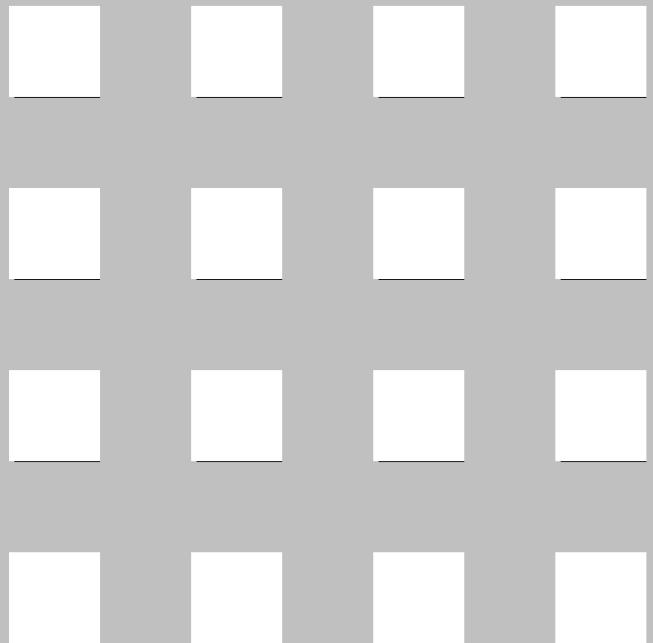


MATRIX F SERIES



IP Configuration Manual

Safety precautions and warnings

Thank you for deciding to use a Frama Franking System.

The information in this guide is intended to support you during the configuration of the franking system to connect via TCP / IP to FramaOnline2.

Your franking system meets currently valid safety regulations. Inappropriate use, however, can lead to personal injury or damage to property. With this in mind, please read this guide first before you put the unit into service. By doing so, you will protect yourself and avoid damaging the unit. Store this guide carefully and pass it along to any subsequent owner.

Symbols used

This configuration guide uses the following symbols:



Note!



Tip!

This symbol points to dangers and safety risks when handling, operating or servicing your franking system which could result in personal injury.

This symbol points to valuable guidelines and instructions for handling your franking system which can eliminate the risk of damage to the franking system, the mail items or the immediate environment.

Interesting notes and tips for efficient handling.

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1 Introduction

This manual describes how to configure the franking system to connect via the Internet to the FramaOnline2 system.

Read this manual in line with the franking machine user manual. Refer to the franking machine user manual for further information on safety, operation maintenance. The franking machine screens provided in this manual are for reference only and may differ from country to country.

This manual requires enhanced knowledge about network technology. Speak to a qualified IT support person if you feel uncomfortable with the network setup.

2 Overview TCP/IP connection Frama Matrix F series

This chapter shall provide a detailed overview with regards to the requirements of the clients IT infrastructure to operate a franking system of Matrix F series within the TCP/IP network. Always refer to the "IP configuration manual for Matrix F series" which can be downloaded from www.frama.com

2.1 System requirements

- An Ethernet network socket that connects to the Internet
- The franking system must be able to communicate
 - via TCP port 443 (https / TLS) to the URL fo2.frama.com
- Supported proxy server configuration (refer to section 2.2.2)



All security sensitive connections with the FramaOnline2 backend system are only established through a TLS secured https tunnel!

Note!

The ftp connection to URL mupd.frama.com is established using directly the then valid IP address.

2.2 TCP/IP Specification of Frama Matrix F series TCP/IP port

2.2.1 Connection / Protocols

- TLS v1.2 embedded
- FIPS 140-2 certified SSL stack
- Ethernet 10 Base-T (IEEE 802.3i)
- Half duplex
- RJ45 socket
- Internet protocol IPv4
- Complete and reliable TCP/IP Linux stack
- Supports DHCP (standard) and Static IP Address Configuration



The Ethernet port used on Frama Matrix F series is only active and enabled during connection with FramaOnline2!

Note!



The Ethernet port does not support IEEE 802.1Q.

Note!

2.2.2 Proxy Servers

- Proxy Servers are supported without authentication or with basic authentication (username and password)
- Addressing of proxy server is supported using proxy server IP-Address and port number



Communication via Proxy Server with SSL Interception is not supported!

Due to security requirements, the franking system cannot connect through https proxy servers that intercept the SSL encrypted communication.



Update of LAN module firmware and proxy

The "Service Note: LAN module firmware update manual" gives detailed information on the procedure and restrictions of this firmware update.

2.3 FramaOnline2 Connection Procedure

The following steps are performed when the Frama Matrix F series franking systems connects to FramaOnline2 (fo2.frama.com).

Step	Action	Details
0	Pre-conditions to initiate a connection	Manual process The franking system user (the "user") initiates a connection via the corresponding functions "Inspection", "Re-set" or by using the SmartShop Automated process (Auto-Connect) Automatically performed on a daily, weekly, monthly basis or other period (due to local requirements)
1	Network initialisation	Franking system seals print head Franking system enables its TCP/IP port (power on) DHCP address mode The franking system performs a DHCP broadcast request and waits for DHCP-Server answer for about 60 seconds Static IP-Address mode The franking system uses the address settings configured in Setup2/FramaOnline2/Connection/Network Setup
2	Connection to fo2.frama.com	The Franking system connects to port 443 on fo2.frama.com. In any case communication via a proxy server is mandatory, the parameters in Setup2/FramaOnline2/Connection/Network Setup will be used. Please note the supported proxy server configurations The franking system communicates through SSL/https tunnel with FramaOnline2. Data exchange starts.
3	Termination of connection to fo2.frama.com	After the successful data exchange with FramaOnline2 the franking system terminates communication to port 443 on fo2.frama.com The franking system disables the TCP/IP port (power off) The franking system displays the communication result to the user

3 System Requirements

In order to connect your franking system with the FramaOnline2 system, you minimally require the following:

Firewall

- Port 443 open
- Port 53 open if the DNS is located outside the network the franking system is connected to

Infrastructure:

- An Ethernet network socket that connects to the Internet
- The franking system must be able to access DNS via TCP port **53**
- The franking system must be able to communicate via TCP port **443** (https / SSL) to the URL **fo2.frama.com**

Proxy server

- The franking system supports connection via a **http proxy server** with **basic authentication** or **without authentication**



Note!

Communication via Proxy Server with SSL Interception is not supported!

Due to security requirements, the franking system cannot connect through a https proxy server that intercepts the SSL encrypted communication.



Tip!

Proxy servers using SSL-interception require a specific rule in order to allow transparent communication (franking system via F-Link to FramaOnline) via https port 443.

The specific rule grants correct identification of FramaOnline2 (https certificate) for the franking system.

4 Quick-Start Installation and Configuration

If you connect your franking system to a so-called SOHO (Small Office / Home Office) infrastructure via a DSL router to the internet, installation and configuration of the franking system is very simple and straight forward:

Preconditions:

- (DSL) Router device connecting to the internet
- DHCP enabled on router and access to internet from LAN not restricted

Procedure:

- Make sure that the franking system is switched off.
- Connect the green framed RJ-45 socket labelled „LANG4“ of the franking system with a free LAN-port on your router using a standard CAT5 RJ-45 network cable
- Power on the franking system
- Check the connection as described in section 8.8.



Tip!

→ Perform the required installation connect as described in your franking system user manual to trigger the initial connection to the FramaOnline2 system.

→ Perform any subsequent inspection or re-set connections as described in your franking system user manual.

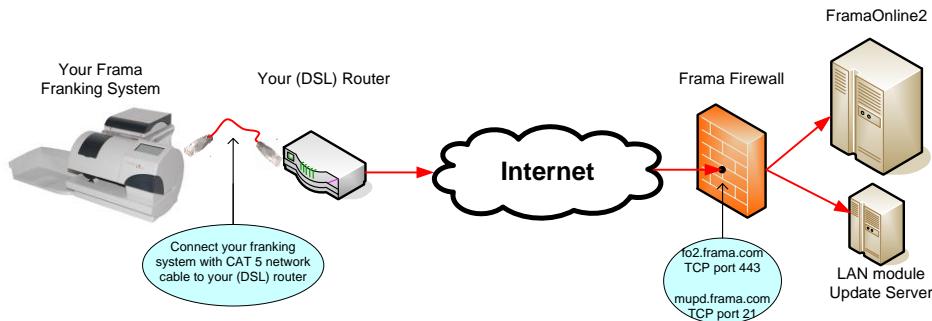
Refer to the following sections in this manual for detailed information on configuration in case your network does not meet the pre-conditions for a quick start installation and configuration.

