LCD in-line applications

Get display quality under control.

Measure and adjust 100% of your products !

- Adjust flicker (Vcom) of your display
- Adjust display Gamma
- Adjust display contrast
- Adjust white point
- Adjust black level
- Measure response time

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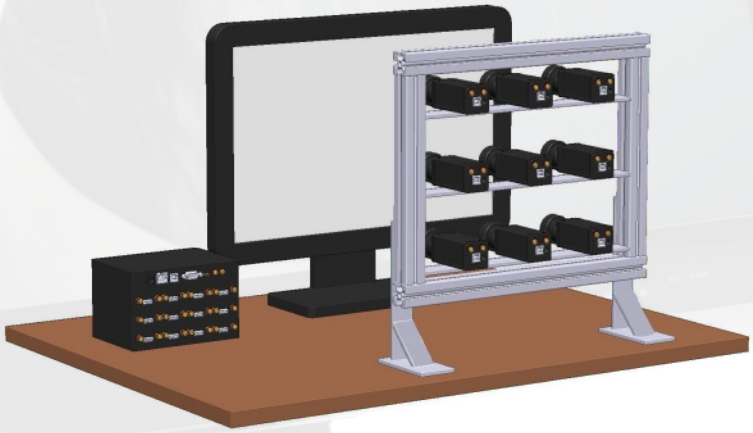
Admesy solutions for in-line LCD testing

Admesy provides a range of products suitable to measure displays ranging from mobile display to large displays and projection displays.

The basis of the in-line solution is either a single point or multi-point colorimeter system.
To control the display, a pattern generator must be used in order to drive the display with a specific pattern.
The kind of pattern generator depends on the kind of display that is being measured.

Admesy does not manufacture pattern generators but can interface to any pattern generator that allows to be PC controlled in order to provide a total solution.



Typical display measurements for in-line applications :

- **Flicker measurement and adjustment**
- **Contrast measurement and adjustment**
- **Gamma adjustment**
- **White point adjustment**
- **Colour measurement**
- **Response time measurement**

