



ANALOG WAY[®]
Pioneer in Analog, Leader in Digital

QUICK START GUIDE

Pulse - Ref. PLS300

Thank you for choosing **Analog Way** and the **Pulse**. By following these simple steps, you will be able to setup and use your powerful Dual Scaler Hi-Resolution Seamless Switcher within minutes. Discover the **Pulse** extensive capabilities and intuitive interface while configuring your first show, and unleash your creativity for a new experience in show and event management by **Analog Way**.

What's in the box

- 1 x **Pulse** (PLS300)
- 1 x Power supply cord
- 2 x DVI-I male to HD15 female and DVI-D female cable
- 1 x HD15 to 5 BNC cable
- 1 x Ethernet cross cable (*for device update*)
- 1 x Set of 3 audio 5 pin screw terminals
- 4 x M4x12mm screws
- 1 x Quick Start Guide (*Sticker*)

- 1 x RCS (*Remote Control Software for PC only*) *
- 1 x User Manual (*PDF version*) *
- 1 x Quick Start Guide (*PDF version*) *

* Download on our website: www.analogway.com

WARNING !

If required, front handles of the device can be dismantled, but with caution.

The original screws removed must not be reintroduced to their location without handles in place.

Substantial damages can occur, including risk of electric shock from the mains voltage.

Only **M4x12mm** screws can be used.
(They are supplied with the unit)

Quick install and setup

Getting started:

You may wish to reset the unit to factory settings to get started.
Go to: **Menu --> Control --> Default Values --> Yes**.

1. Select the Output resolution that matches the native resolution of your display. You will next be prompted to choose enable follow mode if desired and output rate.

Menu --> Output --> Output format --> 1024x768 --> Internal Ref --> 60 Hz.

2. Inputs can be configured automatically using the *Auto Set All* function.

Menu --> Inputs --> AutoSet All.

It will scan each input and detect the sync type that is plugged in. You can still do an *Autoset* or manual setup per input.

The Pulse has 4 layers available called: **[BACKGROUND FRAME]**, **[BACKGROUND LIVE]**, **[PIP]** and **[LOGO]**. Each layer will obscure your view other layers below.

3. To display a source, Select the **[BACKGROUND LIVE]** layer (it will begin to blink) then, select a source (it will also blink). Press **[TAKE]** to transition your source from preview to program output.

There will always be a layer selected (blinking) and a source selected (blinking) to the selected layer (blinking). To view on preview or change the contents of a different layer, simply select it. Only 1 layer can be seen on the preview at a time.

4. To display a PIP, select the PIP layer (it will begin to blink) then select your source (it will also blink). Press **[TAKE]** to display the PIP on program output.

To see the layer beneath, you will need to clear or move the layers that are on top.

5. To clear the PIP or any other layer, select the layer (it will blink) then, select **[BLACK]**. Press **[TAKE]** to remove the layer from the program output.

TIP If you would like the Program and Preview to toggle/flipflop during each Take, enable this feature by going to **Menu --> Control --> Preset Toggle**.

Once enabled, everything on the Program output will become the Preview during each Take.

6. To display a logo or frame (framestore) follow the steps on page 4.

See the next page which describes the button lighting color code and other front panel features.

PLS300 can be used to display:

- sources seamlessly switched in the **Background Live layer**.
- **1 PIP** and 1 Logo over the Background Live layer.
- **2 PIPs** and 1 Logo over a Background Frame by resizing the Background Live layer.

IMPORTANT: Simply selecting a menu item will not set it to that value. Be sure to press the **ENTER** button when parametering the menu items.

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Front Panel Description

LAYERS

LAYER HIERARCHY



Press to select a layer, then choose an input.
LOGO: Display a partial screen Logo
PIP: Display a live source
Bkgnd Live: Display a live source
Bkgnd Frame: Display full screen frame in this layer

PRESET

Recall a custom stored preset (4 memories available).
To store a preset, use Menu -> Preset.

EFFECT

Select a custom transition



CONTROL

EXIT/MENU: Home Menu or back one level
ENTER: Validates the menu or command

INPUT SELECTION

#1 to #6: Press to access analog source #1 to #6
DVI 1 to DVI 2: Press to access DVI #1 or DVI #2
SDI 1 to SDI 2: Press to access SDI #1 or SDI #2
BLACK: Clear the active layer

FREEZE

Freeze the input linked to the current layer on MAIN

TAKE

Transition the pre-selected sources onto the MAIN output with the selected effects

STAND-BY

Hold for 3 seconds for stand-by Mode

BUTTON COLOR USAGE

#1 = Source is on the main outputs

#2 = Freeze enable

#3 = Stand-by button

#4 = Preset Selection

#1 = Source is on Preview

#2 = Function available for modification

Layer/source selected, and is currently active on the main output

Layer/source selected, and is not currently active on the main output

Solid red:



