

COMPARING DIFFERENT HDTV PICTURES

Direct-view (tube) TVs

- Pros: Relatively inexpensive; excellent picture quality; wide viewing angle; long life; can be viewed in brightly lit environments.
- Cons: Bulky and heavy; limited screen size.
- Forecast: These sets are still going strong, but their end is in sight.

Flat-panel TVs

Plasma

- Pros: As little as 3 inches thick; potential for very large screen size; wide viewing angle; often computer-display capable.
- Cons: Expensive; potential for burn-in.
- Forecast: Prices have fallen a bit and pictures have improved dramatically, but don't expect to see affordable plasmas for a few years.

Liquid crystal display (LCD)

- Pros: As little as 2 inches thick; very bright picture; no burn-in; long life.
- Cons: Pricey; small screens; subpar black level; low response time.
- Forecast: Prices should fall precipitously over the next couple of years. We think that big-screen LCDs will soon threaten plasmas.

Rear-projection TVs

Cathode ray tube (CRT)

- Pros: Relatively inexpensive; excellent black-level performance; still the best picture quality in a proper environment with proper setup.
- Cons: Deep cabinets; need periodic maintenance; not ideal for bright rooms; narrow viewing angle.
- Forecast: Over the next couple of years, microdisplays will fall in price, and we'll witness the extinction of the tube.

Digital light processing (DLP)

- Pros: Very good black-level performance; no maintenance required to preserve sharpness; often computer-capable; thinner, lighter than CRT.
- Cons: Expensive; some rainbow effects; video noise in dark areas; periodic lamp replacement required.
- Forecast: It's getting cheaper and more popular, but LCD will keep up.

Liquid crystal display (LCD)

- Pros: Good black-level performance; no maintenance required; often computer-capable; thinner and lighter than CRT; excellent color fidelity.
- Cons: Pricey; blacks not as deep as DLP; periodic lamp replacement.

- Forecast: LCD has made some tremendous leaps in performance and will continue to match DLP as prices fall fast.

Liquid crystal on silicon (LCoS)

- Pros: Very high resolution; no maintenance required to preserve sharpness; often computer-capable; thin and light compared to CRT.
- Cons: Pricey; periodic lamp replacement; technology needs refinement.
- Forecast: LCoS' short-term future may suffer, but rumors from Intel are enough to keep it afloat.

Front-projection TVs

Digital light processing (DLP)

- Pros: Good black-level performance.
- Cons: Rainbow effect.
- Forecast: More and more manufacturers are leaning toward DLP -- especially among inexpensive models -- so prices will continue falling.

Liquid crystal display (LCD)

- Pros: Good color fidelity.
- Cons: Black-level performance not quite as good as DLP.
- Forecast: Cheap DLP models is forcing LCD to improve, drop in price.

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