5 Supported Network Infrastructure

In order to connect a Frama franking system to the FramaOnline2 system via the Internet the following network structures are supported:

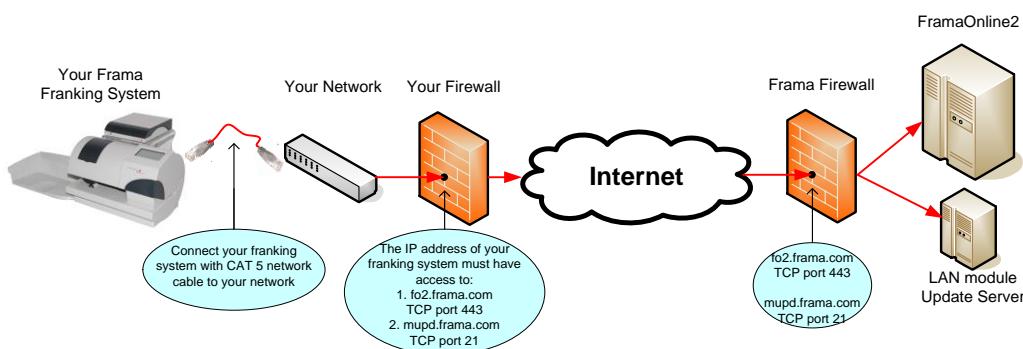
Simple Network Layout:

Your franking system is connected via a network router device (e.g. a DSL router) to the internet.



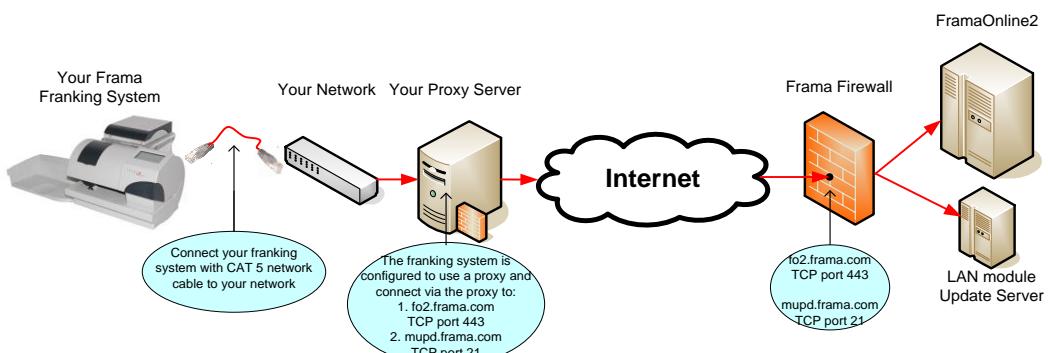
Typical Company Network Layout without Proxy Server

Your franking system is connected via a company network and a routing device to the internet.



Typical Company Network Layout with Proxy Server

Your franking system is connected via a company network and a proxy server to the internet. All traffic from the company internal network is routed via the proxy server to the internet.



Addressing Mode

Independently of the physical or logical network layout, the addressing mode defines how the franking system does determine the IP address to use for network communication. The franking system supports DHCP and static IP address mode.

- **DHCP:** In DHCP addressing mode, the franking system is automatically assigned to an IP address, subnet mask, default gateway and DNS-Server from a DHCP server.
- **Static IP Address:** In this mode, you are required to configure the static IP address, subnet mask, default gateway and DNS-Server. If your network requires the franking system to use static IP address, your IT personnel shall be able to provide you with the values required.

6 Information required for manual configuration / proxy configuration

Before you start the configuration of the IP parameters of the franking system, please ask your IT personnel for the following information:

What addressing mode must be used?

The addressing mode defines how your franking system determines IP address and related parameters to be able to communicate in your local network. The franking system supports DHCP and static IP address mode:

- **Static IP Address:** If your network requires a static IP address the following additional information is required:
 - IP Address Format: nnn.nnn.nnn.nnn Example: 192.168.2.36
 - Subnet Mask Format: nnn.nnn.nnn.nnn Example: 255.255.252.0
 - Default Gateway Format: nnn.nnn.nnn.nnn Example: 192.168.2.1
 - DNS-Server Format: nnn.nnn.nnn.nnn Example: 168.192.178.25
- **DHCP:** In DHCP addressing mode, the franking system is automatically assigned to an IP address, subnet mask, default gateway and DNS-Server from a DHCP server.

Do you have to configure a Proxy Server?

In case your local network configuration requires all connections to be routed via a proxy server you need to get the following information:

- **Proxy Server IP Address:** What is the IP address of the proxy server?
- **Proxy Server Port Number:** What port number has to be used on the proxy server?
- **Authentication Mode:** The franking system support the following proxy authentications:
 - **No authentication:** No user and password is required to connect through the proxy
 - **Basic authentication:** If the proxy requires basic authentication you have to be given a username and password to connect through the proxy.



Use the form provided in section 10.1 to get the required information from your IT personnel.

Tip!

7 Installation

Connect your franking system via the provided RJ45 network cable with your local network:

- Use the green framed RJ-45 socket labelled with „LANG4“ at the back of the franking system.



The Ethernet port on the franking system is only active during a connection to the FramaOnline2 system. Use the function “Connection Test” described in section 8.8 to power the Ethernet port and to check the connection.

Note!

8 IP Configuration

Please use the questionnaire provided in section 10.1 to ask your IT personnel for the required information for configuring the IP parameters in your franking system.

Section 8.1 describes how to login as admin user and to navigate to the network configuration screen.

The following table shows you, what configuration has to be done on the franking system:

IP Configuration Values	Description	Required steps for new installation	How to assure that the IP parameters are set correctly
DHCP and no proxy server	This is the default configuration of the IP parameters in the franking system	Nothing!	Section 8.3 and 8.5
DHCP and Proxy Server	DHCP is set by default, you only have to configure the proxy server.	Section 8.6 when no username/password is provided for the proxy. Section 8.7 when a username/password is required for the proxy.	Section 8.3 and 8.6 or 8.7
Static IP Address and no proxy	You have to configure the parameters for static IP configuration.	Section 8.4	Section 8.4 and 8.5
Static IP Address and Proxy Server	You have to configure static IP and the proxy server	Section 8.4 AND Section 8.6 when no username/password is provided for the proxy. OR Section 8.7 when a username/password is required for the proxy.	Section 8.4 and 8.6 or 8.7

Note!



The screen texts of the franking system user interface are translated to the local language depending on the country and settings of the franking system.

In the following pages button referenced in the description are shown in *Italic* when they will appear in the local language. Buttons referenced in normal font are always displayed in English.

Example:

- "FramaOnline2" → references the button which in all languages is shown as

FramaOnline2

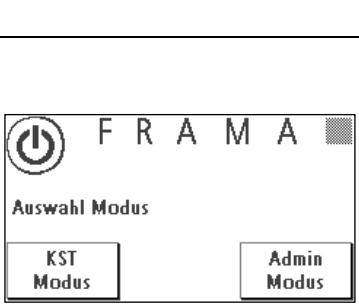
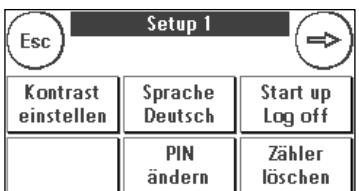
- "*Connection*" → references the button which e.g. in German is translated as:

Verbindung

8.1 Admin Login and Connection Settings

Description

Power on the franking system

	Matrix F12	Matrix F22 – Matrix F82
Select the Admin Login		
Enter the pin code		
Select the Button "i"		
Select the tool button in the upper right corner.		
Select the button "→"		

Select the button "FramaOnline2"

Setup 2		
System Info	Status liste	Kreditwarn. 100.00
Hoher Wert 10.00	Max. Wert 100.00	Frama Online2

Setup 2	
Bitte Funktion wählen:	
Hoher Wert 10.00	FramaOnline2
Max-Wert 100.00	Kreditwarnung 100.00
Tasten-Beep EIN	PIN Code EIN
Auto Log off 10 Min.	KST Löschen P1.J / P2.J

Select the Button "Connection"

FramaOnline2		
Kredit laden	Inspektion	
Connection		Letzte Meldung

FramaOnline2	
Bitte Funktion wählen:	
Kredit laden	
Inspektion	
Uninstall	Letzte Meldung
Verbindung	Rapport Druck

Select the button "Network Setup"

Connection		
Verbindung Network		
		Network Setup

Verbindung	
Bitte Funktion wählen:	
Verbindung Network	Verbindungs-test
	Network Setup

In the network configuration menu (2 pages), you can

- define the network settings of the franking system,
- display the actual configuration,
- trigger a connection test,
- trigger an internet connection test and
- display the connection log.

