



ENGINEERS OF LIGHT

DIGITAL OFFICE Waldmann ENG



6% more time saved *

BRIGHT MINDS HAVE LTX

In 2030, roughly six out of ten people will live in cities, with the rest heading there regularly. Most of these people will have a laptop or tablet as they move around. Plus, they will all be able to communicate with each other on the Internet. The majority will work in offices. Just not the kind we're familiar with today. Open-plan work spaces where each team member has their own desk as well as personal offices are not only a waste of space but also human labor. The reality is: Subpar conditions produce subpar results. That's where we come in. Based in Germany, we're the global market leader for office and industrial lighting. And we've come up with a groundbreaking sensor technology for tomorrow's workplaces: LTX.

Waldmann lighting units with LTX built in can detect your actual office utilization in real time. Temperature, noise levels and air quality are vital factors influencing your staff's well-being – and how efficiently they are able to perform. LTX captures and collates this data so it can be used to optimize facility management. That's how LTX helps you get the most out of your offices and workforce with the least effort. And create the best possible work environment. LTX can be used either as the core technology in a desk-sharing concept, or be optionally incorporated into work spaces without cloud integration. Whatever the nature of your business – whether start-up, family business or listed company – and its current offices, LTX can definitely help you take things to a whole new level. 5% increase in efficiency*

(() UDA

BRIGHT MINDS WORK MORE EFFICIENTLY

This is Simone. She no longer has a desk to go to every day. She has a choice of 42. Spread over three floors. So which one best suits her needs right now? LTX gives her a heads-up on her smartphone. LTX lets her know which desks are free, reserved or occupied. Which one can be used as a conference table. And where she can work with the fewest distractions. With LTX, Simone always gets her pick of the work spaces. So she can concentrate fully on the job at hand. What a bright idea! Says Simone.



The *where-the-heck-am-I-going-to-sit-today LED*. In shared-desk offices, it directs workers to available desks, which helps them navigate their working days better.



*Figure based on subjective perceptions of well-being combined with potential reductions in absenteeism due to illness.

BRIGHT MINDS LOVE A HEALTHIER WORK ENVIRONMENT

Alexander used to get cold feet. All the time. And then there were those headaches that would creep up on him sometimes. Alexander never knew there was an ideal temperature range for offices. Or that stale air, while not harmful, can make your head pound. With LTX, Alexander can now keep an eye on all that. If the office feels stuffy, too cold (or too hot – not that Alex has any idea what that feels like!), the LED on his Waldmann Yara with LTX lights up. Time to get some fresh air and clear your head.



The boy-is-it-getting-stuffy-in-here LED. It helps staff nail climate control in the office. Ideal temperatures increase productivity and enhance well-being.

8% increase in concentration *

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Figure based on potential savings of the time needed to refocus following a distraction.

BRIGHT MINDS ARE MORE FOCUSED

Lisa thinks the people around her make too much noise. Everyone else disagrees. But it turns out Lisa was right! Once distracted, a person needs an average of 10–15 minutes to refocus on their original task. LTX measures ambient noise for Lisa, showing her and the office manager when the noise level is too high. That way, the office manager can take measures to ensure a better work environment for everyone. Thanks, LTX! And thank you, Lisa.



The see-I-told-you-it-was-too-loud LED. It helps workers regulate noise levels in the office themselves. That prevents breaks in concentration and improves productivity.

3% time saving on the commute home*

BRIGHT MINDS CHOOSE THEIR MOMENT

Marc hates a jam. On the way home. In the printer. In the elevator. In the cafeteria. Especially in the cafeteria. Waiting around wastes too much of his precious time. Which is why Marc checks the LTX sensor data to find out whether the line in the cafeteria is too long and whether it's worth heading to the elevator right away – and in the future, it will show him whether the traffic on the freeway is flowing. With LTX, Marc can make the most of his working hours. And his breaks, too. Marc loves LTX.



Clients can freely program the *I-only-check-what-matters-to-me LED*. He can time his lunch break and quitting time perfectly with the API interfaces.

