



V1.3

Operation &

Maintenance web application







Index

Operation

operation.	
■ Introduction	3
■ Basics	
 Construction of the image to be printed 	
Built in print web services	
 Sharing SmartD90EV HotFolders with Samba 	9
■ FTP Service	10
■ Samples	11
The maintenance web application	
 Login to the maintenance web application as administrator 	13
Start maintenance page	
■ Top Menu	<u>15</u>
■ Order Info	<u>16</u>
Printer Info	17
System Info	18
 HotFolder Setting 	20
Print Setting	
Service Setting	26
System Setting	31
 Additional Setting 	
■ Maintenance	35
Appendix	
How to realize frequent tasks	37
■ Glossary	
Troubleshooting	
Warnings	40





Operation





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 evens, ...

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

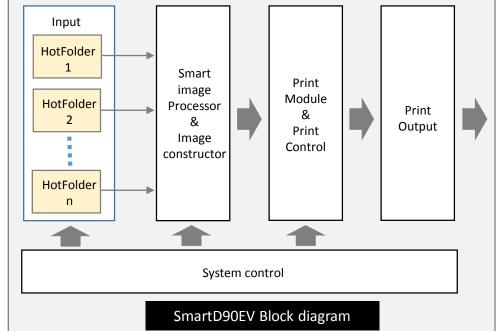
The SmartD90EV software offers two different built in printing services based on web technology than can be selected and setup from the maintenance application, that is also based on web technology and provided by the internal web server.

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 the image to be printed 1/3

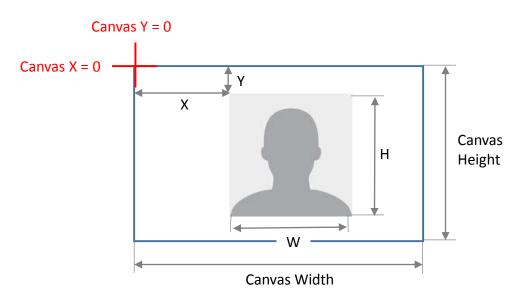
Each one of the input HotFolders has its own image constructor parameters. The image processor uses these parameters to build the image to be printed.

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.





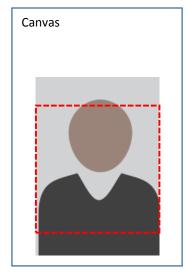




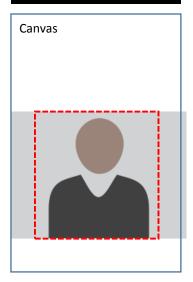
Construction of the image to be printed 2/3

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

Portrait canvas Portrait image

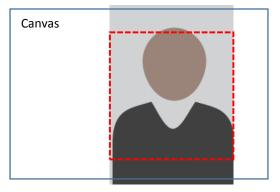


Portrait canvas Landscape image

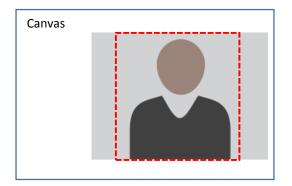


☐ The parts of the image out of the red doted square (defined area for the image) are not printed.

