



Lighting the future.

CityTouch
Smart lighting.

PHILIPS

For Cities

- 04 Sustainable lighting solution for city leaders
Reference: Salobre, Spain
- 06 CityTouch benefits & global reach

For People

- 08 Improved life quality for the citizens
Reference: Rietberg, Germany

For Operators

- 10 Innovative software solution for lighting operators
Reference: Buenos Aires, Argentina

CityTouch Products & System

- 12 CityTouch LightPoint –
Lighting Asset Management
- 13 CityTouch LightWave –
Remote Lighting Management
- 14 CityTouch Platform
- 15 CityTouch Eco System



04



08



10



12

Welcome to the future of lighting.

Imagine if you could light up all the dark, shadowy areas in your city, allowing people to move around freely and safely wherever they wanted. Imagine if you could illuminate the city center, parks, and main urban traffic routes flexibly, as lighting needs change over time.

You could decide how to switch and dim the lights in selected areas of your city, delivering light exactly when and where it is needed — all by a simple mouse click. You could significantly reduce energy consumption and operational complexity, cutting costs and optimizing maintenance processes at the same time, with benefits to both the environment and your municipal budget. Planning, controlling, and managing your entire lighting infrastructure would be easier than ever before. And thanks to web-based automatic updates, your system would always be at the forefront of the industry's latest developments.

Far from being a figment of the imagination, all of this is a reality today. CityTouch, the innovative lighting management software by Philips, answers the demands to offer solutions that maximize ease of use, efficiency, flexibility, and upgradability. Set your lighting management on the right path for the future. Make your city a smart city.

Welcome to **CityTouch – Smart lighting**.

8.48 P.M.: ON THE WAY BACK FROM A CITY COUNCIL MEETING

“ How can I make my city more attractive without breaking the bank?

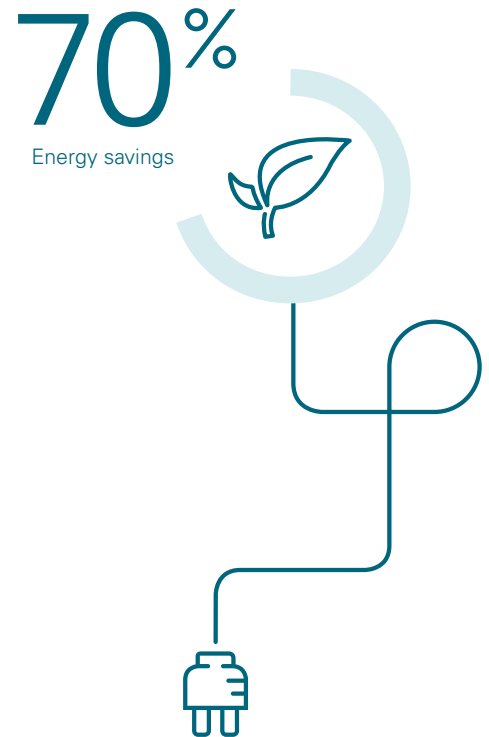
With a clever solution. CityTouch lighting management software combined with LED luminaires can reduce energy use by more than 70%.

Even the most effective city managers face considerable challenges today. On the one hand, administrators want to give citizens and visitors a beautiful and safe city to live in and enjoy. On the other hand, they need to save costs. "Green" and sustainability goals are becoming ever more difficult to achieve as cities grow and the demand for energy increases. Global challenges, including climate change, the growing scarcity of raw materials, and rising energy prices exacerbate the situation.

Facing these challenges, how can cities invest in the future while decreasing energy consumption and cutting costs in their municipalities? One key element is intelligent lighting management – or, in the language of CityTouch: Smart lighting.

By "Smart lighting" we mean intelligent and flexible lighting management that allows cities to adapt public lighting to all kinds of changing conditions and situations, including the time of year, weather patterns, and local traffic intensity, all while realizing energy and cost savings.

Take the Spanish town of Salobre, for example, where using CityTouch software in combination with LED luminaires has reduced the municipality's energy consumption by more than 70% and cut CO₂ emissions by 29 tons per year.



Source:
Report, Gas Natural Fenosa (2012)

SALOBRE / SPAIN



THE CHALLENGE

Inefficient urban lighting. High electricity consumption despite low brightness levels.

THE SOLUTION

Combination of CityTouch lighting management system and energy-efficient LED luminaires to maximize energy savings and optimize maintenance processes.

THE RESULT

Electricity savings of over 70%, according to a report published by Gas Natural Fenosa. Greatly improved lighting management. Optimized light levels in residential streets and adjusted illumination of urban streets and public spaces to boost safety.



Alexandra van Huffelen, councillor in Rotterdam

The CityTouch lighting management system enables us to use the public lighting in Rotterdam efficiently and effectively at night, providing less light where possible, and extra light where necessary.

More sustainability – economy through ecology.

Energy savings is the watchword. “Green” cities are far more attractive than gray ones. Adopting a lighting management software solution perfectly matched to your requirements changes the game, allowing you to manage energy and other resources intelligently and responsibly. By helping to significantly reduce CO₂ emissions, CityTouch makes your city environmentally friendlier while easing the financial burdens. It’s a sustainable and reputation-enhancing contribution that your city can make towards international efforts to mitigate climate change. In fact, the contributions of CityTouch towards reducing CO₂ emissions have been officially endorsed and honored by an international committee at the UN Rio+20 conference as the top sustainable solution for intelligent outdoor lighting.