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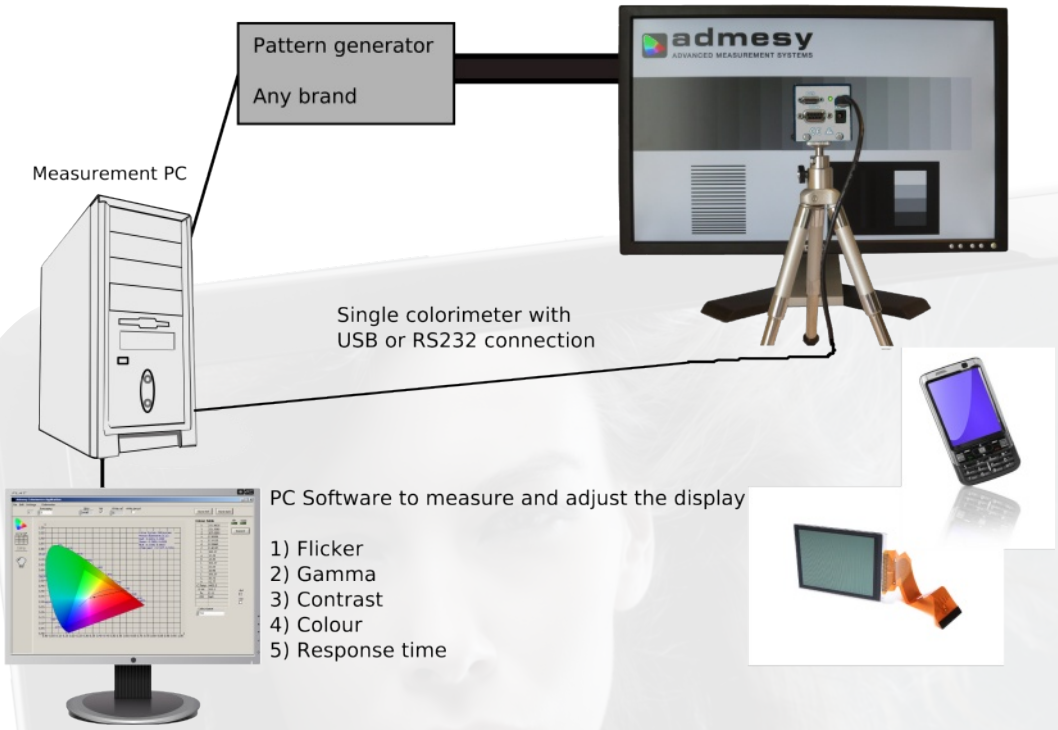
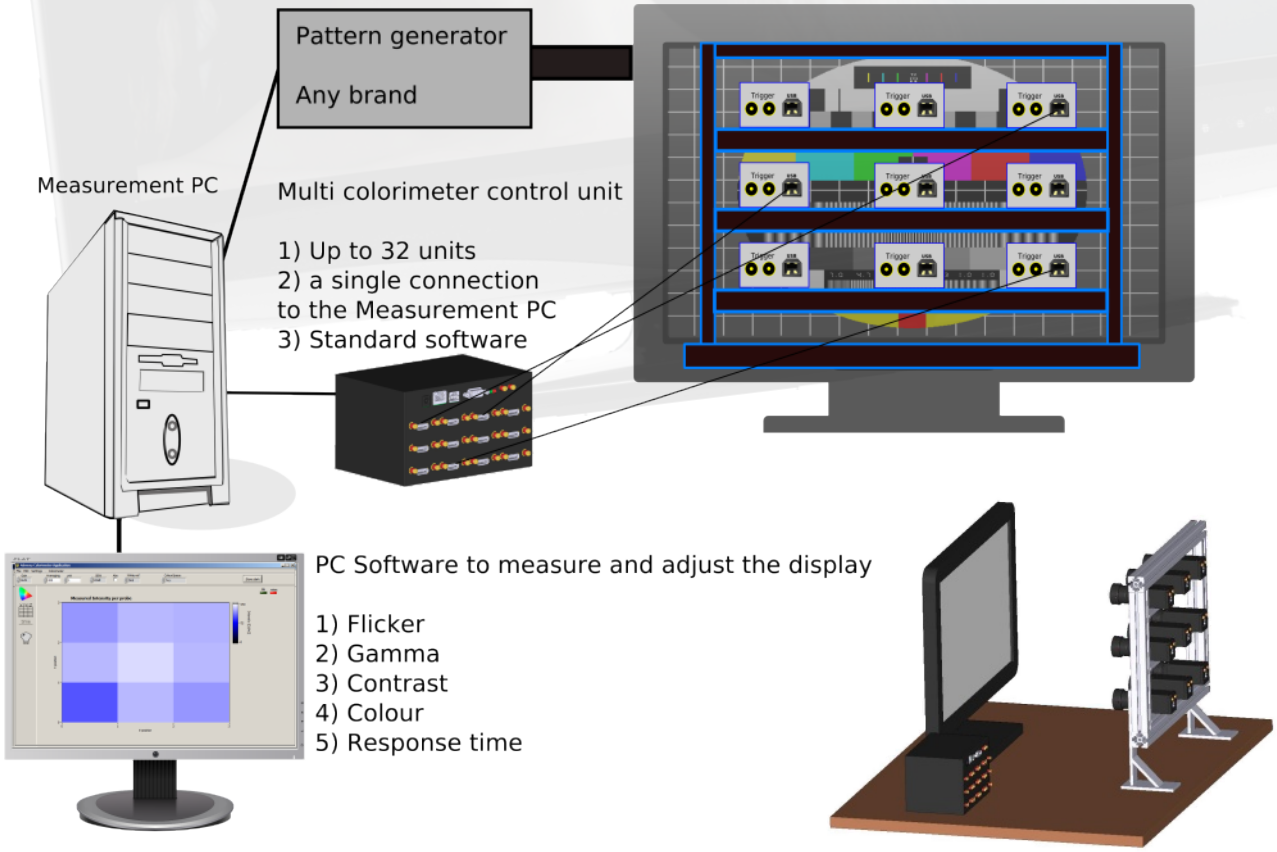
Single point system example



Multiple point system example



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System components

Measurement PC

This can be anything of the following :

- **Normal PC**
- **laptop/netbook**
- **Embedded system**

Colorimeter

This can be anything of the following :

- **Brontes-LL (single point)**
- **Medusa system (multiple point)**

Pattern generator

This component is usally already in use at the customer. When not available, Admesy can suggest one. Admesy can integrate the pattern generator in the operating software.

Operating software

This is usually customer specific. Admesy has modular software setup that allows fast implementation of this software. Standard software is available for initial tests.

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Example measurement software