Landscape canvas Portrait image



Landscape canvas Landscape image





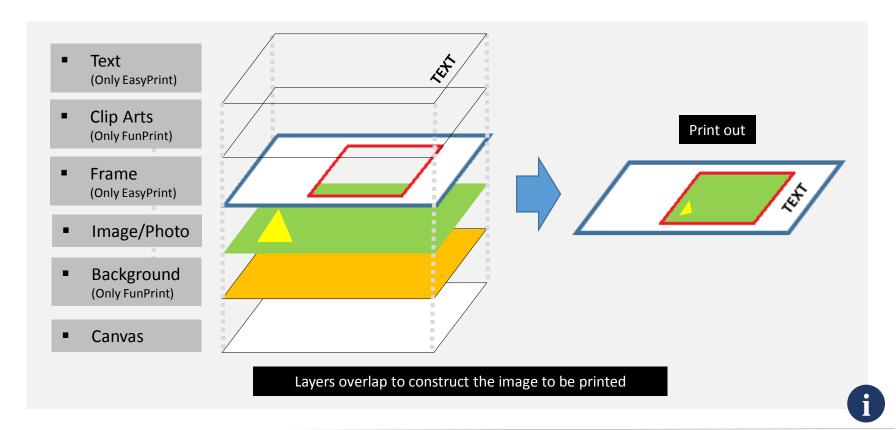




Construction of the image to be printed 3/3

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





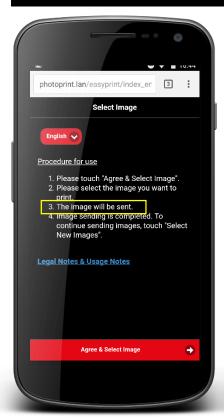
Built in print web services

EasyPrint1

EasyPrint2

FunPrint 5x15(2x6")

FunPrint 15x8.9(6x3.5")









Images are send to the SmartD90EV as soon as they are selected Needs confirmation (Click "Order") to send the images after selected

Strip with 3 images + decoration, logo, ... 5x15 (2x6") size

Image on a decoration background with Polaroid style

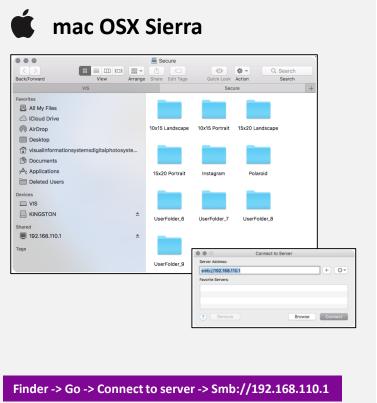




Sharing SmartD90EV HotFolders with Samba

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.









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.

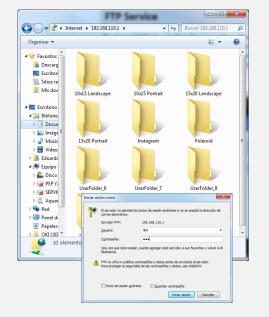
Port: 1212

User name: "dps" (default) Password: "dps" (default)

Infrastructure mode

Passive mode







Connection wizard

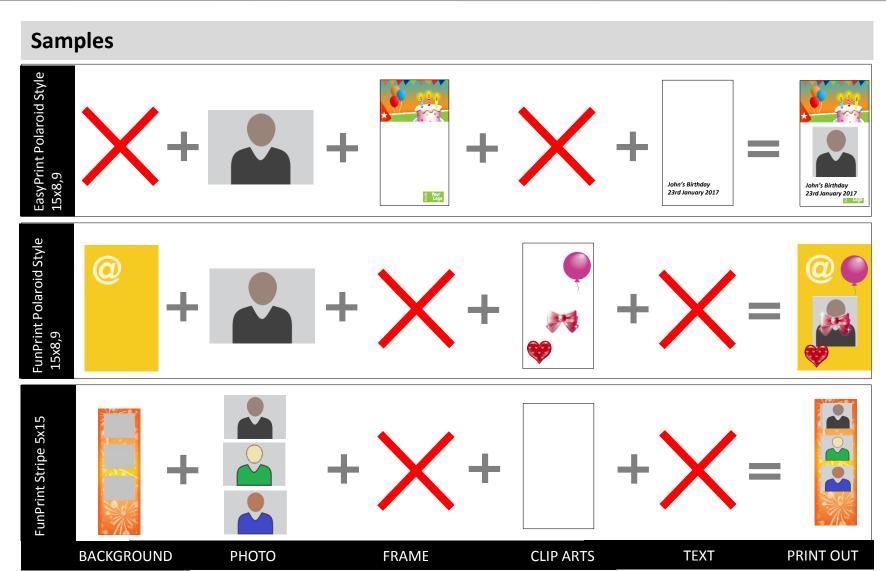
Transfer with caption

Windows File Explorer

Canon EOS 1D













The maintenance web application



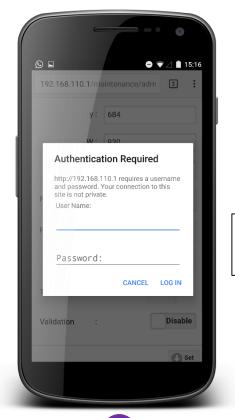




Login to the maintenance web application as administrator



Go to your Smartphone Wi-Fi settings and select the SmartPhotoPrinter SSID: **#PhotoPrint**



