

User Manual





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1. Introduction

Thank you for purchasing FrameXX – high-performance and low-cost digital signage platform with LAN/internet connectivity that allows you to play multimedia content in Full HD quality.

The user interface is easy to understand and no additional software is required. Simply insert the memory card or set-up network connection and you can play the media files from the selected source.

There are the following models available – series FrameXX HOME/PRO and FrameXX SIGN/2.

FrameXX HOME27x is a standalone device with very rich digital photoframe features. It is based on a full HD 27" quality AMVA/TN panel, and features a wooden frame in size 79x48cm. The construction allows you to replace the wooden frame (standard colours – black, natural wood, white) very easily and customize to a requested design.

Frame PRO is based on a fullHD 27"- 65" professional industry class AMVA/IPS panel.

FrameXX SIGN/2 contains identical engine & software as FrameXX HOME/PRO, the only difference is in the missing display, which allows the device to be connected to any display device with an HDMI input (up to 4K video resolution). It is mostly used in the Digital Signage industry, however it can also be connected to large flat TV devices at home.

For presentation from local or internal memory there are no additional settings necessary, for presentation from intranet or internet (e.g. Flickr, Dropbox) you have to set up a wireless connection with credentials. The FrameXX devices are ideal for advertising, retail displays, museum exhibits, galleries, home usage and other applications. The possibility of remote content management via **FrameXX CONTROL** cloud and automatic slideshow synchronization with remote source also makes it eligible for maintenance and remote usage. Just switch it on and the FrameXX can start the show automatically. You can use built-in advanced Timers or any simple programmable outlet timer to switch it on and off at any favourite time

2. Product Features

- Wireless multimedia device WiFi-N (HOME27x) and LAN (PRO, SIGN) connectivity
- Supports different multimedia sources Internal memory, USB/SD, LAN (SMB/UPnP), Internet, Flickr, FTP, Dropbox, websources...
- Photo slideshow with music in the background
- Supported formats
 VIDEO (MPEG4, MKV,AVI,TS,VOB,MPG, MP4, MOV,3GP...),
 PICTURE (JPG,BMP,GIF,BMP,TIFF)

WWW (ASCII text with filename ABC.www. Each line contains 1 www address. Time delay between lines corresponds to the current Delay valid for Slideshow.

PLST (Playlist file, ASCII text with filename ABC.plst. Each line contains command for 1 item within Slideshow) IFR system command file (for internal memory operations - copy,

- Built-in HTML5 browser (http+https) able to run in Slideshow or standalone
- Built-in Youtube separate module (not able run in Slideshow)
- Mix content play (Photo/Video/WWW)
- Autoplay for all media formats and all sources
- Slideshow of all sub-directories
- Landscape / Portrait presentation mode
- Multiple transition effects, flying text, fixed image (multi-layer system)
- Remote Slideshow synchronization/update over LAN or internet
- Full HD resolution (HOME), 4K output (SIGN) with HDMI output, portrait/landscape, 50/60Hz modes
- Multiple languages
- Centralized remote surveillance of running devices (CONTROL cloud)
- Fan less design (silent operation)
- and more.....

delete...)

3. Usage Scenarios

- Maintenance and advertisement in public spaces (shops, hospitals..).
- Operation with remote control over internet (can be used by non-IT users e.g. older parents) by other distant people (family). Family can then change the content of Slideshow by adjusting their own Flickr account, remote SMB, FTP, Dropbox or CONTROL cloud.
- Connection and all content will be synchronized. Therefore only ON/OFF can be required by local user.
- Presentations (with description) controlled and monitored from one place.
- Instant home direct presentation of ALL photos/videos stored in NAS (the most safe and suitable place for photo/video)

4. Package Contents

FrameXX HOME/PRO

- 1. FrameXX HOME/PRO device
- 2. Remote Control
- 3. User Manual
- 4. "Invisible" transparent extension 3m cord

FrameXX SIGN/2

- 1. FrameXX SIGN device
- 2. Remote Control
- 3. External Infra sensor
- 4. HDMI thin 1,5m cable
- 5. Metallic holder
- 6. User Manual
- 7. Power Adapter

5. Hardware Overview

FrameXX HOME/PRO

2x USB slot: can be used for USB memory, USB keyboard or USB mouse (faster data input)

WiFi antenna: non removable antenna for WiFi 802.11 b/g/n connectivity,

2.4/5GHz modes

Audio out (L+R), cinch connection Audio in (L+R), cinch connection

LAN RJ-45 port: model PRO default, model HOME custom design

IrDa built in receiver

FrameXX SIGN/2

2x USB slot: used for USB memory, USB keyboard or USB mouse, USB numbering depends on the insertion order, not USB slot position.

1 x SD slot: for memory card

WiFi antenna: non removable antenna for WiFi 802.11 b/g/n connectivity,

2.4/5GHz modes

LAN RJ-45 port: wired Ethernet 10/100Mbps connection (RJ45 connector)

HDMI out: 4K video+audio output (connected to monitor/TV) **DC in**: DC input from Power adapter (use only supplied adapter)

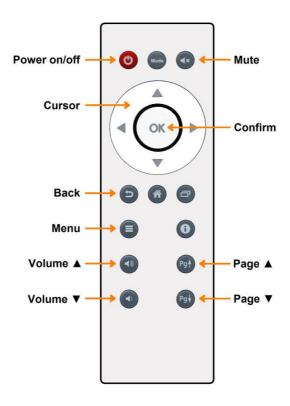
External Infra sensor connector: 2.5" jack connector for external IrDA

sensor

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Multi cable connector (optional): RS-232 (DB-9), audio out, analog video out (switchable with HDMI – only one video out from device), IrDA in

6. Remote Control



The Remote Control is powered by 2x AAA 1,5V batteries.



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7. Starting the FrameXX

Powering FrameXX

- Connect to power socket, eventually use HDMI video cable to connect FrameXX Sign and TV or monitor.
- 2. With HOME/PRO, check if needed to use manual switch next to power cord, then use RC and power the device.
- If you want to work from local removable memory, insert the memory into the USB or SD slot. All slots are hot-plug, so you can insert the memory while the device is running. (if you want to start presentation from 13GB internal memory, it is needed first to copy files there)



Main Menu

The main screen will show up after power on by default. Initial pre-configured settings has Autostart ON, and demo Slideshow will start automatically. You can terminate it anytime with sc key on RC.

Main screen layout consists of 4 regions:

1. FrameXX Menu

Located here are 3 submenus – FrameXX application options, Timers and System Menu (settings of system, system maintenance, Youtube..)

2. Main Menu

Memory – internal memory on board. This location is handled via *.ifr system files (explained later) or via browser (direct Web access)

Memory card slots

1xSD (SIGN), 2xUSB 2.0., available/inserted memory is highlighted. These storages can be disabled in Options and then they will be not displayed.

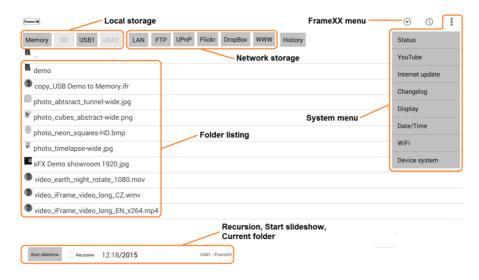
Network media sources for presentation:

LAN

Network Samba server (standard network storage used in Windows, NAS) **FTP** – server accessible via File Transfer Protocol

UPnP

Any available UPnP/DLNA media source within local network The UPnP access can be disabled in Options (as it is Default) and then it is not displayed.



Flickr

World's #1 photo internet cloud storage for your media files (www.flickr.com)

Dropbox

World's #1 independent cloud service

WWW - html page as defined in WWW option



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History – list of recent Slideshow media sources with possibility to run any address (this list makes the future slideshow from different sources very easy to access quickly, it works like "bookmarks"). The most recent (top line) is the active source for Autostart.

Note: Manual presentations(not started via **Start Slideshow** button) are not stored in the History list, except for www and plst files. The selected Slideshow runs according to the current device settings (Delay, Transition, Recursion...).

There is a special History item as default that allows you to quickly access the FRAMEXX FLICKR DEMO account, it cannot be deleted.

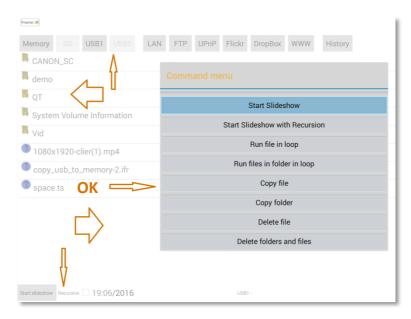
3. Folder selection

Browsing and selection of folders and files.

