



SMART PHOTO PRINTER

MODEL

SmartD90-EV

USER'S GUIDE
Version V1.5.2.0



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INTRODUCTION

The SmartD90EV is a new concept of photo printer system designed to offer an outstanding user experience while print your camera shoots, memories, and any instant moment taken at any event: Private parties, ceremonies, corporate events, ...

The system consists of the multi format dye sublimation photo printer CP-D90DW combined with a powerful small computer. The built in software of this new generation computer provides the capability of wireless connection from different devices (Smartphones, Tablets, PCs, high end photo cameras, ...) and with multiple transfer protocols (ftp, http, smb)



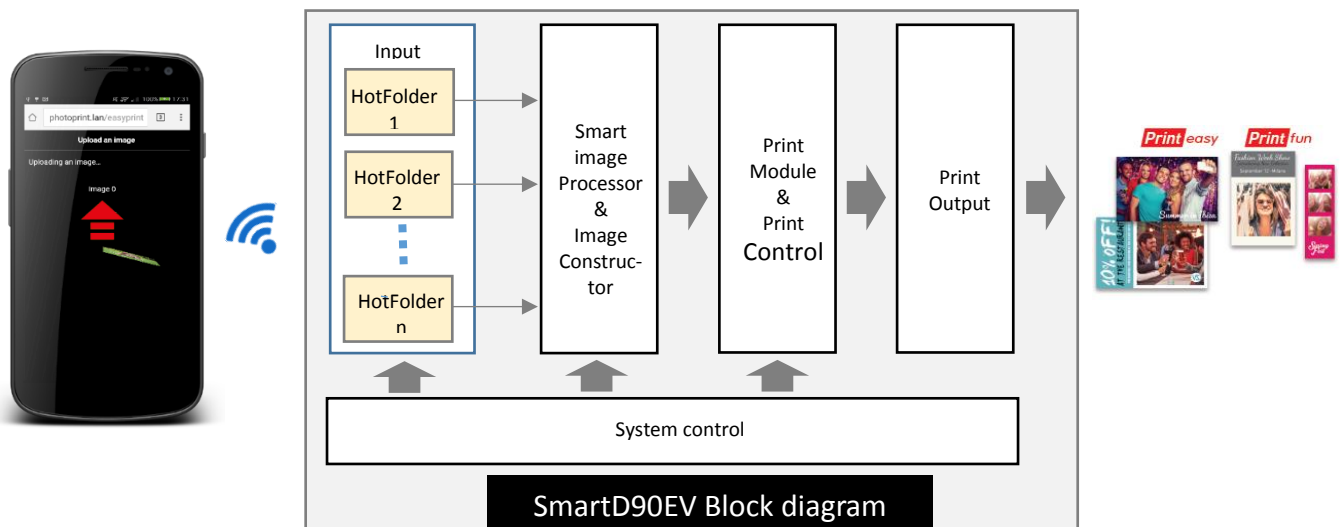
BASICS

The SmartD90EV software offers two different built in printing services based on web technology than can be selected and setup from the maintenance application, that is also based on web technology and provided by the internal web server.

The built in printing web services available are the EasyPrint service and the FunPrint service.

The SmartD90EV also offers printing services from external applications, like the Kiosk Print app available for Android and iOS Smartphones and Tablets, high end photo cameras, and other applications and systems developed by authorized third parties.

The SmartD90EV's input photo/image area is structured in smart containers called HotFolders. The unique combination of the HotFolders, the Smart Image Processor and the Print Module gives large flexibility to print out high quality multi format photos ,add frames and text, and allows the SmartD90EV offer several print services simultaneously: EasyPrint, Kiosk Print app, third parties apps , ...



CONSTRUCTION OF COMPOSITIONS

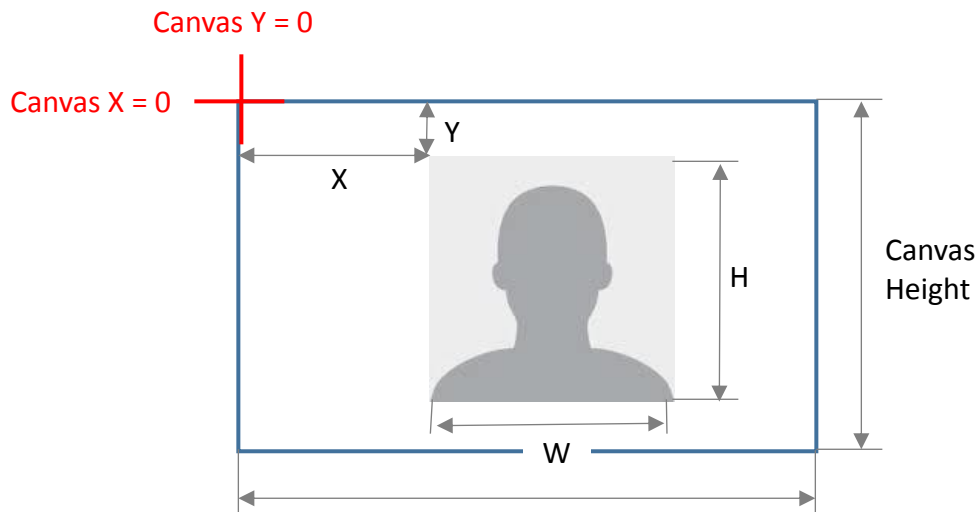
Each one of the input HotFolders has its own image constructor parameters. The image processor uses these parameters to build the image to be printed.

The construction of the image is based on a canvas concept. The SmartD90EV's image processor creates a solid surface base on where the different layers that will create the final image are painted following a certain order. The availability of some layers depends on the selected service mode and the settings of the HotFolder used by the service selected.

Each layer has its own group of settings that can be adjusted from the SmartD90EV's maintenance application.

All the layers are referenced to the upper left corner of the base canvas, being this point the 0,0 coordinate. In order to create a correct final image, all the layers have to be equally sized.

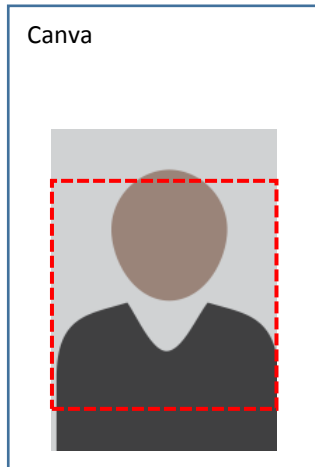
The image/photo layer has four parameters for the image constructor: X, Y W, H. The values must be in pixels and defines the are where the image will be fitted. If these values are blank, the image/photo will match the canvas size.



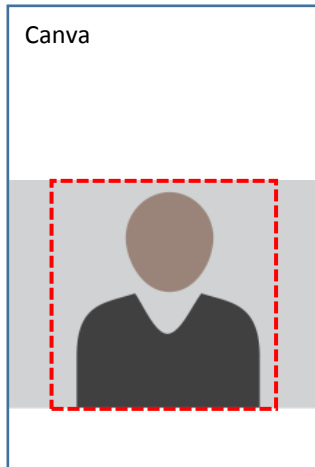
CONSTRUCTION OF COMPOSITIONS

When a specific area is defined for the image, it will be processed and fitted according to the canvas format

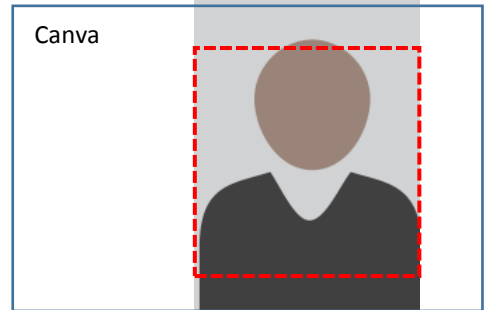
Portrait canvas
Portrait image



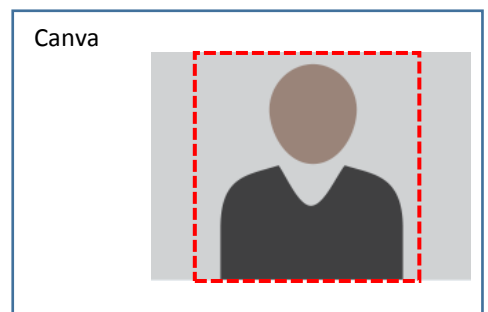
Portrait canvas
Landscape image



Landscape canvas
Portrait image



Landscape canvas
Landscape image



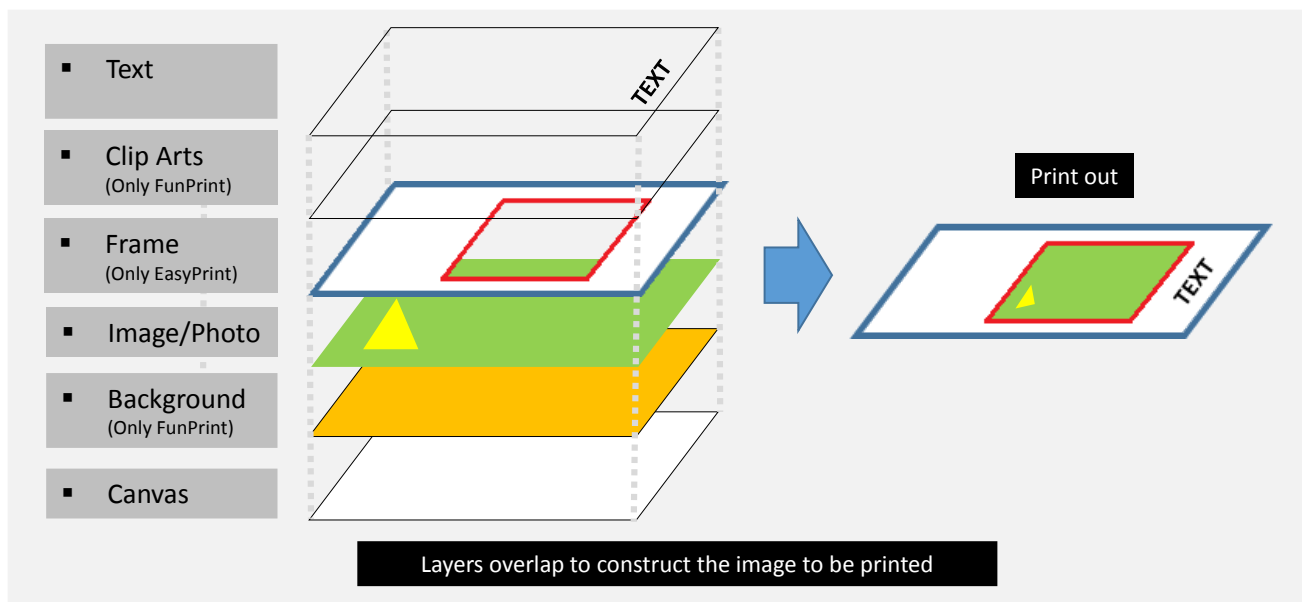
❑ The parts of the image out of the red dotted square (defined area for the image) are not



CONSTRUCTION OF COMPOSITIONS

Main parameters to construct the image:

- **Text:** Disable/Enable, Color, Size, Shadow, Background, horizontal and vertical position
- **Clip Arts:** Select built in Clip Art images.
- **Frame:** Disable / Enable. If enabled, then select the type of frame (*.png file)
- **Canvas:** Width, Height



OPERATION

Easy Print Service

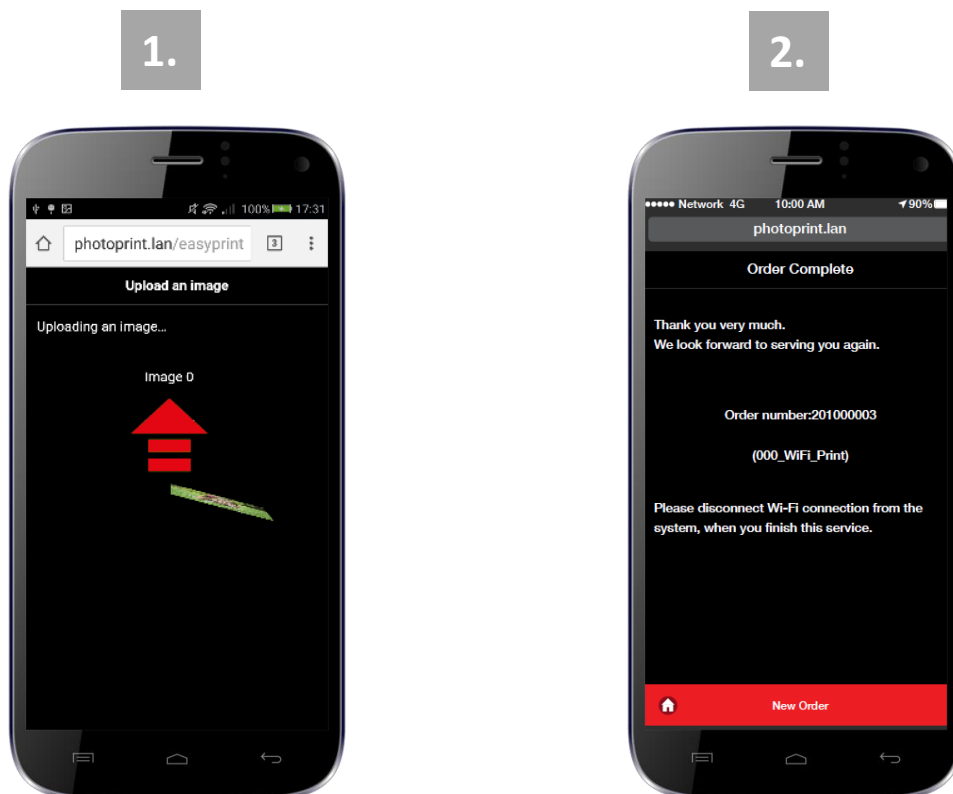
Easy Print provides a quick and easy way of printing stored images from mobile phones and tablets (iOS and Android). This service feature and functions are:

- Quick print service
- One image per print
- Users can select an image from their photo library or take a photo and send it directly for printing thru Wi-Fi connection
- Import custom frames to add to the photo
- No photo editing

Easy Print1

After selecting photo:

1. "Order Confirm" screen will come up.
2. The image will be immediately uploaded to the system. Printing will begin shortly.