BRIGHT PLANNERS HAVE LTX

The LTX cloud-based services

- Report tailored for facility management
- Report tailored for HR
- Intuitive app for reserving work stations
- Easy to use and roll out thanks to a simple dashboard
- Want more details? Consultation and an in-depth analysis of your data are already included in the offer.



It's not just employees who love state-of-the-art lighting from Waldmann. The solution addresses all office cost pools by optimizing energy costs. While reducing facility costs. Plus, the work environment improves across the board. Which is good news for HR managers and the entire HR department. And it will have facility management beaming. Our LTX sensor modules are being premiered in our floor lamps because they allow for the greatest flexibility when positioned in workplaces. In the future, they will also be compatible with our popular pendant lamps thanks to a standardized sensor slot. That gives you the perfect tool kit to optimize any office. And rest assured, security is our top priority. We leave no stone unturned in ensuring that data is protected at all points in the system, i.e. to prevent unauthorized individuals from gaining access to the lamps, gateway or cloud thanks to the latest security measures.

What LTX delivers

- Precise occupancy reading displayed for each work station
- Sensitive noise level reading displayed for each lamp
- Accurate air quality reading displayed for each lamp
- Objective temperature reading displayed for each lamp
- Visualization of external data, such as waiting time in the cafeteria



The light of precision, so productivity improves.

The light of reason, so everyone understands.

The light of creativity, so better ideas emerge.

The light of knowledge, so R&D delivers more findings.

The natural light of day, so people stay healthy.

The light of sustainability, so nothing goes to waste.

The light of connectivity, so everything in the building works as a system.

The light of experience, so mistakes don't occur.

The light of success, so companies can grow.

Shine the #blackforestlight and defeat darkness everywhere.

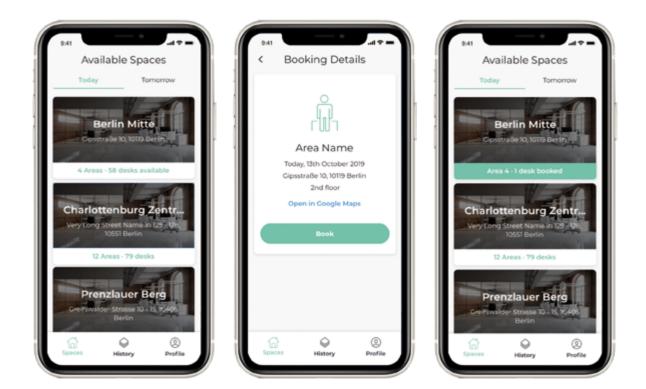


WHEN YOU HAVE LTX, YOU HAVE MORE EFFICIENT OFFICES

An empty work station is a waste of space. But too many employees crammed together is also not ideal. So what's the solution? Floor lamps with integrated sensors to determine office capacity are a great start. Since a single Waldmann floor lamp is able to illuminate a shared work station, the YARA lamp head with LTX technology features two sensors. Data on work station usage is supplied to the LTX Admin for evaluation. Facility managers can have the system notify them when threshold values are not met or exceeded. So you're assured of receiving all the relevant information necessary to optimize office use in real time. Pretty efficient, right?

With the LTX Finder, a great work station is always at your fingertips

Staff in shared-desk offices use the LTX Finder app to quickly locate and reserve a desk. At the same time, facility management can keep an eye on occupancy levels and make specific interventions where necessary. Thanks to digitalization specialist and Waldmann subsidiary LIZ Smart Office in Berlin, all this transparency and support comes built in.



Benefits of the LTX Finder

- Increase work station occupancy rates
- Make better use of existing space
- Easily reserve work stations, meeting rooms and telephone booths as needed
- Less day-to-day hassles in navigating office life translate into more satisfied employees



WHEN YOU HAVE LTX, YOU HAVE A PERFECT WORK ENVIRONMENT

Light, good-quality air and ideal temperatures for everyone. No sooner said than done – thanks to the ingenious LTX sensors. LTX's sensors gather all the data that's relevant to staff. LTX's sensors even offer suggestions. So each employee directly receives supportive feedback right at their work space, telling them whether it's too noisy, the temperature is right and the air quality is as good as it should be. That can really improve the quality of the time spent at work – especially in tightly packed, dynamic office spaces. Are there any areas that get too noisy on a regular basis? Do they need to be redesigned? Could individual work spaces be converted into meeting zones? LTX data provides the best framework for thoroughly understanding how your office space is being used and where changes are necessary and sensible. That's the best way for you to work, too!

