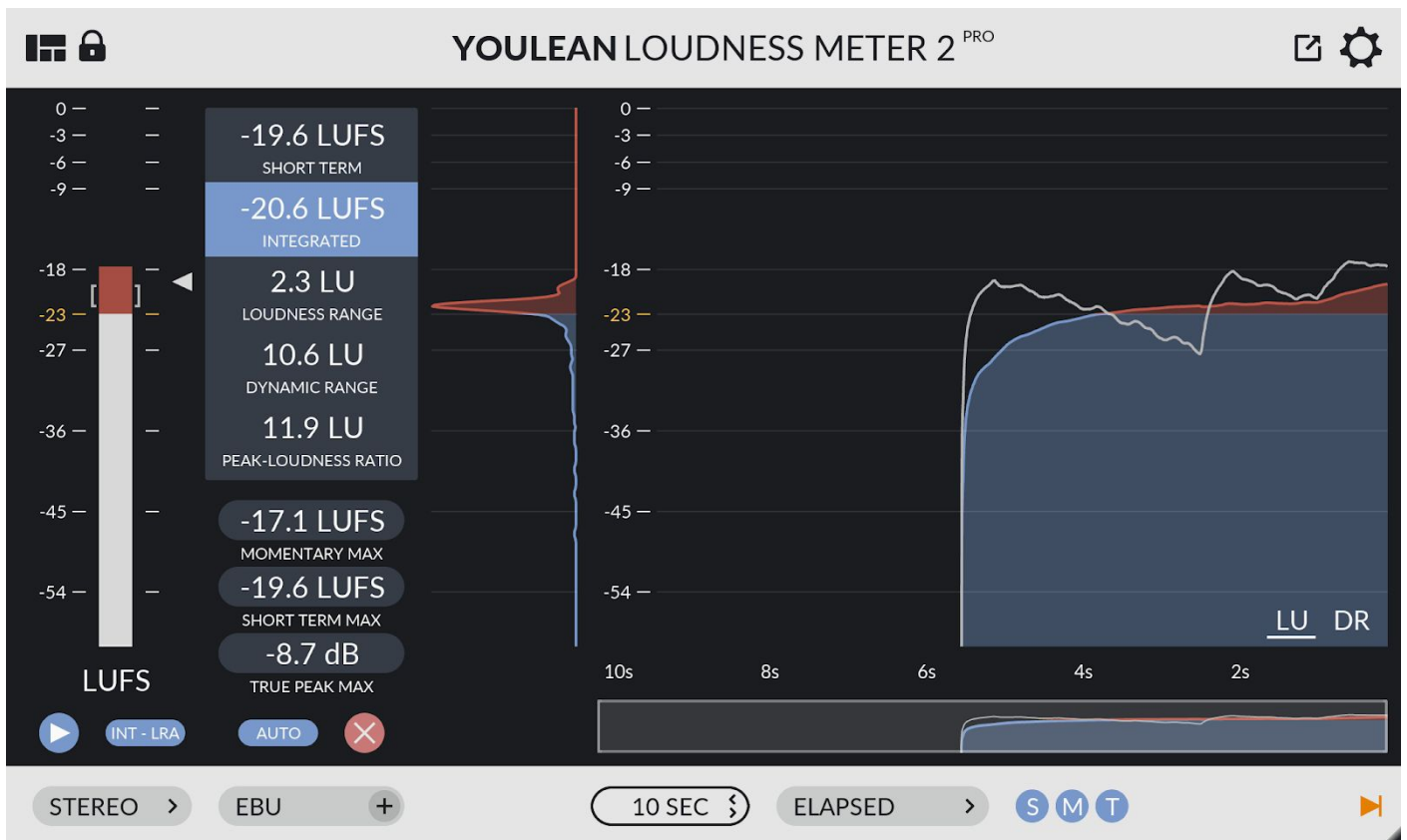


# MANUAL



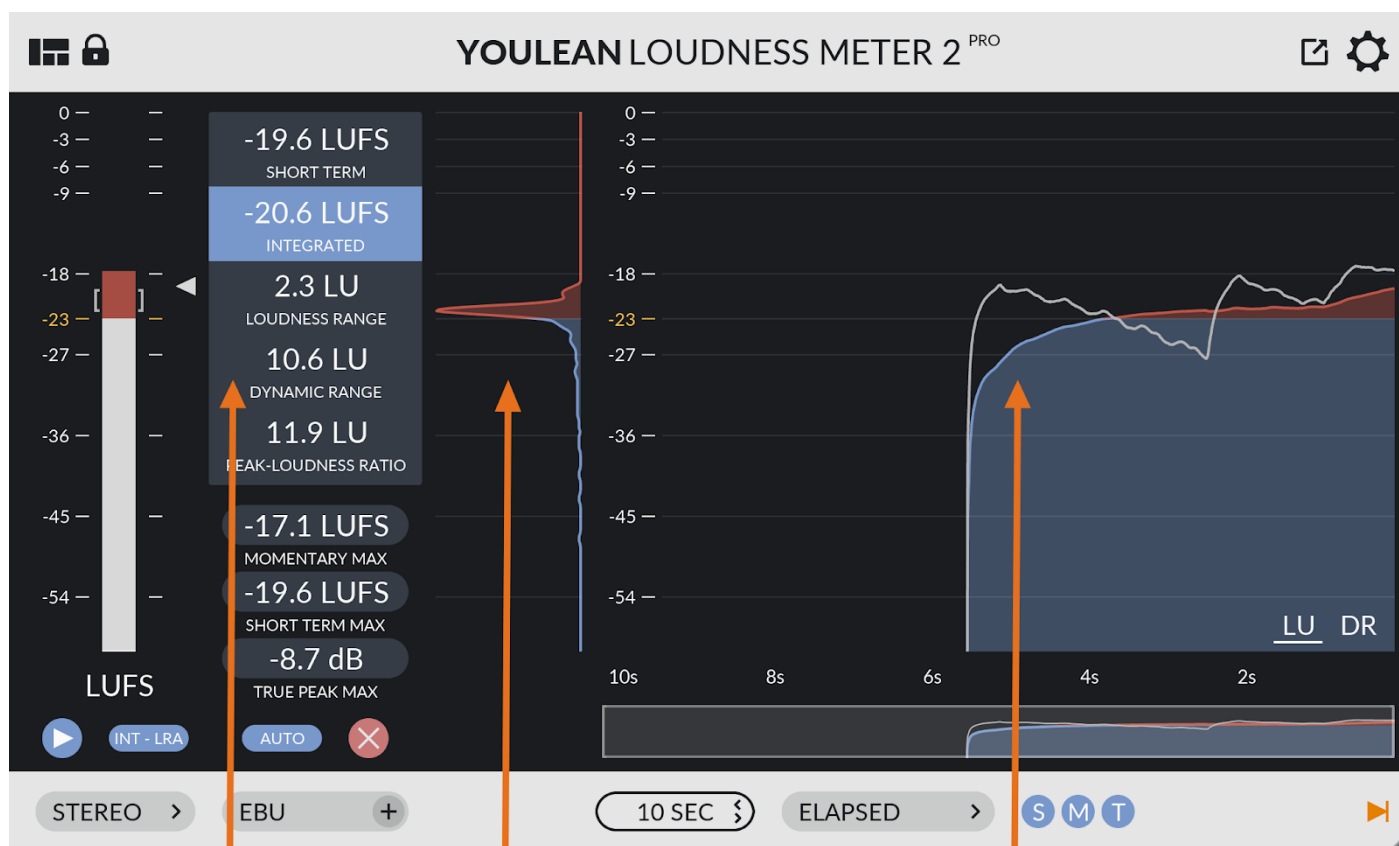
**Software Revision - v2.1.0**

**Document Revision - November 2018**

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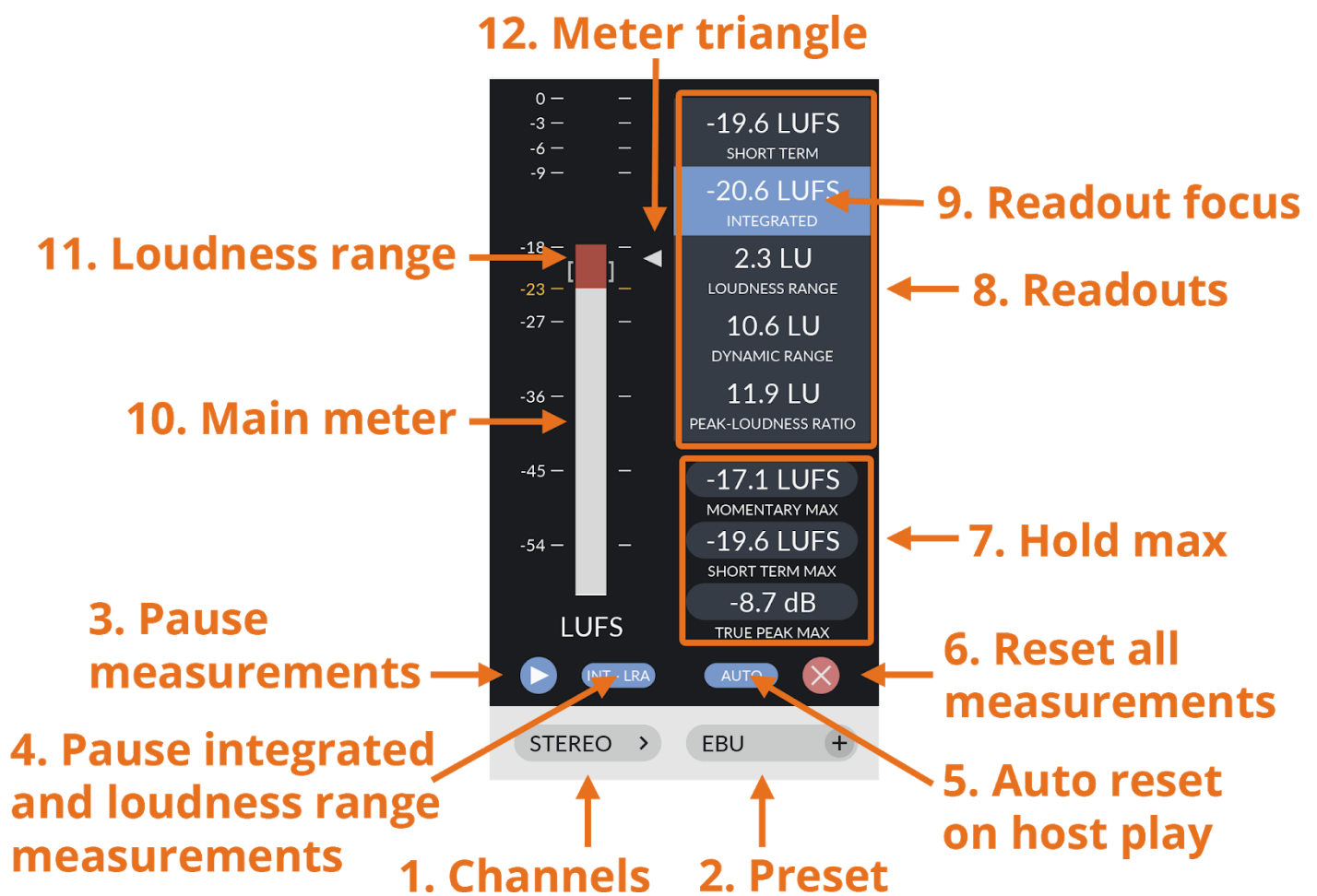
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Mini view

Distribution view

Histogram view



**1. Channel configuration** - Sets the channel configuration that is used for loudness measurements.

## 5.1 routing

- DTS: L R Ls Rs C LFE
- ITU: L R C LFE Ls Rs
- Film: L C R Ls Rs LFE

**2. Preset** - Sets the loudness standard that is used for the measurement.

There are 2 groups of standards:

### **Film - TV - Gaming**

- ITU-R BS.1770-4
- EBU R128
- EBU R128 S1
- ATSC A/85
- OP-59
- ARIB TR-B32
- AGCOM 219/09/CSP
- ASWG-R001 HOME
- ASWG-R001 PORTABLE

## Online Streaming

- AES Streaming
- Spotify
- YouTube
- Apple Music
- Tidal

**Custom presets:** You can save up to 10 custom presets.

**NOTE:** If preset has an "(E)" in front of its name, that means that the preset has been edited.

**Edited preset** → 

**NOTE:** Presets for Youtube and Apple Music are approximations since these companies haven't openly published the algorithm they are using for loudness normalization.