Note: when cursor is located in Folder selection, you can get promptly to the Main Menu with Left arrow and to Start Slideshow&Recursive with the Right arrow. Fast browsing available with Page UP/Down buttons on remote control.

If cursor located on file, pressing of OK will open Action menu, where a lot of functions is available (Start Slideshow, Copy, Delete...).

Only Local storage (Memory, USB, SD) has all options available, other Slideshow sources do not offer Copy /Delete functions.



4. Start Slideshow & Recursive

The Start Slideshow starts presentation according to the selected parameters and location. Each using of this function writes an entry into History (like Bookmarks) to easily find and start the slideshow later. Marking the "Recursive" option allows to include not only the files, but all subfolders in Slideshow as well.

The Slideshow can be Paused anytime (OK) and then continued (OK). If picture rotation needed, in Pause mode press arrows left/right (90degrees CCW/CW rotation).

8. FrameXX Menu

System Menu

is accessible by cursor buttons (3 dots in upper right corner):

\bigcirc Status YouTube Internet update Changelog Display Date/Time Device system

Status

This dialog has 2 functions

1st - General information about current FrameXX device

2nd- You can access Developer menu that allows to

- make local system upgrade
- start Teamviewer module
- update Youtube or Teamviewer module (see Chapter #13)

For access to the Developer menu press Left arrow and Right arrow on remote control consequently.

FrameXX Version - 3.5 WIFI MAC - 04:E6:76:49:73:E8 LAN MAC - AC:DB:DA:39:A5:9C IP - 192.168.0.203 Fixed SMB server - None Flickr account - None Device name - 999 Reserved File Mask - All visible Date Mask - Disabled Autostart/Reboot - Enabled / Enabled 03:00 Supported monitor- Not supported () Internal memory - 5320 MB Free SD card - Not present USB1 - Not present USB₂ - Not present

FrameXX local update

Teamviewer start

Youtube undate/installation Teamviewer update/installation Exit FrameXX

Youtube

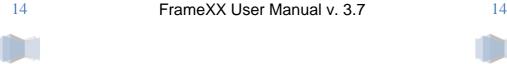
This is separate Youtube module. In older systems it is needed to install first, more in Chapter 13. (YT module available under Download section at www.framexx.com)

Internet update

FrameXX checks availability of new firmware version on the Internet.

Changelog

Here the info and history of all firmware revisions appears. Note – as this file is downloaded from server, internet connection is reauired.



Display

Located here are display settings as well as the Miracast function. It is possible to select resolution (up to 4K/30fps), display orientation (landscape/portrait), 50/60Hz modes, adjust picture position/size (20 levels) and use Miracast module (Wifi video/audio transfer from PC/tablet/phone to FrameXX)

Note:

FrameXX has default 720p output resolution for SIGN and 1080p for HOME. If your TV/monitor allows using of higher resolution, please set it accordingly (4K, full HD=1080p, HD-ready=720p). When selecting a new mode, one more step is required to confirm visibility of the new display mode. If nothing confirmed, display mode will revert to previous resolution within 15 sec. You can also make a display position and size adjustment (each output resolution requires separate display adjustment). For certain special conditions (TV video record..), there are 50Hz modes available (if you do not know why you should use 50Hz, then use 60Hz settings)

Date/Time

Settings of current Date/Time, the highly recommended setting is Automatic (requires internet connection). **Don't forget to set your GMT zone**.

WiFi

WiFi is enabled by default and it is necessary to set up your WiFi connection.

Note: For FrameXX SIGN and HOME-XL/XXL the RJ-45 slot can be used as well, default settings is DHCP automatic configuration. It is always better to use cable LAN connection, if not possible, we recommend to use 5GHz Wifi hand

Device system

Located here are full system settings. Please be careful, some settings can even delete configuration or terminate device operation. You must always know what you configure.

Timer Menu

is located under clock symbol.

Timer options

Timers allow you to define when the device will be switched ON/OFF.

When Timer scenario is completed then it appears in the basic Timer rules list.

Every Timer must be defined separately (**Add** button).

Once completed, please review defined Timers in Timer rules list, set **Enable timer** to **ON** (it is possible to keep Timers in the device inactive, just

switch to OFF – therefore not needed to remove Timers when temporary Timers not requested) and select **Save and exit**.

The Timer is defined by following rules:

- Timer ON (hour, minutes)
- Definition of day. Following repetition scenarios are available:

Every day

Working days (Mo-Fr)

Working days (Mo-Sa)

Working days (Su-Th) Working days (Sa-Th)

Weekend (Sa.Su)

Individual days (Monday – Sunday)

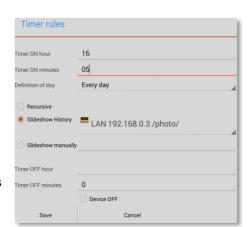
- Recursive (option to contain subfolders in the Slideshow)
- Timer OFF (hour, minutes)
- Device OFF (this option will switch

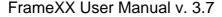
FrameXX to off once Timer period expires, otherwise FrameXX returns to the Main Menu).

There is unlimited number of Timers and we recommend not overlap new Timers as it will simplify understanding of working scenario. It is allowed to start next Timer at exact the same time when previous Timer ends.

Note: Timers can be set from browser Web access or via CONTROL cloud as well. Don't forget to set the GMT zone used in CONTROL cloud account







profile. Device consists of RTC (real time clock with battery) therefore internet NTP synchronization is optional only.

FRAMEXX options menu

OPTIONS - General options

Delay

Time between the consecutive photos during Slideshow (Range 1sec – 100hrs)

Layout

Layout of the Slideshow defines the design of current Slideshow.

Following options:

Fullscreen Dissolve (default)

Fullscreen Fade in/out

<u>Four regions</u> – photo can be placed variably into different regions (various size)

<u>Four regions centered</u> – photos are placed equally into 4 regions

Random photo placer

Four corners

Single fly by – single photo will come from left side moving

Double fly by

Random fly by

Single fly down

Single fly up

Transition

Here it is possible to define the style of transition between 2 items in Slideshow.

The following options are available:

Dissolve

Fade in, fade out

Zoom in

Zoom out





Slide left

Slide right

Random

None

Zoom effect

Greyscale effect

Page turn

Blinds

Zoom in effect

Background color

It defines colour on the border outside of the active Slideshow item.

Aspect ratio

Selection of how the screen will be filled out with current picture There are 3 options

<u>Default</u> – photo is displayed with exact aspect ratio as original <u>Max visible (Aspect ratio preserved)</u> – Photo will use maximum of screen with original aspect ratio. The photo will have mostly border region removed, as the screen ratio is 16:9 and photo will not cover full screen <u>Max visible (Aspect ratio changed)</u> – photo will cover full screen and is adjusted to the screen aspect ratio (therefore not original). Photo is usually heavily modified.

Photo order

It defines the order of how the files and folders are displayed in Slideshow (it appears only during Slideshow)

<u>Random selection</u> – each presentation is unique as the order will be random

<u>Alphabetical order</u> – It works for all items (Folders & Files)

<u>Timestamp order</u> – order according to time information

<u>Alphabetical order (keep folder structure)</u> – useful for "Recursion ON". The order will follow first the directories, and then the files.

Start opacity

It defines how slowly/quickly new photo will be displayed (fade-in). Range 0-255, value 0 means slow appearance, value 255 is instant photo appearance. Usually it is not needed to change this value.

End opacity

It defines how slowly/quickly current photo will disappear (fade-out). Range 0-255, value 0 means slow fade-out, value 255 is instant fade-out. Usually it is not needed to change this value.

Banner options

Enable/disable vertical banner of the display on the right side.

There are following submenus

- Horizontal banner top
- Horizontal banner bottom
- Vertical banner left
- o Vertical banner right
- Text speed
- RSS location
- o Background color
- Text font
- Color font
- o Picture in fulscreen
- Banner size
- Banner item position

Horizontal banner top/bottom Vertical banner left/right

Enable/disable banners around the display.

There are the following options:

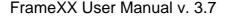
None – banner disabled

<u>Fixed image (Device name.JPG)</u> – it displays a single image during complete Slideshow. This file must be in JPG or PNG format (this is important when identical filenames exist) and placed in the starting directory of the Slideshow. Image files must carry identical filename as "Device name" – e.g. "Device name.jpg"

Note: If Slideshow runs from Flickr or website when not possible to simply put Fixed image to that location, then <u>Device name.JPG</u> file must be stored in root of MEMORY.

If PNG saved with transparency option and a Picture in fullscreen is enabled, then it is possible to place image as a transparent logo into pictures/videos in Slideshow.