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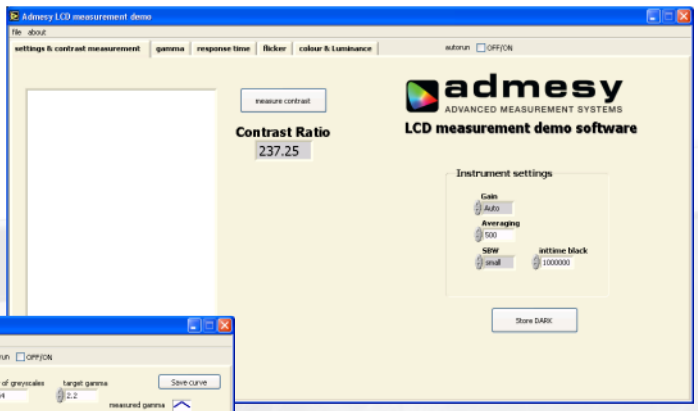
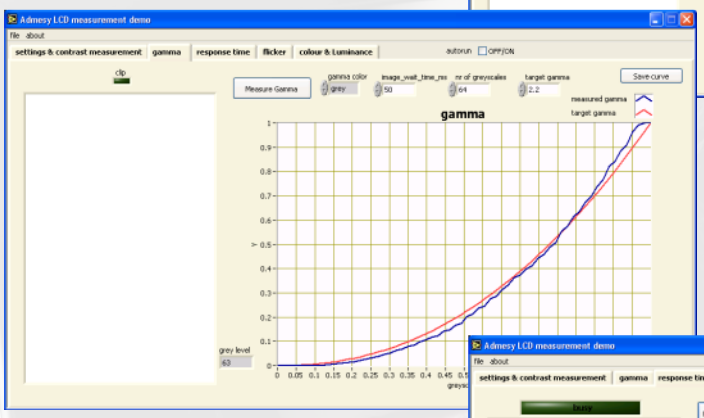
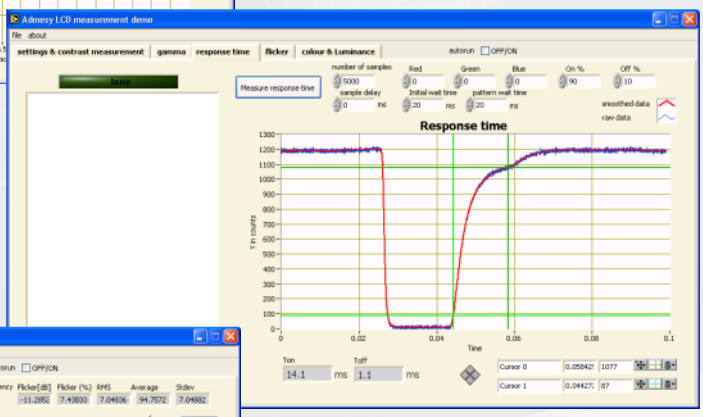
Contrast Ratio



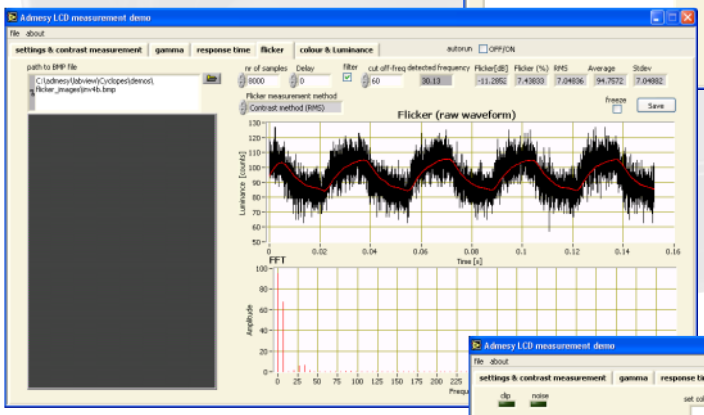
Gamma



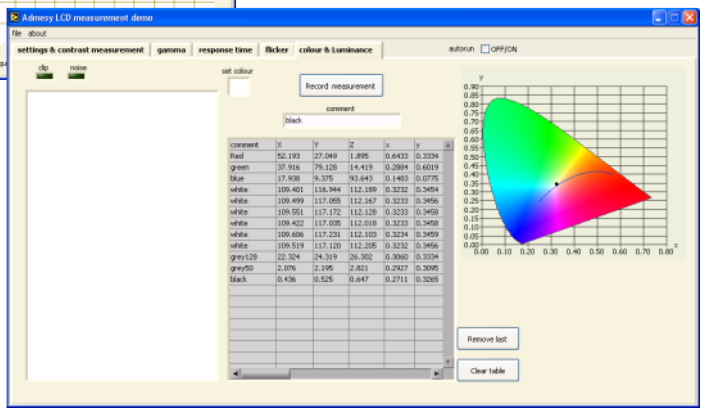
Response time



Flicker



Colour



Typical implementation plan

Step 1:

Determine whether single or multiple point system is needed.

Step 2:
What kind of pattern generator is used ?

Step 3:
What needs to be measured ?
(flicker, gamma, contrast, colour etc....)

Step 4:
What is the customer's reference system ?
This can be any optical system used to create display specifications. This is usually expensive laboratory equipement.

Step 5:
Implement the in-line system
(Mechanics, software, documentation)

Step 6:
Calibrate the system towards the reference system.

Step 7:
Verify the result is equal to the reference system (as defined in step 4).

Step 8:
Release the system for mass-production.

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About Admesy

- Founded by former Philips employees
- Long history in LCD testing (since 1994)
- Experts in Electronics, Optics and (embedded) Software design.
- Focus on products for in-line applications
- Headquarter in Netherlands
- Worldwide distribution network

Product benefits

- Small form factor products
- Easy to use
- Very fast measurement
- Great cost/performance ratio
- Easy integration
- Worldwide support also from headquarter

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