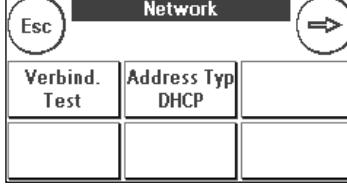
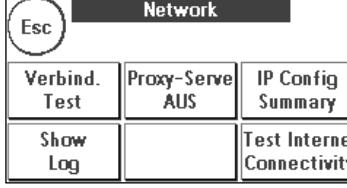
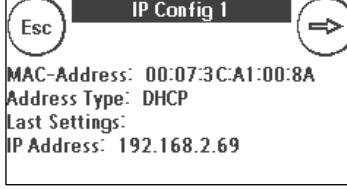
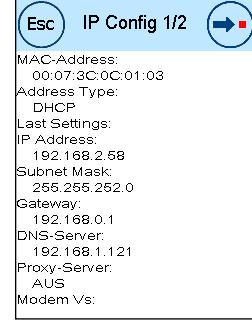
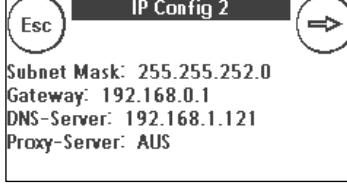
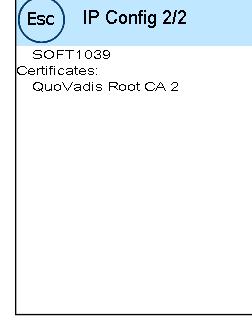
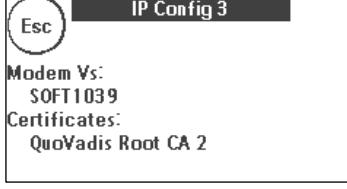
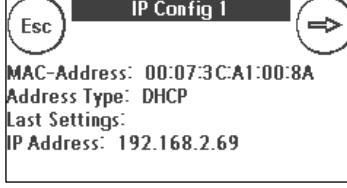
Network		
Verbind. Test	Address Typ DHCP	

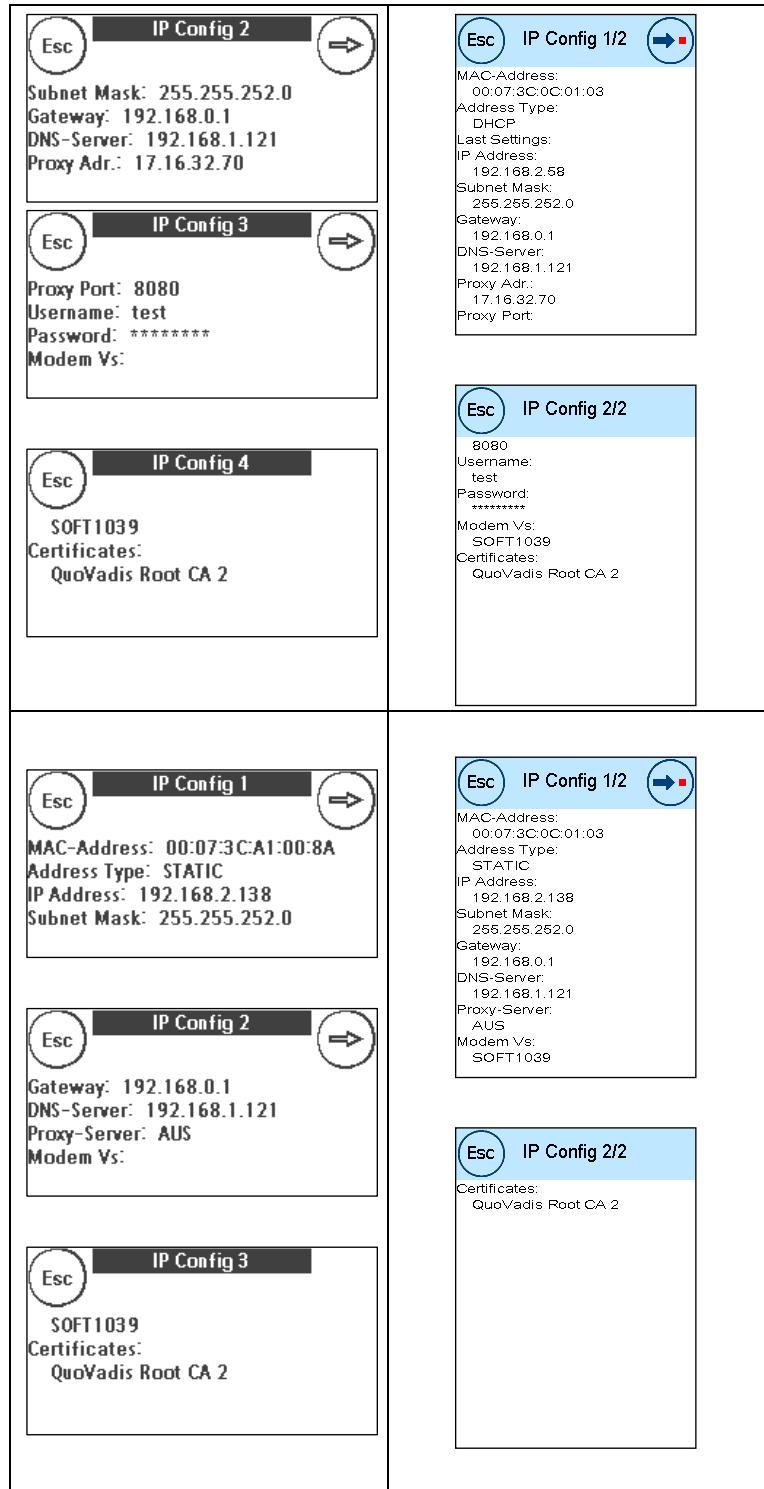
Network	
Bitte Funktion wählen:	
Verbindungs-test	IP Config Summary
Address Type DHCP	
	Proxy-Server AUS

Network		
Verbind. Test	Proxy-Serve AUS	IP Config Summary
Show Log		Test Interne Connectivity

Network	
Bitte Funktion wählen:	
Test Internet Connection	Show Log

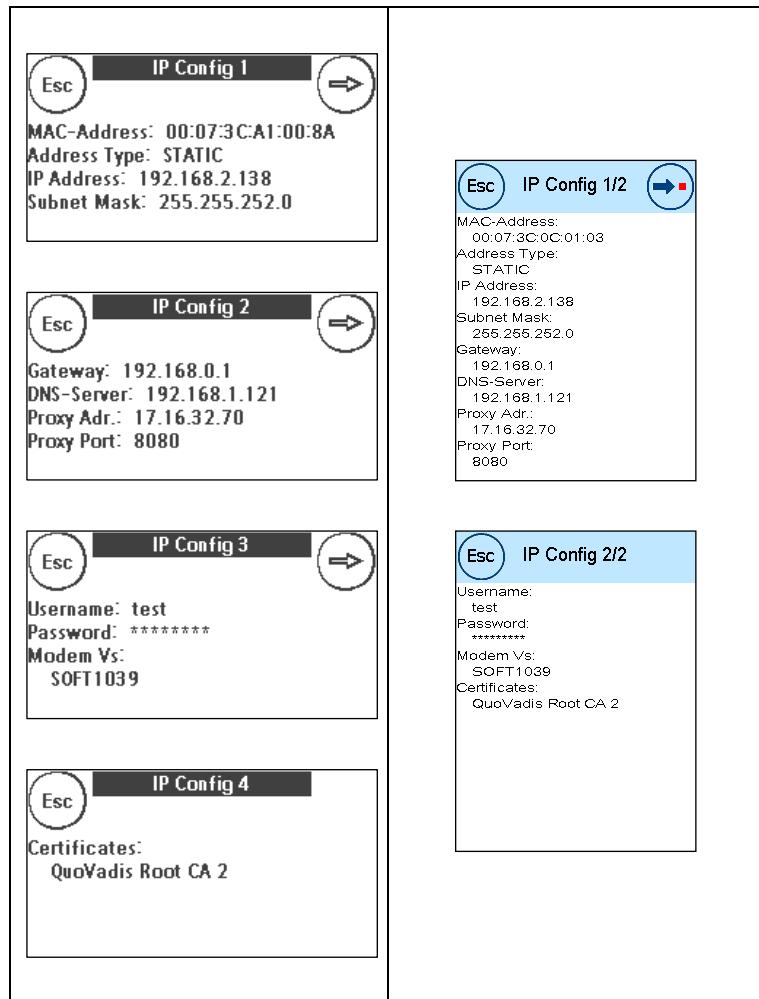
8.2 Display Current Network Configuration

Description	Matrix F12	Matrix F22 – Matrix F82
Power on the franking system, login as "Admin" and navigate to the network settings page → refer to section 8.1		
F12: Go to the second page of the network configuration screen with the button "=>".		
F22 – F82: Press the button "IP Config Summary".		
The franking system displays the current IP configuration:		
<ul style="list-style-type: none"> First sample: DHCP and no proxy 		
		
		
<ul style="list-style-type: none"> 2nd sample: DHCP and proxy with authentication 		



- 3rd sample: Static IP and no proxy

- 4th sample: Static IP and proxy with authentication



8.3 DHCP

Description

Power on the franking system, login as "Admin" and navigate to the network settings page → refer to section 8.1.

