

## Updating Firmware and Serial Emulation

You can update Qscan readers using the ibc Flash Utility found on our website at <http://interbar.com>.

Rs232 and Tcp/ip readers can be updated directly through their serial connections.

To update QscanT and Qscan Minis with your own cable please see the following page. To update QscanT and Qscan Minis using the IBC programming adaptor please see page 80.

To update Qscan and Qscani readers with emulation interfaces (wiegand, aba) you will need to make a cable or use the IBC programming adaptor (page 80) to connect the reader to a pc or laptop. The wiring connections for making your own cable are:

Red Power  
Blue Ground and DB9 pin 5  
Green DB9 pin 2  
Yellow DB9 pin 3

Connect Orange and White together

You must connect orange and white together before applying power. This is the signal to the Qscan reader that you want to start up in a serial mode so that you can download the new firmware. The reader will start up at 9600 baud, 8 data bits, no parity.

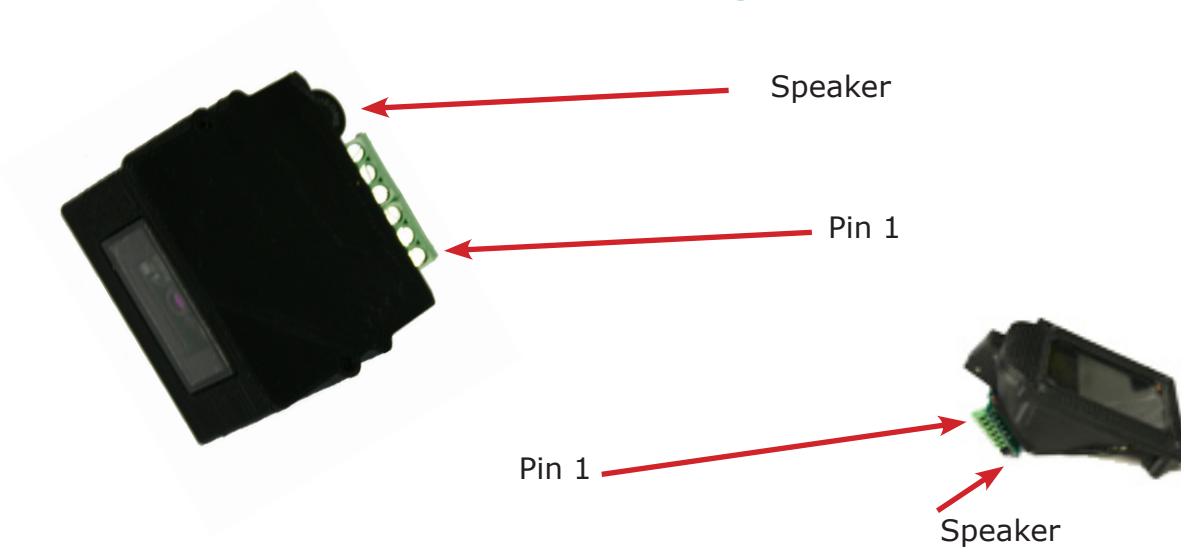
Besides updating firmware, Qscan readers with an emulations interface can be started up in the serial mode for the following purposes:

Sending programming commands to the reader

Viewing barcode data through the serial connection.

In case you are having issues with wiegand programming not working and you need to view what is encoded in a barcode, you can do this with a serial connection using the wiring pinout described above. Use the terminal mode from any of the ibc utility software programs to view the data.

## Updating Firmware and Serial Emulation Wiring - Qscan Mini and QscanT



SERIAL EMULATION AND FIRMWARE UPDATES

Pin Definitions For Serial Connection		
	LABEL MARKING	
Pin 1	-	Power Gnd and DB9 Pin 5
Pin 2	+	8Vdc - 12Vdc
Pin 3	0	DB9 Pin 2
Pin 4	1	Jumper to Pin 6
Pin 5	L	DB9 Pin 3
Pin 6	A	Jumper to Pin 4

You must connect Pin 3 and 6 together before applying power. This is the signal to the Qscan reader that you want to start up in a serial mode so that you can download the new firmware. The reader will start up at 9600 baud, 8 data bits, no parity.

## Using the Flash Utility

Start the IBC Flash Utility program.

On the communications screen:

For tcp readers, select TCP mode and enter in the ip address of the reader.  
For RS232 and wiegand readers select the proper com port and leave the baud rate at 9600.

Go into the Terminal Mode and type V then hit the enter key. If properly wired and configured, the reader should respond with an identification message. Do not proceed until you are able to get this message.

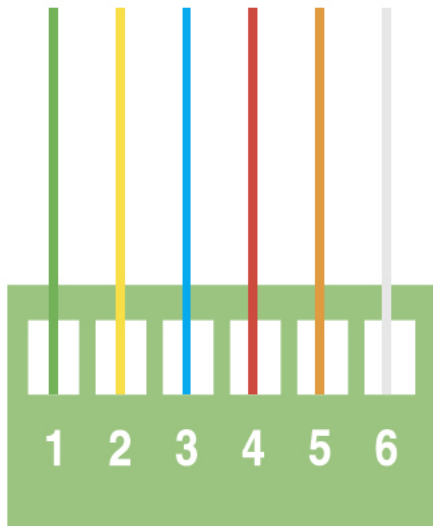
Click on Flash Device. The Flash Download screen will appear. Click on Select File to Download and then select the .bin file containing the new firmware. Then click on Start Flash Download and the new firmware will be loaded into the reader. If at any time the download stops or is interrupted, simply try again.

When the download is complete, the reader will restart.

In some cases, a reset of the reader may be required to initialize new features in the updated firmware. IBC will tell you if a reset is required. Note that if a reset is required, then any reprogramming that you may have done to the reader will be lost and you will need to reprogram again. To reset the reader, in the terminal mode, hit the F10 key followed by UU and then hit the enter key. You can also reset the reader by scanning a reset barcode which you can request from IBC.

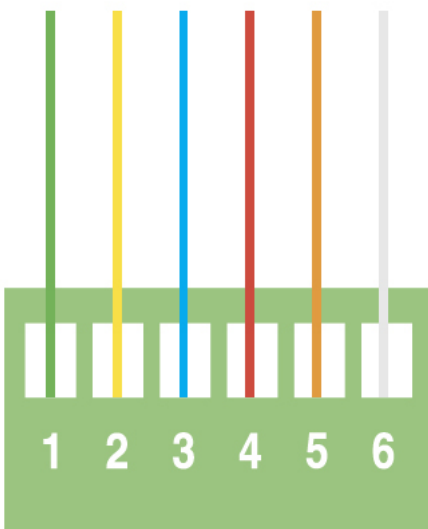
## Using the IBC Serial Flash Adapter

To connect a Qscan or Qscani with flying leads:



- 1** : Green
- 2** : Yellow
- 3** : Blue
- 4** : Red
- 5** : Orange
- 6** : White

To connect a Qscan Mini or QscanT:



Make a short cable and attach as follows:

Mini/T Pin	Adaptor Pin
1	3
2	4
3	1
4	6
5	2
6	5

Do not apply power until all connections have been made