YSOFT
SAFEQ ®

making the MFDs think™

YSoft SafeQ[1] – Terminal Professional

v3.x Guide

Version 1.2

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Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

1   DOCUMENT VERSION

For document version history see Table No. 1:

Version	Date	Change	Author
1.2	February, 2009	Update for Terminal v3.2.8	PNE

Table No. 1- Document version

2   SAFEQ® TERMINAL PROFESSIONAL

Picture 1: YSoft SafeQ Terminal Professional

The SafeQ Professional terminal has a graphic touchscreen and is equipped with a four-port network adapter.

It also features a microcomputer, flash ROM, network interface and a card reader. The card reader is optional, as PIN code can used for authentication instead of cards. In practice, only a very small proportion of terminals are delivered without card readers. Both types of terminals also need an external power supply (included in the package).

WARNING:

Do not confuse the copier interface with the network ports!

Although they look similar, they are not compatible.Confusing them may cause damage to the terminal and/or copier! Such damage would not be covered by the warranty. Please note that the copier interface has 10 pins while the network interface is a standard RJ-45 eight-pin connector.

The card reader is an replaceable module: there are many different standards and types of identification cards, both contactless and contact cards, and the reader must be compatible with them. The most common card and reader types are RFID 125 kHz, Mifare, Motorola Indala and HID.

The terminals communicate with the SafeQ server over the network using a TCP channel. This means that each terminal needs to be configured like any other network device. The configuration method for the terminals is different from that of the two types.

2.1   TERMINAL CONFIGURATION - COMMON

You need to set at least the following on the terminal:

- if a DHCP server is to be used for configuring the terminal network settings, enable the use of DHCP;
- otherwise, set the IP address of the terminal, the subnet mask and default gateway and check that DHCP is disabled;
- in both cases, set the SafeQ IP address of the server and the port number; note that this is not the port of the web interface that you were asked for during installation but the TCP port on which the SafeQ Server communicates with the terminals. By default its number is 4096
- you can also set other options, such as displayed languages, the default language etc.

2.2   YSOFT SAFEQ TERMINAL PROFESSIONAL

While the SafeQ Professional terminal also has an (optional) web interface, it is easier to configure using the service menu directly on the touch-screen display.

After starting the terminal and the main menu has been displayed (with the "Place card" message), do the following to enter the service menu:

1. touch the top left corner of the screen
2. touch the bottom right corner of the screen
3. touch the top left corner of the screen again
4. touch the bottom right corner of the screen again
5. a numerical keyboard should be displayed now. Press the 0 (zero) button four times and then press OK. A precondition is that the default access code for the service menu (0000) has not been changed
6. the terminal service menu should now be displayed

If the terminal is, however, configured to use PIN authentication only (no cards), it will never display the main menu. In this case, enter 000000000 (nine zeroes) in the PIN entry screen, and then proceed with step 5 above.

The administrator is advised to change the default access code to the service menu (0000) to prevent users from changing any of the settings.

NOTE*:*

When entering the data on screen manually, you should hear a beep with every registered touch. Press the screen only until your depression causes a beep. Do not use greater force than necessary. (The beeping may be turned off.)

When entering IP addresses in the various menu options, note that you must enter all three digits of all the four numeric fields of the address. For example, to enter 192.168.0.37, you press the 192168000037 buttons on the on-screen keypad and then confirm with OK.

When the required parameters have been set, push the "Save" button and exit the settings. The terminal will restart and the new settings will take effect.

The administrator is advised to change the default access code to the service menu (0000) to prevent users from changing any of the settings.