Default values:

- admin
- admin

2

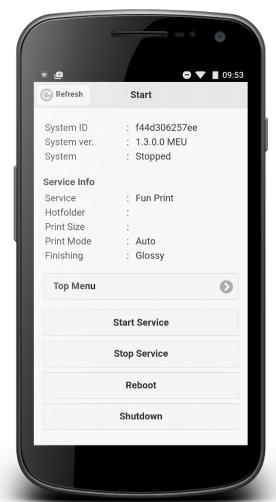
Launch the browser (Chrome, Safari, Opera, ...) and open the SmartPhotoPrinter maintenance web: http://192.168.110.1/maintenance/admin





Start maintenance page

- System ID: Shows the unique system ID
- System ver: Software version installed in the equipment. In this case, V1.2
- **System**: Shows the status for the print service:
 - Ready: The SmartPhotoPrinter is ready to print
 - Stopped: The print Service is stopped and the SmartPhotoPrinter can not print
 - Error: The SmartPhotoPrinter can not 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)

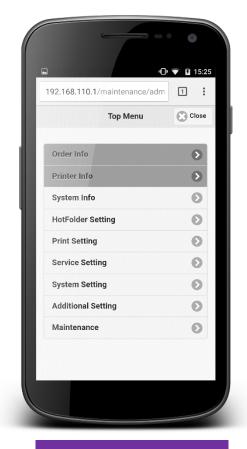




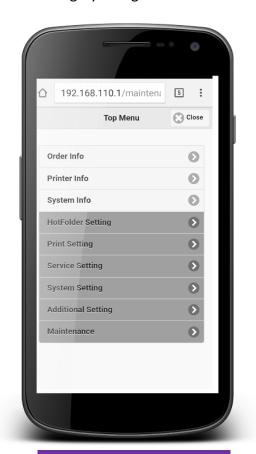


Top Menu

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 SmartPhotoPrinter settings are changed. Items with dark grey background are disabled.



System: Stopped



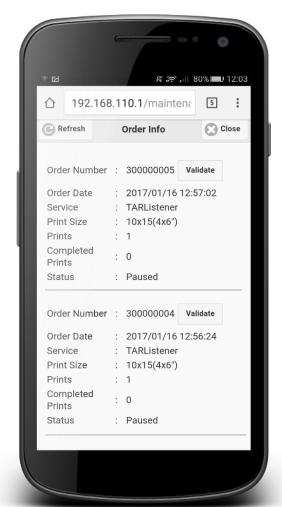
System: Ready





Top Menu -> 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



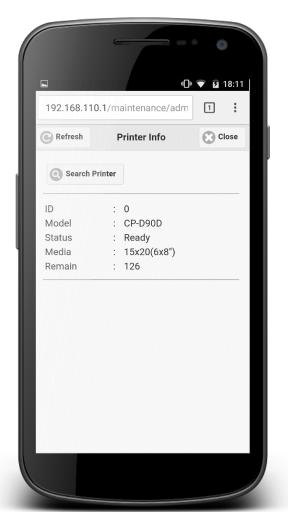




Top Menu -> Printer Info

It shows different type of information about the printer device:

- 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.







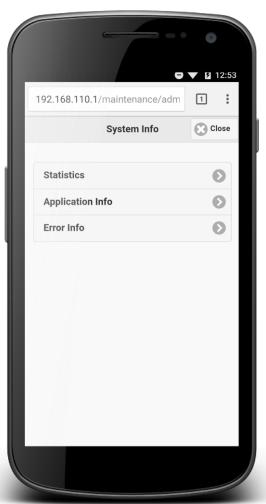
Top Menu -> System Info (1/2)

 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.



