1. USB Driver Installation

You should install the appropriate USB Driver for USB Comunication between PC and Farmware .

1) At first, you should download USB Driver from the site of Micronix Corp.
for Driver Installation .

Micronix Download Site for USB Driver
http://www.micronix-jp.com/Products/download/download.html

2) Connect the machine MSA400 series and PC by the USB cable, and turn on .
The Found New Hardware Wizard will appear .
If you are prompted to answer a question about Windows, choose **[No, not this time]** and click **[Next]** .

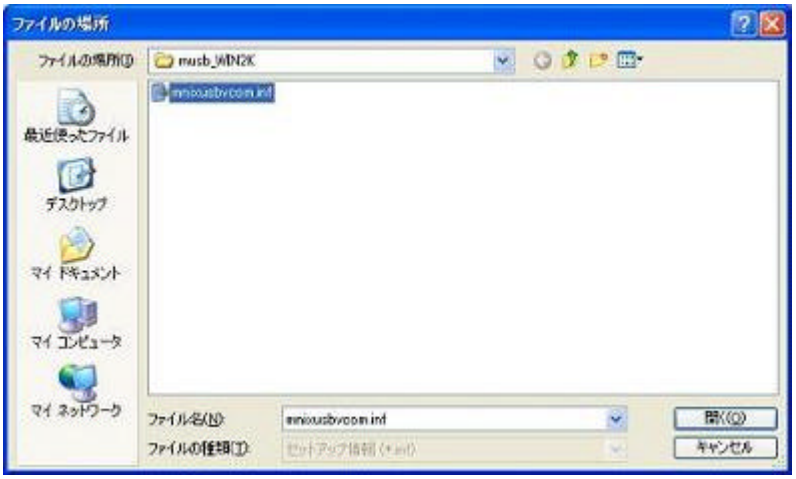
3) Select **[Install from a list or specific location (Advanced)]** and click **[Next]** .

4) Select **[Don 't search . I will choose the driver to install .]** and click **[Next]** .

5) Click **[Have Disk ...]** .

6) Click **[Browse]** in the following window .

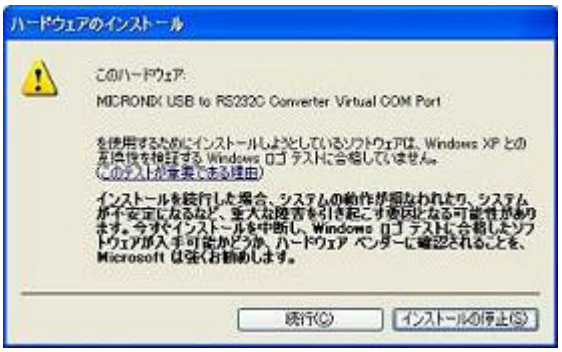
7) Browse to the **[Micronix_Usb_EN]** directory .
Select the file **[mnixusbvcom.inf]** and click **[Open]** .



8) click **[OK]** to Continue .

9) Click **[Next]** to continue .

10) Click **[Continue Anyway]** in the warning dialog box .



11) Click **[Finish]** .

2. Sample Program

In this chapter, the example of the program which transmits by USB is shown .

The condition of the setting : Center Frequency 1GHz

```
////////////////
/// Port Open ///
////////////////
HANDLE handle;
handle = CreateFile("COM1", GENERIC_READ | GENERIC_WRITE, 0, NULL, OPEN_EXISTING,
                                                        FILE_ATTRIBUTE_NORMAL, NULL);

   if(handle == INVALID_HANDLE_VALUE)
   {
            AfxMessageBox("COM Cann't Open.");
            CloseHandle(handle);
            return -1;
   }

   COMMTIMEOUTS cto;
   GetCommTimeouts(handle, &cto);
   cto.ReadIntervalTimeout = 1000;
   cto.ReadTotalTimeoutMultiplier = 10;
   cto.ReadTotalTimeoutConstant =100;
   cto.WriteTotalTimeoutMultiplier = 10;
   cto.WriteTotalTimeoutConstant = 1;
   SetCommTimeouts(handle, &cto);

   DCB dcb;
   GetCommState(handle, &dcb);
   dcb.BaudRate = 9600;
   dcb.ByteSize = 8;
   dcb.Parity = NOPARITY;
   dcb.StopBits = ONESTOPBIT;
   dcb.DCBlength = sizeof(DCB);
   SetCommState(handle, &dcb);
```

```
////////////////////
/// Send Command ///
////////////////////
DWORD nSend;
CString StrBuf;

StrBuf.Format("FREQ1G\r\n"); // "FREQ1G" + CR + LF //
WriteFile(handle, StrBuf, StrBuf.GetLength(), &nSend, 0); // Frequency is set as 1GHz //

//////////////////
/// Receive Reply ///
//////////////////
DWORD nRecv;
char RevStr[256];
memset(RevStr, 0, sizeof(RevStr));

int i = 0;
while(1)
{
        ReadFile(handle, &RevStr[i], 1, &nRecv, 0); // A receiving character is stored in RevStr. //
        if(RevStr[i] == 0x0a) // It will end, if character LF is received. //
                break;
        i++;
}

/////////////////
/// Port Close ///
/////////////////
CloseHandle(handle);
```