AccuVIEW™ OCD ::
Frequently Asked Questions

Like a cola wars "taste test," Texas Digital encourages our corporate brand partners to review our functionality, our engineering, our track record, and even our balance sheet in a side-by-side assessment. We are confident you will come to the conclusion that Texas Digital is the right business partner for your brand!

LCD backlight technology continues to evolve with some technologies touted with a life of 100,000 hours. What is the AccuVIEW OCD's backlight technology expected life?

LCD backlight technology is rated in mean time to half life or MTTH. Mean time to half life is the operational hours before the backlight diminishes to 50% of the original backlight intensity or readability. Texas Digital's LCD backlight technology is rated at 50,000 MTTH. Assuming 20 hours of operation per day, this means the backlight intensity reaches 50% of the original brightness after almost 7 years of operation. While it may be true that the new technology has an "end life" of 100,000 hours, that is not an apples-to-apples comparison to MTTH and is, for the most part, a useless specification since MTTH is the standard measure of a unit's useful life. Further, 99+% of the outdoor LCDs deployed today across all applications uses the same backlight technology deployed in the AccuVIEW and proven to be reliable over years of continuous life.

Additionally, Texas Digital's backlight technology is 50% more energy efficient than the "new" backlight technology and can save the restaurant approximately $40 annually in energy costs.

If the backlight technology is not rated at "mean time between failure", what is the AccuVIEW OCD's MTBF?

The failure of any OCD is not solely based on the reliability or life of the LCD backlight. While the LCD is the most expensive component, it is also the most reliable. Several other electronic components in an OCD contribute to a unit's overall reliability and MTBF. For VGA units, the electronic components housed outside include a power supply, an environmental control sensor and processor, an inverter, a VGA controller, and a VGA receiver. All of these components are susceptible to failure. A more accurate assessment of a unit's reliability and life is the fundamental engineering and quality of the components used. The AccuVIEW's failure rate is less than 10% annualized.

How is the failure rate determined or calculated?

Texas Digital calculates failure rates based on actual field data from more than 20,000 AccuVIEW installations over the past 10+ years. Failure rates, and the corresponding "mean time between failure" (MTBF), are similar measures of a product's overall reliability and susceptibility to failure. More information on failure rate and MTBF – and how they are calculated – can be found at itl.nist.gov/div898/handbook/apr/section1/apr123.htm.

Texas Digital's AccuVIEW OCD is now in its fourth generation design. As expected, each generation has been more reliable and had lower failure rates as technologies improved and our engineers applied "key learnings" from earlier generations. The failure rate we publish is based on the last two generations of our unit which have a field installation base of thousands of restaurants and 5+ years of deployment.

Is a large installation base or long period of installation important or necessary to calculate an accurate failure rate?

A failure rate can be calculated based on a sample size of one unit and one year being installed. In that case, if the unit does not fail, the one year failure rate is 0%. While the calculation can be made, the only meaningful failure rate statistics require a scientifically representative population or sample size. Additionally, the sample period should be long enough to be scientifically significant.

To calculate the AccuVIEW OCD's failure rate, Texas Digital uses all field installation data for a rolling three year period. For example, the failure rate we reference today uses data from over 4,000 installations in the period of 2005 through today. Quite frankly, providing a MTBF or failure rate without a large sample population and timeframe is possibly misleading and susceptible to error.

Texas Digital has monitored AccuVIEW OCD reliability, in failure rate and MTBF, since the product was introduced more than 10 years ago. Today, the AccuVIEW population exceeds 20,000 units and the failure rate statistics can be scientifically supported and trusted as reliable.

There are two general configurations for OCD – "PC Controller in Office" and the "Embedded PC". What is the difference and what design is the AccuVIEW OCD?

Texas Digital offers both an embedded PC version and a VGA version of our OCD. The primary difference is that the embedded PC version has a ruggedized PC installed in the unit outside and the data signal to the unit is serial or IP. For the "PC controller in the office" design, the processor is inside the restaurant and the signal to the outdoor display is VGA. We have installed thousands of each configuration and the reliability and life of both are very consistent.

While neither OCD design is inherently "better" than the other, the embedded PC is significantly more energy efficient as it uses 33 watts of electricity which is roughly 1/10th the carbon footprint and can save more than $1,000 in electricity costs over the life of the display.

Does the "Embedded PC" design lead to a less reliable or durable solution because the processor is outside and exposed to the elements?

No. The reality is that most of an OCD's components are required to be outside in both configurations and an embedded PC, built to a ruggedized specification, is just as durable in an outdoor environment as an off the shelf PC that is placed inside. The ruggedized specification dictates that all components are commercially rated to operate in an outdoor, 24x7 operating environment. Texas Digital's annualized failure rates for our embedded PC solution are lower than the annualized failure rates of most standard notebooks (www.gartner.com/press_release/asset_154164_11.html).