<u>Text from file (Device name.TXT)</u> – it displays the text from ASCII text during complete Slideshow. This file must have TXT extension placed in the starting directory of the Slideshow with identical name as "Device name" – e.g. framexx.txt (if Device name is "framexx")





This option is mainly suitable for horizontal orientation of FrameXX device. Note: If Slideshow runs from Flickr or website, then Device name.TXT file must be stored in root of MEMORY.

Clock – it displays an analogue clock

<u>Digital Clock</u> – it displays a digital clock

<u>Information</u> if there is an identical TXT file as current photo/video (e.g. pic1.jpg and pic1.txt), then corresponding TXT file is assigned and displayed with the photo.

If there is no such TXT file, then a full filename and date of the current photo is displayed. This option is suitable for horizontal orientation of FrameXX device.

Name – this option displays Filename only (without extension

 \underline{RSS} – the RSS feed is taken according to the $\underline{RSS\ location}$ address settings .

Text speed

If displayed text is longer than screen, then it starts scrolling. Here it is possible to select speed of scrolling

Very slow

Slow

Normal

Fast

Verv fast

RSS location

This field defines the RSS feed address when RSS option for banner is selected. If requested to display more RSS feeds, each RSS address must be separated by a comma ",".

It is possible to define up to 4 various RSS feeds for all Banners.

RSS feeds are displayed in order corresponding to current banner settings (in given order – HBT, HBB, VBL, VBR).

Example:

20

Horizontal banner top – RSS

Horizontal banner bottom - RSS

RSS: http://RSS_feed_1,http://RSS_feed_2

Background color

Here it is possible to define background of enabled banner.

Available in the following colours: <u>Transparent/Black/Blue/Dark gray/Gray/Green/Light gray/Magenta/Red/White/Yellow</u>

Text font

Here it is possible to choose from 15 various fonts (normal, bold, italic..)

Color font

Font settings for text banner are available in the following colors: Black/Blue/Dark gray/Gray/Green/Light gray/Magenta/Red/White/Yellow

Picture in fullscreen

Picture/Video will use always maximal display area, therefore banner will be displayed on top of running Slideshow.

Banner size

Banner size can be defined in 6 levels. Percentage number displays exact aspect ratio of reserved window for Banner.

Example – level 2 (20%) – window has aspect ratio 100:20 (for horizontal banners), respective 20:100 (for portrait banners).

For complete window filling the aspect ratio is important, not the resolution (auto-adjustment is processed) , image for banner in Full HD is 1920x384, HD ready 1368x273.

Banner item position

Left/Top

Center (default)

Right/Down

File mask for Slideshow

Here it is possible to select (a mask) what types of files are visible in Slideshow.

Show photos

Show videos

Show www lists (.www)

Show playlists (.plst)

The **WWW** file is plain ASCII text with filename ABC.www (using Notepad.exe in Windows means Saving with ANSI Code page, otherwise saving in Unicode or UTF-8 will result in added reserved bytes in the header of the file, which could cause problem in processing of the first line).



Each line contains 1 www address; it is possible to use short names (w/o http or www). Time delay between lines corresponds to the current Delay valid for Slideshow.

Example:

www.ibm.com

http://www.framexx.com

http://www.framexx.com

This causes framexx website to be refreshed according to the current Delay value.

The **PLST file** (Playlist file) is plain ASCII text with filename *.plst. Each line contains full command for one item within Slideshow. Full details on PLST specification in Chapter 11 – Playlist usage

Date mask for Slideshow

Here it is possible to select what files are visible within Slideshow, based on Date information.

<u>Activate mask type</u> (Disabled, Fixed date, Fixed period)

<u>Fixed date</u> (the Slideshow will include files from present day to the Fixed date as the oldest)

Fixed period (the Slideshow will include files within this period only. Example – when set 7days, then the Slideshow displays files only from the last 7 days. When Reload is enabled, then every new day the files beyond the 7 days limit will be excluded from Slideshow and the new files from current day will be loaded automatically)

Note – please check the current date settings (visible in System Menu – Date&Time or here in Options – Date mask for Slideshow).

Date format

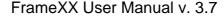
Selection of 12hr/24hr time format

Enable portrait mode

If selected, all photos are displayed in Portrait mode orientation, not important what orientation info is stored in EXIF flag . It is suitable for Slideshow of portrait photos.

Enable external video engine

It enables SW decoding of video files. This is very special option, it is usually best to keep it unchecked as the device has built-in internal powerful 8-core HW GPU (graphical processing unit).



SW video decoding consumes a lot of processor computing power and with high-quality (or high frames rates) video files the decoding cannot be processed smoothly. It can result in slow choppy video playback This option is suitable for playback of simple (low-res) video files and has the following advantages

- seamless transition between video files
- more fluent RSS/TXT feed
- wider video codec compatibility

OPTIONS - Network options

LAN server

As the standard LAN item in the menu can search/browse just within the current local LAN subnet, these settings are required in the following cases

- Local LAN server is located in the same subnet. Then this option will speed up the availability of this server (typically – 1 server in home network)
- Local LAN server is located in another subnet. Then this option is the only way to reach such server (standard LAN/uPNP search/browse can work in single subnet only)
- 3. Remote LAN server is located anywhere on the internet. This option is the only way to reach this server.

 (Note: When used for accessing of remote SMB server, it is often necessary to provide/enable the SMB access on remote router/firewall. Standard open ports required for accessing of the Samba shares are 139 and 445, FTP protocol requires port 21.

Fixed server

IP address of LAN server

Username

Password

Domain (optional)

FTP server

FTP server

IP address of FTP server used for browsing via FTP option in Main Menu. When requested to use special FTP port (other then 21), use syntax IP_FTP_SERVER:port

FTP user

FTP password

Web browser options

WWW starts with

Homepage (as defined in WWW address)

Empty

Using WWW menu item in Main Menu will bring up an empty screen. Within the browser, using the Menu key on the Remote Control will open Bookmark Submenu, where it is possible to store favourite websites or load website from this list.

Other options to run html pages (even during Slideshow as standard item) are by using of **www file** from main browser.

WWW address

This URL address of the html page will be used with WWW menu item in Main Menu (e.g. html://www.framexx.com, www.framexx.com,framexx.com)

Preferred WWW desktop version

This option enables display of the html page in full desktop mode as preferred.

Touch to Stop running slideshow (for TAB model only)

FrameXX with installed multitouch IrDA frame (eventually any HID device, like mouse, keyboard...) can work as an information kiosk.

Typical scenario is

- Autostart enabled (FrameXX will automatically start Slideshow after each restart)
- WWW starts with option set to Homepage
- WWW address set to required website

Then FrameXX displays Slideshow until the screen is touched. Then, **WWW address** site is automatically started and user can browse within this WWW site. If screen is not touched longer then **Delay to restart slideshow** parameter, WWW site is closed and Slideshow is again restarted. Slideshow can use all synchronization methods and sources available in the system.

Delay to restart slideshow

When no touch comes within this interval to the screen, the Slideshow is restarted again. FrameXX will open predefined **WWW address** site once screen is touched again.

Enable UPnP

It enables UPnP/DLNA networking browsing from main menu. If it is not enabled, this option is hidden in the Main menu.

Flickr

Flickr account name

FrameXX supports direct access to Flickr accounts.

To be able to view a Slideshow from Flickr, it is first required to enter the Flickr web address of the desired Flickr Photostream.

Note: According to the latest changes in May/2014 regarding Flickr user account policy, it is possible for Free account there with up to 1TB free space, up to 60 collection, max 200MB/1 picture, max 1GB/1 video (up to 3mins duration). Complete info can be found at

http://www.flickr.com/help/limits/#150470666

To be able to provide the photos for FrameXX, it is required to create unique Flickr web_address (You – Your_account – Your Flickr web address) – e.g. http://www.flickr.com/photos/naviion/ . In this example, the word "naviion" is the only unique web_address and must be entered in the "Flickr account name" dialog.

This web_address must be entered prior to entering Flickr from Main Menu.

Flickr quality

25

It defines quality of downloaded/presented pictures from Flickr.

There are 3 levels

<u>Low</u> = approx VGA quality

Medium = approx HD ready quality

High = approx Full HD quality

Since Flickr is providing various formats from the original pictures immediately on the fly upon request of FrameXX, the exact format/aspect ratio and resolution is based on original files.

Note: Please be aware that this selection has significant impact on volume of transferred data from server to FrameXX device.

Enable reload

Synchronization function, for LAN/Flickr/UPnP/Dropbox Slideshow... It enables/disables reload/synchronization of the current running Slideshow with the remote original Slideshow source. Upon content change on remote server location, the current running Slideshow will be adjusted automatically.

Reload interval

It defines interval between 2 consecutive controls (synchronizations), if there is any change between currently running Slideshow and source files on the original server.

Range 1sec - 100hrs.

Enable reload must be active.