Press the button "Address Type" until it displays on the second line "DHCP".

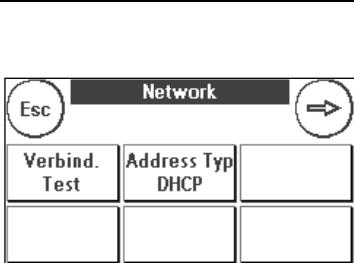
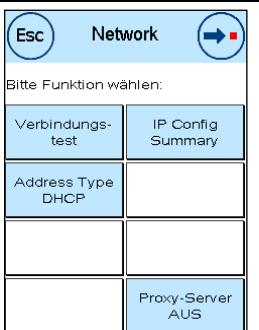
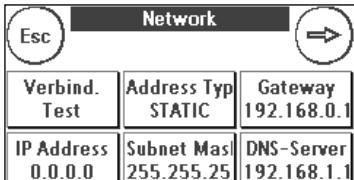
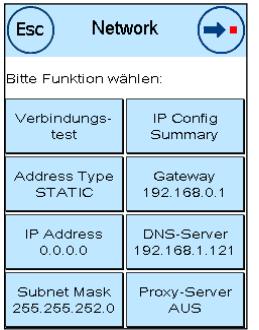
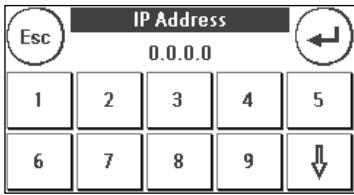
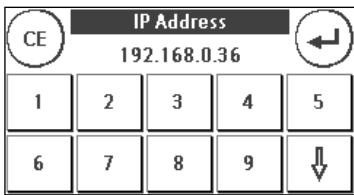
Matrix F12	Matrix F22 – Matrix F82						
<p>The screenshot shows the Network menu with two rows of buttons:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 15%;">Verbind. Test</td> <td style="width: 15%;">Address Typ DHCP</td> <td style="width: 15%;"></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>	Verbind. Test	Address Typ DHCP					<p>The screenshot shows the Network menu with four buttons:</p> <ul style="list-style-type: none"> Verbindungs-test (highlighted in blue) IP Config Summary Address Type DHCP Proxy-Server AUS
Verbind. Test	Address Typ DHCP						

8.4 Static IP Address

Note!



Due to the limited space in the buttons, some of the static IP parameters may not be displayed completely in the button. But you are always able to check and see the complete value of a parameter, by pressing the button.

Description	Matrix F12	Matrix F22 – Matrix F82
Power on the franking system, login as "Admin" and navigate to the network settings page → refer to section 8.1		
Press the button "Address Type" until it displays on the second line "STATIC"		
 When switching from DHCP to static IP Address, the franking system will always reset the IP address to 0.0.0.0 and use the last values known for the other parameters.		
Press the button "IP Address" to manually set the IP address		
Enter the IP address to the value defined by your IT personnel. Complete the entry by pressing "←".		
The franking system will only accept valid IP addresses: <ul style="list-style-type: none"> • Format: n.n.n.n • $0 \leq n \leq 255$ 		

Press the button "Subnet Mask".

Network		
Esc	Verbind. Test	Address Typ STATIC
		Gateway 192.168.0.1
	IP Address 192.168.0.3	Subnet Mas 255.255.25
		DNS-Server 192.168.1.1

Network	
Esc	→
Bitte Funktion wählen:	
Verbindungs- test	IP Config Summary
Address Type STATIC	Gateway 192.168.0.1
IP Address 192.168.0.36	DNS-Server 192.168.1.121
Subnet Mask 255.255.252.0	Proxy-Server AUS

Enter the **subnet mask** to the value defined by your IT personnel.

Complete the entry by pressing "←".

The franking system will only accept valid subnet masks:

- Format: n.n.n.n
- $0 \leq n \leq 255$

Subnet Mask				
Esc	255.255.252.0			
1	2	3	4	5
6	7	8	9	↓

Subnet Mask				
Esc	←	Einstellung ändern:		
255.255.252.0				
1	2	3	CE	
4	5	6	.	
7	8	9	0	

Press the button "DNS-Server".

Network		
Esc	Verbind. Test	Address Typ STATIC
		Gateway 192.168.0.1
	IP Address 192.168.0.3	Subnet Mas 255.255.25
		DNS-Server 192.168.1.1

Network	
Esc	→
Bitte Funktion wählen:	
Verbindungs- test	IP Config Summary
Address Type STATIC	Gateway 192.168.0.1
IP Address 192.168.0.36	DNS-Server 192.168.1.121
Subnet Mask 255.255.252.0	Proxy-Server AUS

Enter the **DNS Server** IP address to the value defined by your IT personnel.

Complete the entry by pressing "←".

The franking system will only accept valid subnet masks:

- Format: n.n.n.n
- $0 \leq n \leq 255$

DNS-Server				
Esc	192.168.1.121			
1	2	3	4	5
6	7	8	9	↓

DNS-Server				
Esc	←	Einstellung ändern:		
192.168.1.121				
1	2	3	CE	
4	5	6	.	
7	8	9	0	

Press the button "Gateway".

Network		
Esc	Verbind. Test	Address Typ STATIC
		Gateway 192.168.0.1
	IP Address 192.168.0.3	Subnet Mas 255.255.25
		DNS-Server 192.168.1.1

Network	
Esc	→
Bitte Funktion wählen:	
Verbindungs- test	IP Config Summary
Address Type STATIC	Gateway 192.168.0.1
IP Address 192.168.0.36	DNS-Server 192.168.1.121
Subnet Mask 255.255.252.0	Proxy-Server AUS

Enter the **default gateway** IP address to the value defined by your IT personnel.

Complete the entry by pressing “”.

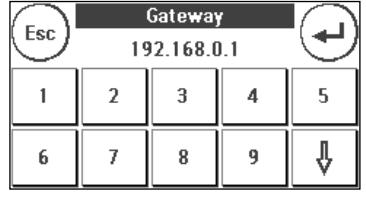
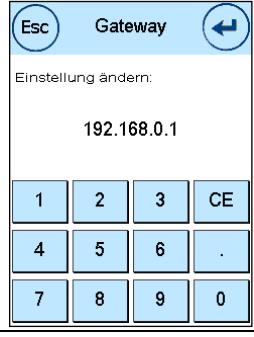
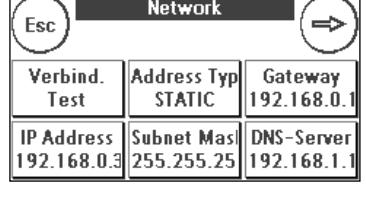
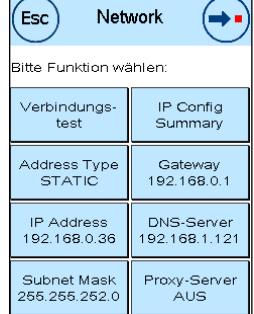
The franking system will only accept valid subnet masks:

- Format: n.n.n.n
- $0 \leq n \leq 255$

Now you have set all parameters for a static IP address configuration.

Now make sure to configure the proxy server correctly:

- See section 8.5 when no proxy server must be set.
- See section 8.6 to configure a proxy server without authentication
- See section 8.7 to configure a proxy server with basic authentication

 <p>Gateway 192.168.0.1</p> <table border="1" style="margin-top: 10px;"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr> <tr><td>6</td><td>7</td><td>8</td><td>9</td><td></td></tr> </table>	1	2	3	4	5	6	7	8	9		 <p>Einstellung ändern: 192.168.0.1</p> <table border="1" style="margin-top: 10px;"> <tr><td>1</td><td>2</td><td>3</td><td></td></tr> <tr><td>4</td><td>5</td><td>6</td><td>.</td></tr> <tr><td>7</td><td>8</td><td>9</td><td>0</td></tr> </table>	1	2	3		4	5	6	.	7	8	9	0
1	2	3	4	5																			
6	7	8	9																				
1	2	3																					
4	5	6	.																				
7	8	9	0																				
 <table border="1" style="margin-top: 10px;"> <tr><td>Verbind. Test</td><td>Address Typ STATIC</td><td>Gateway 192.168.0.1</td></tr> <tr><td>IP Address 192.168.0.3</td><td>Subnet Mask 255.255.25</td><td>DNS-Server 192.168.1.1</td></tr> </table>	Verbind. Test	Address Typ STATIC	Gateway 192.168.0.1	IP Address 192.168.0.3	Subnet Mask 255.255.25	DNS-Server 192.168.1.1	 <p>Bitte Funktion wählen:</p> <table border="1" style="margin-top: 10px;"> <tr><td>Verbindungs-test</td><td>IP Config Summary</td></tr> <tr><td>Address Type STATIC</td><td>Gateway 192.168.0.1</td></tr> <tr><td>IP Address 192.168.0.36</td><td>DNS-Server 192.168.1.121</td></tr> <tr><td>Subnet Mask 255.255.252.0</td><td>Proxy-Server AUS</td></tr> </table>	Verbindungs-test	IP Config Summary	Address Type STATIC	Gateway 192.168.0.1	IP Address 192.168.0.36	DNS-Server 192.168.1.121	Subnet Mask 255.255.252.0	Proxy-Server AUS								
Verbind. Test	Address Typ STATIC	Gateway 192.168.0.1																					
IP Address 192.168.0.3	Subnet Mask 255.255.25	DNS-Server 192.168.1.1																					
Verbindungs-test	IP Config Summary																						
Address Type STATIC	Gateway 192.168.0.1																						
IP Address 192.168.0.36	DNS-Server 192.168.1.121																						
Subnet Mask 255.255.252.0	Proxy-Server AUS																						

8.5 No Proxy Server

Description

Power on the franking system, login as "Admin" and navigate to the network settings page → refer to section 8.1

F12: Go to the second page of the network configuration screen with the button "⇒".