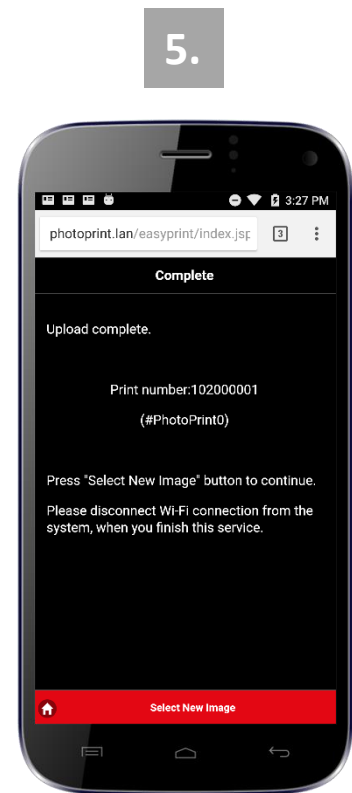
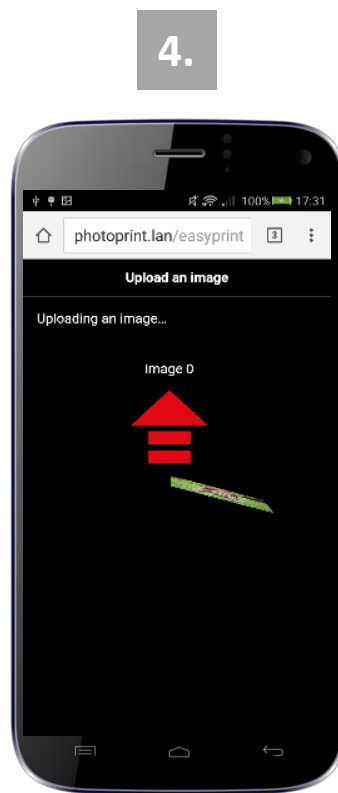
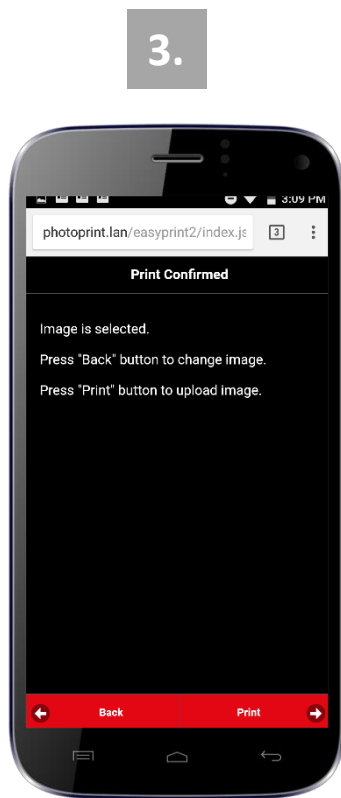


OPERATION

Easy Print2

After selecting photo:

3. Click "Print" button to upload the image to the SmartD90EV. Press "Back" to re-select photo.
4. The image will be immediately uploaded to the system. Printing will begin shortly
5. Once the image has been uploaded the user will get an order ref number that can be used for validation purposes. To continue press "Select New image".



OPERATION

Fun Print Service

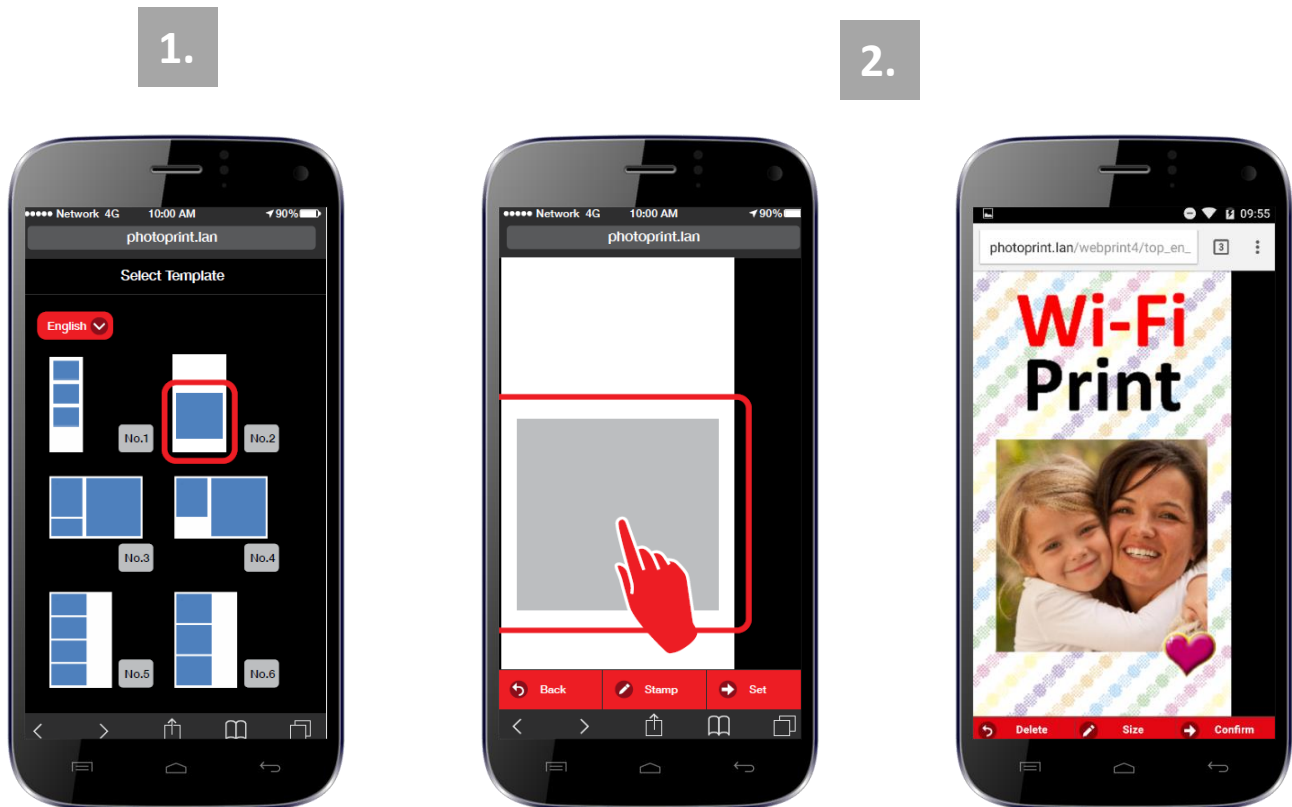
Fun Print allows selection of up to 6 images from your mobile device and place them in a pre-format template. Can preview and edit each image before printing. The feature and functions are:

- Up to 6 images per print
- Users can edit each image (size, angle, position) and add decoration icons.
- Copies are selectable by end-users
- End-users can preview image(s) before sending it for printing

Fun Print

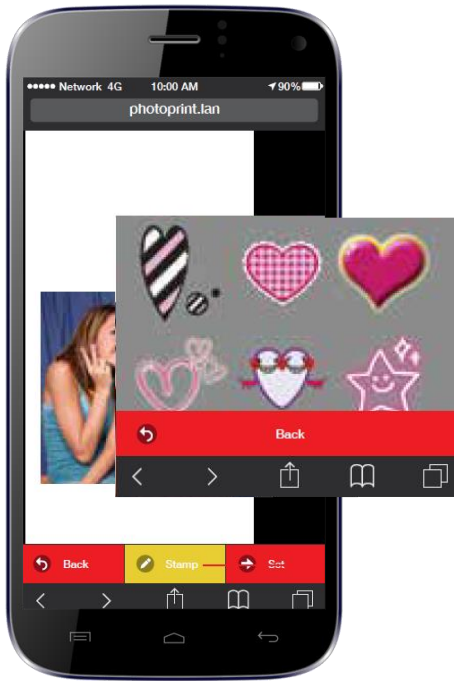
After selecting photo:

1. Choose a template design (No. 1 - 6).
2. Tap on the square to place the photo in that location.
3. **Optional:** click Stamp to show Select Stamp screen. Choose a stamp and select a stamp size. Touch image to stamp.
4. **Optional:** To edit the photo, touch the photo and hold, to show the edit menu.
*Adjust size, position and angle or re-select image (center icon).
5. Click confirm to upload the image and print.

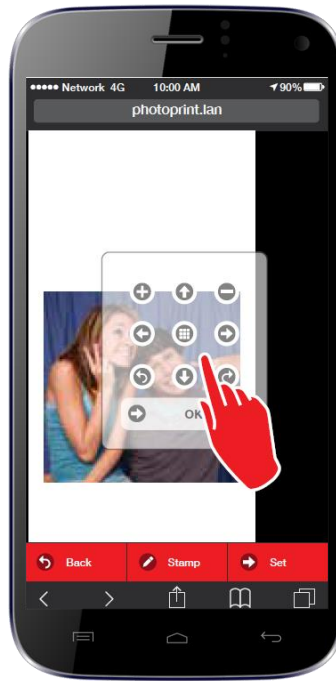


OPERATION

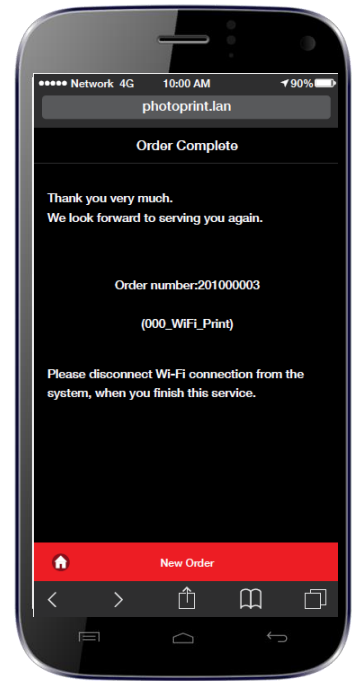
3.



4.




5.

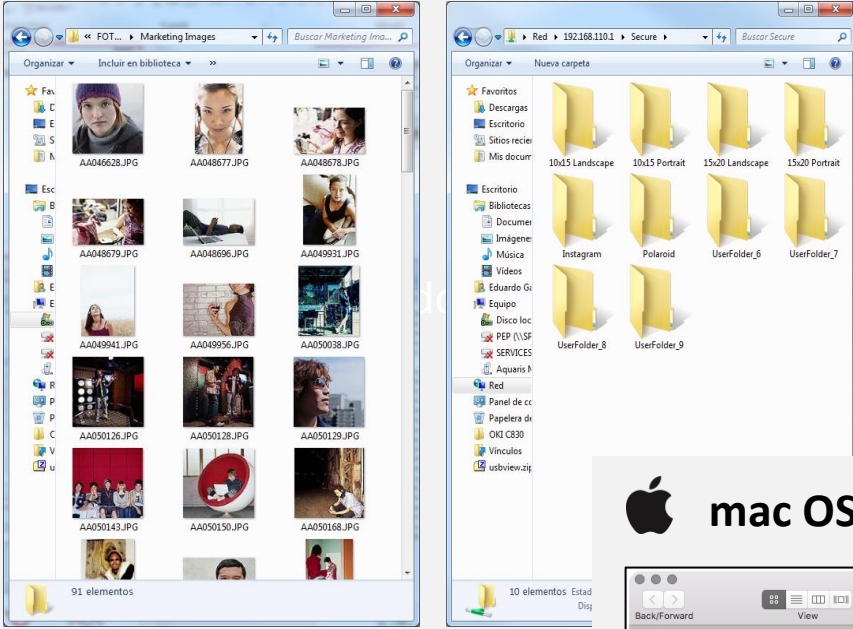


OPERATION

Sharing SmartD90EV Hotfolders with Samba

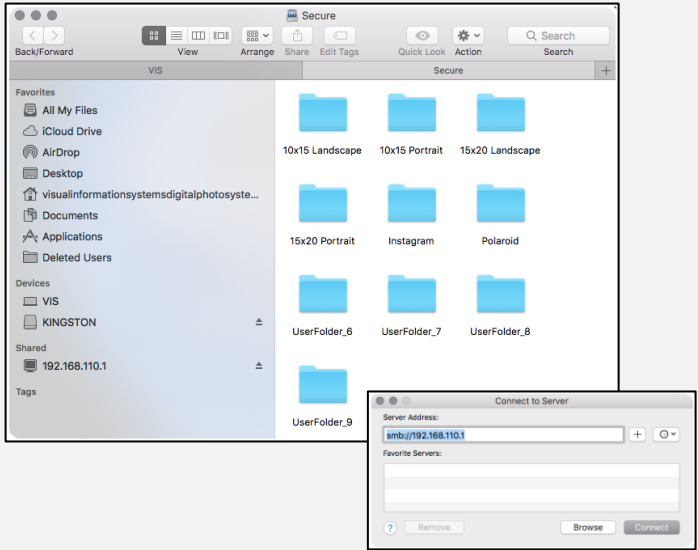
The SmartD90EV implements Samba (SMB) protocol to share its internal HotFolders. It makes very easy create a network connection between computers (MAC, Windows, Linux) and the SmartD90EV and then send the file images stored in these devices by simply “Click” ->”Drag” and “Drop” the files into the HotFolders.