Monitoring / Remote control / Proxy

FrameXX account

It defines the FrameXX account on CONTROL cloud (where device is reporting/monitoring to).

Example of typical scenario:

- -Create a FrameXX account on CONTROL cloud (control.framexx.com).
- -Type this new account name in the device (into this field)

Note: First, an account on FrameXX CONTROL cloud must exist. If not, entering FrameXX account in the device will fail.

As a result, you can then follow all FrameXX devices that belong to this account (grouping) on CONTROL cloud (control.framexx.com). Here you can find all information about running devices, as well as full control, history report, etc...

More info in CONTROL cloud chapter.

Monitoring

It enables/disables monitoring in CONTROL cloud. When unchecked, device does not appear in CONTROL.

Remote control

It allows remote control of the device from CONTROL cloud. Level of remote control depends on current CONTROL license (Free or Pro).

Remote control settings

Note: It can be used untouched with default settings (internal system ftp framexx server used), but then it is not possible to upload files to device from internal FTP manager

FTP server

This remote FTP server is used for CONTROL cloud file and playlist storage.

If set default, then the device is controlled via system FTP account. Default FTP server settings support only the device remote control. It does not support file operation, therefore it is not possible to use dedicated FTP storage space and Playlist creator wizard cannot work.

We strongly recommend that you use your own dedicated FTP server to enhance operation security and consequently, open access with any standard FTP client for handling of files.

Note: FTP server and the following credentials must correspond to the CONTROL cloud account settings!

Selected FTP server must allow simultaneous access for the number of users (best is without limitation), some basic public FTP servers do limit to concurrent connection for 1-3 users which cannot work with FrameXX devices.

FTP user / FTP password

Credentials for remote FTP server.

If server is Default, then keep this untouched (default)

Remote control interval

There is a delay between two consecutive device controls on CONTROL cloud if any new command has been left for the device by the user. Default is 20 sec, after setting up the device communication with CONTROL cloud, it is recommended to increase the interval (to lower server load).

Include files and folders

A control XML file generated by the device for remote communication with CONTROL cloud will contain full file listing of all local storage locations (Memory, USB, SD). It can heavily increase data traffic (due to high number files and folders). However it allows, to remotely select any file(s) or folder(s) to be started, deleted, etc...

SOCKS Proxy Settings

This option enables FrameXX to work in corporate environments where all internet traffic is directed via Proxy server.

Proxy server

Proxy server name

Proxy port

Proxy server port

Proxy user

Proxy password

Enabled communication with connected monitor

This option opens communication for connected supported monitor. Current firmware version supports Philips Digital Signage series monitors (Q, D, E, V, X lines) with internal protocol (SICP – Serial Interface Communication Protocol) version 1.87 and higher.

Monitor settings

If FrameXX is connected to a supported monitor and Communication enabled (see previous parameter), then it is possible here to adjust monitor parameters.

Following parameters can be adjusted:

Monitor ON / OFF

<u>Input source</u> – selection of an active monitor input (HDMI1-2-3, DVI,

DP,VGA...)

Volume speaker

Brightness

Contrast Color

Color temperature

Sharpness

<u>Gamma</u>

Backlight

Picture format

Developer settings

The following options are used in very special cases, any change in these fields must be processed very carefully.

Monitoring server

For special instances, when user requests using of his own CMS system, it is possible to redirect all monitoring (LOG) communication from the FrameXX system server to a separate FTP server.

Syntax is - ftp://user:passw@server [/folder]

Compatible Log

This option will enhance time precision information by adding seconds in the monitoring LOG file. As default CONTROL cloud does not support this format, use of this parameter must be processed by separate cloud procedure.

Experimental video player - Do not use this option.

OPTIONS - Audio options

Background music

It enables MP3 music playback during the Slideshow.

The MP3 file(s) must be placed in the top directory of the current Slideshow. There are the following options

Off – music is not played

<u>Sequential order</u> – music files are played in the order exactly as displayed <u>Shuffle</u> – music files are played in random order

Note: MP3 files are visible in Folder selection, but cannot be started directly. The visibility is for review of available music files only.

Volume

29

Range 0-100, can by adjusted during playback from the remote control as well.

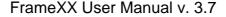
OPTIONS - System options

Autostart/Reboot options

Start Slidedehow after reboot

It enables/disables the ability to run the last used Slideshow (top line in History) immediately after restart.

Note: History folder contains just recent Slideshows (starting with Start Slideshow command). Single files or Slideshows started directly from the



line of file appearance (in Manual mode) will not be saved in History, and therefore cannot be automatically started immediately after reboot.

Endless boot

If previous parameter enabled, device waits up to 60sec to get connection for requested Slideshow (when LAN/UPnP, FTP, WWW, Dropbox used). It is enough for all standard scenarios.

However, if device restart is connected with LAN infrastructure restart or mobile hotspot restart, setting valid LAN connection can take much longer. This option enables to wait endlessly for this valid LAN connection.

Repeated Reboot

It is very practical to restart the device once a day to refresh all internal memory and cache.

Repeated Reboot Time

If Repeated Reboot enabled, then device is restarted every day at this time.

Immediate Reboot

Device is immediately restarted. This function can be identically processed with a long press of ON/OFF button on the device (SIGN) or on remote control.

Copy remote files

This feature enables unique non-streaming functions. First, all requested files for Slideshow are copied to Local memory (MEMORY,USB,SD). Then, the Slideshow is played from this local memory only (therefore no streaming every picture).

This function is very useful for limitation of internet traffic, for mobile hotspot connections or for simultaneously running devices when more video streams could be requested at the same time. In such situations, a Wi-fi router cannot provide sufficient bandwidth.

Important – when the reload/synchronization function is enabled, then upon changes of remote files for Slideshow, the files in the local memory are synchronized then on the background during the running Slideshow. Note: If enabled, when the Slideshow contains a lot of files, it can take a long time at first to copy all the files to the FrameXX local memory.

Copy folder

30

Selection of the local memory storage folder for copied files (MEMORY, USB, SD)



When Copying remote files is enabled, then each remote Slideshow creates a local copy (in subfolder).

4 locations available – MEMORY (default), SD, USB1, USB2 (very rare case and numbering is assigned upon insertion order – therefore can be used just in case when permanent one USB slot is permanently occupied)

Visible information

Selection of status/progress information displayed on screen.

Enable photo numbering

Total number of photos and current position within Slideshow

Display progress rotational circle

Show indicator of progress/loading during the Slideshow in the right bottom corner

Check for update

Check for a system update over the internet. If found, a notification message is displayed in the bottom line ("New firmware available"). Nothing is processed automatically, it is necessary to run the update manually (Internet update from System Menu)

All status information about loading during slideshow
Enables/disables all progress messages during Slideshow

Local storage

It enables/disables direct access menu buttons in Main menu. SD usage is typically disabled for HOME/PRO due to a missing SD slot. Or, it is possible to disable USB2 if just one USB memory will be used. It simplifies the Main menu visibility and makes operation with the remote control faster (similar to UPnP enable/disable option).

Device name

Device name is used for

- Remote communication with CONTROL cloud and recognition during reporting and remote control (when enabled)
- Use of IMAGE/TEXT file in Vertical/Horizontal banner

Default name is FrameXX + WiFi MAC address and can be changed to almost any string (avoid using following strings % # @:,).



For larger installations, it is advisable to include current location into Device_name, it helps for better orientation on the CONTROL cloud.

Web interface

FrameXX device contains a web server that allows direct access to FrameXX via LAN in any web browser. *Note - any change requires restart of device.*

Enable web interface

Enabled / Disabled

Web interface port

Default port 8080, can be changed to any value higher than 1024. To access the device in browser, type in the command line IP:port, e.g. 192.168.0.100:8080

Username / Password

Default credentials are username: admin password: framexx

Language

Selection of requested language (English, German, French, Spanish, Czech, Dutch, Portuguese), English is default.

Wifi Remote control

This option allows to fully operate Framexx device from any other android device (phone, tablet..).

Load settings

File framexx_settings.xml (placed in root of USB or SD) is loaded into the system. Settings also contain the History.

Save settings

Current device settings are saved in file framexx_settings.xml (placed in the root of USB or SD). Settings also contain also the History.

Clear history



This completely erases the device History bookmark.

Clear Dropbox credentials

As Dropbox is working in a secure mode by supplying encrypted tokens to the host (FrameXX) device, only entering Dropbox credentials in the internal Dropbox login dialog allows a full access to the Dropbox account. If you would like to use another Dropbox account, it is first necessary to erase these secure tokens in FrameXX. Once proceed, the device is not anymore assigned to any Dropbox account and it is possible to enter new credentials during the next Dropbox visit.

