble the Whole Unit:

- Step 1: Cover the battery cell (8)

- Step 2: Insert the outer body (7).

(There is an indentation on top of the metal outer body and there is a fitting convex point on the pen housing, you can find it just beneath the pen clip. When inserting the outer body, you have to adjust them to suit for steady holding the outer body to the pen.)

- Step 3: Insert the rotary tube (6), and then insert the pen head(5) and tighten it.

THIS DEVICE COMPLIES WITH PART 15 OF THE FCCURLES. OPERATIONS IS SUBJECT TO THE FOLLOWING TOW CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESRIED OPERATION.

(4) Operating the PenCam Kits:

PenCam:

- Step 1: Insert the 5pcs GPA76 batteries to the pen camera as indicated in point (一)
- Step 2: Switch on the same channel as indicated in point (二) to suit the receiver channel.
- Step 3: Assemble the whole unit as indicated in point (三)
- Step 4: Push the button on top of the pen to turn on, push the button again to turn off.
(You will find the button that, while on turn off mode, it is slightly higher than when it is in turn on mode.)

Receiver:

- Step 5: Connect the receiver to the equipment you wish to transmit to [monitor, TV, VCR, ...etc.]
- Step 6: Direct the antenna of the receiver towards the PenCam. The integrated antenna inside the case of the receiver is located at the opposite end to the connectors.)

(二) Power Source “Type 2”: Using 1pc 9V Auxiliary Battery:

In addition to using different battery, same step (1)/(2)/(3)/(4) as above.

Remark: Take off the cover of the battery cell and insert the 9V battery adapter (Negative is downward and positive is upward), then slip on the metal outer body which is with a hole. Plug the 9V battery snap in the hole on the metal outer body for connecting with the attached 9V .battery.

(六) Operating Tips:

- 1) When putting the pen camera inside the pocket, please don't put another metal pen or other metal devices inside the same pocket to avoid poor transmitting quality.
- 2) When using the pen camera, you can fit the camera on the pen clip to aim at the subject.
If you want to adjust the angle of the lens, in avoiding attraction to other people, you can use the pen camera to write, just like a regular pen. (Take note that the pen camera will provide writing for only 5M in length.)
- 3) When holding the pen camera to write, take note that the holding position must not exceed the rotary tube which is with shuttle pattern. Because the antenna is located at the position of the pen head (5), if exceed the shuttle pattern (6), it will result to poor transmitting quality.
- 4) The pen camera is with built-in microphone. It is an omni-directional high sensitive Mic.
No need to adjust, it is designed to detect the sound..
- 5) When inserting the battery, **the negative(-) must be downward and the positive(+) is upward.**
Wrong insertion of the batteries will cause damage.
- 6) **The battery cover must place on top of the batteries (power source type 1).** Otherwise it will cause short circuit between the brass outer body (7) and the batteries, and will damage the pen camera.
(If the attached battery cover is lost, you can use other unit which is of isolated material to replace it.)
- 7) Order of inserting the 5pcs GPA76 batteries: Inserting the 5pcs GPA76 batteries piece by piece.
When inserting the GPA76 batteries, make sure that each battery is in the same direction, Negative(-) is downward and positive(+) is upward.

(六) Important:

- 1) Use the attached GPA76 batteries only, or replace by the same batteries.
- 2) Don't place above or near a heat source which may cause the equipment to overheat.
- 3) Avoid “Oily” locations.
- 4) Microwave ovens can cause interference and diminish the quality of the signal if the pen camera or receiver located close by.
- 5) Beware of humid locations. Water droplets or spray may damage the units. If condensation occurs, do not use until the equipment has dried out.
- 6) Do not use in temperature exceeding 55 degC.
- 7) Never paint or attach metallic labels and sticker of any kind.
- 8) Do not use two pen cameras and receivers operating at the same time in the same area.
This might result in picture and sound interference.
- 9) For a long period of not using the pen camera, please take off the batteries.

Note: The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Important Note: To comply with the FCC RF exposure compliance requirements, no change to the antenna or the device is permitted. Any change to the antenna or the device could result in the device exceeding the RF exposure requirements and void user's authority to operate the device