 **Windows**



Windows File Explorer -> type: \\192.168.110.1

 **mac OSX Sierra**



Finder -> Go -> Connect to server -> smb://192.168.110.1



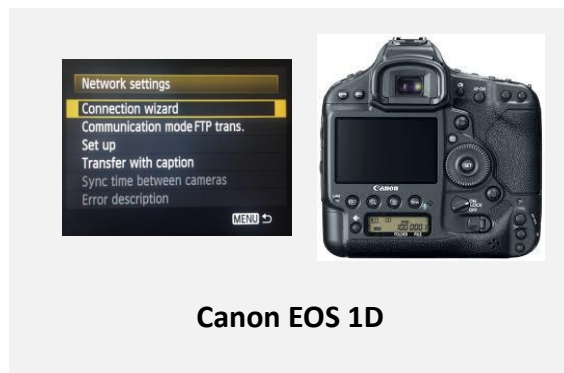
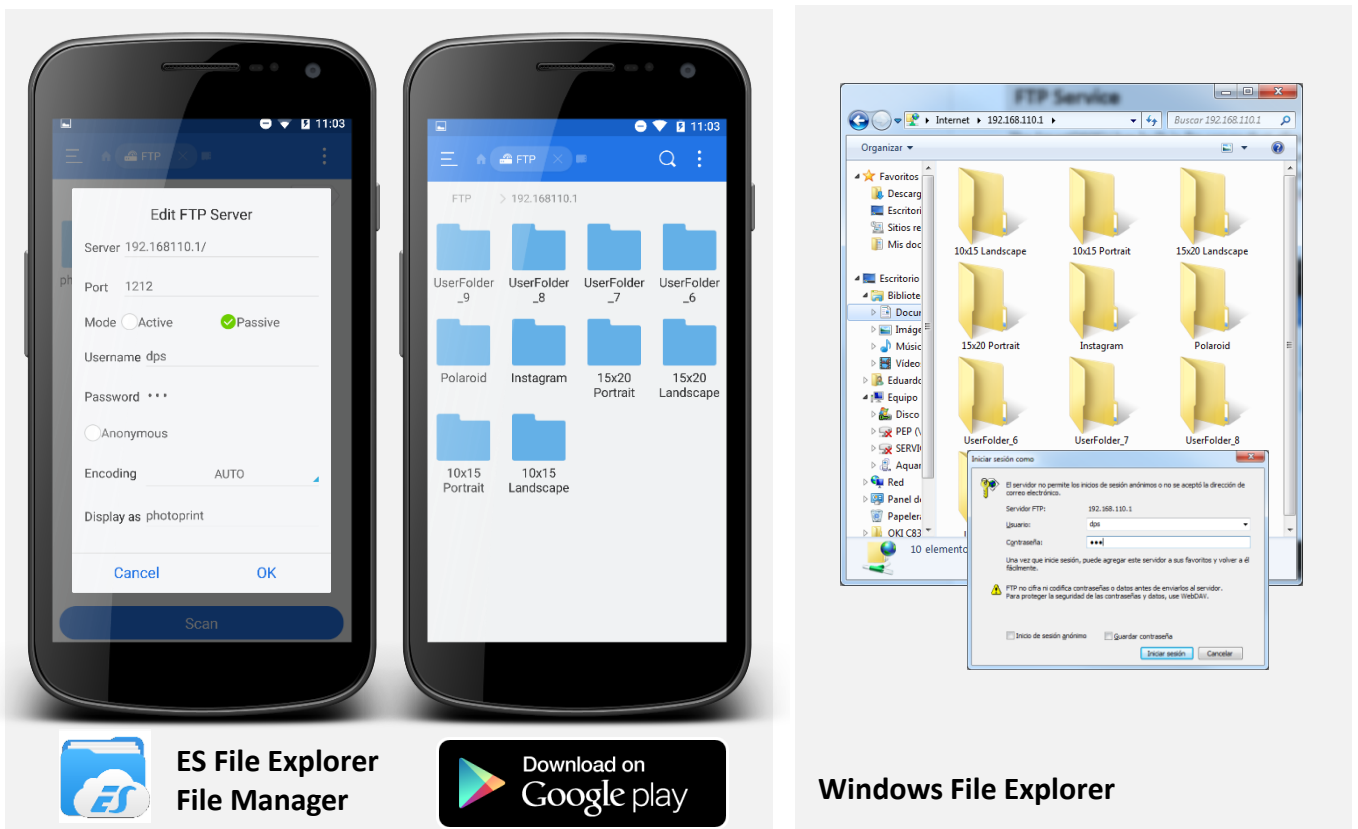
OPERATION

Ftp service

The SmartD90EV has built in ftp server that allows image file transfer from several types of wireless devices and applications, like photo cameras, smartphones, computers,

Therefore, ftp can be used to send the image files from these devices supporting ftp to the SmartD90EV HotFolders.

The image files sent to the HotFolders will be processed and printed.



Ftp Client setup data;

- **Server:** 192.168.110.1:1212/ in the file explorer.
- **Port:** 1212
- **User name:** "dps" (default)
- **Password:** "dps" (default)
- **Infrastructure mode**
- **Passive mode**

To setup the devices to be connected with the SmartD90EV refer to the user manual of the device.



OPERATION

#Hashtag print service

From V1.5, the SmartD90EV has a built in app that searches in internet for images labeled with a specific #Hashtag on social network like Instagram or Twitter, download the images found and print them. The #Hashtag service works under license.

To setup the SmartD90EV with #Hashtag service you will need:

1. #Hashtag service license: Ask your distributor or contact https://www.mitsubishielectric-printing.com/contact_us for more information about the type of licenses and how to get them.
2. An account at the software management platform: <http://www.mecloudprinter.com>
3. SmartD90EV registration at <http://www.mecloudprinter.com>
4. #Hashtag license activation
5. SmartD90EV setup with Internet connection (Recommended Lan or WiFi to a dedicated network for the application)



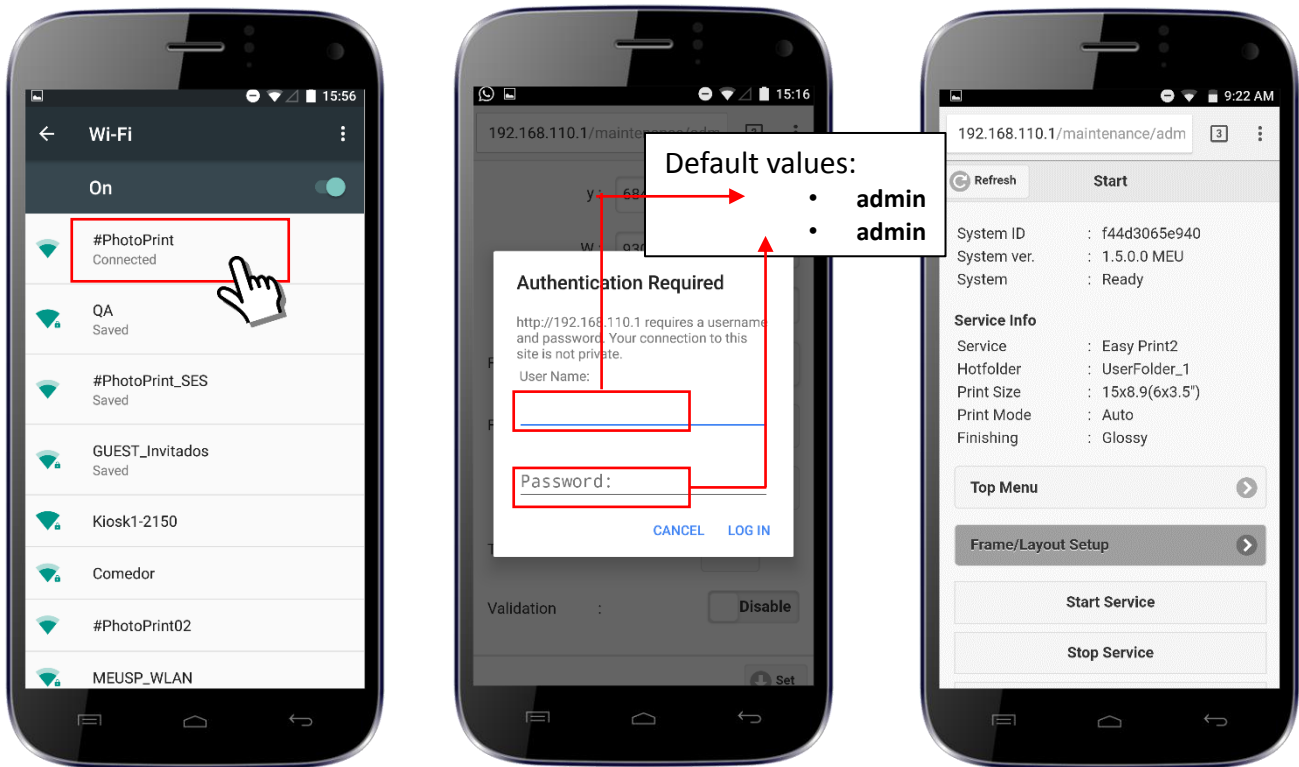
The availability of the #Hashtag service may be affected by changes in the technical specification and/or use on the Instagram and Twitter platforms.



SETTINGS

Log in

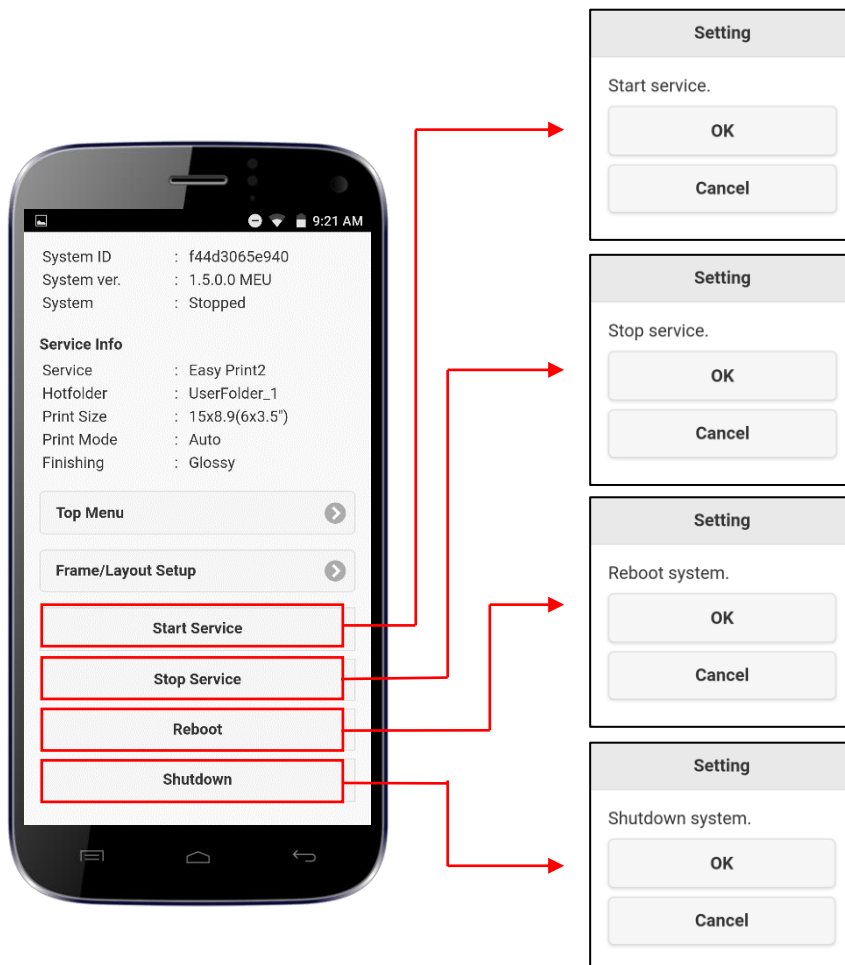
1. Go to your Smartphone Wi-Fi settings and select the SmartPhotoPrinter SSID:
#PhotoPrint
2. Launch the browser (Chrome, Safari, Opera, ...) and open the SmartPhotoPrinter maintenance web: <http://192.168.110.1/maintenance/admin>



SETTINGS

Start maintenance web application

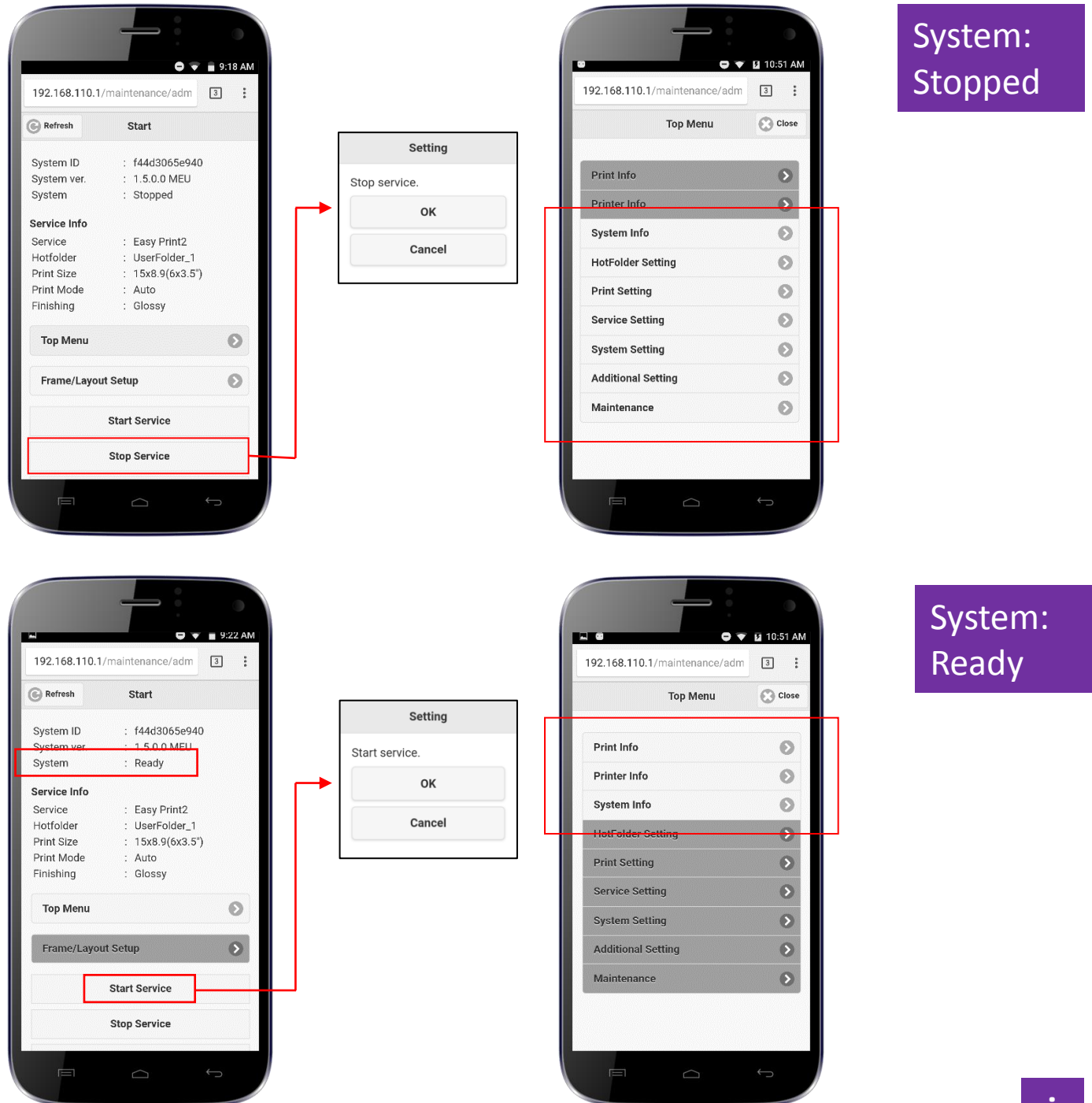
- **System ID:** Shows the unique system ID
- **System ver:** Software version installed in the equipment. In this case, V1.4
- **System:** Shows the status for the print service:
 - Ready: The SmartPhotoPrinter is ready to print
 - Stopped: The print Service is stopped and the SmartPhotoPrinter cannot print
 - Error: The SmartPhotoPrinter cannot print. Check the printer condition.
- **Service Info:** Shows the main web print service settings **Top Menu:** It launches the maintenance menu
- **Start Service:** Starts the printing service
- **Stop Service:** Stops the printing service
- **Reboot:** Reboots the smart system (not the printer)
- **Shutdown:** Switches off the smart system (not the printer)