Due to this secure mechanism, it's not safe to use Dropbox Slideshows from History bookmark (for Autostart, e.g.), because in case that device will be re-assigned to another Dropbox account, this will not work.

Default settings

Languages

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This option consists of 2 phases that run separately.

 $1^{\rm st}$ phase allows to return to factory default settings (it is possible to reject it with NO selection)

2nd phase allows to clear internal memory.

It returns all settings back into factory default settings:

Delay between pictures Layout Dissolve Aspect ratio Default Order of files Alphabetic Start opacity End opacity Show numbering Enabled Vertical banner None Horizontal banner None Text speed Normal Photo/Video Photo + Video + www Date format dd/MM/yyyy kk:mm Music Off Volume 50 Reload of files Disabled Reload check interval 20 Fixed IP **Empty** Flickr account **Empty** Flickr quality Iow Reboot enabled Disabled Folder selection after reboot Disabled Copy files before start Disabled Path of files empty Device Name FrameXX-[MAC]

English

Max number of files FTP Reporting FTP account 20.000 Disabled Empty



9. Remote access - Direct (intranet)

Generally, this is direct access within your own network, therefore it is expected that all ports are open for communication. This can be used for larger remote installation, but definitely the security issues will arise as open ports on remote routers will be needed.

The biggest advantage is direct operation with the device where all commands and reports are processed immediately and sent actively from device back to the PC.

This direct access relies on **Web interface** settings in Options. By default, communication is opened via port 8080, with default credentials **admin/framexx** (all can be modified).

Go to System Menu-Status, check the current device IP address assignment and type in the command line (in any browser)

IP_address:port (example 192.168.0.200:8080)

Login popup will appear to enter the credentials.

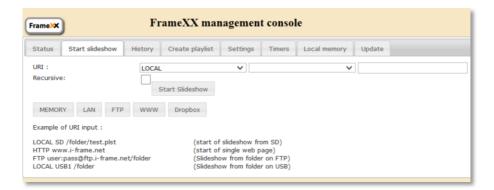
The Web interface contains 9 sections (see below, 1 section can be hidden/disabled when device is not connected or connected to an unsupported monitor) and the FrameXX device can be fully controlled via this Web interface.

This method represents very practical style how to work with internal memory (13GB available), as well as it is possible to update device with new firmware version located in PC or to see real current screenshot from running device.

Section "Status"



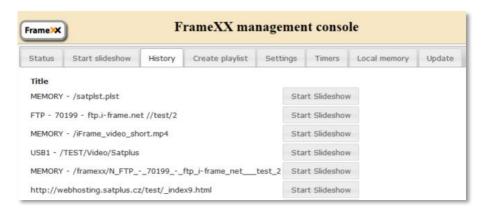
Section "Start slideshow"





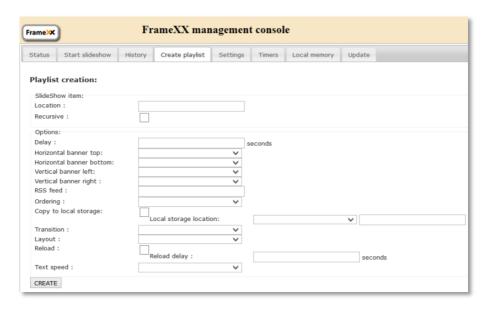
36

Section "History"



Section "Create playlist"

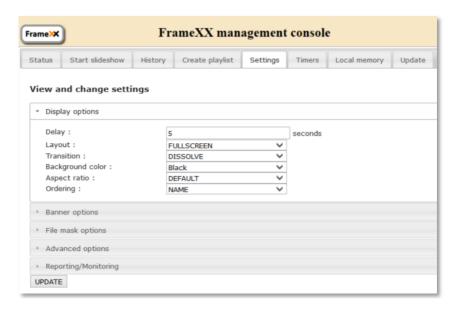
This is very basic implementation, for operation with Playlists we strongly recommend to use Playlist wizard in CONTROL cloud.



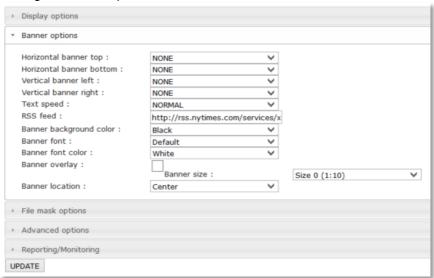


Section "Settings"

This section contains 5 subsections grouped by settings options. Settings – Display options:

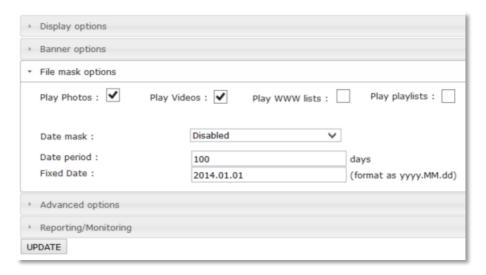


Settings - Banner options:

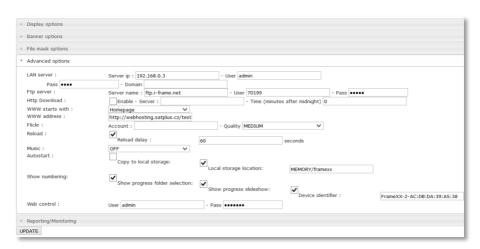




Settings - File mask options:



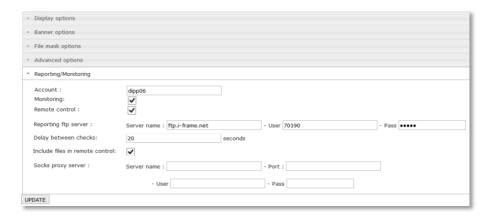
Settings - Advanced options:



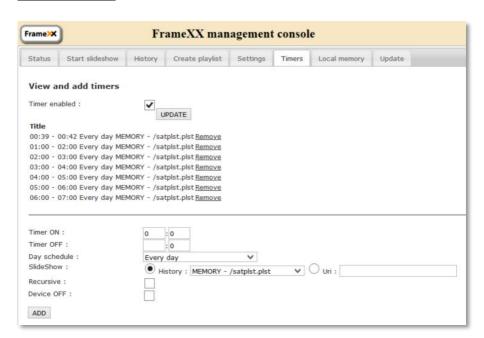


39

<u>Settings – Reporting/Monitoring:</u>



Section "Timers"





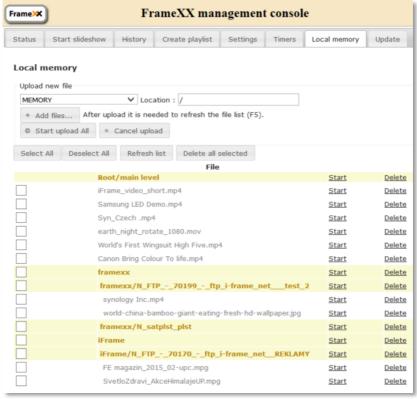


Section "Local Memory"

It is possible to address any local storage location from the dropdown menu (MEMORY, SD, USB1, USB2).

Field "Location" contains folder, if entered non existing folder then new will be created.

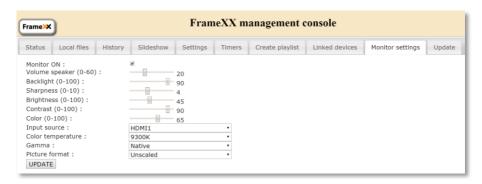
Once Copy procedure is completed, press "Refresh list" button to get current file listing.



Section "Update"



If supported monitor is connected to the framexx via RS-232 cable and (Options-Monitoring/Remote control / Proxy – Enabled) communication with connected monitor is ON, then this interface contains one Tab more – Monitor settings.



At this moment, Philips Signage monitor series is supported only (SICP - Serial Interface Communication Protocol) version 1.87 and higher. If supported monitor is connected, then it is possible to control / change following monitor parameters:

Monitor ON /OFF (standby) – monitor must be set in System - ECO – Normal mode (not System - ECO - Low Power mode)

Volume speaker (mostly 60 levels, some monitors have 100 levels)

Backlight (100 levels)

Sharpness (mostly 10 levels, some monitors have 20 levels)

Brightness (100 levels)

Contrast (100 levels)

Color (100 levels)

Input source – be aware, not all video input sources all available on all monitors

Color temperature

Gamma

Picture format



10. Remote access - CONTROL cloud

The FrameXX CONTROL cloud server (control.framexx.com) allows to control assigned devices located anywhere around the world via any webbrowser.

First, you must be sure your device contains firmware version 3.1 or higher. If not, please process firmware update, otherwise FrameXX CONTROL cannot run properly.

It's generally recommended to upgrade system to the latest firmware version (currently version 3.6).