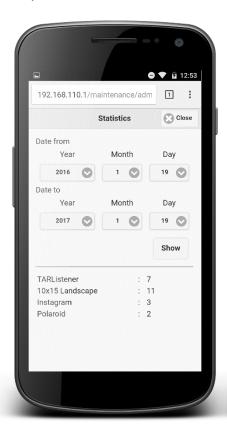




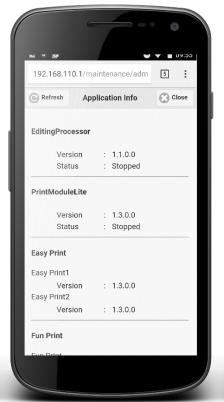


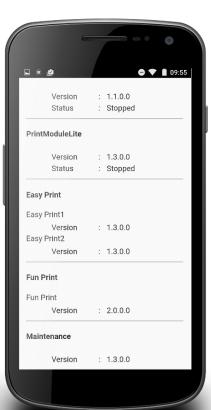
Top Menu -> System Info (2/2)

System info sub menus









Statistics

Error info

Application Info 1/2

Application Info 2/2

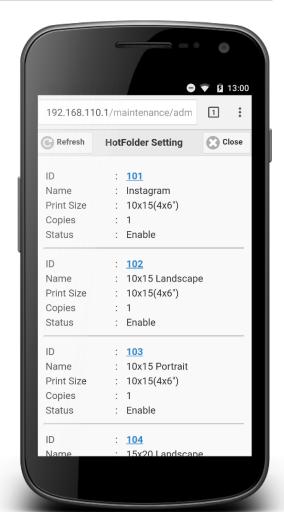




Top Menu -> HotFolder Setting 1/3

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

- **ID**: It shows the ID number of a HotFolder. The ID is a unique identification number that can not be edited.
- Name: An alias for the HotFolder. The name can be edited for a better identification
 of the 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.







Top Menu -> HotFolder Setting 2/3

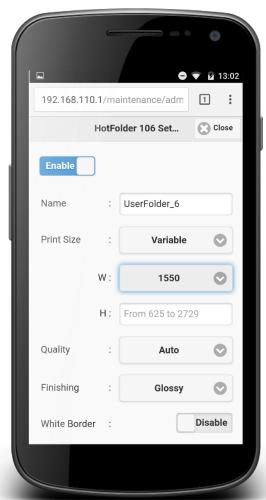
- Enable / Disable: If DISABLE is selected the HotFolder can not be used for any service.
- Name: The alias for the HotFolder. Type a name according to the printing format for a better understanding and more easy service setup.
- Print Size: Select from the list one of the predefined printing sizes. If "Variable" is selected, then choose "Width" between 1550/1852 pixels and input "Height" accordingly.
- Quality: Printing quality:

<u>Auto</u>: 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.

<u>Ultrafine</u>: 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.







Top Menu -> HotFolder Setting 3/3

- 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

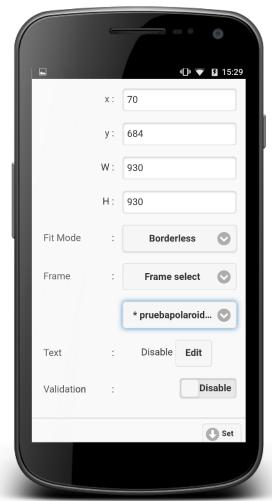
- Fit Mode:
- Frame: Allows the selection of a frame (*.png file) to decorate the print out.

None: No frame is selected

Frame select: Enable the list to select the available frames.

<u>Rotation</u>: 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.







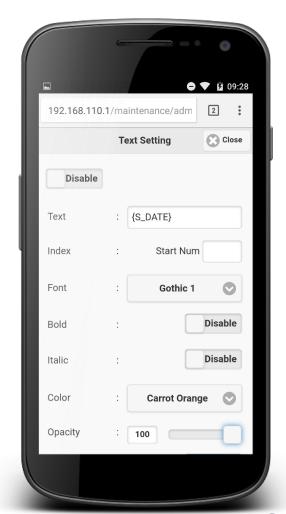


Top Menu -> HotFolder Setting -> Text Edit 1/2

- 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

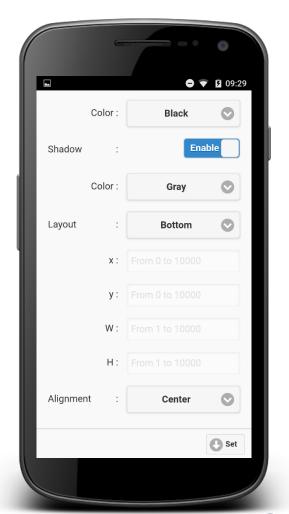






Top Menu -> HotFolder Setting -> Text Edit 2/2

- **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.