SETTINGS

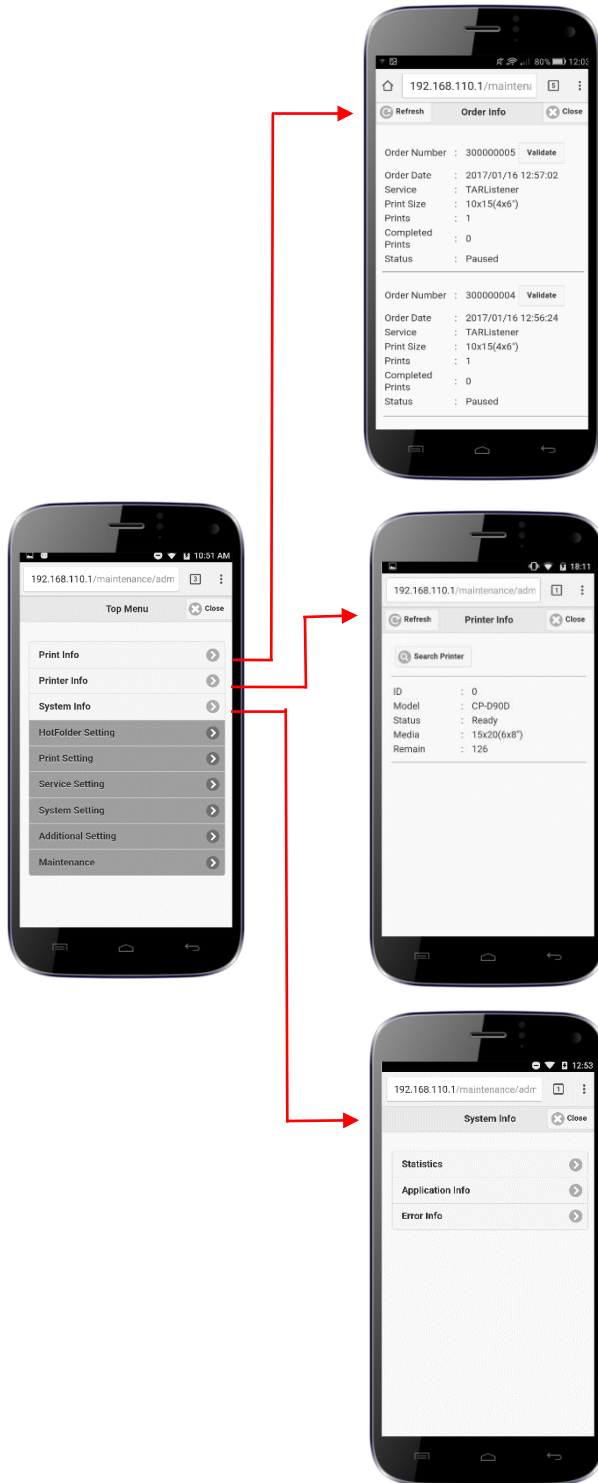
Top menu

- The enabled items of the “Top Menu” depend on the system status. When the system is in “Ready” condition, most of the items are disabled to avoid that the Smart Photo Printer settings are changed. Items with dark grey background are disabled.



SETTINGS

Top menu : System ready



ORDER INFO

- **Order Number:** It shows the order ID number.
- **Order Date:** The system date and clock when the order was received. To set up system date and clock go to: Top Menu -> System Setting -> date & Time setting
- **Service:** Shows the "Hot Folder" name used by the print service. TARListener (for Kiosk Prints app), Polaroid, Instagram, ...
- **Print Size:** Size of the printed out. 10x15, 15x20, ...
- **Prints:** Number of prints included in the order.
- **Completed Prints:** Number of prints that are completed at a certain moment.
- **Status:** It can be shown 3 different status
 - Printing: It is shown while the order is being printed
 - Paused: It is shown if the order is pending of validation.
 - Completed: It is shown once the printing order has been finished

PRINTER INFO

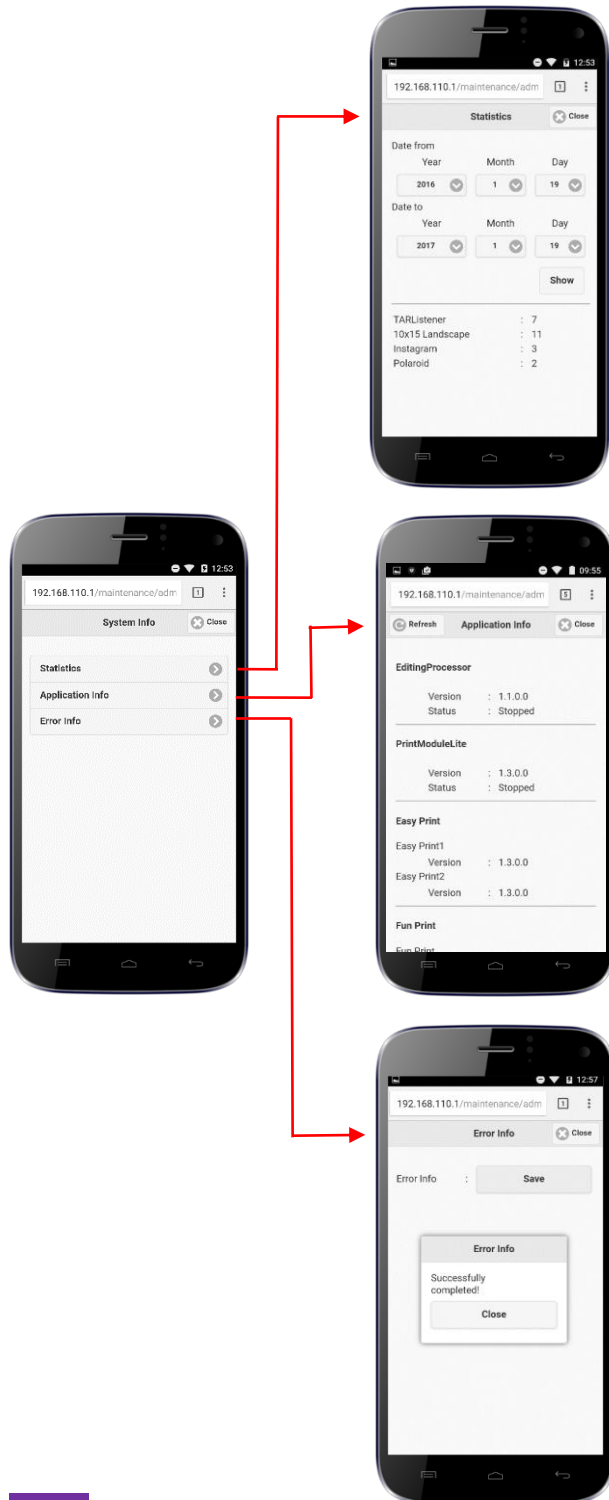
- **ID:** Not used
- **Model:** CP-D90D in the image
- **Status:** The status of the printer device at a certain time: Ready, Door Open, Error, ... Press "Refresh" button to update the status,
- **Media:** Type of media loaded. In the image 15x10(6x8") for CK-D868
- **Remain:** Remaining photos. In the image 126 remaining.

SYSTEM INFO



SETTINGS

System Info



- **Statistics:** Shows a report of all the services ordered between the selected dates grouped by type of service

TARListener	: 7
10x15 Landscape	: 11
Instagram	: 3
Polaroid	: 2

- **Application Info:** Show information about the software versions of each printing service component: Editing Processor, Print Module Lite, Easy Print, Fun Print, Maintenance.

- **Error Info:** Creates a compressed file containing log and error information about the system. The file is saved into a memory device that must be attached to a free USB port of the SMARTD90EV. In the USB memory device it is created a folder named with the System ID that contains the saved file.



USB memory device

Folder named with System ID
Ex: //root/f44d3063d026

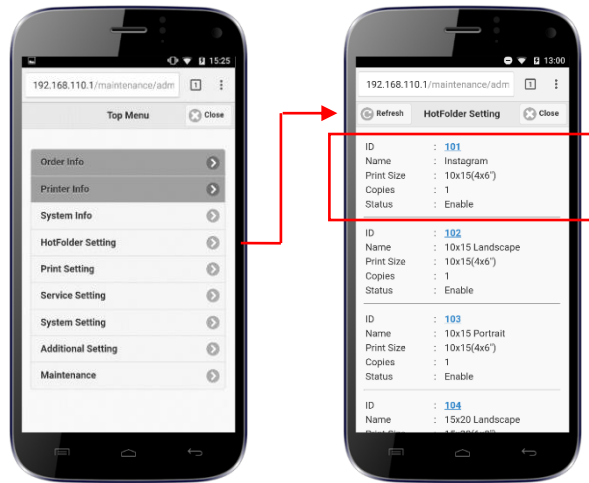
Compressed file with error info
log_backup.tar.gz



SETTINGS

Hotfolder setting

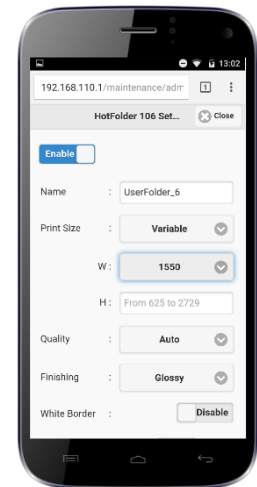
Stop Service to access this item



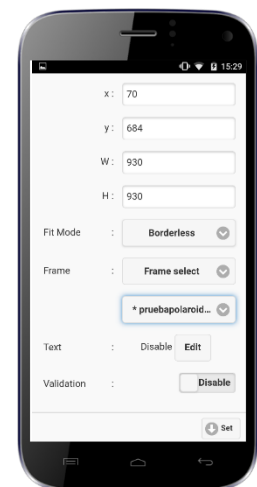
The HotFolder Setting item displays the basic settings for each one of the existing HotFolders. To edit the settings of a specific HotFolder, click on its ID

- Hotfolders ID 101 to 120 are used for Easy print service.
 - Hotfolders ID 201 to 206 are used for Fun print service.
 - Hotfolder 300 is used for the Smart Print application for Android and iOS smartphones
 - Hotfolders 301 to 320 are used for ftp and smb services.
 - Hotfolder 360 is used for #Hashtag service.
- **ID:** It shows the ID number of a HotFolder. The ID is a unique identification number that cannot be edited.
 - **Name:** An alias for the HotFolder. The name can be edited for a better identification of the printing format.
 - **Print Size:** The selected print size for the images sent to the HotFolder.
 - **Copies:** The number of copies for each image sent to the HotFolder
 - **Status:** If the HotFolder is Enabled or Disabled.

- **Enable / Disable:** If DISABLE is selected the HotFolder can not be used for any service.
- **Name:** The alias for the HotFolder. Type a name according to the printing format for a better understanding and more easy service setup.
- **Print Size:** Select from the list one of the predefined printing sizes. If "Variable" is selected, then choose "Width" between 1550/1852 pixels and input "Height" accordingly.
- **Quality:** Printing quality:
 - Auto: The printer selects the print mode depending on the image content. For dark images it will use "Ultra fine" mode to print more detailed images.
 - Fine: For faster printing.
 - Ultrafine: For a more detailed print out.
- **Finishing:** Print out Glossy / Mate
- **White Border:** Enable/Disable a white border around the printed image.
- **Copies:** Number of copies for each image sent to the HotFolder
- **Layout:** Set "Variable" to customize the print out using the Canvas item and the X, Y W, H values. Set a predefined layout to set the image area to a predefined size and position.



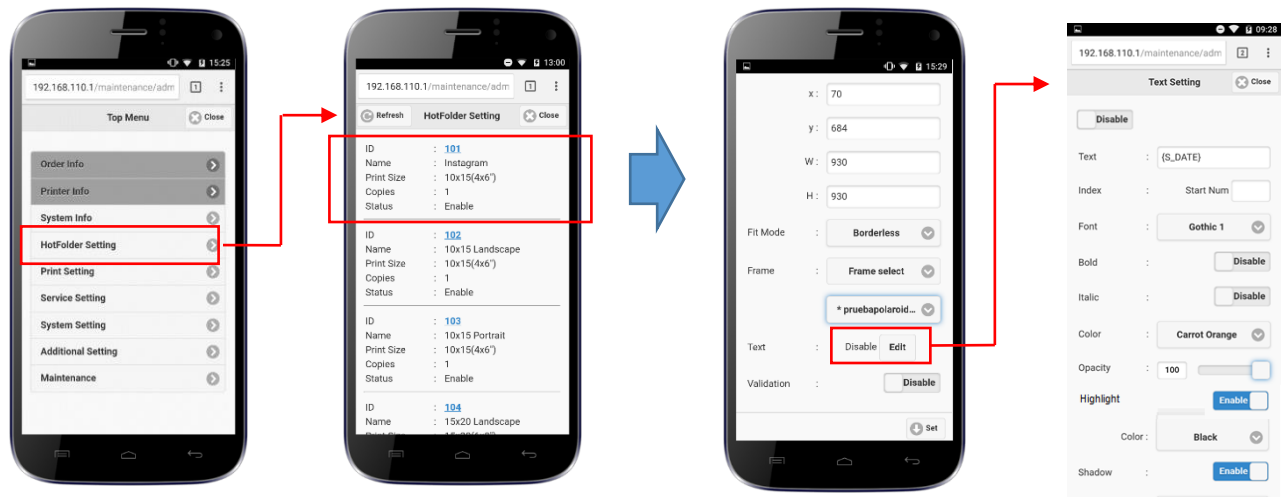
- **Canvas:** Sets portrait or landscape orientation for the canvas
- **X, Y, W, H:** Defines the area where the image/photo will be fitted. If the values are blank, the image area will match the print size (canvas).
 - X:** Horizontal start position for the image
 - Y:** Vertical start position for the image
 - W:** Width of the image.
 - H:** Height of the image
- **Fit Mode:**
- **Frame:** Allows the selection of a frame (*.png file) to decorate the print out.
 - None: No frame is selected
 - Frame select: Enable the list to select the available frames.
 - Rotation: This value will enable the frame rotation function. This function has its own setup menu to select the frames and the rotation frequency for each frame.
- **Text:** Click the "Edit" button to access the Text edit page.
- **Validation:** Enable/disable - Toggle value. If Enabled, the images sent to the HotFolder will remain "Paused" until printing is "Validated" from the "Order Info" page.
- **Set:** Click "Set" to apply and save the changes.