When the button "Proxy Server" shows "OFF" in the second line → The franking system uses no proxy server and you are done.

When the button "Proxy Server" shows an IP address in the second line, then the franking system is configured to use a proxy server →

Press the button "Proxy Server".

Press the button "Proxy Server ON" to disable the proxy server configuration.

Press the button "Esc" to go back to the network configuration screen.

Matrix F12

Network		
Esc	Verbind. Test	Address Typ DHCP

Network		
Esc	Verbind. Test	Proxy-Serve AUS
Show Log		IP Config Summary
		Test Interne Connectivity

Matrix F22 – Matrix F82

Network		
Esc	Verbindungs- test	IP Config Summary
	Address Type DHCP	
		Proxy-Server AUS

Network		
Esc	Verbindungs- test	IP Config Summary
	Address Type DHCP	
		Proxy-Server 17.16.32.70

Proxy		
Esc	Verbindungs- test	Proxy Port 8080
	Proxy Adr. 17.16.32.70	Proxy-Serve EIN
	Username	Password

Network		
Esc	Verbind. Test	Proxy-Serve AUS
		IP Config Summary
		Test Interne Connectivity

8.6 Proxy Server without Authentication

Description

Power on the franking system, login as "Admin" and navigate to the network settings page → refer to section 8.1

F12: press the button "⇒" to navigate to the second page

Press the button "Proxy Server" to use a proxy server to connect via internet to the FramaOnline2 system.

To set (or change) the proxy port number, press the button "Proxy Port" and ...

Enter (or change) the port number for the proxy port and complete the entry with the button "⬅" or "OK".

Press the button "Proxy Adr." and ...

Matrix F12

Network		
Esc		
Verbind. Test	Proxy-Serve AUS	IP Config Summary
Show Log		Test Interne Connectivity

Matrix F22 – Matrix F82

Esc	Network	⇒
Bitte Funktion wählen:		
Verbindungs- test	IP Config Summary	
Address Type STATIC	Gateway 192.168.0.1	
IP Address 192.168.0.36	DNS-Server 192.168.1.121	
Subnet Mask 255.255.252.0	Proxy-Server AUS	

Proxy		
Esc		
Verbindungs- test		Proxy-Serve AUS

Esc	Proxy-Server	
Bitte Funktion wählen:		
Verbindungs- test	Proxy-Server AUS	

Proxy		
Esc		
Verbindungs- test	Proxy Port 0	Proxy-Serve EIN
Proxy Adr.	Username	Password

Esc	Proxy-Server	
Bitte Funktion wählen:		
Verbindungs- test	Proxy-Server EIN	
Proxy Port 0	Proxy Adr.	
	Username	
		Password

Proxy Port		
CE	8080	
1	2	3
4	5	6
7	8	9
0		

Esc	Proxy Port	⬅
Einstellung ändern:		
8080		
1	2	3
4	5	6
7	8	9
0		

Proxy		
Esc		
Verbindungs- test	Proxy Port 8080	Proxy-Serve EIN
Proxy Adr.	Username	Password

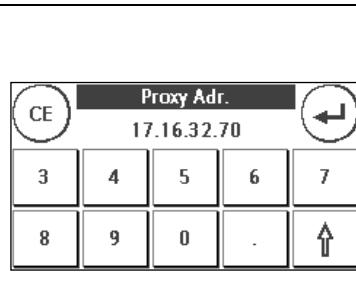
Esc	Proxy-Server	
Bitte Funktion wählen:		
Verbindungs- test	Proxy-Server EIN	
Proxy Port 8080	Proxy Adr.	
	Username	
		Password

Enter (or change) the **proxy server** IP address to the value defined by your IT personnel.

Complete the entry by pressing “”.

The franking system will only accept valid IP addresses:

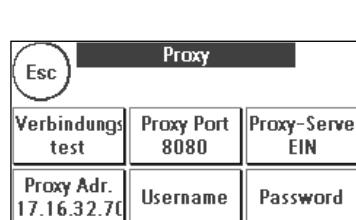
- Format: n.n.n.n
- $0 \leq n \leq 255$



A numeric keypad with a 'CE' button in the top-left corner and a backspace key in the top-right corner. The number keys are arranged in a 3x5 grid: Row 1 (3, 4, 5, 6, 7), Row 2 (8, 9, 0, ., Up Arrow), and Row 3 (1, 2, 3, CE, Down Arrow). The current value displayed is "17.16.32.70".



Proxy Adr. 
Einstellung ändern:
17.16.32.70
1 2 3 CE
4 5 6 .
7 8 9 0

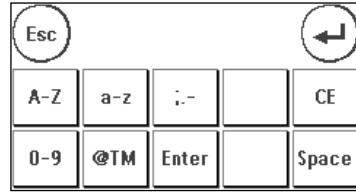


Proxy
Esc
Verbindungs test | Proxy Port 8080 | Proxy-Serve EIN
Proxy Adr. 17.16.32.70 | Username | Password

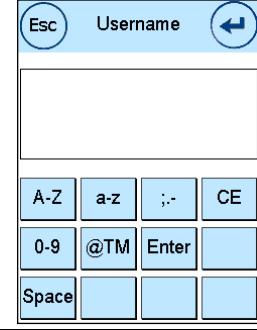


Proxy-Server
Bitte Funktion wählen:
Verbindungs-test | Proxy-Server EIN
Proxy Port 8080 | Proxy Adr. 17.16.32.70
Username
Password

Press the button “Username” to check that no username is set ...



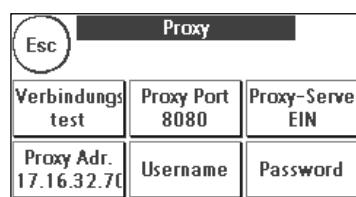
A numeric keypad with a 'CE' button in the top-left corner and a backspace key in the top-right corner. The number keys are arranged in a 3x5 grid: Row 1 (A-Z, a-z, ;-, ., CE), Row 2 (0-9, @TM, Enter, Space, Space), and Row 3 (Space, Space, Space, Space, Space). The current value displayed is "17.16.32.70".



Username 
A-Z a-z ;-. CE
0-9 @TM Enter
Space Space Space

Delete an eventually set username by pressing “CE” until the input field is empty.

Complete the entry by pressing “”.

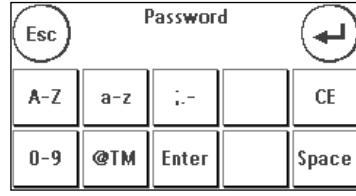


Proxy
Esc
Verbindungs test | Proxy Port 8080 | Proxy-Serve EIN
Proxy Adr. 17.16.32.70 | Username | Password

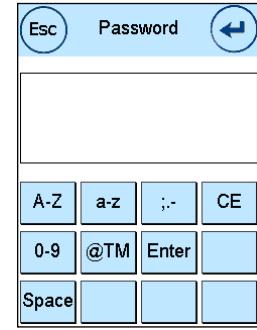


Proxy-Server
Bitte Funktion wählen:
Verbindungs-test | Proxy-Server EIN
Proxy Port 8080 | Proxy Adr. 17.16.32.70
Username
Password

Press the button “Password” to check that no password is set ...



A numeric keypad with a 'CE' button in the top-left corner and a backspace key in the top-right corner. The number keys are arranged in a 3x5 grid: Row 1 (A-Z, a-z, ;-, ., CE), Row 2 (0-9, @TM, Enter, Space, Space), and Row 3 (Space, Space, Space, Space, Space). The current value displayed is "17.16.32.70".



Password 
A-Z a-z ;-. CE
0-9 @TM Enter
Space Space Space

Delete an eventually set password by pressing “CE” until the input field is empty.

Complete the entry by pressing “”.

Note: Password entry is not in clear text, all characters entered are displayed as “*”.

Now you have completed the entry of the proxy parameters.