**3. Pause measurements** - Pause all measurements.

**4. Pause integrated and loudness range measurements** - All other measurements are not paused. It will be indicated in the histogram with a white block over the loudness measurements.

**5. Auto reset on host play** - All measurements will reset after you stop and start playback or if you jump a play position in the playlist.

**6. Reset all measurements** - All measurements will reset instantaneously.

**7. Hold Max** - Shows a maximum of momentary, short-term and true peak measurements. Values will change their color to red if the threshold is exceeded. You can set custom thresholds in the **SETTINGS** menu.

- Click on the value to reset

**8. Readouts** - Show numerical values for short-term, integrated, loudness range, peak to short-term loudness and peak to integrated loudness.

**9. Readout focus** - It helps you to visually focus on the specific readout. It can be changed in the **VIEW** menu.

**10. Main meter** - Shows momentary loudness.

**11. Loudness range** - Shows loudness range.

**12. Meter triangle** - Shows short-term loudness.



## 1. Loudness Distribution



## 2. Dynamic distribution

**1. Loudness distribution** - Shows distribution of all loudness measurements.

**2. dynamics distribution** - Shows distribution of all PLR-Short Term measurements.

## 11. True peak above the threshold

## 10. Paused

## 12. Mouse over

## 9. Incomplete buffer

## 8. Loudness target

## 4. Window control

## 1. Window size

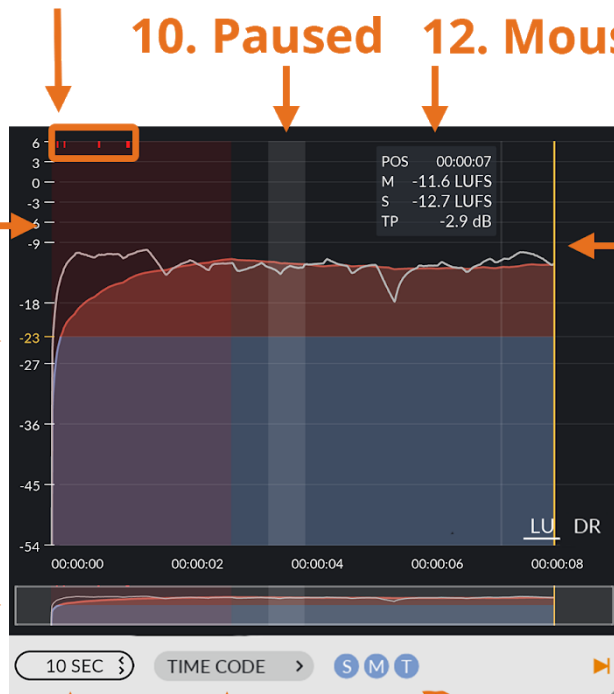
## 2. Histogram mode

## 3. Histogram view

## 7. Current position

## 6. Loudness - dynamic switch

## 5. Tracking



**1. Window Size** - Sets the window size that is used in histogram display.

## **2. Histogram mode**

- **Continuous** - Continuously measuring the loudness regardless of the state of host playback.
- **Elapsed** - Pauses the measurements if the host pauses the playback.
- **Time Code** - Loudness data is stored against the time code position. This mode enables the loudness overdub mode.
- **System Time** - Choose this option to select a system clock (HH:MM:SS) reference. System time mode will allow events to be correlated with the system clock. This mode will be useful to track loudness measurements of live events and other scheduled programs.

**3. Histogram view** - Shows or hides short term, momentary or true peak values from the histogram.

**4. Window control** - Shows a macro overview of the histogram history stored within the plug-in. The rectangular window shows the data currently represented in the history display and can be dragged left/right to locate a specific region in the histogram inspector.

- Click outside the rectangular window to quickly jump to a region

**5. Tracking** - This control determines whether the histogram graph automatically scrolls, or shows a static view. Click to toggle the auto tracking on/off. Tracking will be automatically turned on if you reset the data.