SETTINGS

Hotfolder setting: Text Setting

Stop Service to access this item



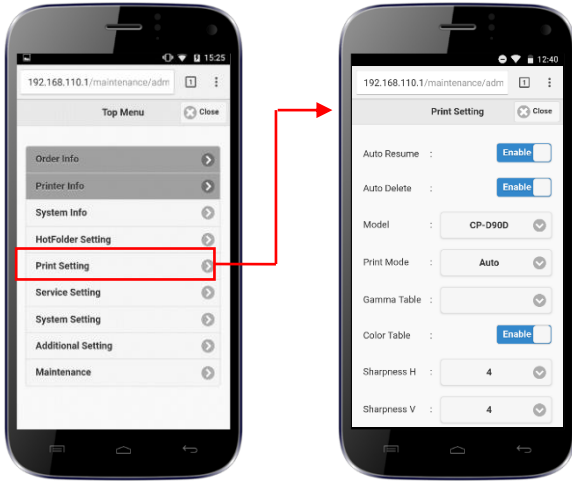
- **Enable / Disable:** Set Enable to add text on the print outs.
- **Text:** Input text field. The system has some functions to add an the name of the file, dates, or an index. These functions must be written between curly brackets:
 - {NAME} = image file name
 - {S_DATE}=the date the photo was taken.
 - {P_DATE}=the print date,
 - {P_TIME}=the print time,
 - {INDEX}=sequential number
- **Index:** First number to start the sequence using {INDEX}
- **Font:** Type of text (Gothic 1 / Gothic 2 / P Gothic / Micho / P Micho)
- **Bold:** Enable/Disable **Bold** text.
- **Italic:** Enable/Disable *Italic* text.
- **Color:**
- **Opacity:** 100 = Max opacity, 0 = Transparent
- **Highlight:** Paint the text on a solid square rectangle background.
 - Enable/Disable
 - Color: Sets the color background for the text
 - **Shadow:** Creates a shadow for the text.
 - Enable/Disable
 - Color
- **Layout:** Variable / Top / Middle / Bottom
- X:** Horizontal start position for the text (If layout = Variable)
- Y:** Vertical start position for the text (If layout = Variable)
- W:** Width of the text (If layout = Variable)
- H:** Height of the text (If layout = Variable)
- **Alignment:** Align the horizontal position of the text to Left / Centre / Right.
- **Set:** Click "Set" to apply and save the changes.



SETTINGS

Print setting

Stop Service to access this item



- **Auto Resume:** Enable/Disable
- **Auto Delete:** If Enable, then delete the image files sent to the SmartD90EV once they have been printed.
- **Model:** Printer device model (CP-D90DW)
- **Print Mode:** Default printing mode
- **Gamma Table:** Not in use.
- **Color Table:** Enable/Disable color table.
- **Sharpness H:** Horizontal sharpness setting.
- **Sharpness V:** Horizontal sharpness setting.
- **Set to default:** Set default values for all items
- **Set:** Click “Set” to apply and save the changes.



SETTINGS

Service setting

Stop Service to access this item

- **Enable / Disable:** Enable or Disable both EasyPrint and FunPrint services.
- **Mode:** Selects one of the listed modes:



- **System:** Enable/Disable the max number of copies during an event
- **User:** Enable/Disable the max number of copies by user during a specific period of time (in hours).

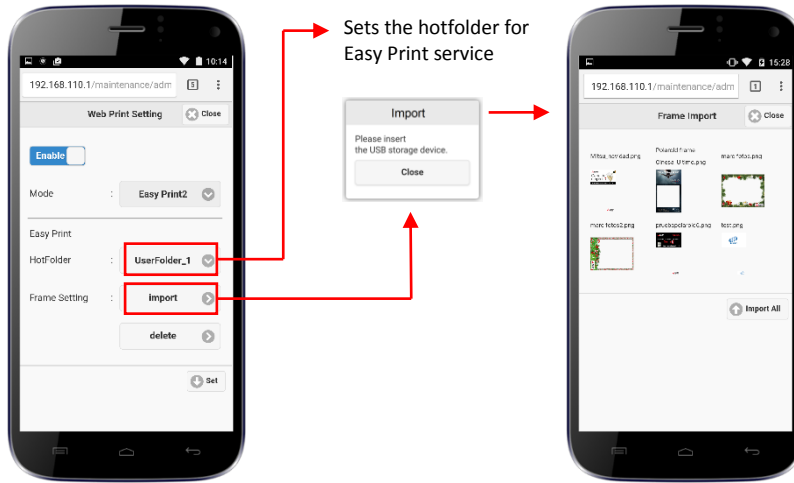


SETTINGS

Service setting

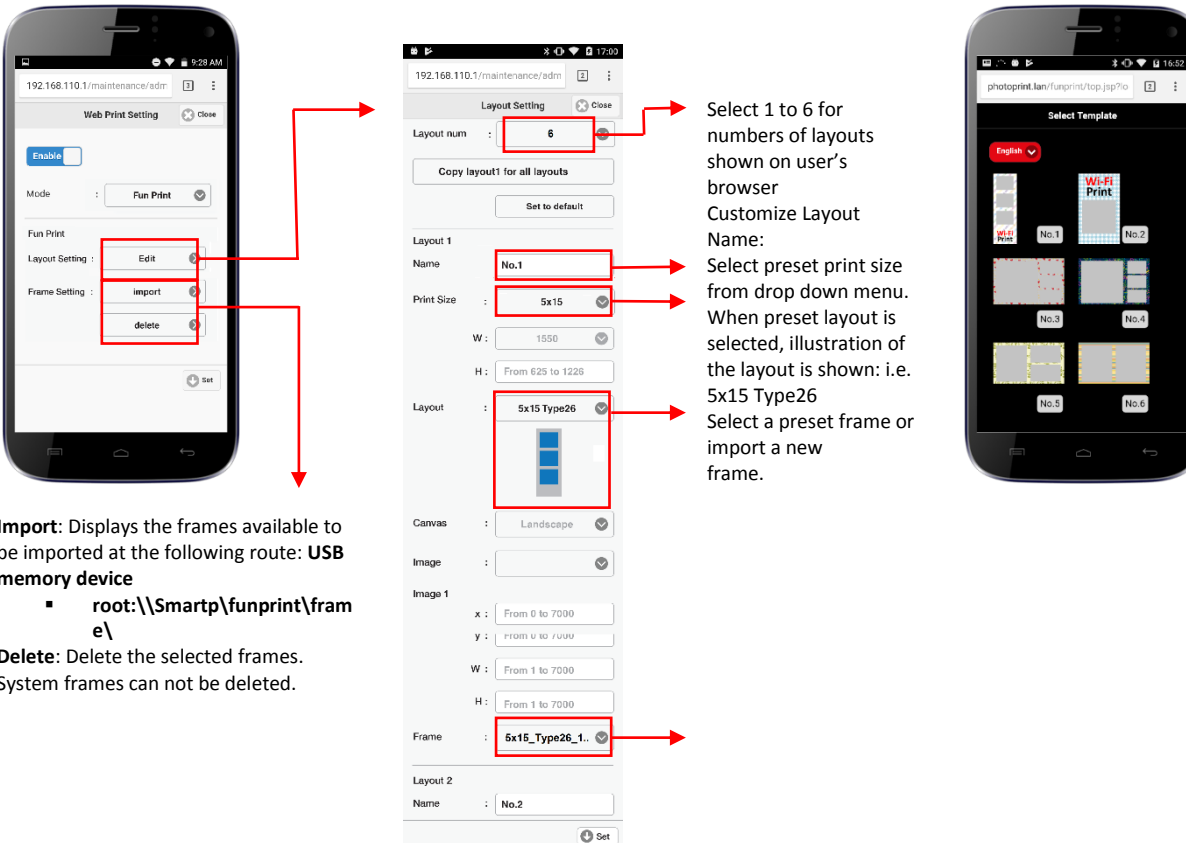
Stop Service to access this item

Easy Print setup



- Import: Displays the frames available to be imported at the following route: **USB memory device**
- **root:\\Smartp\easyprint\frame**
- Delete: Delete the selected frames. System frames can not be deleted.

Fun Print setup



Import: Displays the frames available to be imported at the following route: **USB memory device**

- **root:\\Smartp\funprint\frame**

Delete: Delete the selected frames. System frames can not be deleted.

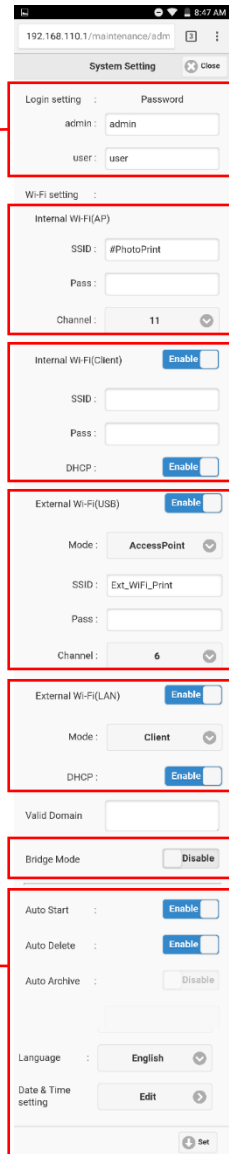
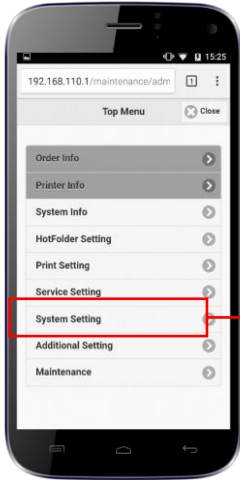
- Select 1 to 6 for numbers of layouts shown on user's browser
- Customize Layout Name:
- Select preset print size from drop down menu. When preset layout is selected, illustration of the layout is shown: i.e. 5x15 Type26
- Select a preset frame or import a new frame.



SETTINGS

System setting

Stop Service to access this item



- Login Setting:** admin and user names can not be changed.
 - admin: Set the Password to enter the admin menu. Full access to all SmartD90EV setting.
 - User name: admin (cannot be changed)
 - Password: admin - default value. (It can be changed)
 - user: Set the Password to enter the user menu. Some items of "tart page and Top menu are not available"
 - User name: user (cannot be changed)
 - Password: user - default value. (It can be changed)

- Auto Start:** Enable/Disable. If Enable, the selected print service will start automatically after switch ON the SmartD90EV. If Disabled, the SmartD90EV will be started with stopped services.
- Auto delete:** Deletes the original images and compositions after printing.
- Language:** Sets the default language for the EasyPrint, FunPrint services and maintenance menu.
 - Date & Time Setting:** Edit the System date & Time
 - Set:** Click "Set" to apply and save the changes.

- Enable Bridge mode to allow applications Access to Internet (i.e. Hashtag Service)

Internal Wi-Fi (AP):

- SSID:** Sets the SSID name for the print service applications. Default name is "#PhotoPrint"
- Pass:** Sets a Password for the Wi-Fi connection. If blank, then password is disabled. Password must have 8 char min.
- Channel:** Sets the RF channel for the Internal Wi-Fi



If you set a **password for the Wi-Fi**, keep it in a safe and known place. If you forget this password the system may result unusable and require a service action.

Internal Wi-Fi (Client):

- Enable/disable the internal Wi-Fi client
- SSID:** Sets the SSID name of the network to connect.
- Pass:** Sets a Password of the network to connect

External Wi-Fi (USB) setting

- Connect USB Wi-Fi adapter to a PC box.
 - *Make sure to plug the USB port of the PC box before setting
- Apply External Wi-Fi (USB) settings
- Reboot the system
 - *Some USB Wi-Fi adapter may not be compatible



External Wi-Fi (LAN) Setting

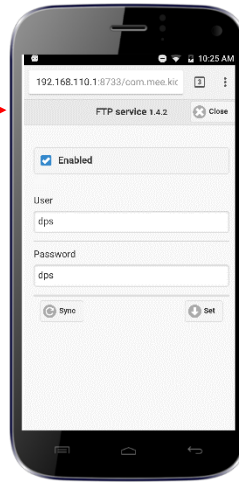
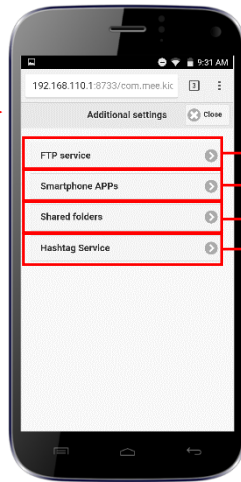
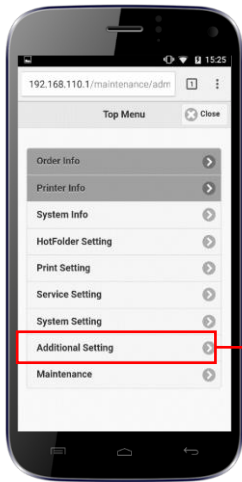
- Set access point settings as follows:
 - Mode: Access point mode
 - Access point name: any SSID
 - Wired LAN setting:
 - IP Address setting: Fixed
 - IP Address: 192.168.110.250
 - Subnet mask: 255.255.255.0
 - DHCP server: Disabled
 - *Name of setting may differ depending on model
 - *See operational manual of access point device for detail
- Connect the Wi-Fi access point with LAN cable to the LAN port of a PC box
- Apply External Wi-Fi (LAN) settings
- Reboot the system
 - *Some USB Wi-Fi adapter may not be compatible



SETTINGS

Additional Settings

Stop Service to access this item

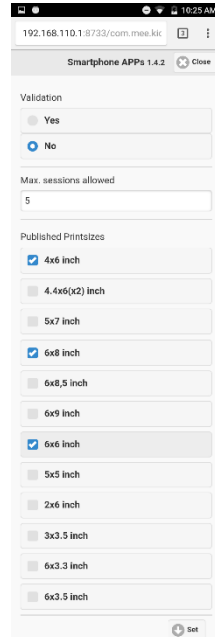


FTP service

- Enable/Disable the ftp service
- User: Sets a user name for the ftp service
- Password: Sets a Password for the ftp service

Click "Sync" to apply changes after rename folders from the HotFolder setting menu.

The Hotfolders available for this service are ID 301 to 320.



Smartphone Apps settings



- Enable / disable the validation for the print orders sent from the Smart print App.
- Max sessions allowed: Max number of copies per photo.
- Published printsizes: Sets the print sizes that will be visible from the Smart print app.