Use button "Esc" to go back to the network configuration screen

Proxy		
Esc	Verbindungs-test	Proxy Port 8080
	Proxy Addr. 17.16.32.70	Proxy-Serve EIN
	Username	Password

Proxy-Server	
Esc	Bitte Funktion wählen:
Verbindungs-test	Proxy-Server EIN
Proxy Port 8080	Proxy Addr. 17.16.32.70
	Username
	Password

Network		
Esc	Verbind. Test	Address Typ STATIC
	IP Address 192.168.0.3	Gateway 192.168.0.1
	Subnet Mask 255.255.25	DNS-Server 192.168.1.1

Network	
Esc	Bitte Funktion wählen:
Verbindungs-test	IP Config Summary
Address Type STATIC	Gateway 192.168.0.1
IP Address 192.168.2.36	DNS-Server 192.168.1.121
Subnet Mask 255.255.252.0	Proxy-Server 17.16.32.70

Network		
Esc	Verbind. Test	Proxy-Serve 17.16.32.70
	Show Log	IP Config Summary
		Test Interne Connectivity

Network	
Esc	Bitte Funktion wählen:
Verbindungs-test	IP Config Summary
Address Type DHCP	
	Proxy-Server 17.16.32.70

This shows the resulting network configuration screen:

- DHCP
- Proxy Server

Network		
Esc	Verbind. Test	Address Typ DHCP

Network		
Esc	Verbind. Test	Proxy-Serve 17.16.32.70
	Show Log	IP Config Summary
		Test Interne Connectivity

8.7 Proxy Server with Basic Authentication

Description

Power on the franking system, login as "Admin" and navigate to the network settings page → refer to section 8.1

F12: press the button "⇒" to navigate to the second page

Press the button "Proxy Server" to use a proxy server to connect via internet to the FramaOnline2 system.

To set (or change) the proxy port number, press the button "Proxy Port" and ...

Note on F12: Due to the limited space in the buttons the proxy server IP address is not shown completely.

Enter (or change) the port number for the proxy port and complete the entry with the button "⬅" or "OK".

Press the button "Proxy Adr."

Matrix F12

Network		
Esc	Verbind. Test	Proxy-Serve AUS
		IP Config Summary
	Show Log	Test Interne Connectivity

Matrix F22 – Matrix F82

Network	
Esc	Network
Verbindungs- test	IP Config Summary
Address Type STATIC	Gateway 192.168.0.1
IP Address 192.168.2.36	DNS-Server 192.168.1.121
Subnet Mask 255.255.252.0	Proxy-Server AUS

Proxy		
Esc	Verbindungs- test	Proxy-Serve AUS

Proxy-Server	
Esc	Proxy-Server
Verbindungs- test	Proxy-Server AUS

Proxy		
Esc	Verbindungs- test	Proxy Port 0
		Proxy-Serve EIN
	Proxy Adr.	Username
		Password

Proxy-Server	
Esc	Proxy-Server
Verbindungs- test	Proxy-Server EIN
Proxy Port 0	Proxy Adr.
	Username
	Password

Proxy Port				
CE	8080	⬅		
1	2	3	4	5
6	7	8	9	0

Proxy Port			
Einstellung ändern:			
8080	1	2	3
CE	4	5	6
OK	7	8	9
0			

Proxy		
Esc	Verbindungs- test	Proxy Port 8080
		Proxy-Serve EIN
	Proxy Adr.	Username
		Password

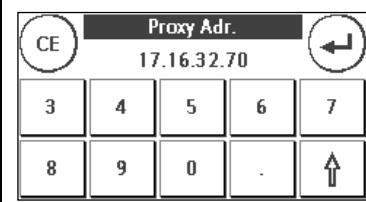
Proxy-Server	
Esc	Proxy-Server
Verbindungs- test	Proxy-Server EIN
Proxy Port 8080	Proxy Adr.
	Username
	Password

Enter (or change) the **proxy server IP** address to the value defined by your IT personnel.

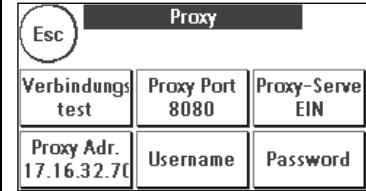
Complete the entry by pressing “”.

The franking system will only accept valid IP addresses:

- Format: n.n.n.n
- $0 \leq n \leq 255$

	
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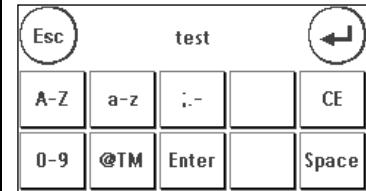
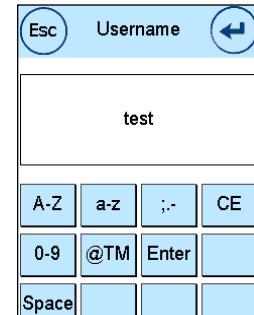
Press the button “Username” to set the proxy username.

	
--	---

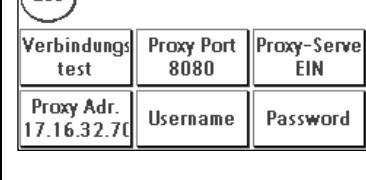
Type in the username for the proxy authentication:

- To enter characters, press first the corresponding category button and then select the character.
- To change back to the screen on the right, use the button “”

Complete the entry by pressing “”.

	
---	--

Press the button “Password” to set the proxy password.

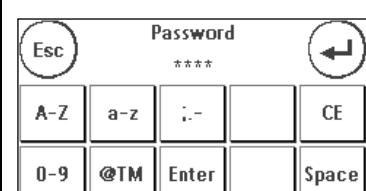
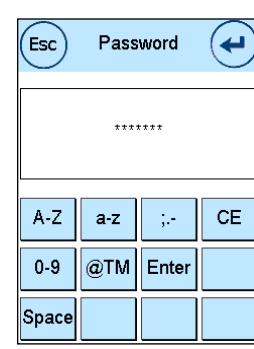
	
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Type in the password for the proxy authentication:

- To enter characters, press first the corresponding category button and then select the character.
- To change back to the screen above, use the button “”

Complete the entry by pressing “”.

Note: Password entry is not in clear text, all characters entered are displayed as “*”.

	
--	---

Now you have completed the entry of the proxy parameters.

Use button "Esc" to go back to the network configuration screen.

Proxy	Proxy-Server
Esc	Bitte Funktion wählen:
Verbindungs-test	Verbindungs-test
Proxy Port 8080	Proxy-Server EIN
Proxy Adr. 17.16.32.70	Proxy Port 8080
Username	Proxy Adr. 17.16.32.70
Password	Username
	Password

This shows the resulting network configuration screen:

- static IP address
- Proxy Server

Network	Network
Esc	Esc
Verbind. Test	Address Typ STATIC
IP Address 192.168.0.3	Gateway 192.168.0.1
Subnet Mask 255.255.25	DNS-Server 192.168.1.1
Network	Network
Esc	Esc
Verbind. Test	Proxy-Server 17.16.32.70
Show Log	IP Config Summary
	Test Interne Connectivity

This shows the resulting network configuration screen:

- DHCP
- Proxy Server

Network	Network
Esc	Esc
Verbind. Test	Address Typ DHCP
Network	Network
Esc	Esc
Verbind. Test	Proxy-Server 17.16.32.70
Show Log	IP Config Summary
	Test Interne Connectivity

8.8 Connection Test

Description

Power on the franking system, login as "Admin" and navigate to the network settings page → refer to section 8.1

When you have completed the network configuration, press the button "Connection Test" to check the connection

Press "Yes" ...

The franking system initializes the connection module and connects to the FramaOnline2 system...

After a successful connection this message from FramaOnline2 is displayed.

	Matrix F12	Matrix F22 – Matrix F82

8.9 Internet Connection Test

Description

Power on the franking system, login as "Admin" and navigate to the network settings page → refer to section 8.1

F22 – F82: Press the button "➡■" to navigate to the second page.

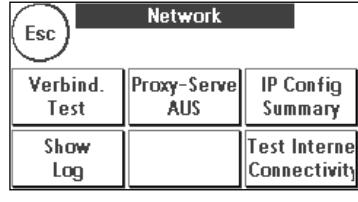
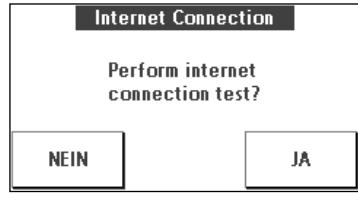
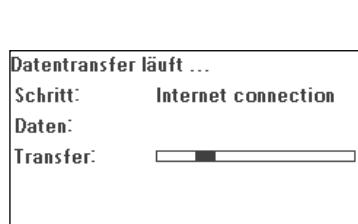
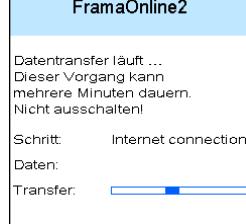
Press the button "Test Internet Connection".