LTX Admin: If you have it, you always have everything under control

The ingenious LTX dashboard gives floor managers and HR specialists up-to-the-minute reports on their work areas.



Benefits of LTX Admin

- Improve the quality of the time spent in all office areas on a lasting basis
- Thoroughly optimize the office environment through cloud-based data management
- Get clear overviews that prevent data overload
- Keep everything under control at all times to empower employees and provide tailored support
- Enjoy LTX's intelligent support in evaluating data
- Get professional cloud integration from Waldmann's subsidiary LIZ

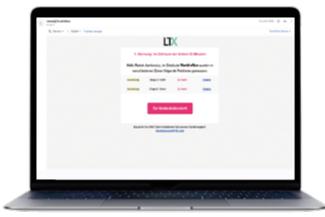


WHEN YOU HAVE LTX, YOU HAVE A BETTER HANDLE ON YOUR OFFICE

How do you stay competitive on the market and in the war for talent? By taking your office digital, of course. There's an expensive way to do that – by building a new office or converting the old one. Or you can do it the fast, inexpensive way – with LTX. If you want to understand all your work spaces better, you don't have to rebuild them to accommodate digital infrastructure. And no one needs invasive procedures performed on buildings. What you need are smart sensors – the ones we are now installing in the most popular office lamps on the market. That's killing two headaches with one lamp. Floor lamps are the ideal place for sensors: they can be placed anywhere flexibly, cover several work spaces and communicate with one another. No major installations to get them up and running; instead, just a simple switch to an intelligent office system. When the lamps are in place, they give you personalized reports about everything that's happening in your office. No information overload, no guesswork – just clearly presented data with straightforward actionable recommendations. Clear enough?

LTX Admin Message and LTX Admin Cockpit: If you have them, you're simply savvier

Use the daily overview to see what's happening in your work areas at any given time, and the cockpit view to take a deeper dive into your office world.