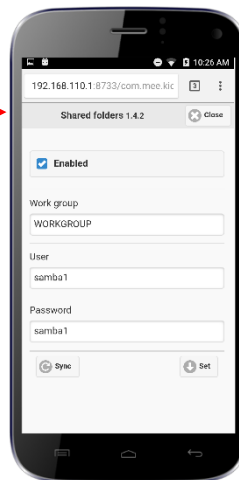
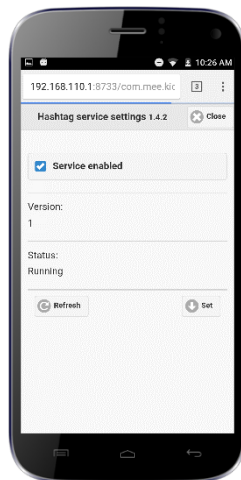
This service uses Hotfolder ID 300

#Hashtag service settings

- Enable/Disable the Hashtag service.

To use #hashtag printing service the SmartD90EV must have access to Internet.

This service uses Hotfolder ID 360



Shared folders

- Enable/Disable the shared folders service
- User: Sets a user name for the shared folders service
- Password: Sets a Password for the shared folders service

Click "Sync" to apply changes after rename folders from the HotFolder setting menu.

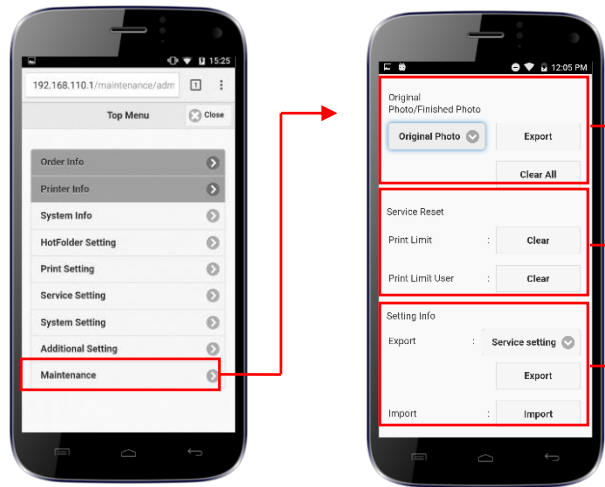
The Hotfolders available for this service are ID 301 to 320.



SETTINGS

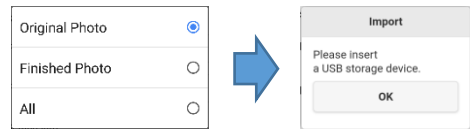
Maintenance

Stop Service to access this item



Original photo/Finished photo

- **Export:** It allows export to an USB memory device both the print orders and the original images sent to the SmartD90. A new folder named with the SmartD90 ID will be created. Then, inside this folder two additional folders will contain the print orders and the original images. The export will be only possible if the "Auto delete" is enabled. If not the print orders and original images will be deleted once the print order is completed.



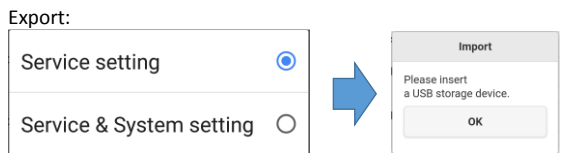
- **Clear all:** Remove all the print orders and the images from the Smart Photo Printer

Service Reset

- Resets the print limit settings

Setting Info

- Export / Import Service settings or Service & System settings



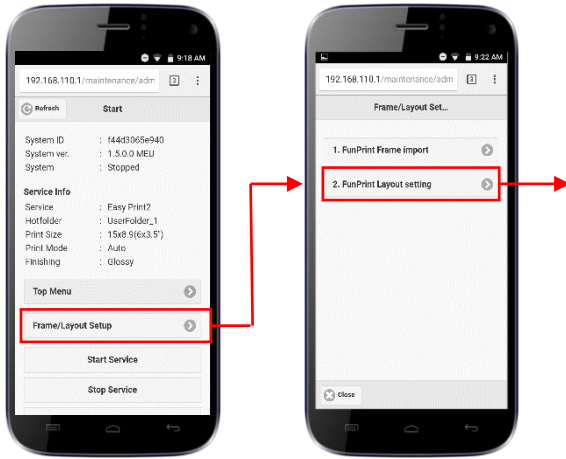
USB root://SmartpUpdate



SETTINGS

Frame Layout Setup

Stop Service to access this item



The Frame Layout Setup function launches a guide to setup the fun print Service.

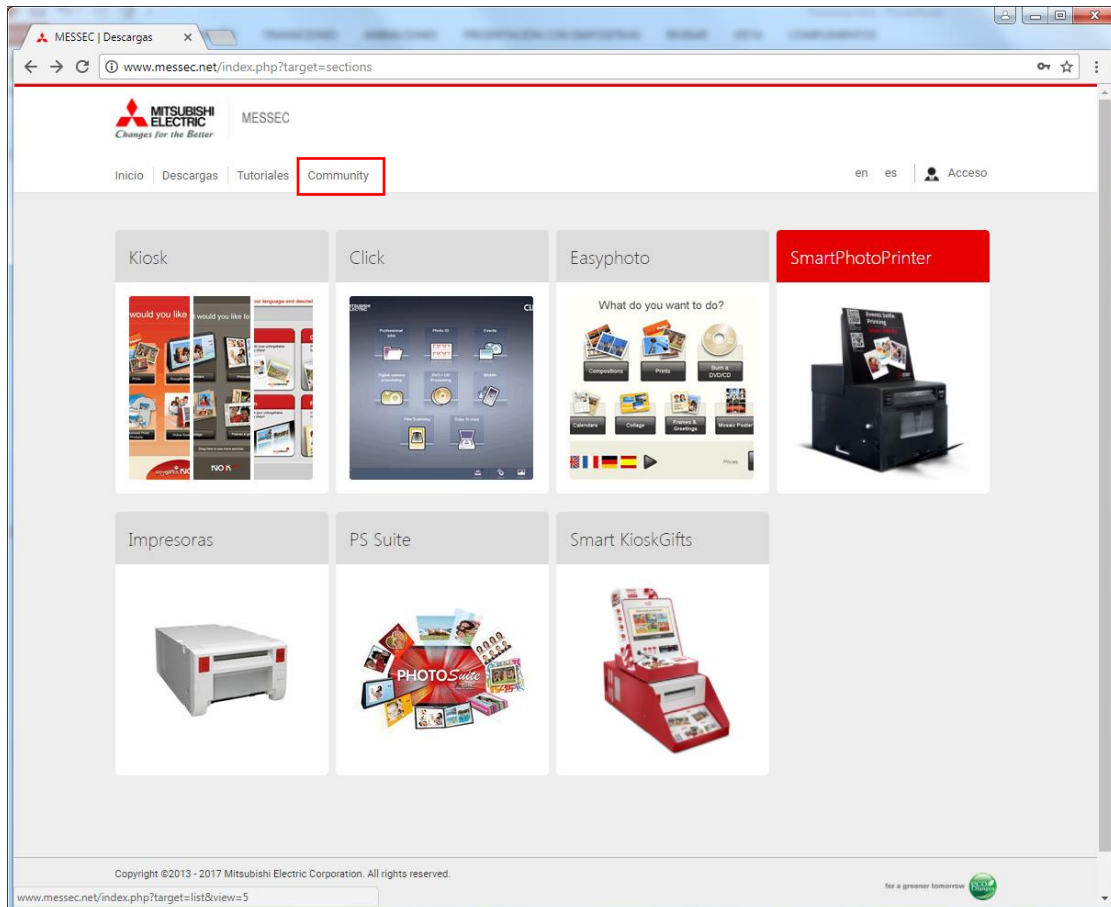
- FunPrint Layout setting starts the 7 steps setup for Funprint.



Appendix

SmartD90EV Upgrade procedure

1.- Download the zip file containing V1.5 from: <http://www.messec.net> -> Download



2.- Copy the downloaded “SP_v1500.zip” file in a USB pen drive under the route:
root:// SmartpUpdate/SP_v1500.zip (Keep Upper and Lower case letters as indicated. Otherwise it won't work).

3.- Switch Off the SmartD90



Appendix

SmartD90EV Upgrade procedure

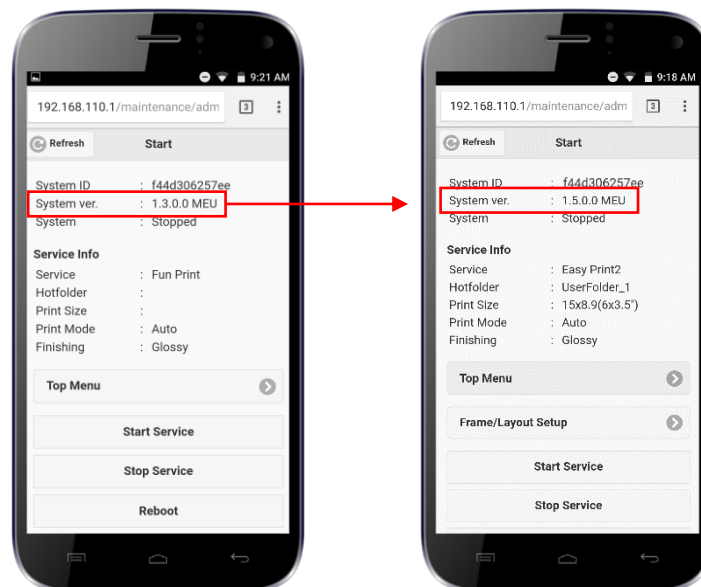
4.- Attach the USB Pen drive to a free SmartD90 USB port.

5.- Switch On the SmartD90 and wait for about 10min.



6.- Log into the maintenance web and check version

There is no any indication of the upgrade progress, or indication that the upgrade has finished.



Appendix

How to check if the SmartD90EV has Internet access

Some of the SmartD90EV services need proper Internet access. The access must be setup from the System Settings Wi-Fi (USB /LAN) settings.

The SmartD90EV do not provide “free” access to Internet, but only to the DNS domains needed by the services to work.

To check if the SmartD90EV has been properly setup and connected to Internet:

1. Connect your Smartphone to the SmartD90EV SSID (Default is #PhotoPrint)
2. Open the browser and type <http://www.mecloudprinter.com> . If you can get the site in your smartphone, then it means that the SmartD90EV has Internet access.



Appendix

Frequent tasks

TASKS	PROCEDURE
Check media condition (Type of media, remaining copies)	<ul style="list-style-type: none">▪ Maintenance (admin) -> Start Service (if system is not ready) -> Top Menu -> Printer Info
Change web print service	<ul style="list-style-type: none">▪ Maintenance (admin) -> Stop Service -> Top Menu -> Service Setting -> Web Print -> Mode (Select the desired Service) and confirm Enable is checked. Then, match Fun Print Service or Easy Print Service with your choice.▪ Click “Set” button to apply and save the changes▪ Go back to Start page and “start” the service
Import new customized frames (backgrounds)	<ul style="list-style-type: none">▪ Maintenance (admin) -> Stop Service -> Top Menu -> Service Setting -> Web Print:<ul style="list-style-type: none">• Frames for EasyPrint: EasyPrint Frame Setting -> Import• Frames (background) for FunPrint: FunPrint Frame Setting -> Import▪ Click “Set” button to apply and save the changes▪ Go back to Start page and “start” the service
Change frame in EasyPrint	<ul style="list-style-type: none">▪ Maintenance (admin) -> Stop Service -> Top Menu -> HotFolder Setting -> Select the folder used by the web Service -> Frame -> Frame select -> Click on the selection list to choose the new frame▪ Click “Set” button to apply and save the changes▪ Go back to Start page and “start” the service.
Apply Text in EasyPrint web service	Maintenance (admin) -> Stop Service -> Top Menu -> HotFolder Setting -> Select the folder used by the Easy Print web Service -> Text -> Click



on the “Edit” button -> Click on the “Enable/Disable” toggle button to set “Enable”

- Click “Set” button to apply and save the changes
- Go back to Start page and “start” the service.

Apply print order validation
(Print orders must be validated from “Order Info” menu.

- Maintenance (admin) -> Stop Service -> Top Menu -> HotFolder Setting -> Select the folder used by the print service in use -> Validation -> Click on “Enable/Disable” toggle button to set Validation “Enable”
- Click “Set” button to apply and save the changes
- Go back to Start page and “start” the service

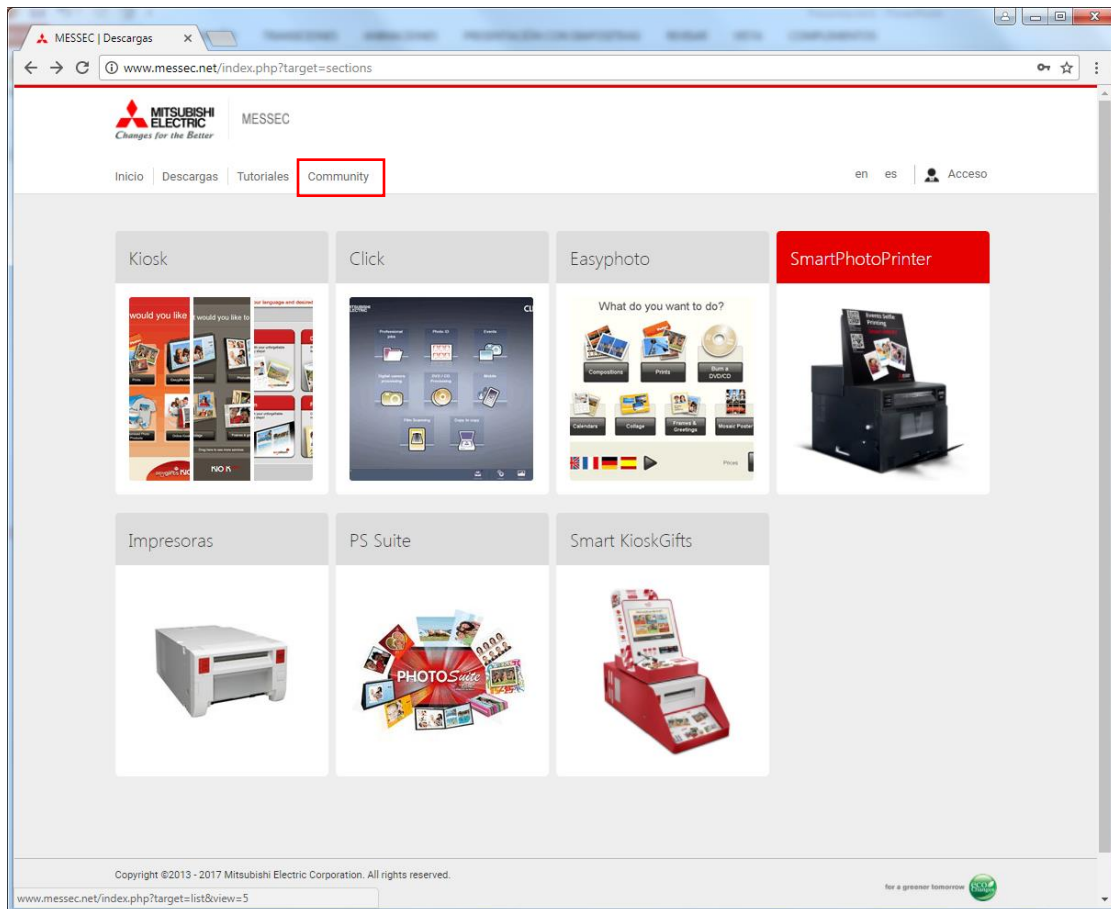


Appendix

System recovery

If the system doesn't start, admin password is forgotten, or any other issue that requires a system recovery, follow these steps to restore the system to factory condition:

1.- Download the zip file named NUC USB 1.2.zip (Recovery SmartPhotoPrinter) from: <http://www.messec.net> -> Download



2.- Unzip the downloaded file “NUC USB 1.2.zip” and copy the full contents on the root of a USB pen drive.