Short guide how to use it:

Create FrameXX account on FrameXX CONTROL cloud

Please follow the instructions, do not forget to enter Timezone that corresponds to the locations of FrameXX devices.

New account becomes active once confirmed registration link you have received in the confirmation email.

Set device for remote control.

- 1. Define device name (**Device name**) or if you prefer you can keep default name (FrameXX-"Wifi MAC")
- 2. Go to **Monitoring / Remote control / Proxy** and enter FrameXX account as registered already on CONTROL cloud
- 3. Be sure you have **Monitoring device** option Enabled as factory default. This is passive part of communication (device reports current status) that allows to see all assigned devices on cloud and review operation history)

Following steps are mandatory:

- 4. In the device, enable the **Remote control** (see bellow). This option allows actively control and operate the devices, it is disabled in default factory settings.
- 5. Define FTP/CMS server.

If you intentionally wish (and have) own FTP server, then use this option, otherwise you can leave it.

If you use default settings (FrameXX server), **Monitoring device** and **Remote control** works as expected, however you will be limited to store files for Slideshow and Playlist usage (security reasons, working on system framexx server).

If you define FTP server, then all features are available (do not forget to edit new FTP server address in FrameXX account)

- 6. Define Remote control interval (period when device checks if any new command on FTP/CMS server present), default is 20 seconds. Please note that short interval can cause higher server traffic and consequently can limit server responsibility
- 7. In case you wish to be able operate local memory on device, enable option **Include Files and Folders**. Then, you have remotely available full local file listing (MEMORY, USB, SD) on CONTROL.

Please be aware how many files is stored in memory locations as this can lead to higher data traffic (even 8GB memory can carry more then 1K files..).







General features

This is the most universal device remote control that can be accomplished in any network. The device just requires basic internet access for download, even mobile connection can be used. Framexx device uses communication out only, therefore it is not needed to make any settings on local router or firewall. This works well even for large corporate installations and preserves all security aspects.

The communication is processed via independent ftp server. When set as Default, the device is using FrameXX system server. However, FrameXX can be configured to communicate with any FTP server.



Note: if remote communication is forwarded to other FTP server, be sure the server supports an unlimited number of simultaneous accesses as some basic public FTP servers have a limit set for a few connections (1-5) which prevents proper FrameXX remote communication.

Because the communication is based on full configuration XML file, almost full set of device commands is supported and it is possible to change majority of device parameters.

The device is operating according to the XML configuration file located on FTP server and is checking it in regular intervals. This interval can be set in **Remote control interval** parameter (default is 30 sec) and this value represents longest interval between sent commands from CONTROL cloud.

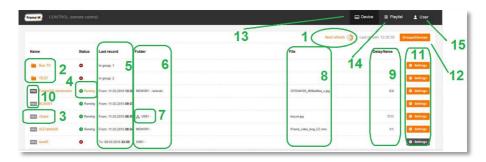
CONTROL cloud main features:

- Centralized monitoring and administration facilities
- Remote control
- Control of individual devices and groups
- Creating playlists (Drag and Drop)
- Remote settings (even detailed device parameters and groups)
- Full-screen presentations archiving
- For increased safety, possibility to use of private FTP server for device management and display content
- 2 levels of access FREE (includes basic settings and device status), PRO (full functionality)
- Onetime fee for obtaining a license, the license is transferable to any device (the number of active licenses corresponds to the number of devices with full access at any given moment, the license can be transferred between devices)

Differences between FREE and PRO license type:

	FREE	PRO
Basic surveillance overview of all devices/groups from one account	~	V
Basic device settings (Device ON/OFF, Restart, Stop Slideshow, Transition, Delay, Remote control interval, Start Slideshow from History, Start Slideshow from command line)	~	V
Advanced device settings (90% of all full local settings, Timers, Start Slideshow with files in the device (browse), Start Slideshow from FTP, Copy file(s) to device, Delete file(s) in device, Create folder(s) in device	×	V
Playlist creation wizard on assigned FTP server	~	V
Device assignment into groups, working with groups		V
General history view	~	V
Detailed history view with export	×	~

Basic view of all devices / groups from one account



- Counter to next device status refresh (according to User profile settings – interval). It is possible to refresh the list anytime – click on "Next refresh" or to use browser refresh from cache (F5), eventually full browser refresh (Ctrl+F5)
- Single devices can be grouped into groups (with PRO license).
 Then, you can send commands to all devices contained in this group.

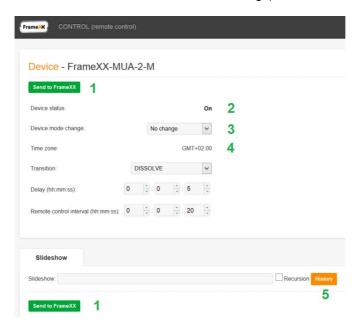


- History here it is possible to enter LOG files from all completed Slideshows
- 4. Current device status. If device is running and has PRO license active, you can access current Slideshow LOG
- 5. Exact information, when last Slideshow has been terminated (red symbol Slideshow not running) or at what time it has been started (green symbol Slideshow running)
- Folder of the last Slideshow (red symbol Slideshow not running) or folder of current Slideshow (green symbol – Slideshow running).
 Folder appears only when Slideshow uses folder, for example web presentation (WWW) does not use folders, therefore field is empty
- 7. Symbol if Recursion flag is active (Recursion means playing of complete folder structure, not only main folder)
- 8. Last file from the last Slideshow (red symbol Slideshow not running) or currently presented file (it is affected by refresh interval settings) of current Slideshow (green symbol Slideshow running).
- Current Delay (for images it is the period of exposition till the next image transition, for website refresh period, it does not effect for video) and total number of items in Slideshow
- 10. FREE or PRO symbol of current license
- 11. Device remote control. Device must have remote control enabled (and monitoring) and must use identical FTP remote control settings as in current FrameXX account. Orange colour button=running device or running recently, Grey colour=device operating in the past with possibility of being remotely controlled (no guarantee device is connected at this moment)
- 12. Enter to Options device/group management, licensing (explained further)
- Back to current device list view the list is always processed (not from cache), therefore the view is refreshed and corresponds to current moment
- 14. Enter to Playlist wizard. Note when FTP remote server is defined as Default, Playlist wizard is not supported (the reason is shared system storage space, therefore all users would share all data which is not acceptable).
- 15. User account settings, log-out.

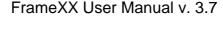
Basic settings of individual devices / groups

There are 2 control levels of device remote control – Basic and Advanced (it requires PRO license).

As a common condition, controlled devices must have Remote control enabled (in Monitoring / Remote control / Proxy) and properly configured (either keep "default" value or define own ftp server – this must be in accordance with FrameXX account settings).



- Button that sends current settings to the device. This button is placed in 2 locations (top, bottom) and has identical functionality
- Device Status. As the colour of the Settings button in Basic view may not exactly reflect current device status, here it is possible to find out an exact information
- 3. Here it is possible to change current device status from the following options:
 - -No change (default, it is expected that sent commands change device settings not device mode)
 - <u>-DEVICE ON</u> (device will be ON, regardless of what the current mode is)
 - <u>-DEVICE OFF (sleep)</u> Device will be in sleep mode. Sleep mode is special mode when the device has HDMI output off (therefore it allows the preconfigured monitor to enter standby mode), but it is operating in basic mode with Wifi/LAN/IrDA enabled, therefore it is possible to restart device (locally, remotely) anytime.





- <u>Restart</u> Device will be restarted (if device autostart is defined then Slideshow can be started automatically after restart)
 <u>Stop Slideshow</u> – Device will return to basic file selection screen.
- 4. Time zone is a very important parameter! Time zone must be identically set in the device as well as in FrameXX account settings. If not, then red warning message will be displayed here and it is recommended to adjust the Timezone immediately, otherwise the Time information during the Slideshow (and in History) may be not correct.
- Start Slideshow command line can be entered manually or it is possible to use menu and select Slideshow from device history (already completed Slideshows).

Advanced settings of individual devices / groups

Advanced settings appear with devices that have PRO license level enabled (a 20-digit unique code is required).

There are a lot of settings (number of supported functions varies according to current implemented features in the device), but the goal is to support a full set of functions available locally in the device via menu.

For exact descriptions of these functions, please follow Chapter #8, Settings.

Significant difference is in command window (located in bottom).



Here it is possible to define Timers, command file operations (Delete, Copy) and select files from FTP server and from any local device memory (MEMORY,USB,SD).

COPY-DELETE



It is possible to Delete File Delete Folder Create Folder Copy

All functions are working with local device memories, here it is possible to fully control the files remotely within the device.

A Location can be used by any local memory, i.e. MEMORY, USB1, (USB2) or SD.

