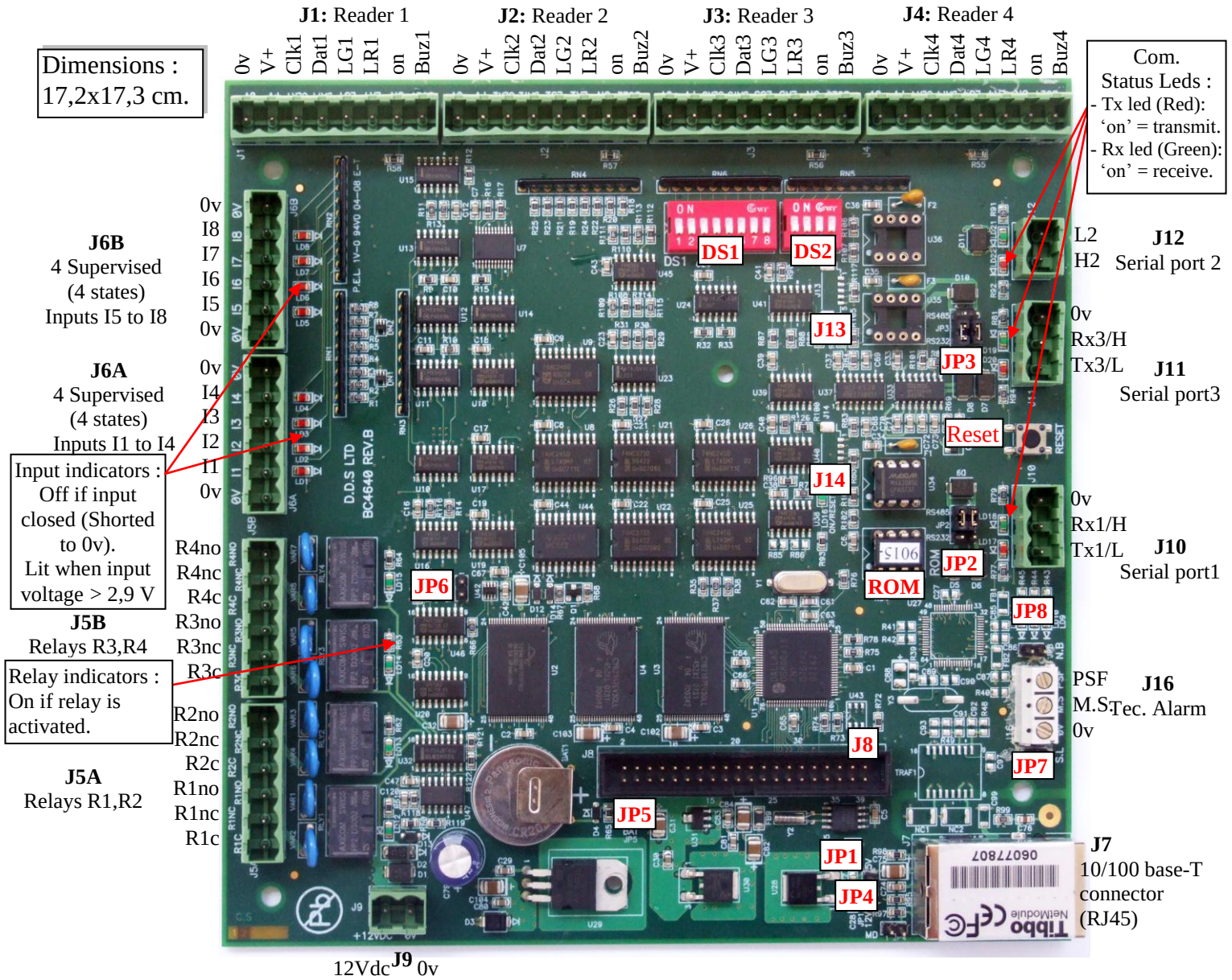
4 Readers, 8 Supervised inputs, 4 relays, 3 serial ports, TCP/IP (option)



EXTERNAL CONNECTORS	
J1 to J4	Card Readers No.1 to 4
J5a/J5b	Relays 1 to 4 (**C**ommon, **N**ormal **C**lose, **N**ormal **O**pen) (24v /1A max).
J6a/J6b	8 supervised Alarm inputs I1 to I8 (±30v max)
J8	Connector for extension board
J9	Power: 9,5Vdc to 14Vdc Max. Consumption (nude): 170 mA
J10	Serial Port 1 (RS232 or RS485), Default Baud Rate : 9600
J11	Serial Port 3 (RS232 or RS485)
J12	Serial Port 2 (RS485 only)
J16	Technical Alarms (Housing Box Micro-Switch and Power Supply Failure)
J7	10/100 base-T connector (RJ45)

SWITCHES DS1	
DS1/1-5	Controller Address
DS1/6, 7 , 8	Reader Technology:
off, off, off	Mag. ISO2 or Bar Code 39 (According to reader type).
on, off, off	Wiegand (Up to 50 bits) with parity check
off, on, off	Wiegand (Up to 50 bits) without parity check
off, off, on	Programmable technology
on, on, off	Touch
on, off, on	Radio
on, on, on	Mag. ISO1 or Bar Code 2/5 (According to reader type).

INTERNAL CONNECTORS	
J8	For extension board connection

JUMPERS	
JP1	Card Readers Power source (V+): Either 5vdc or 12Vdc. Caution ! Damage may be done to the card readers if wrong selection
JP2/3	Port 1/2 RS232/RS485 Selection: JP2 : Port1 — RS485 RS232; JP3 : Port3 — RS485 RS232
JP4	TCP/IP Bridge prog. (Only for service !): Momentary short JP3 to switch TCP/IP bridge to Program Mode
JP5	Lithium Cell on/off: Do not remove

SWITCHES DS2	
DS2/1to 4	Reserved

ICPRO Rev. B Layout.

