



### **MMC-1105 Quick Guide**

MMC-1105 is a micro digital wireless camera, which is digital totally from lens to RF output circuit. For real time wireless monitor use, its resolution can be HDTV 1280×1024; its definition is 3-10 times as the equipments of former microwaves(CCD wireless camera, the theoretic resolution is 720\*576 or 760\*480) and COFDM. If use it for low altitude aerial photography, you can see clearly the brand name of the cigarette box on the ground don't need change the lens focus. . For book photographing or evidence taking, at one time it can photograph clearly all the words on 2-3 A4-sized papers. The above-mentioned performance of MMC-1105 is beyond the normal PAL/NTSC videography equipment can do, including some of the equipments for broadcast use.

Taking advantage of the most update 2.4GHz BroadWide™ RF blind-area compensable technology, the advanced technology MM-1105 takes has very good performance in signal transmission. It can attain very long transmission distance with very small transmission power. Take basic specification of MMC-1105 as an example, the transmission power of it is only 50mW, but its reference transmission distance can be more than 5KM and MMC-1105S is 15KM. Comparably, to meet the above mentioned long transmission distance 15KM, the standard 8M-bandwidth CODFM or microwave equipments must need very high transmission power of above 1000mW.

Additionally, MM-1105 has interfaces of voice input and output, data link and it is built in a 16G memory cell (optional). If necessary, you can use it for communication, transmit data with speed of <9600bit or record video of an extra 3 hours or so.

### **Main Specifications of MMC-1105**

**Weight:** 125g (including built-in 1200mAh lithium battery, which can support MMC-1105 to work continuously more than 3 hours.)

**Resolution of Image Sensor:** SXGA 1280 x 1024 10 frame/second, XGA 1024 x 768 30 frame/second

**Sensitization of Image Sensor:** < 0.5 lux@F2.8

**Size:** 93×72×23 mm (not including the projecting part)



### **Configuration & Basic Application of MMC-1105**

A complete set of MMC-1105 system consists of a wireless camera host machine, MMC-1105-Center and a laptop computer (the laptop is prepared by yourself, the video memory of which must be more than 256M). The process of data transmission is: from host machine wirelessly transmit to MMC-1105-Center, and then wirelessly transmit to the laptop. From the above, we can see the three parts can be separated in different places. And the user doesn't need to stay with MMC-1105-Center; it can be independently put in high place.

Switch on the power of host machine and MMC-1105-Center, through the laptop we can see a wireless network of MMC-1105-Center, which is an SSID calling sign from MMC-1105-Center.

After switching on the host machine, there will be followed by a self-test for about 30 seconds. When the red light of the indicator turns into green, it still need above 45 seconds for the host machine to communicate with MMC-1105-Center.

To use this system, you should first set the IP of WIRELESS NETWORK CONNECT as 192.168.0.X, the X must be among 0-255, but it cannot be 20.

For XP system, the setting process is as follows:

Click START—CONROL PANNEL—NETWORK CONNECT, in the pop-up window right-click PROPERTY in WIRELESS NETWORK CONNECT, click INTERNET AGREEMENT (TCP/IP), choose PROPERTY, in the following new window click USE THE FOLLOWING IP ADDRESS, and then fill in 192.168.0.X in the blank IP Address (I), and then click subnet mask, the computer will automatically enter the default 255.255.255.0, just press ENTER to confirm it.

NOTE: In the above-mentioned case, the computer cannot connect INTERNET through wireless connection.

Open IE in the computer, fill in <http://192.168.0.20/> and press ENTER, the screen will pop up a window of MMC-1105, for the user to enter the account and passwords. The manufacturer default account number is admin, the passwords are blank.

After enter exact account and passwords, we will see the monitor video and operation administration page of MMC-1105.

NOTE: If it is the first time for the computer to connect with MMC-1105, some operating system maybe need to install ActiveX control, otherwise the user will only see the toolbar, and cannot see the pictures. If IE prevents installing ActiveX control, the user can temporarily change the set of IE: click TOOL on IE menu, choose INTERNET, select USER DEFINED in SECURITY, find DOWNLOAD NON-SIGNITURED ACTIVEX CONTROL, change FORBIDDEN (recommend) into STATRT or HINT, then press ENTER, close IE and then restart IE.