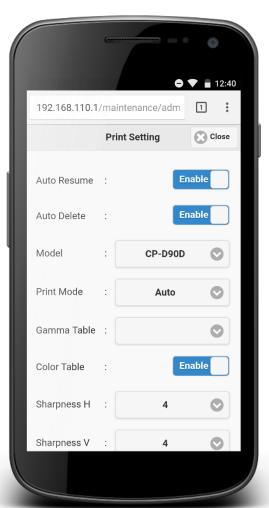




Top Menu -> Print Setting

Adjust the main print settings.

- 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.



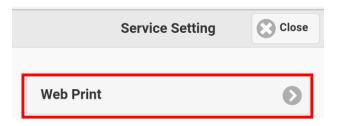






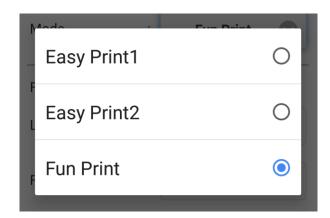
Top Menu -> Service Setting 1/5

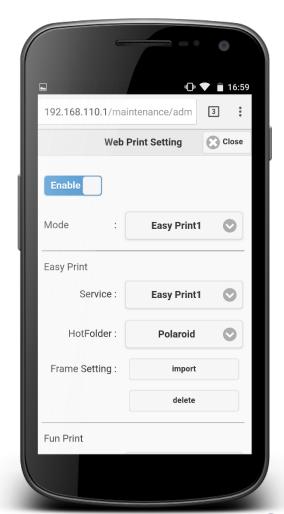
■ Web Print





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









Top Menu -> Service Setting 2/5

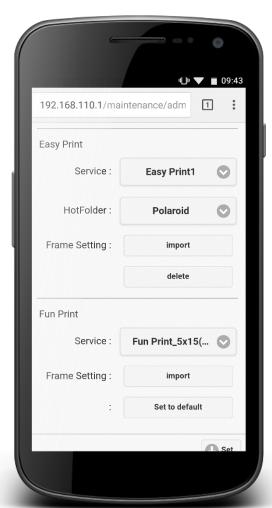
■ Web Print

EasyPrint

- Service: Easy Print 1 / Easy Print 2
- HotFolder: Sets the HotHolder that will be used for EasyPrint Service. A selection list is displayed to show the available HotFolders.
- Frame Setting:
 - 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.





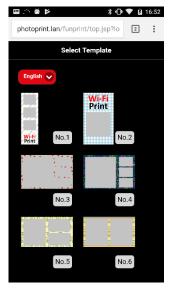


Top Menu -> Service Setting 3/5

■ Web Print

FunPrint (Edit)

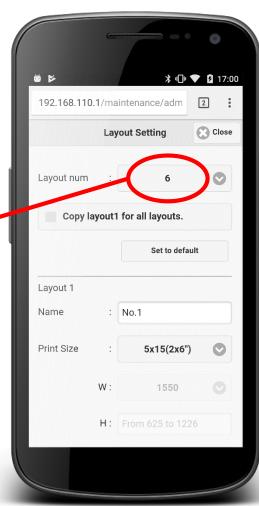
- <u>Layout num</u>: Number of available layouts that are available in the Fun Print web service (Max 6).



Main settings

Name: Name of layout

<u>Print Size:</u> Size of print out. If variable size is selected then the width (1550 / 1852) and height in pixels could be selected.



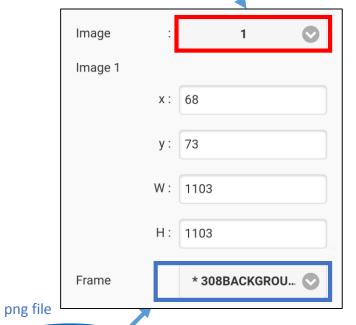




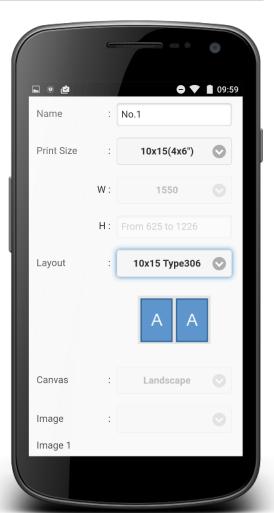
Top Menu -> Service Setting 4/5

■ Web Print

- <u>Layout</u>: Selects the layout to be used. The layouts available are related to the print size selected. The layouts can have between 1 to 6 images. If the selected type is "variable", then it could be possible to edit the image format and position for each one the images.