Command can contain either folder (copy all files, optionally with Recursion flag – as well full subfolder structure) or individual files.

Commands can be combined, therefore it is possible to simultaneously send any number of various commands (for example 1xDeleteFile command, 2xDeleteFolder command and 3xCopy commands...)

TIMERS



The FrameXX device supports an unlimited number of Timer events. Each Timer definition can carry separate parameters, these are:

- 1. Slideshow
- 2. Slideshow can be selected from Device History, from any device local memory or from assigned FTP server
- 3. Slideshow can carry Recursion flag (playback of all subfolders)
- 4. Each Timer event can be defined according to the Time interval and Day scenario (when Timer is valid). There are the following Day scenarios supported



Every day
Working days (Monday-Friday)
Working days (Monday-Saturday)
Working days (Sunday-Thursday)
Working days (Saturday-Thursday)
Weekend (Saturday-Sunday)
individual days (Mo-Su)

Working with Playlists, creating, editing

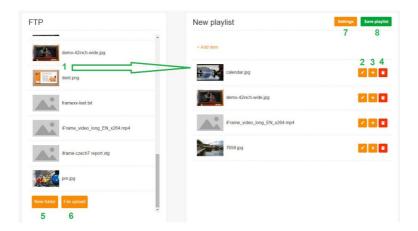
The CONTROL cloud with enabled PRO license contains a Playlist wizard. With this wizard it is possible to simply create your own playlist (extension plst) – exact Playlist description – see Chapter #11.

Please note, it is required to use your own FTP server settings in FrameXX account. If using "Default" value, then the system FTP server is used and for security reasons (sharing of identical server space) it is not allowed to use Playlist wizard.

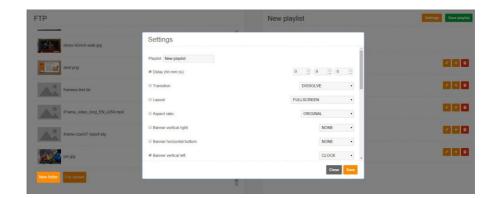


In the main Playlist window it is possible to start with new Playlist or to modify any existing.

Playlist wizard offers following options:



- Pictures, videos (files) located on assigned private FTP server. You
 can use Drag&Drop to move item into the playlist.
- Once an item is moved into the playlist, there are set basic predefined values. All these item values can be modified, each playlist item can hold different individual settings
- 3. Replication button it doubles the current playlist item in playlist
- 4. Delete button
- The CONTROL FTP user interface contains a very simple FTP client. It is possible to create a New folder on FTP and organize files accordingly
- It is possible to upload new files to FTP server. Please note, this is simple FTP interface, therefore it is recommended for big file uploads to use a separate FTP client (as there you can get a lot of other features, e.g. file upload resume, multiple upload optimization etc..)
- The Playlist contains global parameters valid within current playlist (overridden by separate parameters in each line). These parameters, as well as playlist name can be edited here.
- 8. Once completed, Save playlist to FTP server.



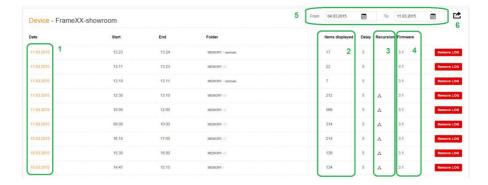


History of presentations in the device

One of the most important features is the ability to review finished activity of devices. All Slideshow are creating the History records (LOGs) and these records can be evaluated later.

There are 2 levels of History records – Basic and Detailed (available with PRO license).

Basic History



- 1. Enter to Detailed LOG view (PRO license)
- 2. Total number of displayed items within Slideshow
- 3. Recursion flag in the Slideshow
- Device firmware version at the time when Slideshow has been running
- Selected period it is possible to define the period windows to limit the number of displayed History records
- 6. All History records can be exported to general text log file

Detailed History

Here all detailed information is available not just about presented items (date, time HH:MM, seconds optional), and filename, but as well as complete Slideshow settings.

This History level can be used as confirmation for Slideshow expositions for business case reports, for example.





Options - device/group management, licensing

This option (item#12 from basic view) enables the definition of new groups, assigning/removing devices to/from group, as well as assigning and changing License codes.

Once everything is done, press Finish to save all the changes and return back to Basic view window.

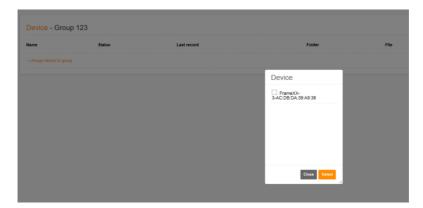
Assigning of new License code - >



Removal of License code (possible transfer to FREE device) ->



New device assignment into group (can be selected only if device has current PRO license) ->



11. Playlist usage

The PLAYLIST file can be manually started from a list of files or run with other files with the Start Slideshow button.

There is even possible to start a PLST file automatically upon USB or SD memory insertion (if filename of PLST is "autorun.plst").

PLST is line structured text file where each line represents individual PLST item with separate options.

A PLST file is processed in the following 3 phases:

- 1) 1st phase PLST file accepts all current settings from device
- 2) 2nd phase PLST looks into general PLST section HEADER where are located common parameters are located for all PLST items
- 3) 3rd phase PLST processes every line and sets appropriate parameters for this item. These parameters are valid just for the specified line.

Next line is processed again from the 1st phase

Parameters are separated with "," symbol
Parameters are not case sensitive
Comments (not functional lines) begin with symbol "#"
HEADER: – section with general settings form PLST file plst
SI: (Slideshow Item) – each functional line line must begin with "SI:"

SD, USB1, USB2, Memory - local storage.

Can be used as well relative path current to PLST folder, e.g. SI: Subfolder/123.jpg

 $\label{eq:ftp.framexx.net/123.jpg} FTP \ remote \ location - \underline{ftp.FrameXX.net/123.jpg} \ or \ with \ credentials \\ \underline{ftp://username:pasword@ftp.FrameXX.net/123.jpg}$

WWW remote location – http://www.cnn.com or www.cnn.com or <

STREAM remote location (when rtcp stream requested) – Stream://www.stream.net

Example of plst file

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HEADER,D:10, LAYOUT:FULLSCREEN, NUMBER:FALSE, SILENT:ON, HB:NONE, VB:NONE, TRANS:DISSOLVE, TXIM_NAME: IF-show,TXIM_LOCATION: SD/iFrame SI:ftp://70199:70199@ftp.FrameXX.net/ds-13.jpg,,HB:info, VB:IMAGE SI:http://www.FrameXX.net

SI: FolderA/23.jpg

identical location as PLST file, one folder deeper)

SI: USB1/iFrame/ABC.jpg,, ar:zoom, VB:image

SIPREF:stream://212.79.96.134:8015, TIM:30, D:300

This video stream will start repeatedly at reaching 30mins (12:30, 13:30 - according system time) and # playback will last 5 minutes (300 sec)

KEY	AVAILABLE PARAMETERS	DESCRIPTION	EXAMPLE
D	<number in="" seconds=""></number>	delay to the next photo (in seconds), duration	D:20
НВТ	NONE, TEXT, IMAGE, CLOCK, INFO	Horizontal banner top)	
НВВ	NONE, TEXT, IMAGE, CLOCK, INFO	Horizontal banner bottom)	
VBL	NONE, TEXT, IMAGE, CLOCK, INFO	Vertical banner left)	
VBR	NONE, TEXT, IMAGE, CLOCK, INFO	Vertical banner right)	
		name of the identifier used to retrieve image	
	<filename expected<="" extension,="" td="" without=""><td>or text file to be used in a banner,no</td><td></td></filename>	or text file to be used in a banner,no	
TXIM_NAME	*.txt for TEXT and *.jpg for IMAGE>	extension needed, only file name)	
			TXIM_LOCATION:sr
		location where the image or text file for the	TXIM_LOCATION:ftp TXIM_LOCATION:U
TXIM LOCATION	<path for="" location=""></path>	banner can be found)	TXIM_LOCATION:M
		barrier carrier round,	_
BLOC	TOP LEFT, CENTER, BOTTOM RIGHT	IMAGE or CLOCK position within banner	
BSIZE	<number 00's="" corresponding="" in="" size="" to=""></number>	banner size	BSIZE:300 (identical :
	BLACK, BLUE, DARK GRAY, GRAY,		
	GREEN, LIGHT GRAY, MAGENTA, RED,		
втс	WHITE, YELLOW	banner text color	
BOS	FALSE, TRUE	banner overlay	
	BLACK, BLUE, DARK GRAY, GRAY,	,	
	GREEN, LIGHT GRAY, MAGENTA, RED,		
BBG	WHITE, YELLOW	banner background	
	VERY SLOW, SLOW, NORMAL, FAST,	Speed of crawling text (if text longer then	
TEXT	VERY FAST	screen width)	
ORDER	RANDOM, NAME, TIME, PATH	Files order within Slideshow	
COPY	FALSE, TRUE	false/true if the files should be copied first	
COPYLOC	<pre><path -="" cache="" for="" local="" location=""></path></pre>	Location to copy before Slideshow starts	COPYLOC: MEMORY/
	DISSOLVE, FADE_IN_OUT, ZOOM_IN,		
	ZOOM_OUT, SLIDE_LEFT, SLIDE_RIGHT,		
	RANDOM, NO_TRANSITION,		
	#KEN_BURNS_ZOOM_OUT,		
TRANS	GRAY_SCALE, PAGE_TURN, BLINDS	Transition type between pictures	
	FULLSCREEN, FOUR_REGIONS,		
	FOUR_REGIONS_CENTERED, RANDOM,		
	CORNERS, SINGLE_FLY, DOUBLE_FLY,		
	RANDOM_FLY, FLY_DOWN, FLY_UP,		
LAYOUT	MAX	Current Slideshow layout	
		Find photo also in subfolders (not effective in	
R	TRUE, FALSE	HEADER)	
AR	DEFAULT,STRETCH,ZOOM	Aspect ratio of the image	