Press "Yes" ...

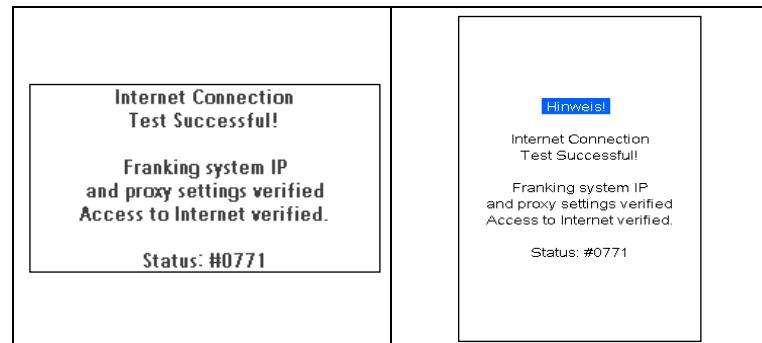
... the franking system tries to "ping" www.google.com ...

Matrix F12

Matrix F22 – Matrix F82

	 <p>Bitte Funktion wählen:</p> <table border="1"> <tr><td>Verbindungs-test</td><td>IP Config Summary</td></tr> <tr><td>Address Type DHCP</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td>Proxy-Server AUS</td></tr> </table>	Verbindungs-test	IP Config Summary	Address Type DHCP					Proxy-Server AUS							
Verbindungs-test	IP Config Summary															
Address Type DHCP																
	Proxy-Server AUS															
	 <p>Bitte Funktion wählen:</p> <table border="1"> <tr><td>Verbind. Test</td><td>Proxy-Serve AUS</td><td>IP Config Summary</td></tr> <tr><td>Show Log</td><td></td><td>Test Internet Connectivity</td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td>Test Internet Connection</td><td>Show Log</td></tr> </table>	Verbind. Test	Proxy-Serve AUS	IP Config Summary	Show Log		Test Internet Connectivity								Test Internet Connection	Show Log
Verbind. Test	Proxy-Serve AUS	IP Config Summary														
Show Log		Test Internet Connectivity														
	Test Internet Connection	Show Log														
	 <p>Perform internet connection test?</p> <table border="1"> <tr><td>NEIN</td><td>JA</td></tr> </table>	NEIN	JA													
NEIN	JA															
	 <p>Datentransfer läuft ... Schritt: Internet connection Daten: Transfer: </p>															
	 <p>Datentransfer läuft ... Dieser Vorgang kann mehrere Minuten dauern. Nicht ausschalten! Schritt: Internet connection Daten: Transfer: </p>															

... and displays this message when it's successful.



8.10 Display IP Log

Description

Power on the franking system, login as "Admin" and navigate to the network settings page → refer to section 8.1

F22 – F82: Press the button "➡" to navigate to the second page.

Press the button "Show Log".

Now the franking system displays a detailed technical log of the initialisation and configuration of the Ethernet module.

Notes:

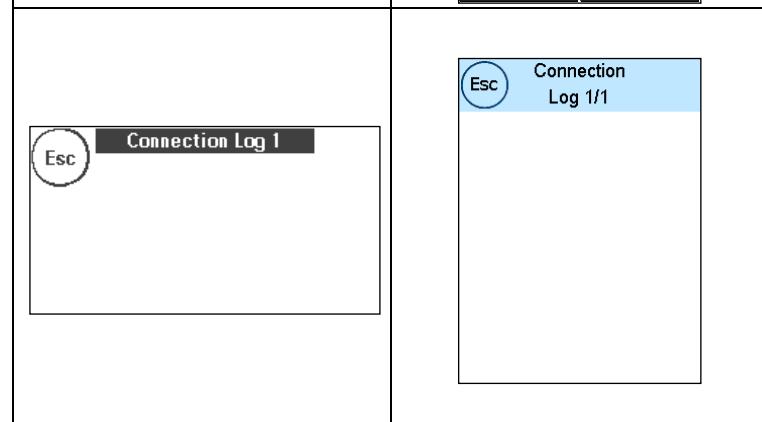
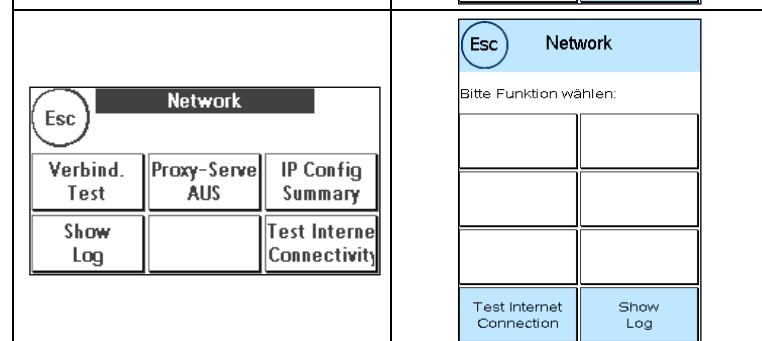
- The log shows information on connection setup since the last power-up and is limited to around 2k data
- Information is appended to the end of the log and older information is overwritten

See section 9 interpretation of the contents.

Matrix F12



Matrix F22 – Matrix F82



9 Troubleshooting

Note!

The part of the message text displayed to the customer which is translated to the local language is shown in *Italic*. The message text displayed in normal font is always displayed in English.

Note!

Due to the screen size of the Matrix F12, the screen message is displayed without the header line "*Information!*" and the footer with the status code may be missing.

9.1 E0755

Code	Screen Message	Description
E0755	<i>Information!</i> <i>General Connection Failure.</i> <i>Please try again later.</i> Please refer to the manual for further info.	No connection to FramaOnline2 system. The FramaOnline2 system may be temporary unavailable or the proxy configuration may be incorrect .

Status: #0755

Possible Causes	Solution
• The problem may be caused by temporarily connection problems.	• Try again later
• No access to the internet from the network connection you are using.	• Use the function "Internet Connection Test" (see section 8.9) to check accessibility of the internet from this device. • Use another network device and connect this to the same Ethernet cable/socket to check this.
• The configuration of the proxy server is not correct.	• Use the function "Internet Connection Test" (see section 8.9) to check accessibility of the internet from this device. • Use the questionnaire in section 10.1 to interrogate your IT personnel and make sure that the franking system is configured accordingly.
• In case of static IP address configuration, the DNS server IP address might be wrongly configured.	• Use the function "Internet Connection Test" (see section 8.9) to check accessibility of the internet from this device. • Use the questionnaire in section 10.1 to interrogate your IT personnel and make sure that the franking system is configured accordingly. • Section 8.4 shows how to configure static IP address.

9.2 E0757

Code	Screen Message	Description
E0757	<i>Information!</i>	Connection lost to FramaOnline2 system. <i>Connection Lost.</i> <i>Please try again later.</i> Please refer to the manual for further info. <i>Status: #0757</i>

Possible Causes	Solution
<ul style="list-style-type: none">The problem may be caused by temporarily connection problems.No access to the internet from the network connection you are using.The franking system network configuration is not correct.	<ul style="list-style-type: none">Try again later.Use the function "Internet Connection Test" (see section 8.9) to check accessibility of the internet from this device.Use another network device and connect this to the same Ethernet cable/socket to check this.Use the function "Internet Connection Test" (see section 8.9) to check accessibility of the internet from this device.Use the questionnaire in section 10.1 to interrogate your IT personnel.Section 8 shows you, how to configure network parameters.If the problem persists, contact your FramaOnline2 help line.

9.3 E0764

Code	Screen Message	Description
E0764	<i>Information!</i>	<p>No network cable detected.</p> <p><i>No network cable detected. Check network cable and network cable connectors and connect further.</i></p> <p>Please refer to the manual for further info.</p>

Status: #0764

Possible Causes	Solution
<ul style="list-style-type: none">The franking system is not connected to a working network device, orThe network cable is not plugged in correctly into the green framed RJ45 labeled "LANG4" network socket, either at the franking system or the wall socket.The network device or the network wall socket is not operational.	<ul style="list-style-type: none">Connect the network cable correctly.Make sure the network device / network wall socket is operational.You may connect another network device to check if the wall socket / router / hub is working.Contact your IT personnel to check the network wall socket / router /hub.

9.4 E0767, E0768, E0769, E076A

Code	Screen Message	Description
E0767	<i>Information!</i>	Invalid DNS server.
	Static IP Address Settings: Wrong Parameter(s) detected. Check IP settings. Please refer to the manual for further info.	
	<i>Status: #0767</i>	
E0768	ditto	Invalid IP address.
	<i>Status: #0768</i>	
E0769	ditto	Invalid subnet mask.
	<i>Status: #0769</i>	
E076A	ditto	Invalid default gateway IP address.
	<i>Status: #076A</i>	

Possible Causes

- One or more of the four parameters for static IP configuration is not correctly configured.