To add a preloaded or customized decoration background, click on the "Frame" Popup list.



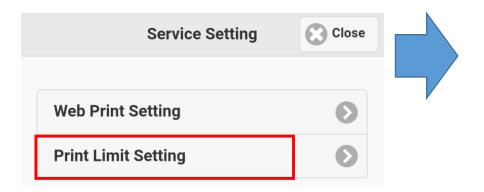




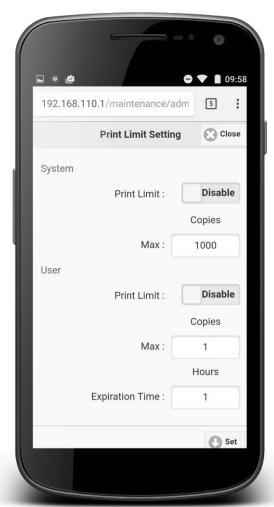


Top Menu -> Service Setting 5/5

Print Limit Setting



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







Top Menu -> System Setting 1/2

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. http://192.168.110.1/maintenance/admin

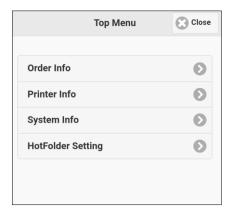
<u>User name</u>: **admin** (cannot be changed)

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 http://192.168.110.1/maintenance/user

User name: user (cannot be changed)

Password: user - default value. (It can be changed)





If you change the default **admin password**, keep it in a safe and known place. If you forget this password, the system may result unusable and require a service action.







Top Menu -> System Setting 2/2

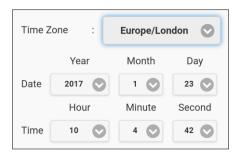
Wi-Fi Setting:

- SSID: Sets the SSID name. Default name is "#PhotoPrint"
- <u>Pass</u>: Sets a Password for the Wi-Fi connection. If blank, then password is disabled. Password must have 8 char min.

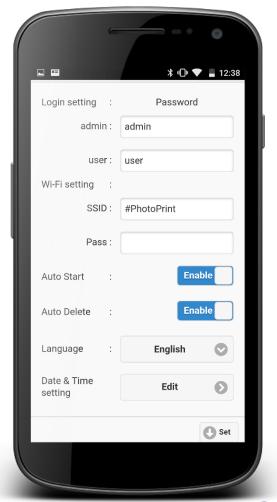


If you set a **password for the Wi-Fi**, keep it in a safe and known place. If you forget this password, the system may result unusable and require a service action.

- 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.







Top Menu -> Additional Setting 1/2

- FTP service: Setup "User" name and "Password" for the FTP client service.
- Smartphone APPs: Setup the Smart Photo Print app service. The Smart Photo Print app send the print orders to the HotFolder ID 300. These settings override the HotFolder 300 equivalent setting values (print size, validation, ...)

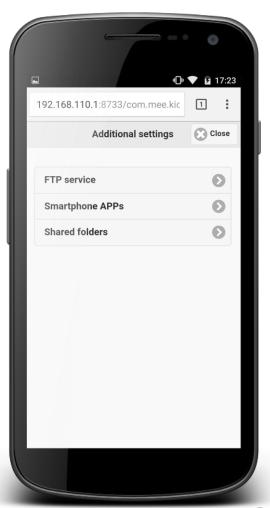






- Shared folders:
- Work group: Sets the Work group within the shared folders' network.
- Sets the "Work group", "User" name and "Password" for the Samba (SMB) client service.