12. Special system files, special features

IFR STRUCTURE

.ifr file allows operation with Memory (Memory can be controlled also via local Web access)
Parameters are not case sensitive

This file can be manually started from filelist or automatically started upon USB/SD insertion (if filename is "autorun.ifr"). Processed is according to the following syntax (XML file):

<autocopy>

<copy from="USB1/Av" to="MEMORY/Averia/" DeleteBeforeCopy="true"/>

<start location="MEMORY/Av"/>

<delete location="MEMORY/Av"/>

</autocopy>

<autocopy></autocopy> obligatory start /end

<Copy from="Source" to="Destination" DeleteBeforeCopy="true" Recursion="true"> if

DeleteBeforeCopy or Recursion not present then no Destination delete accomplished and no Recursion

<Start location="Storage_path"/> where is Slideshow immediately started from

<Delete location="Storage_path"/> deletes any file or folder

WWW STRUCTURE

Simple ASCII file with list of www pages (1line=1URL). Example, file "123.www".

www.asc.com http://www.123.com http://www.123.com

Processed with current system Delay, therefore repetition in first 2 lines (identical URL address) causes refresh of web page. For Windows users - using Notepad.exe in Windows requests Saving with ANSI Code page, otherwise there will be some added reserved bytes in the header of the file (Unicode, UTF-8), which could cause problem in the processing of the first line). In the Notepad, save it with *.* mask, otherwise there will append .TXT in filename (LIST.WWW.TXT) which the device cannot recognize.

WWW COMMANDS IN BOWSER

Within intranet or VPN (where are all ports open) it is possible to control FrameXX device with http commands. This feature can be used by a lot of home automation central units.

Typical http command looks following way:

http://admin:framexx@192.168.0.204:8080/start?uri=USB1/&recursive=false

where syntax is following: username password IP address Communication port (8080 default for framexx) List of commands:

	1-	
URL	Parameter	Description
POST /reboot	none	restart the device
POST /sleep	none	bring device to sleep (disabled HDMI)
POST /wakeup	none	wake up the device (enabled HDMI)
POST /next	none	Go to next photo
POST /prev	none	Go to previous photo
POST /stopSlideshow	none	Stop the slideshow and go to folder selection.
POST /start	uri : The uri to start	Start a slideshow with given uri and recursive flag.
	recursive : true/false	
POST /addTimer	start_hour, start_minute, end_hour, end_minute, day_schedule, recursive, deviceOff, slideshow_manual, slideshow_type and slideshow_history	Add timer (see timers)
POST /settings	key/value of options	Sets the given keys to their values. Beware the booleans are always reset since they are not passed in POST request.



POST /fileupload	location_prefix : MEMORY, SD, USB1 and USB2 location : path after prefix Files to upload	Upload files to location_prefix/location
POST /deleteAll	filesToDelete : file names to delete	
GET /	none	Web page using index.vm template
GET /status	none	Web page using status.vm template (to be included in normal web page)
GET /static/*	none	Static resource included in app under res folder.
GET /preview	none	Screenshot of current state of the app.
GET /deleteMemory	path	Single file to delete
GET /fileList	location	List of files at location using filelist.vm template.
GET /deleteTimer	id	
GET /start	uri recursive	see POST /start
GET /reboot, /sleep, /wakeup, /next, /prev, /stopSlideshow	none	see POST equivalent
GET /httpUpdate	none	Start HTTP download immediately.

System inquiry GET/statusJson returns current device status

Examples:

```
{"state":"FOLDER_SELECTION", "content":"", "currrentSlideShow":""}
```

or

 $\label{localized-continuity} $$\{"state":"INIT_SLIDESHOW", "content":"Loading ...","currrentSlideShow":"FTP - 70200 - ftp.framexx.com//Syno"\}$$

or

 $\label{thm:content} \{ "state" : "SHOW_CONTENT_AUTO", "content" : "//Syno/ds-413", "currrentSlideShow" : "FTP-70200 - ftp.framexx.com//Syno" \}$

13. Developer menu

This special menu can be used for local system changes and for maintenance of Teamviewer and Youtube modules.

Once you in **Status** (**System menu – Status**) press with the remote control consequently Left_arrow Right arrow

Developer menu will appear ->



FrameXX local update

In case that framexx installation file is available to you and located in root of inserted local storage (USB/SD) use this option. This is mainly used for beta testers as for final firmware releases the official Internet update channel will be used.

Teamviewer start

If the Teamviewer module is present in framexx system, it will start Teamviewer.

You will see 9-digit unique code that must be provided to FrameXX remote administrator. Once a FrameXX remote administrator enters this code into system, you must confirm on FrameXX device that you agree with the fact that your device is under full remote control.

This 2-level security system prevents accidental hacking of FrameXX and makes system very safe and reliable.



Youtube update/installation

This option can be used for following situations

- your system is old and does not include Youtube module in system firmware
- your system contains old Youtube module, therefore first uninstall and then install must be proceed here

Teamviewer update/installation

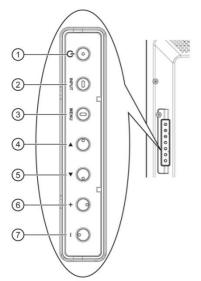
This option can be used for following situations

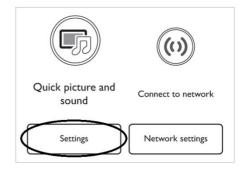
- your system is old and does not include Teamviewer module in system firmware
- your system contains old Teamviewer module, therefore first uninstall and then install must be proceed here

Exit FrameXX

Special option, for Developers. Normally it causes FrameXX firmware restart.

14. HOME – manual monitor adjustment





1 [POWER] button

Press to switch the display on or off.

② [INPUT] button

Press to select input source.

③ [MENU] button

Press to access the OSD menu.

④ [▲] button

Press to move the highlight bar up to adjust the selected item while $\ensuremath{\mathsf{OSD}}$ menu is on.

⑤ [▼] button

Press to move the highlight bar down to adjust the selected item while $\ensuremath{\mathsf{OSD}}$ menu is on.

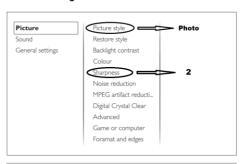
⑥ [+] button

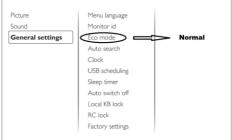
Press to increase the adjustment while OSD menu is on, or to increase the audio output level while OSD menu is off.

[—] button

Press to decrease the adjustment while OSD menu is on, or to decrease the audio output level while OSD menu is off.

Default settings









15. Limited warranty

As the original purchaser of this product, you receive these warranties from Kobe s.r.o..

Your FrameXX (hereafter referred to as "Device") will be free from defects in material and workmanship and will perform in substantial compliance with your user documentation accompanying Device for one year from the purchase date providing proper use of Device.

Any unauthorized or improper use of Device may cause your warranty to become void.

Disclaimer

This limited warranty is the only warranty Kobe s.r.o. makes for Device. To the extent allowed by Law, no other warranty applies, whether expressed, implied, or statutory, including any warranty of merchantability, of fitness for a particular purpose, or of non-infringement. This warranty does not cover accidental damage, wear and tear, or consequential or incidental loss. Under no conditions is Kobe s.r.o. liable for loss of or damage to, a computer; nor loss of, or damage to, programs, records, or data; nor any consequential or incidental damages, even if Kobe s.r.o. has been informed of their possibility.