Solution

- Use the questionnaire in section 10.1 to interrogate your IT personnel.
- Section 8.4 shows how to configure static IP address.

9.5 E076B, E076C, E076D, E076E

Code	Screen Message	Description
E076B	<i>Information!</i>	Invalid Proxy IP address.
	Proxy Server Settings: Wrong Parameter(s) detected. Check Proxy settings. Please refer to the manual for further info.	
	<i>Status: #076B</i>	
E076C	ditto	Invalid Proxy Port number
	<i>Status: #076C</i>	
E076D	ditto	Invalid Proxy Username
	<i>Status: #076D</i>	
E076E	ditto	Invalid Proxy Password
	<i>Status: #076E</i>	

Possible Causes

- One or more of the four parameters for proxy server configuration is not correctly configured.

Solution

- Use the questionnaire in section 10.1 to interrogate your IT personnel.
- Section 8.6 and 8.7 show how to configure the proxy server parameters

9.6 E076F

Code	Screen Message	Description
E076F	<i>Information!</i>	No DHCP server found. <i>No answer from DHCP server. Please try again. Check that DHCP server answers in less than 45 seconds. Please refer to the manual for further info.</i> <i>Status: #076F</i>

Possible Causes

Solution

- The problem may be caused by temporary connection problems.
 - No DHCP server available at all, the network requires static IP address configuration.
 - DHCP server answers too late.
- Try again later.
 - Use the questionnaire in section 10.1 to interrogate your IT personnel.
 - Section 8 shows you, how to configure network parameters.
 - Contact your IT personnel to make sure a DHCP server is reachable within 45 seconds.
 - Try to set the feature "PortFast", if your network equipment supports this feature.

9.7 E0771

Code	Screen Message	Description
E0771	<i>Information!</i> Internet Connection Test Successful!	Internet connection test successful. Note: <ul style="list-style-type: none">• This is not a failure, it is a success message. Franking system IP and proxy settings verified Access to Internet verified.

Status: #0771

9.8 E0772

Code	Screen Message	Description
E0772	<i>Information!</i> Internet Connection Test Failed! Possible reasons: IP address settings, local proxy server settings, firewall settings. Please refer to the manual for further info.	Internet connection test failed. Unable to „ping“ google.com while no proxy is configured.

Status: #0772

Possible Causes	Solution
<ul style="list-style-type: none">The problem may be caused by temporary connection problems.	<ul style="list-style-type: none">Try again later.
<ul style="list-style-type: none">The network configuration requires to use a proxy server for internet access, but none is configured yet.	<ul style="list-style-type: none">Use the questionnaire in section 10.1 to interrogate your IT personnel.Section 8.6 and 8.7 show how to configure the proxy server parameters

9.9 E0773

Code	Screen Message	Description
E0773	<i>Information!</i> Internet Connection Test Failed! Proxy server reached, but still no internet access. Check network, IP settings and/or check proxy server configuration. Please refer to the manual for further info.	Internet connection test failed. Proxy server reached, but still unable to „ping“ google.com.

Status: #0773

Possible Causes	Solution
<ul style="list-style-type: none">The problem may be caused by temporary connection problems between the proxy server and the internet.	<ul style="list-style-type: none">Try again later.
<ul style="list-style-type: none">A proxy server is configured, but the local network does not require use of a proxy server for internet access and you reached by chance another server acting also as proxy.	<ul style="list-style-type: none">Use the questionnaire in section 10.1 to interrogate your IT personnel.Section 8.6 and 8.7 show how to configure the proxy server parameters

9.10 E0774

Code	Screen Message	Description
E0773	<i>Information!</i> Internet Connection Test Failed! Proxy server configured, but no answer. <i>Status: #0774</i>	Internet connection test failed. Proxy server configured but no answer from proxy server. Check proxy server configuration. Please refer to the manual for further info.

Status: #0774

Possible Causes	Solution
• The problem may be caused by temporary connection problems between the franking system and the proxy server.	• Try again later.
• The proxy server may be temporary out of service.	• Use the questionnaire in section 10.1 to interrogate your IT personnel.
• A proxy server is configured, but the local network does not require use of a proxy server for internet access.	• Section 8.6 and 8.7 show how to configure the proxy server parameters
• One or more of the four parameters for proxy server configuration is not correctly configured.	• Use the questionnaire in section 10.1 to interrogate your IT personnel.
	• Section 8.6 and 8.7 show how to configure the proxy server parameters

9.11 E0750, E0751, E0752, E0762, E0763, E0765, E0766

Code	Screen Message	Description
E0750	<i>Information!</i>	Communication module initialisation problem.
E0751		
E0752	<i>Status: #07xx</i>	
E0762		
E0763		
E0765		
E0766		

Possible Causes	Solution
• Hardware Failure	• Please contact your FramaOnline2 Hotline.

9.12 E0775

Code	Screen Message	Description
E0775	⁻¹	<p>LAN module firmware update started.</p> <p>Information status entry telling that update of LAN module has been started.</p> <p>Note: This is not a failure, it is a status message.</p>

9.13 E0776

Code	Screen Message	Description
E0776	⁻¹	LAN module firmware update is not successful.

Possible Causes	Solution
• Slow or unreliable internet connection	• The franking system is automatically retrying the LAN module firmware update on next calendar day or after a reboot.
• Load on ftp server too high	• The franking system is automatically retrying the LAN module firmware update on next calendar day or after a reboot.
• Ftp server down	• The franking system is automatically retrying the LAN module firmware update on next calendar day or after a reboot.
• Proxy or firewall blocks completely the required ftp connection	<ul style="list-style-type: none"> • Use one of the workarounds described in section 5 of the document "Service Note: LAN module firmware update manual" to allow the franking system to access the internet via port 21. • The franking system is automatically retrying the LAN module firmware update on next calendar day or after a reboot.

9.14 E0777

Code	Screen Message	Description
E0777	⁻¹	<p>LAN module firmware update completed successful.</p> <p>Note: This is not a failure, it is a success message.</p>

9.15 E0778

Code	Screen Message	Description
E0778	⁻¹	<p>LAN module firmware update process timed out.</p> <p>When E0778 is followed by an E0777, than the update of the LAN module is successfully completed and the E0778 can be ignored.</p> <p>See E0776 for possible causes and solutions.</p>

¹ E0775, E0776, E0777 and E0778 are recorded by the franking system in the status list, but there is no message shown to the franking system user.

9.16 E0779

Code	Screen Message	Description
E0779	<i>Communication module failure. If the error persists please contact Frama Technical Service.</i>	LAN module firmware update was not successful and LAN module is not usable anymore for communication purposes. Note: This message is displayed in the current active language of the franking system. Please refer to section 7 of the document "Service Note: LAN module firmware update manual" for a translation of the displayed message.

Possible Causes	Solution
• Hardware Failure	• Please contact your FramaOnline2 Hotline.

10 Appendix

10.1 IP Configuration Questionnaire

This questionnaire may be used to get the information from your IT personnel.

Addressing Mode

DHCP

Static IP Address

- IP-Address: _____ Format: nnn.nnn.nnn.nnn, nnn <= 255
Example: 192.168.0.36
- Subnet-Mask: _____ Format: nnn.nnn.nnn.nnn, nnn <= 255
Example: 255.255.252.0
- Default Gateway: _____ Format: nnn.nnn.nnn.nnn, nnn <= 255
Example: 192.168.2.1
- DNS-Server: _____ Format: nnn.nnn.nnn.nnn, nnn <= 255
Example: 192.168.175.25

Proxy Server

No local Proxy required.

A local Proxy is required to be used

- Proxy IP-Address: _____ Format: nnn.nnn.nnn.nnn, nnn <= 255
Example: 192.168.172.38
- Port Number: _____ Format: nnnnn <= 65535
Example: 8080

Proxy Server Authentication Mode (only applicable if proxy server must be used)

- No authentication required on proxy server
- Basic authentication is required for proxy server
 - Username: _____
 - Password: _____



Note!

Make sure that the IP address values and related configurations respect the syntax and semantic rules. Your IT personnel will be able to give you more information on this topic.

10.2 Default IP Configuration

Setting	Default Value	Remark
Addressing Mode	DHCP	-
Proxy Server	No proxy server	-

10.2.1 Default Values Static IP Address

When you switch from DHCP to static IP address, the network parameters are initialised with the following values:

Setting	Default Value	Remark
Static IP address	0.0.0.0	-
Subnet-mask	last known setting from DHCP e.g. 255.255.252.0	empty, if no DHCP connection yet established
Default gateway	last known setting from DHCP e.g. 192.168.2.1	empty, if no DHCP connection yet established
DNS server	last known setting from DHCP e.g. 192.168.175.25	empty, if no DHCP connection yet established