2.3   TERMINAL USE INSTRUCTIONS
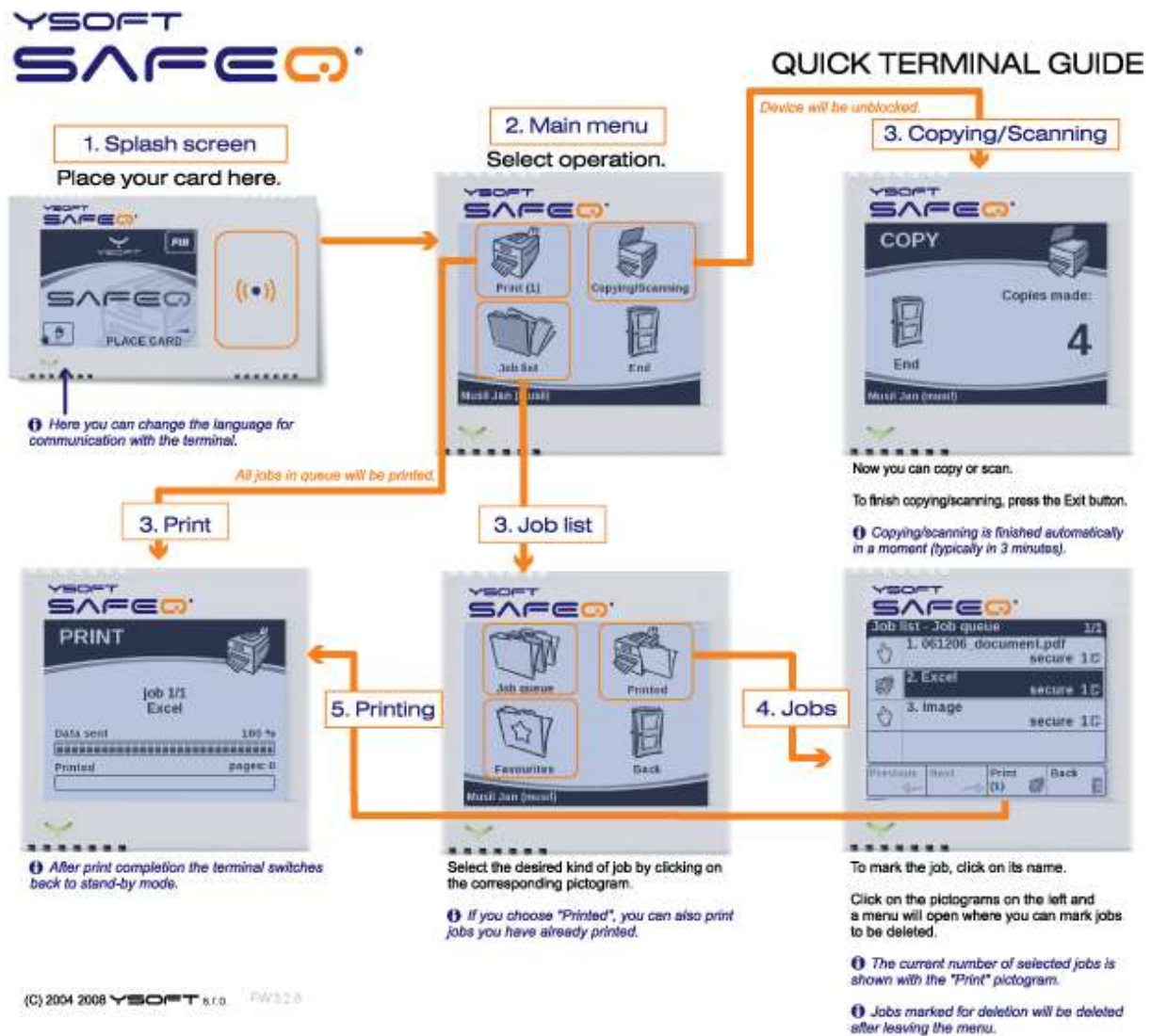
Picture 2: Quick Terminal Guide

3 TECHNICAL SPECIFICATIONS

YSoft SafeQ Professional terminal is a device with a graphic touch-screen showing continuously-updated information on the availability of SafeQ functions. YSoft SafeQ Professional terminal may be equipped with various card readers (around fifty types).

YSoft SafeQ Terminal Professional functionality:

- choice print / copying / scanning options
- supports follow-me functions, print, copying, scanning and displays information on accounting and credit
- authorisation by PIN, card or a combination thereof
- one-time authorisation by PUK code if the user has no active card
- job list (selection of jobs for print, of favourite jobs and printed jobs)
- deletion of job from queue
- favourite jobs (automatic print of documents directly from terminal)
- project accounting
- information on print/copying status and detailed price accounting on the terminal screen
- beeping of the touch-screen and warning that the copying timeout has expired
- the graphic touch-screen resolution is 320 x 240dpi
- includes a four-port switch (4 x RJ45) and 10/100Mbit automatic network detection
- blocks access to MFD – firewall and routing
- supports SSL and IP SEC communication encryption
- enables central configuration
- Supports remote administration – online terminal display
- data optimisation between SafeQ and printer

YSoft SafeQ terminal is connected to the ethernet network. Any ethernet interface can be connected with RJ45 terminal ports. MFD, printers and LFP communicate with SafeQ "via" the terminal. Access rights may be set for any connector.