Appendix

System recovery

3.- Switch Off the SmartD90



4.- Attach the USB Pen drive to a free SmartD90 USB port.

5.- Switch On the SmartD90 and wait for about 10min.



6.- Log into the maintenance web and check.



Appendix

Frame Specification

Easy Print Layout & Frame Chart

Type	Layout	Print Size	Full Bleed (px)		Start Point (px)		Photo Size (A)	
			W	H	x	y	W	H
1		Variable	-	-	-	-	-	-
		9x13 (3.5x5")	1500	1076	-	-	-	-
		13x18 (5x7")	1500	2128	-	-	-	-
		10x15 (4x6")	1852	1226	602	0	1250	1226
		15x20 (6x8")	1852	2428	789	0	1639	1852
		15x15 (6x6")	1852	1827	602	0	1250	1827
		13x13 (5x5")	1550	1528	-	-	-	-
2		Variable	-	-	-	-	-	-
		9x13 (3.5x5")	1500	1076	-	-	-	-
		13x18 (5x7")	1500	2128	-	-	-	-
		10x15 (4x6")	1852	1226	675	62	1102	1102
		15x20 (6x8")	1852	2428	894	95	1443	1663
		15x15 (6x6")	1852	1827	685	94	1101	1641
		13x13 (5x5")	1550	1528	-	-	-	-
3		Variable	-	-	-	-	-	-
		9x13 (3.5x5")	1500	1076	-	-	-	-
		13x18 (5x7")	1500	2128	-	-	-	-
		10x15 (4x6")	1852	1226	124	115	1605	996
		15x20 (6x8")	1852	2428	-	-	-	-
		15x15 (6x6")	1852	1827	-	-	-	-
		13x13 (5x5")	1550	1528	-	-	-	-
4		Variable	-	-	-	-	-	-
		9x13 (3.5x5")	1500	1076	-	-	-	-
		13x18 (5x7")	1500	2128	-	-	-	-
		10x15 (4x6")	1852	1226	0	0	1852	943
		15x20 (6x8")	1852	2428	0	0	2428	1571
		15x15 (6x6")	1852	1827	0	0	1852	1550
		13x13 (5x5")	1550	1528	-	-	-	-
5		Variable	-	-	-	-	-	-
		9x13 (3.5x5")	1500	1076	-	-	-	-
		13x18 (5x7")	1500	2128	-	-	-	-
		10x15 (4x6")	1852	1226	0	0	1226	1250
		15x20 (6x8")	1852	2428	0	0	1852	1639
		15x15 (6x6")	1852	1827	-	-	-	-
		13x13 (5x5")	1550	1528	-	-	-	-

Type	Layout	Print Size	Full Bleed (px)		Start Point (px)		Photo Size (A)	
			W	H	x	y	W	H
6		Variable	-	-	-	-	-	-
		9x13 (3.5x5")	1500	1076	-	-	-	-
		13x18 (5x7")	1500	2128	-	-	-	-
		10x15 (4x6")	1852	1226	0	0	1226	1250
		15x20 (6x8")	1852	2428	0	0	1852	1639
		15x15 (6x6")	1852	1827	-	-	-	-
		13x13 (5x5")	1550	1528	-	-	-	-
7		Variable	-	-	-	-	-	-
		9x13 (3.5x5")	1500	1076	-	-	-	-
		13x18 (5x7")	1500	2128	-	-	-	-
		10x15 (4x6")	1852	1226	63	69	1101	1101
		15x20 (6x8")	1852	2428	95	90	1663	1443
		15x15 (6x6")	1852	1827	-	-	-	-
		13x13 (5x5")	1550	1528	-	-	-	-
8		Variable	-	-	-	-	-	-
		9x13 (3.5x5")	1500	1076	-	-	-	-
		13x18 (5x7")	1500	2128	-	-	-	-
		10x15 (4x6")	1852	1226	115	124	996	1605
		15x20 (6x8")	1852	2428	-	-	-	-
		15x15 (6x6")	1852	1827	-	-	-	-
		13x13 (5x5")	1550	1528	-	-	-	-
9		Variable	-	-	-	-	-	-
		9x13 (3.5x5")	1500	1076	-	-	-	-
		13x18 (5x7")	1500	2128	-	-	-	-
		10x15 (4x6")	1852	1226	186	0	1040	1852
		15x20 (6x8")	1852	2428	281	0	1571	2428
		15x15 (6x6")	1852	1827	-	-	-	-
		13x13 (5x5")	1550	1528	-	-	-	-
10		Variable	-	-	-	-	-	-
		9x13 (3.5x5")	1500	1076	-	-	-	-
		13x18 (5x7")	1500	2128	-	-	-	-
		10x15 (4x6")	1852	1226	0	0	1226	926
		15x20 (6x8")	1852	2428	0	0	1852	1214
		15x15 (6x6")	1852	1827	-	-	-	-
		13x13 (5x5")	1550	1528	-	-	-	-

Sample: Type 2, 10x15 (4x6") frame

Full Bleed: 1852 px x 1226 px
Trim Size: 1772 px x 1146 px

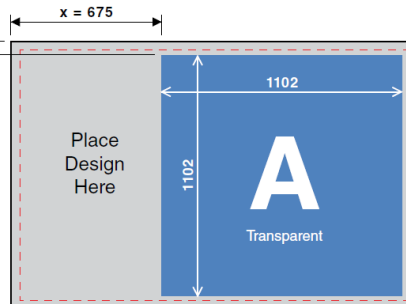
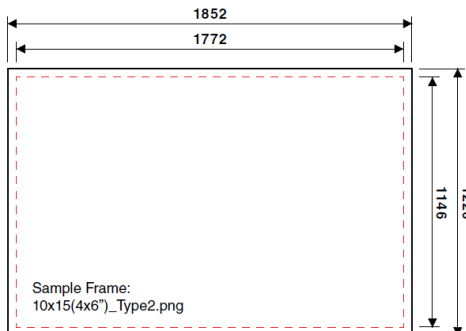
Starting Point: x = 1675 px, y = 62 px
Photo Size: W = 1102, H = 1102

Frame Format: .png
10x15(4x6")_Type2.png

*Trim size is approx. 4mm (40 px) from the edge of the image

*Window area (A) must be a transparent.

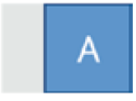
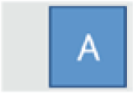



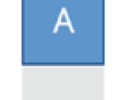


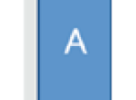
*Frame is overlaid onto photo

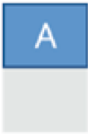
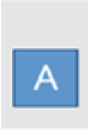









Appendix

Frame Specification

Fun Print Layout & Frame Chart

Type	Layout	Print Size	Image	Start Point (px)		Photo Size (A)	
				x	y	W	H
1		10x15 (4x6")	Image1	602	0	1250	1226
			Image2	-	-	-	-
			Image3	-	-	-	-
			Image4	-	-	-	-
			Image5	-	-	-	-
			Image6	-	-	-	-
2		10x15 (4x6")	Image1	675	62	1102	1102
			Image2	-	-	-	-
			Image3	-	-	-	-
			Image4	-	-	-	-
			Image5	-	-	-	-
			Image6	-	-	-	-
3		10x15 (4x6")	Image1	124	115	1605	996
			Image2	-	-	-	-
			Image3	-	-	-	-
			Image4	-	-	-	-
			Image5	-	-	-	-
			Image6	-	-	-	-
4		10x15 (4x6")	Image1	0	0	1852	943
			Image2	-	-	-	-
			Image3	-	-	-	-
			Image4	-	-	-	-
			Image5	-	-	-	-
			Image6	-	-	-	-
5		10x15 (4x6")	Image1	926	0	926	1226
			Image2	-	-	-	-
			Image3	-	-	-	-
			Image4	-	-	-	-
			Image5	-	-	-	-
			Image6	-	-	-	-
6		10x15 (4x6")	Image1	0	0	1226	1252
			Image2	-	-	-	-
			Image3	-	-	-	-
			Image4	-	-	-	-
			Image5	-	-	-	-
			Image6	-	-	-	-
7		10x15 (4x6")	Image1	63	69	1101	1101
			Image2	-	-	-	-
			Image3	-	-	-	-
			Image4	-	-	-	-
			Image5	-	-	-	-
			Image6	-	-	-	-
8		10x15 (4x6")	Image1	115	24	996	1605
			Image2	-	-	-	-
			Image3	-	-	-	-
			Image4	-	-	-	-
			Image5	-	-	-	-
			Image6	-	-	-	-
9		10x15 (4x6")	Image1	186	0	1040	1852
			Image2	-	-	-	-
			Image3	-	-	-	-
			Image4	-	-	-	-
			Image5	-	-	-	-
			Image6	-	-	-	-

Type	Layout	Print Size	Image	Start Point (px)		Photo Size (A)	
				x	y	W	H
10		10x15 (4x6")	Image1	0	0	1226	926
			Image2	-	-	-	-
			Image3	-	-	-	-
			Image4	-	-	-	-
			Image5	-	-	-	-
			Image6	-	-	-	-
11		15x8.9 (6x3.5")	Image1	100	700	877	877
			Image2	-	-	-	-
			Image3	-	-	-	-
			Image4	-	-	-	-
			Image5	-	-	-	-
			Image6	-	-	-	-
21		10x15 (4x6")	Image1	70	62	522	348
			Image2	70	439	522	348
			Image3	70	816	522	348
			Image4	675	62	1102	1102
			Image5	-	-	-	-
			Image6	-	-	-	-
22		10x15 (4x6")	Image1	70	62	522	348
			Image2	70	439	522	348
			Image3	675	62	1102	1102
			Image4	-	-	-	-
			Image5	-	-	-	-
			Image6	-	-	-	-
23		15x8.9 (6x3.5")	Image1	70	100	522	348
			Image2	70	477	522	348
			Image3	700	100	877	877
			Image4	-	-	-	-
			Image5	-	-	-	-
			Image6	-	-	-	-
24		10x15 (4x6")	Image1	70	71	616	414
			Image2	70	503	616	414
			Image3	70	935	616	414
			Image4	70	1367	616	414
			Image5	-	-	-	-
			Image6	-	-	-	-
25		10x15 (4x6")	Image1	70	71	616	542
			Image2	70	655	616	542
			Image3	70	1239	616	542
			Image4	-	-	-	-
			Image5	-	-	-	-
			Image6	-	-	-	-
26		5x15 (2x6")	Image1	87	71	451	361
			Image2	87	527	451	361
			Image3	87	982	451	361
			Image4	-	-	-	-
			Image5	-	-	-	-
			Image6	-	-	-	-
27		5x15 (2x6")	Image1	87	96	451	361
			Image2	87	529	451	361
			Image3	87	962	451	361
			Image4	87	1395	451	361
			Image5	-	-	-	-
			Image6	-	-	-	-

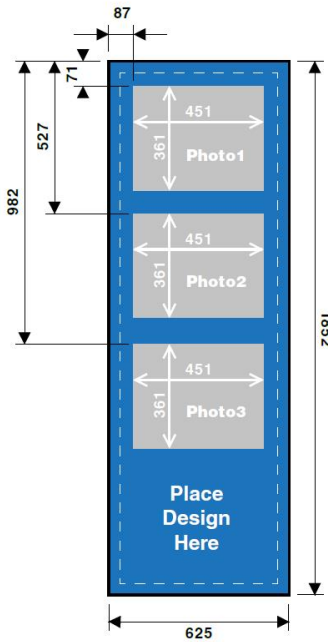
Appendix

Frame Specification

Sample: Type 26, Fun Print_5x15(2x6") frame

Full Bleed: 625 px x 1852 px
Trim Size: 545 px x 1772 px

*Trim size is approx. 4mm (40 px) from the edge of the image



Starting Point:

Photo1: x = 87 px, y = 71 px
Photo2: x = 87 px, y = 527 px
Photo3: x = 87 px, y = 982 px

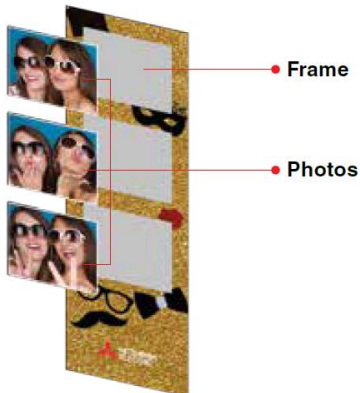
Photo Size:
W = 451, H = 361

*Photo Area Color:
R=195, G=195, B=195

Sample Frame:
5x15(2x6)_Type26.png

Frame Format: .png

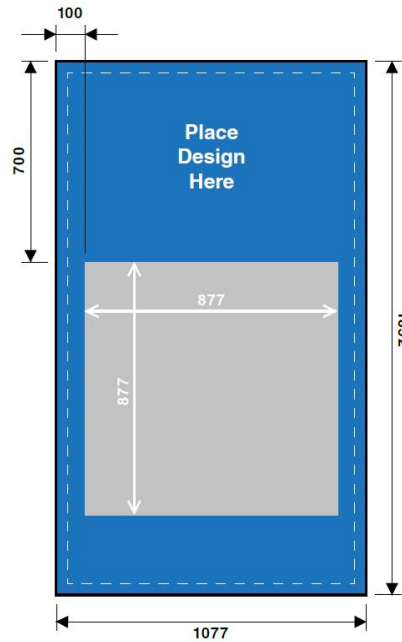
*Photo is set over the gray area of frame



Sample: Type 11, Fun print_15x8,9(6x3,5") frame

Full Bleed: 1077 px x 11852 px
Trim Size: 997 px x 1772 px

*Trim size is approx. 4mm (40dots) from the edge of the image



Starting Point:

x = 100 px, y = 700 px

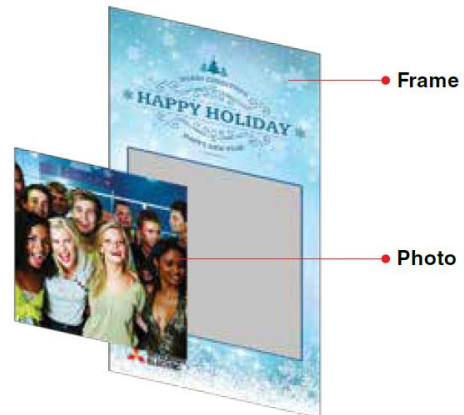
Photo Size:
W = 877, H = 877

*Photo Area Color:
R=195, G=195, B=195

Sample Frame:
15x8.9(6x3.5)_Type11.png

Frame Format: .png

*Photo is set over the gray area of frame



Appendix

Setting up a #Hashtag print service

1.- Setup the SmartD90 to get Internet access. You can setup a Wireless or Wired connection. To setup the SmartD90:

- [Log in](#) to the SmartD90 settings
 - From the [Start page](#), click “stop service”, select Top menu and [System settings](#).
- To setup a **wireless** connection to the network that will provide Internet access:



Smartphone setup to share Internet access



Router as access point to provide Internet

Wi-Fi setting :

Internal Wi-Fi(AP)

SSID : #PhotoPrint

Pass :

Channel : 11

Internal Wi-Fi(Client) Enable

SSID :

Pass :

DHCP : Enable

External Wi-Fi(USB) Disable

External Wi-Fi(LAN) Disable

Bridge Mode Enable

Type SSID and Pass as is setup at the device that provides Internet connection.