Doc. 'ICPRO Rev B Layout'

TCP/IP connection

1. TCP/IP Initialization via the Device Server Tool Kit (TDST)

Done in three steps: setup TDST, setting IP address and setting the properties

Step 1: Setup TDST

Run the latest version of TDST from the self-extracting EXE file. This will install few utility programs on your PC. The TDST setup file is on the CD of the access control application and also available for download from http://public.sensoraccess.co.uk/GuardPointPro/Tibbo/tdst-5-09-05-x86.zip

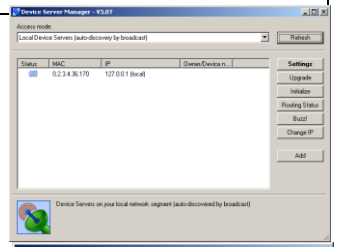
Step 2: Setting the IP address

The initial (first time) IP address setting to the board can only be done when both the controlling PC (from which the new settings are being sent) and the board are on the same network segment. First time IP settings can not be done when the communication is through external gateways, routers, etc...

Router

If the board has to be installed in a remote location (i.e. there is a router between the ICPRO board and the access control application) use one of the following methods:

1. Either Install the DS-Manager (or the whole TDST) in a PC that is located on the same network segment as the board and pre-program the board from that PC.
2. Or, alternatively, temporarily connect the board to a local network segment, pre-program it, then return it to its intended remote location.



Once the **ICPRO** is connected through its RJ45 connector to the **local** segment of your TCP LAN, go to Start-Programs-Tibbo-DS Manager and run it. The 'Device Server' screen should appear:

The default address, factory setting, is 1.0.0.1 which is not a valid IP address for your LAN.

To change the IP address, select (high light) the line with the current IP address and click <Change IP>.

Consult the network administrator and set a new IP.

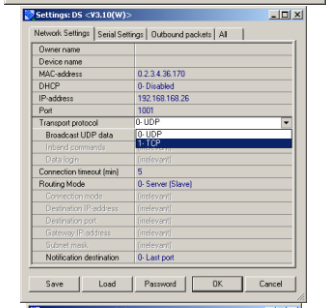
Note: In any case, never set it to 0.0.0.0 !!

The unit is rebooted and after few seconds the new IP will appear.

Step 3: Setting the board TCP/IP properties

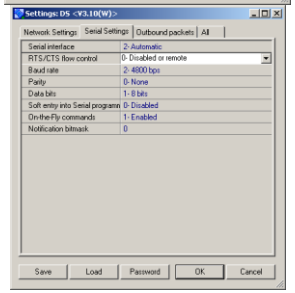
1. Run the DS manager
2. Select the board with the just defined IP address
3. Click the <DS Settings> button. A 'Please Wait' screen will be displayed for a few seconds.

Note: If the TCP/IP interface firmware version is old, you will get a corresponding message. Ignore this message and click few times the <Skip> button until the following properties screen appears:



Perform the three following changes:

1. In Connection Settings tab set "Transport protocol" to TCP. (Default is UDP).
2. In Serial Port Settings tab, set Baud rate according to the Access Control application (Generally 9600 baud).
3. Still in Serial Port Settings tab set "RTS/CTS flow control" to "Disable or remote".



Click OK to exit the properties screen and exit the device manager.

2. Creation of a Virtual Serial Port (VSP) on a PC

Note: Virtual port is needed only when the Access Control application does not include direct TCP/IP communication, e.g., QA8. When using programs that allow the user to type the <IP><Port Number> directly in the application, e.g., **GPP** there is no need to define a virtual port.

- Go to Start-Programs-Tibbo-VSP Manager
- Click <Add VSP>
- In "General VSP Properties" tab set:
  Port number = COM9 (or any other COM that is not actually on the PC)
  Transport protocol = TCP
  Destination = xxx.xxx.xxx.xxx : <Port Number>. (Default port number is 1001)
  Make sure these are the same IP address and port number that had been defined previously.

3. Addressing the ICPRO controller with the TCP/IP interface within GuardPointPro

In **GuardPoint** go to Controller Network screen, set the network as TCP and set its address to **xxx.xxx.xxx.xxx:nnnn** where xxx.xxx.xxx.xxx is the ICPRO Board IP address and nnnn is the Port Number.

Example: **192.175.33.140:1001**

4. Addressing the ICPRO with the TCP/IP interface within QA8.

In order to operate TCP/IP with **QA8**, a virtual serial port (VSP) has to be defined through the Virtual Serial Port Manager. (See above).

In Stations screen of **QA8**, make a new active station and, as communication port, select the virtual port that was created (e.g., COM9). Then create a reader (in **QA8**) and select that newly created station in the corresponding Station field.

5. Controllers Network through the ICPRO RS485 Port.

When the **ICPRO** controller is connected to a TCP/IP network, its RS485 port may be used to connect up to 31 other controllers (OPEN, TPL, DS200, etc.), through their RS485 port, to this TCP/IP network. Refer to the controller installation manual for details on connecting it to the RS485 bus.

Note that extremely high tension produced by lightning bolts can enter the terminals through these above lines. Such tension can reach the level of hundreds of thousands of volts for short periods. It is therefore advised to use the SP200 lightning protection unit to be connected close to the controller.