Solid green:



Blinking red:



Blinking green:



OPERATIONS OVERVIEW

WORKING IN MIXER MODE

- 1- Select Background Live button then select your input.
- 2- On the preview screen, the input appears
- 3- Select an **[EFFECT]** (open/close)
- 4- Press **[TAKE]** to view the result on the Main screen
- 5- Try enabling the 'Preset Toggle' from the Control menu to have your preview replaced by program during each Take

WORKING WITH PIPs IN MIXER MODE

- 1- Press the **[PIP]** button. On the preview screen, the PIP (layer) appears as a color rectangle
- 2- Select an input. On the preview screen, the input appears in the layer rectangle
- 3- Adjust the PIP (layer) with **Layer menu** (Pos & Size or Zoom)
- 4- Select a transition (open/close) or an effect into "Layer menu"
- 5- Press **[TAKE]** to view the result on the main screen
- 6- To remove layer, press **[BLACK]** then **[TAKE]**
- 7- For another PIP setup, repeat from step #1

INPUT SETUP

- 1- Press the **[EXIT/MENU]** button from the Home menu (all functions must be confirmed by the **[ENTER]** button)
- 2- Press **INPUT** and **AUTOSET ALL**
- 3- If the acquisition has failed, check all connections and perform a manual setup
- 4- For a comprehensive Input Setup, please refer to user's Manual
- 5- For a manual input setup, press the **[EXIT/MENU]** button:
 - a) Select **INPUT** menu,
 - b) Select an input from Input #1 up to SDI #2, then
 - c) Select **TYPE**.

NOTE: To adjust input Size or Pos, use the Layer Menu.
To adjust Blanking, use the Auto-Centering or Blanking adjustments in the Image menu.

OUTPUT SETUP

- 1- Press the **[EXIT/MENU]** button from the Home menu (all functions must be confirmed by the **[ENTER]** button)
- 2- Select **OUTPUT** menu,
- 3- Select **OUTPUT FORMAT** menu,
- 4- On Format line, select the display's native resolution
- 5- Control or adjust your display device (Monitor or Video Projector)
- 6- If necessary, select **TEST PATTERN** in the Output menu

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Rear Panel Description

WORKING WITH PLS300

The features of PLS300 can be controlled by the external remote control as:

- Orchestra - Ref. ORC50
- Axiom2 - Ref. ARC200
- Remote Control Software - Ref. RCS (supplied)
- Triple Remote Control Keypad - Ref. TRK-800
- Remote Control Keypad - Ref. RK-300



MCO Male connector for input. DVI #1 & #2 and AUX

3.5mm Jack Stereo Connector Input (unbalanced)

3G/HD/SD-SDI inputs #1 & #2: female BNC

IP-LAN connector

RS-232 communication port on a DB9 female connector

AUDIO OUTPUT
Main Audio Output (balanced)

Outputs #1 & #2: female HD15, DVI-I (simultaneous analog and digital outputs)

DVI connectors: DVI-D inputs #1 and #2 on the DVI-I digital pins, and Universal Analog inputs #5 & #6 on the DVI-I analog pins. Use the included break-in cable

Power supply: IEC/EN/UL/CSA 60950-1, internal, autoswitchable

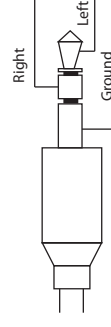
HOW TO ADJUST A SOURCE?

HOME MENU (extract)	
IMAGE (A3)	
(A3) displayed when an input is active	
(R1) Analog Computer Input	
(R2) Analog Input	
(R3) Video Input	
(R4) EDTV/HDTV Input	
(R5) RGB or YUV or YC or CV	
(R6) NTSC Input	
(R7) Interlaced 50 Hz	
(R8) Interlaced 60 Hz	
(R9) SDTV	
* Motion Correction	
The Menu allows to improve the threshold of the comb filter. 0% means no adjustments and 100% is the max. The setting is manual with a visual correction. The result is the removal of the aliasing in the moving picture.	
Auto Centering (R1)	
Blanking Adjust (R2)	
Cropping (R3)	
Optimize (R4)	
Under/Over (R5)	
Aspect IN	
Aspect OUT	
Colorimetry	
Advanced (R6)	
2:22 Pulldown (R7)	
3:2 Pulldown (R8)	
Force 4:3 (R9)	
Reset settings	
H position	
V position	
H size	
V size	
H position	
V position	
H size	
V size	
Phase	
H Total	
Native	
LetterBox 1_78	
LetterBox 2_35	
Full screen	
Centered	
Cropped	
Brightness	
Contrast	
Hue (R6)	
Component Level (R7)	
Motion Correct (R1)*	
Red Level (R8)	
Green Level (R9)	
Blue Level (R10)	