If the router doesn't provide DHCP, then disable DHCP at SmartD90 System settings and type the IP provided by the router.

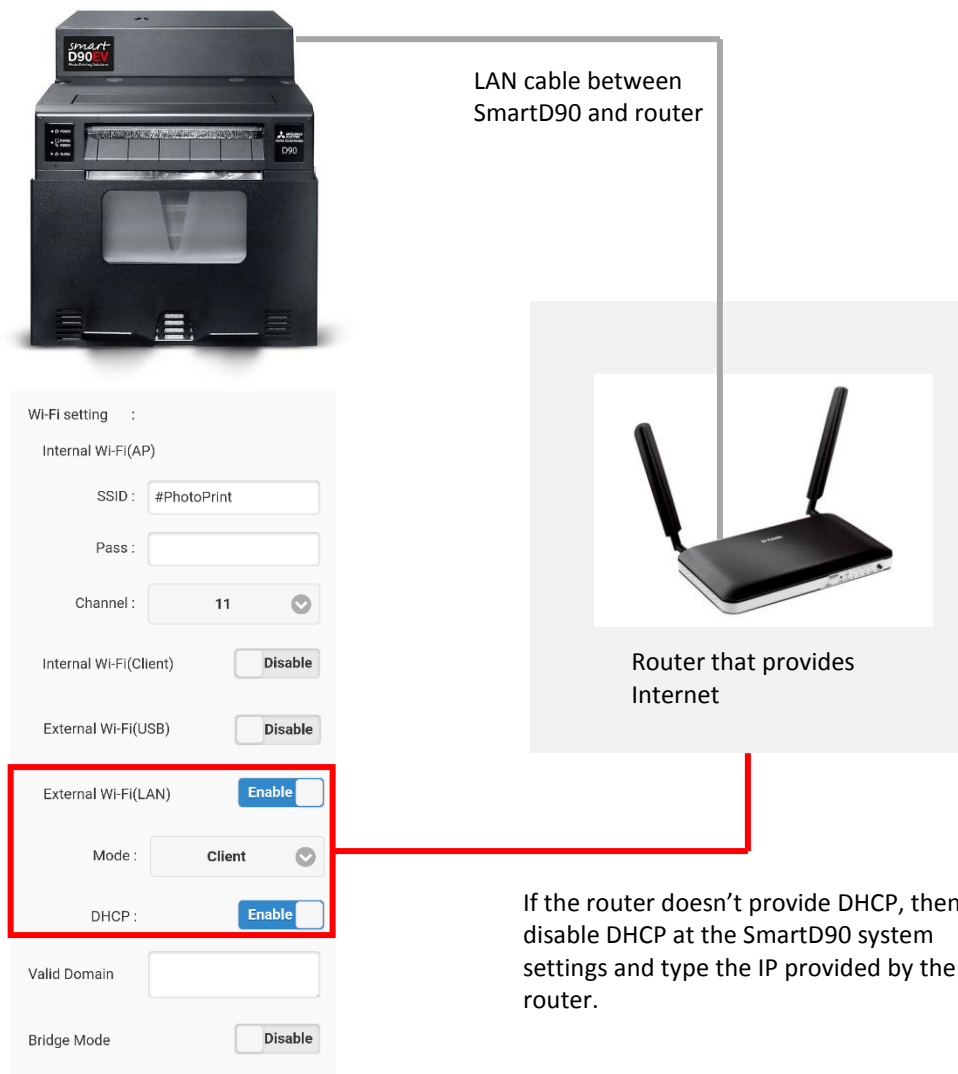
Click set to save changes:



Appendix

Setting up a #Hashtag print service

- To setup a **wired** connection to the network that will provide Internet access:



LAN cable between SmartD90 and router

Router that provides Internet

Wi-Fi setting :

Internal Wi-Fi(AP)

SSID : #PhotoPrint

Pass :

Channel : 11

Internal Wi-Fi(Client)

External Wi-Fi(USB)

External Wi-Fi(LAN)

Mode : Client

DHCP :

Valid Domain

Bridge Mode

If the router doesn't provide DHCP, then disable DHCP at the SmartD90 system settings and type the IP provided by the router.

Click set to save changes:

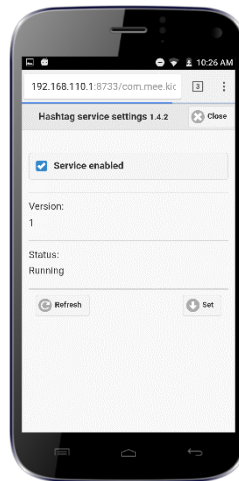


Appendix

Setting up a #Hashtag print service

2.- Enable the #Hashtag service:

- If not logged, [Log in](#) to the SmartD90 settings.
- From the [Start page](#), click “stop service” if the system is not stopped, select Top menu and Additional settings
- Set the checkbox checked to enable #Hashtag service.



Click set to save changes:



Appendix

Setting up a #Hashtag print service

3.- Register your #Hashtag service license and setup a #Hashtag print service event :

- Go to the software license management platform: <https://www.mecloudprinter.com>
- Sign in if you already have an account or create a new account by clicking “Register” from the top bar menu:

The screenshot shows the top navigation bar with the Mitsubishi Electric logo and the tagline "Changes for the Better". The navigation menu includes "HOME", "Register", "Licenses", "Support", and "Help". A "Login" link is visible in the top right corner. The main content area features a "Welcome" message on the left and a login form on the right. The form has two input fields: "Email address" and "Password", followed by a "Sign in" button. Below the form, there are links for "Register new account" and "Did you forget your password?".

Welcome to the software license management platform of Mitsubishi Electric B.V. Photo Printing Solutions.

Manage your licenses and associated devices from this site.

Thank you for your confidence in our products and solutions. If you want to know more, visit our website or contact our distributor

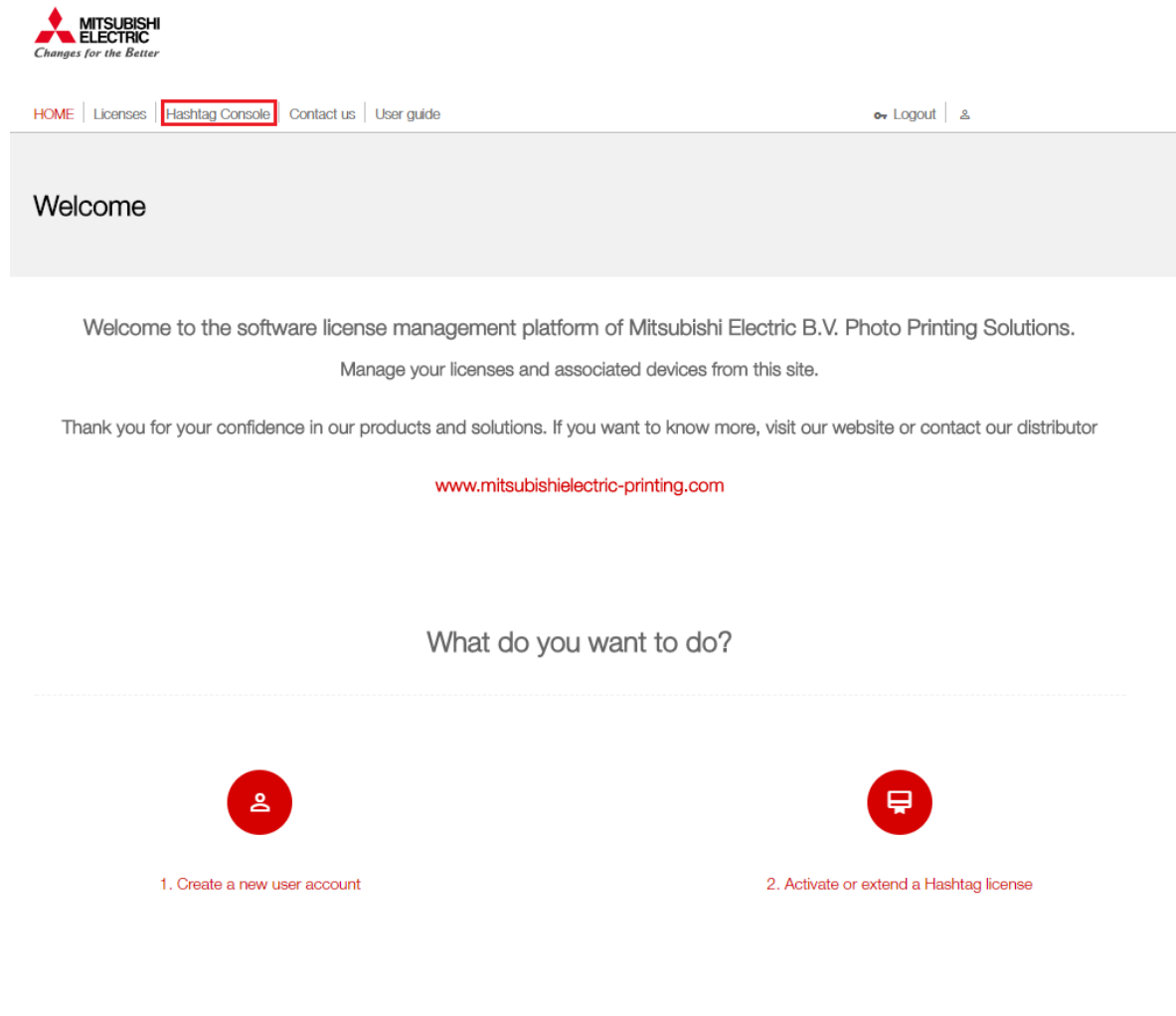
www.mitsubishielectric-printing.com

- Click Licenses from the top bar menu to activate your #hashtag service license:

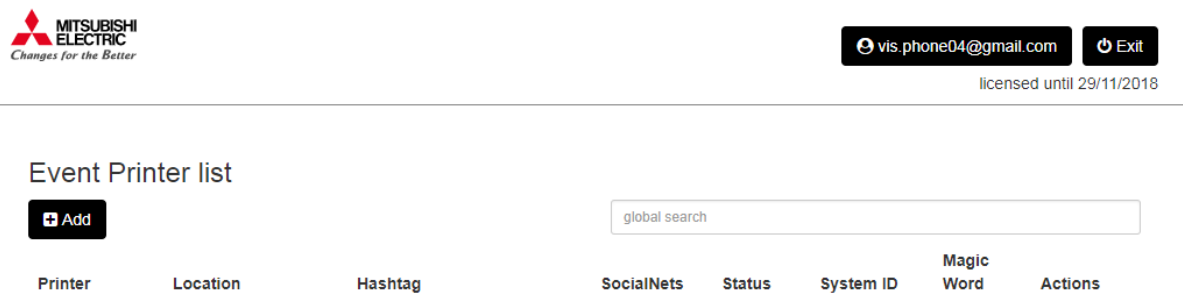
The screenshot shows the "Licenses" page on the Mitsubishi Electric software license management platform. The top navigation bar includes the Mitsubishi Electric logo and the tagline "Changes for the Better". The navigation menu includes "HOME", "Licenses", "Support", and "Help". A "Logout" link and the email address "test@gmail.com" are visible in the top right corner. The main content area features a "LICENSES" heading on the left and a red message "All fields are mandatory" on the right. Below the heading, there is a section for "New license activation". This section includes a "License key" label and a text input field containing a placeholder license key: "xxxxxxxx-xxxx-xxxx-xxxx-xxxxxxxx". Below this, there is an "Identity confirmation" section with a text input field for "User account password" and an "ACTIVATE" button.

Appendix

- Once you have register your license, a new Item will appear on the top menu bar.



- Click on “#Hashtag Console” button to add the printer and setup your #Hashtag event.



Appendix

Glossary

- **Canvas:** It's a virtual two dimensional surface that serves as a reference to create compositions using different objects. Stablishing an x/y coordinate system on a canvas and giving it a size (width and height) it is possible to place different objects on a specific x/y position with a high accuracy.

- **Frame:** A png image file that will be used to decorate the print out.

- **FTP:** File Transfer Protocol.

- **HotFolder:** It is the container where the external devices (Smartphones, laptop, Photo camera, ...) will send the images that will be processed by the selected print Service.

- **NUC:** It's a mini computer from Intel.

- **Print Service:** Refers to one of the built in web print services EasyPrint / FunPrint or also a print service using an external application.

- **Samba (SMB):** A protocol to share folders and its content between computers.

- **SSID:** Service Set IDentifier. It refers to the name of the Wi-Fi hotspot generated by the SmartD90EV.

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