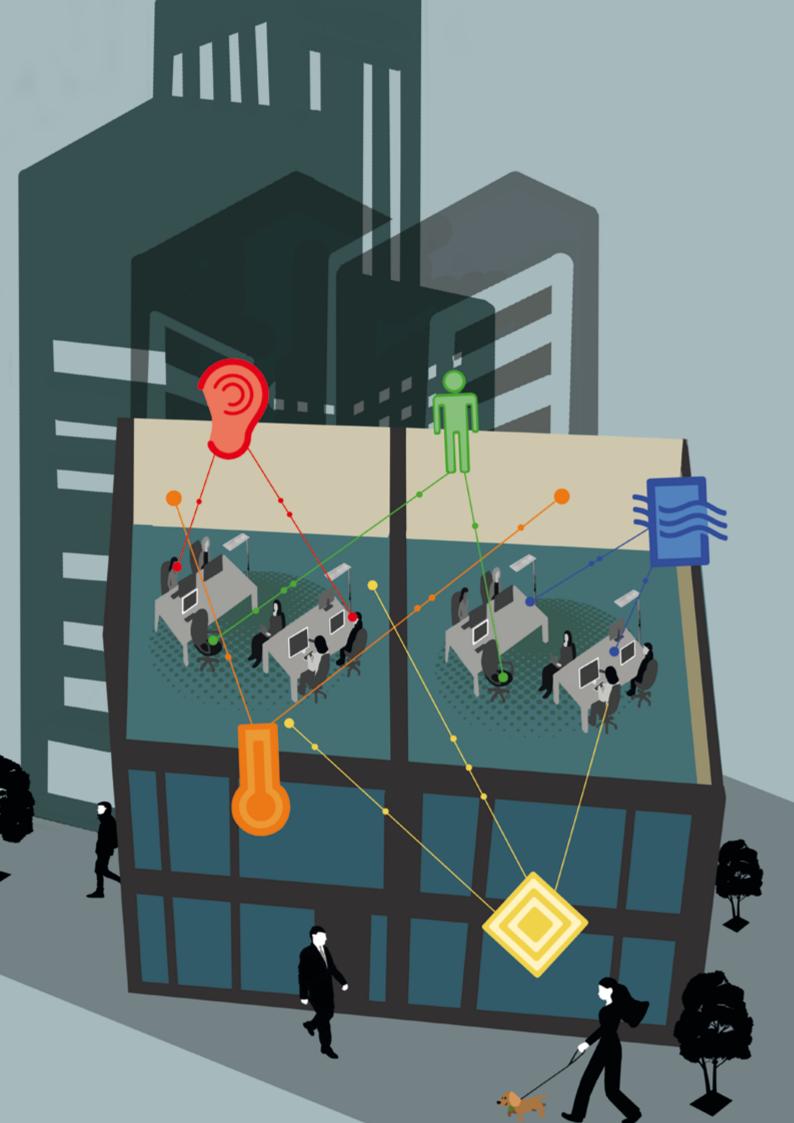
LTX Admin Message



LTX Admin Cockpit

LTX Admin Message and Cockpit

Configure threshold values; if they're exceeded, the system actively messages you
 Weekly reports show you the key data at a glance



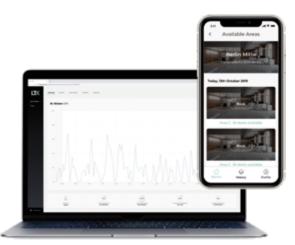
WHEN YOU HAVE LTX, YOU HAVE FREEDOM

Who wants to be tied up long-term nowadays? Being flexible opens up so many opportunities! With Waldmann's LTX, you can even free your staff from being tied to their assigned desks. Know what we think? That should be possible on the tech side of the system, too. So LTX offers an open system. In other words, LTX even communicates with other vendors' devices and services. All the data gathered can be evaluated independently, and the lamps can even communicate with other devices in their immediate surroundings via Bluetooth. Plus, we also provide a cloud-API interface for transferring the data from the lamps to your specific systems, such as building management systems. Who says tech doesn't set you free?

LTX Admin LTX Finder

LTX Admin and LTX Finder are products of LIZ Smart Office GmbH.

Established in Berlin in 2019, the Waldmann start-up LIZ revolutionizes office life with a sophisticated mix of smart hardware and a data-based software solution. Its product portfolio includes not only the digital tools LTX Admin and LTX Finder but also workspace consulting. www.liz.solutions



Benefits of the LTX interfaces

- Bluetooth API for data exchange with local devices
 Bluetooth API for external users to operate the lamps
 Cloud API to connect with other systems and deliver do
- Cloud API to connect with other systems and deliver data



BRIGHT MINDS LET THE LIGHT WORK FOR THEM

When you have LTX, you know you have a good deal:

Even marginal increases in employee productivity pay for themselves quickly.

Much improved utilization of office space when applied to desk-sharing systems.

That's the kind of digital benefit every employee wants.

THE SHINING LIGHT OF BUSINESS.

Here in Villingen-Schwenningen, we've been making some of the world's best lighting systems for more than 90 years. But our lights aren't an end in themselves. Our lights help. To get things done. To create. To broaden horizons. To wake you up. To manage hormones. Their premium quality and ease of use help people do what they want to do. And, thanks to cutting-edge German technology, they do it as well as humanly possible. We cast many leading architects' offices and industrial spaces in the best possible light. With innovative solutions that are straightforward to install and use, and feature timeless, contemporary designs. And with value for money that's typical of their thrifty Swabian origins. Brought to you by a world market leader with a workforce over 1,000 and locations in 10 countries. Family-owned, like all the best hidden champions.



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