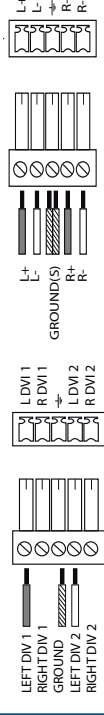
AUDIO INPUTS CONNECTIONS

MCO male connectors

Inputs #1 to #4: Unbalanced connection



Inputs DVI1 to DVI2: Unbalanced connection



Main Output: Balanced connection

The Home Menu is the system's top level menu, from which all others menus can be accessed. To access a menu, press the [MENU] button. To navigate in the Home Menu, please use the knob. To confirm, please use the [ENTER] button. You can also return to the Home Menu by pressing the [EXIT] button.

- **INPUT**: configure the 10 individual input types and resolutions
- **MAIN OUT**: in Mixer mode, set format and rate of main output
- **PREVIEW OUT**: set format and rate of preview output
- **PRESET**: store and use presets
- **IMAGE**: change image settings of an input
- **KEYING/TITLING**: access keying and titling controls and parameters for the selected layer
- **LAYER**: adjust Layer size, position, border transparency or Transition
- **LOGOS/FRAMES**: store (record), and manage layers and frames. To display a frame or logo, use the frame or logo layer (see next page)
- **AUDIO**: access all audio input and output parameters
- **CONTROL**: access device software information, LAN settings, reset factory settings, amongst other user oriented functions (see next page)
- **VIRTUAL T-Bar**: access the Virtual T-Bar

How to do an AutoTake?



The Autotake function performs a TAKE automatically each time an input is selected.

How to record & display a still Frame?



The [Empty] term appears next to all unused slots

Frame: Full and individual picture.

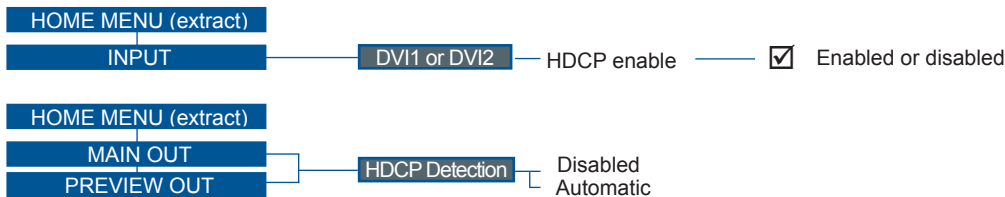
Logo: Part of picture like a graphic symbol which represent a company or organisation.

It is possible to store up to 6 frames and 6 logos in the PLS300 non volatile memory.

- ▶ Select RECORD FRAMES in the Logos/Frames menu.
- ▶ A white rectangle will appear on your main display, indicating the Frame which will be captured.
- ▶ Select an empty frame memory to store the frame into. Your frame will now be stored.
- ▶ To recall a frame: press the [BKGND/FRAME] button, select a frame number (#1 to #6), then press the [TAKE] button. Your Background Frame will appear on your main screen, under any other active layers. Be sure to clear or move any other layers to expose the Background Frame layer.
- ▶ To remove the Background Frame, press [BLACK] button, then [TAKE] button.
- ▶ Once you have recall a frame, you can recall live layers on the top of it.

TIP : A long press on the [BACKGROUND FRAME] button will set all other layers to black/clear on the preview. Press [TAKE] to view your selected frame.

How to disable the HDCP encryption?



The HDCP Encryption can be disabled on DVI inputs #1 to #2 or/and Main Output / Preview Output. This can be useful when you have a computer which is detecting the HDCP compliance of your switcher and protecting the content by encrypting the signal from this computer. This feature will disable the HDCP compliance on this specific DVI input only.

If you want to use HDCP content from your sources, be sure to use only HDCP compliant screens or projector. If it's not the case, the output image could be disabled. When displaying HDCP protected sources on non HDCP compliant equipment, the following message will be displayed on the device screen: « **Due to HDCP content, non HDCP screens cannot display protected sources** ».

Screen will go to black without displaying the HDCP input image, or partially layer out on HDCP content.

The output status can provide you all information about the output in real time. This feature is particularly useful when HDCP is used with long cable to be sure the communication is well handled.

How to use the Auto-Lock Function?



[AUTO-LOCK] allows to select an input only if a signal is connected.

Warranty

This **Analog Way** product has a 3 year warranty on parts and labor, back to factory. This warranty does not include faults resulting from user negligence, special modifications, electrical surges, abuse (drop/crush), and/or other unusual damage.

Going further with the Pulse

For complete details and operations procedures, please refer to the **Pulse** User's Manual and our website for further information: www.analogway.com