Is the AccuVIEW OCD NEMA rated?

Yes, the AccuVIEW is NEMA IV rated as well as IP56 rated and RoHS compliant. The NEMA and IP ratings describe the standards for various grades of electrical enclosures used in industrial applications. Equipment is rated to protect against environmental conditions including water, dust and other environmental hazards. The AccuVIEW OCD is sealed and technically rated as "allowing limited ingress" of dust and moisture.

What "above store reporting" functionality is available?

The reporting differs slightly between the PC/VGA solution and the Embedded PC/IP solution, however the general information available includes a communication status check (confirm communication to the display), a POS data check (confirm POS data was received), a diagnostic check (confirm the display's date, time, temperature, etc), and content check (confirm the current content files and schedule). This information can be tracked and monitored across multiple restaurants using a back office toolset. Further, the AccuVIEW OCD can provide proactive alerts, via email notification, if user-specified variance thresholds are exceeded. For example, the customer's help desk can receive email notification if a restaurant's OCD has not received any POS data within a two hour timeframe.

These are the general "above store reporting" functions but specific answers are dependent upon the customer's final configuration. We encourage you to discuss your specific configuration to ensure a complete and accurate list of functionality.

What content management capabilities and options are available for the AccuVIEW OCD?

The AccuVIEW OCD has several, easy-to-use options for content management to ensure the best solution is deployed specific to each customer's needs. These options include a couple of "in restaurant" tools and options for store owners to manage content, as well as a global management tool for corporate and large franchisees to manage content across multiple restaurants.

Additionally, Texas Digital has now incorporated order confirmation functionality into our VitalCAST Digital Signage Software (DSS) product. VitalCAST is recognized as an industry-leading DSS product for digital marketing in several industries, including banking, cinema, corporate communications, retail, arenas, convenience stores, universities, and hospitality. With this new integration of our product expertise, AccuVIEW customers have access to the full power of a digital signage tool that can drive digital content to restaurant displays other than the OCD such as presell displays and digital menuboards.

We encourage customers to discuss content management needs with so we can describe the advantages of each option and tailor the best content management solution for your organization.

Does Texas Digital offer an integrated OCD & drive-thru timer solution?

Yes, Texas Digital's suite of QSR products includes Acclaro, which is a powerful drive-thru timer solution that can be easily integrated with the AccuVIEW OCD. In addition to being a restaurant level timer to monitor drive-thru traffic and performance, Acclaro can integrate timer data with order and POS data to give operators an additional tool to assess performance. Acclaro can also post data to a centralized database for multiple store consolidation and easy, web-based access to reporting from the corporate office or road. Lastly, Acclaro can proactively send email to defined personnel for daily performance data or ad-hoc alerts if performance measures are out of compliance. More information can be found describing Acclaro at www.txdigital.com/products/acclaro.php.

Describe the AccuVIEW OCD's daytime viewability with regard to ambient sunlight and glare.

The AccuVIEW OCD utilizes a 2,000 Nit panel. Nit is a measure of luminance expressed also as candela per square meter (cd/m^2). Most commercial LCDs sold for indoor use are rated in the 300–500 Nit range. Although the panel is capable of 2,000 Nits, the AccuVIEW is configured to output 1,200 Nits to optimize the balance between readability, power usage, and panel life.

Essentially, there is much more to making a display truly outdoor viewable than luminance alone. The AccuVIEW OCD uses a glass bonding technology that eliminates the air gap between the LCD panel and the exterior glass – thereby eliminating a major source of distortion. Further, AccuVIEW has an anti-reflective (A/R) coating to reduce the reflection of ambient sunlight. Between the panel strength, the bonding, and the A/R coating, the AccuVIEW OCD is designed to maximize daytime readability in direct sun. The full benefits of this design cannot be appreciated in an indoor lab test and we encourage our customers to perform outdoor tests in various lighting conditions.

Your installation documentation states that the AccuVIEW OCD installation requires dedicated power. In many cases this requires additional site work. Is this a requirement?

The AccuVIEW OCD does not require dedicated power, but we do recommend the unit be powered 24x7 in harsh environments for temperature control purposes. For example, in extreme cold environments, the LCD backlight may not "strike", or turn on, until the display's internal heating unit warms the components after being off during the when the restaurant is closed. By ensuring the OCD has power, the unit's environmental control functionality will moderate temperature extremes to ensure it is always functional and there is no start-up delay when the drive-thru initially opens.

It is not necessary to have continuous power if the installation location is in a mild environment or if it is acceptable to allow the unit to warm/cool to the standard operating temperature range once power is restored.

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