The FTP Service and the Shared folders setting menus contain a sync button. It must be clicked before use these services

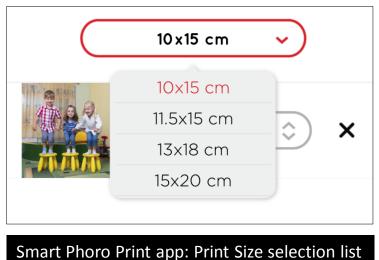




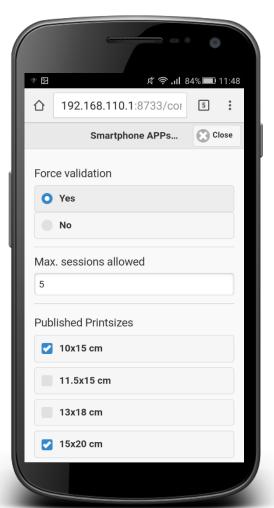


Top Menu -> Additional Setting 2/2 -> Smartphone APPs

- Force validation: If it is set to "No", the images are processed and printed without validation. If it is set to "Yes", then the orders are "Paused" and they have to be validated from the Order Info menu.
- Max sessions allowed:
- Published Printsizes: Defines the Print Sized that will be available prim the Kiosk Prints app:



• Set: Click "Set" to apply and save the changes.

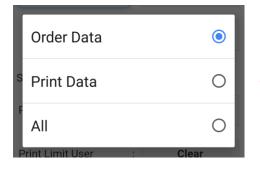




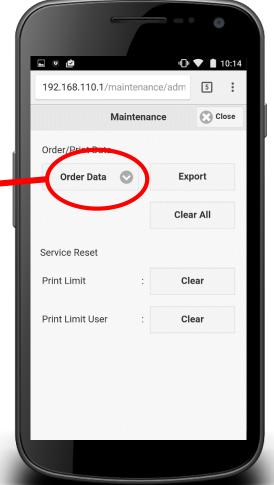


Top Menu -> Maintenance

Order Print data: 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:
 - Print Limit (Clear): Resets the event print counter.
 - Print Limit user (Clear): Resets the print limit per user.









Appendix





How to realize frequent tasks

TASKS	PROCEDURE
Check media condition (Type of media, remaining copies)	 Maintenance (admin) -> Start Service (if system is not ready) -> Top Menu -> Printer Info
Change web print service	 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)	 Maintenance (admin) -> Stop Service -> Top Menu -> Service Setting -> Web Print: 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	 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" 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





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. The names for the png files must follow certain rules: <u>Frames for EasyPrint web service</u>: Only must contain upper or lower chars, numbers and "_" sign (Example Event_10x15_H.png). The sample frames provided follow the rule "Name"+"_"+"format"+"Direction"+".png". <u>Frame for FunPrint service</u>:: A number from 1 to 6 + ".png" (Example 1.png, 2.png)
 The use of other characters may result in a unusable file for the SmartD90EV.
- 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.



Troubleshooting

SYMPTOM	CHECK
Images sent to the SmartD90EV are not printed out	 The printer is ON and front led lights GREEN. No front led is lighting red nor orange. The system is Ready: Maintenance web (admin) Check the Order Info page. The "Validation" condition could be set "Enable" in the HotFolder Setting menú. Click on the Validation Disable/Enable toggle button to change the value.
Frames for EasyPrint service are not shown by the "Import" function.	Check that the png files have a valid name and that are saved in the root: USB memory device root:\\Smartp\easyprint\frame\
Frames/Backgrounds for FunPrint service are not shown by the "Import" function.	 Check that the png files have a valid name and that are saved in the root: USB memory device root:\\Smartp\funprint\frame\
Setting changes are not applied.	Remember click on the "Set" button after change values of settings. Each group of registers has its own set button at the end of the page.
The "Paper/Ribbon" printer front led lights orange. □ PAPER	Open printer deck and check ribbon and paper roll condition.
The "Alarm" printer front led lights/blinks red. O POWER PAPER RIBBON ALARM	Check if paper/ribbon front deck is closed





Warnings



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.



If you change the default **admin password**, keep it in a safe and known place. If you forget this password, the system may result unusable and require a service action.

The "Set to default" button in the FunPrint setting menu will replace all the customized frames (backgrounds) uploaded by the user. By the system frames. The uploaded frames by user can not be recovered from the SmartD90EV.

Place the SmartD90Ev in a stable and safe place to avoid that the equipment could falls down, be hit, and specially the paper tray, exceeds the limit edge of the stand.









The contents of this guide is subjected to change without notice.







- http://www.mitsubishielectric-printing.com
- http://www.messec.net