

INITIAL CHECK

- Check the ip.buffer kit has: Serial Cable & Adaptors, LAN Cable, Power Supply.
- Obtain Client's IP, Subnet & Gateway addresses, also DNS server if used.
Note: If the DNS server is not known, then set DNS1 to the Gateway Address

INSTALLATION

- Plug in the plug-top Power Supply Unit (PSU) and connect to the ip.buffer.
- The Green Status (S) LED should flash approximately once a second indicating the unit is functioning correctly. Additionally, all LEDs (except the "L" LAN) will flash every 8 seconds.
- Connect the ip.buffer to a network hub. The Yellow Link (L) LED should light and flash in time with network traffic
Note: ip.buffer supports 10/100 networks but does NOT work on Gigabit-only networks.
- If a modem is fitted:
 - PSTN: connect the Modem port to the telephone network
 - GPRS: Insert an appropriate SIM card (BEFORE the ip.buffer is powered up) and connect the GPRS antenna (see manual)

GETTING STARTED (full User Manual & SECollector available from www.scannex.com)

- On your PC, run the SEDiscover application and press the F5 key (or the magnifying glass). This will locate all ip.buffer's on the LAN. (The default IP address is **192.168.0.235**)
- If the ip.buffer is already on the same subnet as your LAN, you can highlight the entry in SEDiscover and press the world icon to go straight to the web page of the ip.buffer.
- If the ip.buffer is on another subnet, you can change its IP address if it has been powered up for 5 minutes or less.
Double click the SEDiscover entry to make a change to the IP, Subnet, and Gateway values.
- Once it is on your PC's subnet you can browse with SEDiscover. You should see the ip.buffer's main status page.
- The Network settings can also be set from the Status page:
select **SETUP | Global:Settings** and click on **Network**.
- The default username and password (case sensitive) for the Setup pages are:
Username = **admin** Password = **secret**

CONFIGURATION (Source & Destination)

- Now set up the Source (**SETUP | Channel1 | Source**) to match the PBX (ie. Serial, TCP, UDP or FTP Server). If necessary change the Protocol to the appropriate PBX (default is ASCII Lines).
Note: see "ip.buffer PBX Protocols" for further information
- **Serial PBX:** Connect the Serial cable to the PBX RS232 port. The Source box should go green.
- **TCP/IP PBX:** Set **CONNECT** to:
 - **ipbuffer to Device (active/client):** ie the buffer actively connects to the PBX.
(Set Address to PBX IP address), or
 - **Device to ipbuffer (passive/server):** ie the buffer waits for a connection from the PBX.
(the PBX must be setup to connect to the ip.buffer IP address).
 - In both cases the ip.buffer and PBX port numbers must agree. The Status page Source box should go green when a connection is made.
- Once data is being collected, the **Storage** box (Status page) will show the byte count.
- You can view incoming data by going to the **Tools | General:Live Record View**.
- From the Status Page select **SETUP | Channel1 | Destination** and set this to your required delivery method. (TCP Push/Server, FTP Push/Server, Email Push, HTTP Post, COM Port, Pass-through only, or Legacy Emulation).
Note: Legacy Emulation will only appear if an Emulation script is loaded.
- Test the collection method using your software.

TROUBLE-SHOOTING ISSUES

Serial Connection Basics

Place the ip.buffer as close to the PBX as possible and use the cables provided with the kit.

Serial cables should not be longer than 50ft, though low baud rates will typically go further.

The Scannex PBX cable is wired straight-through, all pins wired.

The ip.buffer continually looks for valid RS232 signal levels (pins 2 & 3) and automatically configures for DTE or DCE. The COM port is turned off until a valid connection is recognised, or Rx/Tx is forced.

Serial Connection Issues

Some PBXs may not turn on their COM until an active serial port is connected to it.

This may be for power-saving, or because a line-powered RS232 repeater has been used.

Forcing the ip.buffer to DTE or DCE (whichever is correct) will resolve this. The PBX port will then become active and the ip.buffer Source box will go GREEN, and collect data.

Some PBXs do not produce valid RS232 signal levels (eg use positive voltage levels only)

Forcing the ip.buffer to DTE or DCE operation will turn on the COM port and data will be received. However, the Source box will stay RED and the RS232 disconnect Alert cannot be used.

ip.buffer used on a Y lead (in parallel with a PC or other buffer)

The ip.buffer will see valid RS232 signals on both pins and default to DTE, and display Rx 2* on the status page (hover the mouse over). This may work if the parallel device is also a DTE. However, If the PBX is disconnected/shut down, losing the selected input signal, the ip.buffer will then lock to the parallel PC/Buffer and log that. It will stay in that mode (until that signal disconnects or the ip.buffer reboots), even if the PBX reconnects.

The ip.buffer COM port must be forced in a Y-Lead situation to match the parallel device (DTE/DCE).

Note: If two ip.buffer are connected in parallel, they must both be forced.

TCP/IP connection Issues

If the TCP Source box (on Status page) does not go green within 1 minute, check that the correct Active/Passive choice has been made and that the IP addresses and Port numbers are correct.

Network Issues

The ip.buffer supports 10/100 (Full & Half Duplex) networks but does NOT support 1000 (Gigabit) only networks. The Link (L) LED should light, flashing with traffic.

If the ip.buffer fails to work reliably on a 100/1000 auto switch then force the switch to 100.

Forgotten Passwords

If a 5 minute window has been set (in web-server settings), the buffer can be accessed in the first 5 minutes after power-up without using passwords. The passwords can then be reset within this time.

If a 5 minute window has not been set (default), the only option is to reset to factory defaults:

- Insert a paper clip in the hole at the front of the ip.buffer, & hold for more than 10 seconds
- When the red LED blinks rapidly you can release the button
- Then ip.buffer restore all factory defaults (erasing all data, configurations, scripts and emulations, including IP address) and reboot

Caution: Once you have performed this, there is no way to recover any data or settings

Batteries

Use only Ni-MH Rechargeable batteries with a minimum capacity of 2000mAH. All batteries should be the same capacity and make, and all replaced at the same time.

Caution: DO NOT use standard (alkaline) batteries as charging them will cause damage and leaking.

Power Supply Issues

The ip.buffer should be powered from the Scannex 7VDC Power Supply Unit (PSU).

If a lower voltage supply is used, the ip.buffer may power up but not have sufficient voltage to operate safely. This can be recognised from the Status screen by:

Source Box = off (box is white)

System Box = **Power LOW VOLTS!!** (box is red - hover over with the mouse to see)