**6. Loudness - dynamics switch** - Select loudness or dynamics graphs.

**7. Current position** - Shows the position where current measurements are drawn. It will change its color to red if a value has been drawn from an incomplete buffer. It needs to pass 3 seconds for the buffer to become complete and to have true loudness representation. If the plugin host support, you can set 3 seconds pre-roll window to compensate for that. If the current value is from an incomplete buffer, it will be inserted only if there are no previous measurements from the complete buffer on that position. Values from the complete buffer will overwrite all the previous measurements.

**8. Loudness target** - Shows the loudness target that was set in the **SETTINGS**.

**9. Incomplete buffer** - Marks where the values from the incomplete buffer where inserted.

**10. Paused** - Marks where the measurements for integrated and loudness range were paused.

**11. True peak above the threshold** - Marks where the true peak was going over the threshold. A threshold can be changed in the **SETTINGS**.

**12. Mouse over** - Shows numerical measurements that are in the horizontal position of the mouse.

## **MOUSE CONTROLS ON THE HISTOGRAM GRAPH**

- Click to pause tracking.
- Double click to resume tracking.
- Click and drag left/right to move through the measurements history.
- Click and drag up/down to move histogram scale.
- Move scroll wheel to change window size (you might need to click on the plug-in interface first to get the mouse wheel to work). If tracking is disabled, moving a mouse wheel will change the window size relative to a mouse position.



**1. View menu** - This menu will control all settings regarding the plugin view.

NOTE: "Readout Focus" will set the blue outline below the specific readout in the **MINI VIEW**. This will help you to visually focus on specific measurement.

**2. Registration menu** - Here you will register the **PRO** version of the plugin. After you buy the **PRO** version, you will receive an email with your license. Then you can copy your registered email and serial number and paste it in the correct fields to register the **PRO** version.

**3. Export menu** - Here you can export all measurements and graphs as a PDF, PNG or SVG file. The export look will be influenced by the plugin settings, so if you change the scale for the **HISTOGRAM VIEW**, for example, the scale will be changed on exported PDF too.

**4. Settings menu** - Sets the SETTINGS of the plugin.

## LOUDNESS

- 1. Split up** - If measurements are above this threshold, the graph will change its color.
- 2. Split down** - If measurements are below this threshold, the graph will change its color.
- 3. Transition** - Sets the color transition. This is useful for visualizing streaming presets since we don't have a precise threshold for it.
- 4. Offset** - Sets the scale offset.
- 5. Range** - Sets the scale range.
- 6. Loudness target** - Sets the visual indication on the scale. Also, it controls zero position if the relative scale is engaged.
- 7. Relative scale** - Changes the scale so that a value from "Loudness target" will become zero on the scale.

## DYNAMICS

- 1. Range** - Sets the scale range.
- 2. Color thresh** - Sets the threshold for different colors. You can also disable colors.



## ALERTS

Here you can set the thresholds for the alerts. There are two type of alerts: if the measurement goes below the threshold, or above the threshold.

## ADVANCED

**1. Use global settings** - If on, the plugin will use global advanced settings. Every new instance of the plugin will have the same advanced options.

If off, all options you set will be saved per plugin instance.

**2. Adv optimizations** - If on, the plugin will activate SSE CPU optimization that will improve plugin performance by ~25%. Also, host project saving will be much faster and it might eliminate the audio glitch when saving large graphs in the project.

**3. Eco true peak** - If on, switches true peak detection to a lower quality one, however true peak detection will still comply with the ITU recommendation. CPU usage should be reduced by ~40%.

**4. Save graphs** - If on, the plugin will save all graphs with the host project. If reloading all graphs after host project reloads is not important to you, you can disable this option.

If off, the project file size will be greatly reduced.

**5. Graph compression** - If on, the plugin will compress all graphs before saving the project. This will make the saving process slower, but, the project file size will be ~60% reduced.

**6. Graph truncation** - If on, the plugin will lower the quality of the graphs before saving the project. This will make the saving process slower, but, the project file size will be ~75% reduced.

## ABOUT

**1. Enable news** - If on, the plugin will check for news once a day. If OS firewall is blocking the internet connection for a host, the plugin won't be able to check for the news.

Special thanks for all BETA testers that have helped over the years!

Code and graphics design were done by Julijan Nikolic - Youlean.