### **Brief Introduction To Operation Administration Page of MMC-1105**

The whole video image page can be unlimitedly zoom in and out by the right and left buttons of the mouse. It is digital zoom. When the screen is too small, it is mainly used to view the details of picture.

At the bottum of the video image, there are many functional buttons, when the mouse hovers over the button, there will appear the function introduction of the button.



These 4 icons are the preset indexes of picture definition and video smoothness. Among them, icon 1 means the highest default definition, that is, 1280×1024 10 frame/second, which has reached the standard of high definition HDTV, and has greatly surpassed the highest resolution of normal computer screen and video OVH. Therefore, its data flow is really huge, if the hardware configuration of the computer can not meet its requirement, the video image on the computer screen will be not so smooth.

2-4 icons represent lower resolution, which can ensure smooth video image in poor condition of transmission. Among them, icon 2 represents the resolution of 640×480, which is same as the highest resolution of common PAL/NTSC equipments. 2-4 icons also can be used for high-resolution photograph for small screen monitor, for example, to save

the memory space of the hard disk, you can use these icons for super long time back-up monitor.



This icon means whole screen view for the monitoring picture. Return to normal proportion of monitoring picture by pressing **Esc** button.



Buttons for photographing and starting video record



This icon means the setting of saving route of the pictures and videos. The default saving route is My Document--MMC-1105 folder.



Buttons for bi-directional voice communication and data link application

### **Warning For Information Safety & Conflicts Between Equipments**

1. If you don't want anyone can visit your MMC-1105 and its accessories, please set passwords for your **admin** account.
2. If you want your MMC-1105-Center to be visited and used by authorized persons, please set passwords for your MMC-1105-Center.
3. If there are many hot machines of MMC-1105 and many MMC-1105-Centers in same places, to avoid conflict, please change the default IP of the host machine and SSID of MMC-1105-Centers.

### **The Tips of Basic Setting in Ground Working Environment**

The working environment between ground and air is very different. Though MMC-1105 takes advantage of the most update 2.4GHz BroadWide™ RF blind-area compensable technology, when there are barriers, its signals still will be declined to some extent. The key to control the decline within the acceptable range is to select a proper position to install MMC-1105 center (mainly for its antenna), which determines the result of the system in ground environment.

Many people maybe have noticed that, usually there is only one mobile phone base center in small cities or towns, but its coverage is really broad. Why? Because the base center always locates at the top of the hill or high building, where is very high and has no barriers around, it is an ideal place for wireless transmission.

The above principle also can apply for the ground position of MMC-1105 center. If MMC-1105 center and its antenna is placed indoors at random, the basic 50mW MMC-1105 only can transmit through less than 3 floors in reinforced concrete building.

For personal use, limited by the condition and environment, it is very difficult or cost too much for a person to get the best position to place MMC-1105 center. But to get better result, the user still needs to find a better position to install MMC-1105 center (mainly for its antenna).

1. The typical method is to take fiberglass omni antenna for MMC-1105 center, and put the antenna in the open and wide balcony. And then the center can directly link with MMC-1105 host machine. This method usually can cover half of the common residence community. When there are barriers, its reference working radius can be 200-500 meters.
2. If MMC-1105 host machine and the monitor computer are in same reinforced concrete building, you can place MMC-1105 center in faraway another building, where MMC-1105 host machine and the monitor computer can see it. If the computer tests the signal is not strong, you can use external wireless LAN card to communicate with MMC-1105 center. Because the signal receiving sensitivity of the external wireless LAN card is above 10 times as the built-in wireless LAN card.

The above operations can ensure good connection for the data link between MMC-1105 host machine and MMC-1105-center, and the link between MC-1105-center and the monitor computer.

3. MMC-1105 host machine has an optional 19cm 6dB gain antenna. If possible, it can replace the standard short 2dB antenna, and the effect can be improved 30-50%.
4. You also can consider buying 5000mW MMC-1105S system or MMC-1105W system with Intelligent-Olfaction-Detection, which can take the public wireless networks and 3G networks as its transmission channels.