Each terminal has a MAC address allocated directly by the producer.

3.1 YSOFT SAFEQ PROFESSIONAL TERMINAL PROPERTIES

Terminal el. power supply input:	**12V DC**

Maximum current input:	**1.0A**
Working temperature	**+10°C to +40°C**
Storage temperature:	**0°C to +50°C**
Maximum air humidity:	**80% without condensation**
Resistance to magnetic field:	**no added resistance**
Weight:	**900g**
Size (W x H x D)	**165 x 99 x 52mm**
Architecture:	**Renesas SH7710/SH-3** **200Mhz CPU, 32 MB SDRAM, 16 MB Flash**
Screen:	**320x240px F-STN, black and white, positive** **Active area: 767 x 576mm** **Dot pitch: 0.24 x 0.24mm** **Maximum pressure: 250g**
Internal readers:	**RFID 125kHz,** **Mifare, Motorola, HID, IDTECK, TIRIS,** **Cotag, Unique, Smart card, magnetic three track** **drafting bar codes, dual readers and many others** - **For the complete list, please see the current price list.**
External interface:	**8pin miniDIN, RS 232 interface,** **input 5V/0.5A**

3.2   TECHNICAL SPECIFICATIONS OF THE TERMINAL

Item	YSoft SafeQ® Professional Terminal
Power/frequency	200MIPS
Data bus	32bit
Instruction set	RISC
RAM memory	64MB
FLASH memory	8MB
FlashDisc support	YES/optional
USB support	YES/optional
PCMCIA support	YES/optional
Routing	YES
VLAN	YES
SSL support	YES/optional
Blocking cables to MFD	YES
Internal operating system	LINUX
Customisation option	YES/as required

4   TERMINAL INSTALLATION

To install the terminal, please do the following four steps in the order mentioned: connect the cables, use the fixing kit for fixing to the terminal in a suitable place (mostly on the side of copier), adjust the network settings using the touch-screen and set the copier to active an external copying control interface.

Picture 3: Professional terminal – front view

4.1   CABLES

The connectors are hidden under the cover on the terminal rear side. Unscrew and open the cover and expose the cables. The cables are as follows (from left to right):

- control interface of copying device used for communication with MFD and copying device – marked with number 1, see Picture 5
- four network ports (RJ-45 connectors for cables for Ethernet UTP or STP) – marked with number 2, see Picture 5
- el. power supply connector – marked with number 3, see Picture 5

Picture 4: Professional terminal – rear view

☄ WARNING

Do not confuse the connector on the far left with network connectors! Even though they look similar, they are not compatible. Confusing them may result in damage to the terminal and/or copier! Such damage would not be covered by the warranty.

Picture 5: Professional terminal – rear view

The four network ports are in fact ports of an in-built network switch. The ports are identical, with the exception of that labeled as "UPLINK", designated for communication between terminal and server. You will usually use only one of the two: the UPLINK port for connection of the terminal to your network (socket) and

occasionally one of the other ports for connection of your printing device / MED to the network. Each of the network ports has a luminescent diod indicator which should light up if an active connection has been established and the el. power supply is ON.

💣 **WARNING**

> **Use the original power supply received with the SafeQ terminal only!** Another power supply may damage the terminal. Such damage would not be covered by the warranty.

Your SafeQ terminal package should include the patch cable specific for your type of copier/MFD. Connect one end of the cable to the connector on the far left and the other end to the control interface of the copier. This step is specific for each copier model; usually you will need to open the rear cover of the device and find the corresponding connector on the circuit board. Some other copier types provide easy access to the connector on the rear or on the side of the device. Please employ the services of a certified technician or the vendor of the printing device.

Picture 6: Professional terminal – rear view

After connecting the control cable of the copier, network cable(s) and power supply cable, close and fix the cover again, placing the cables through the holes. Secure the ready-to-use steel cores around the network cables and close the terminal. This reduces electromagnetic interference.

Picture 7: Professional terminal – rear view

4.2   TERMINAL INSTALLATION

The exact use of installation kits (received with the terminal) depends on the specific set and model of your copier/MFD. There are three types of installation kits:

- wall-mounting kit
- table mounting kit
- installation kit matching device specifications

All these kits may be fixed to the terminal by unscrewing one of the screws in the back, fixing the metal piece(s) and replacing the screw(s). The photos show what the terminals, when fixed correctly, should look like. In some cases, a dual-sided adhesive tape should be used to prevent the terminal from wobbling.