More cost savings – thanks to efficient maintenance operations.

Only 1% of urban lighting installations today are equipped with efficient managing and monitoring systems, even though intelligent lighting management software solutions can offer proven and significant energy and maintenance cost savings. CityTouch enables you to predict maintenance needs and become proactive not reactive. With accelerated planning and replacement activities you can improve the quality of your public lighting and bring more efficiency into your maintenance operations.

More safety – with lighting flexibility.

Public safety is the first duty of every city manager. Through flexible adjustments of light levels that suit all conceivable situations, you can significantly enhance citizens’ sense of security as they move about the city and perform their daily routines.

Better decision-making – thanks to more information.

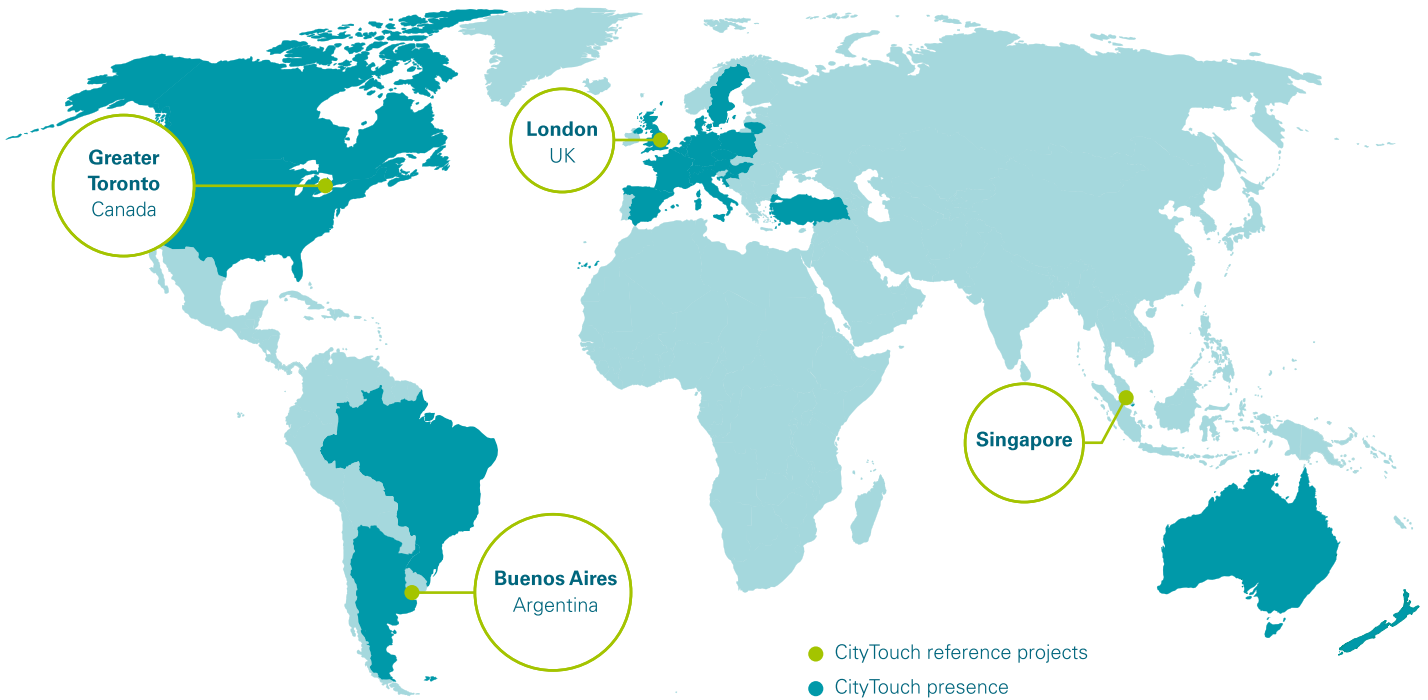
CityTouch gives you the tools you need to easily arrive at the right decision. With our powerful analyses you can quantify benefits of a potential investment in your lighting system. Valuable insights from data analyses enable you to support budgetary needs with robust data, identify further savings possibilities and justify investments to management and citizens.

More inviting and attractive – also at night.

A distinctively illuminated cityscape is attractive and appealing to citizens and visitors alike. When public spaces and facilities become part of a city’s night-life, well-being and culture prosper. Through clever planning of light points and lighting levels, you can enhance the livability of your city and improve leisure experience.



In parks, you can increase the sense of security by adjusting the light levels to the specific conditions and requirements.



CITYTOUCH – GLOBAL PLAYER

CityTouch is in use. Worldwide. On five continents and in more than 20 countries, CityTouch is bringing professionalism into street lighting management to both towns, such as Salobre in Spain and Markham in Canada, and megacities such as London and Buenos Aires.

More reliability – with a partner you trust.

Benefit from the security and reliability of a trusted partner. Having deep understanding of specific needs of small towns, and being chosen as preferred partner of megacities around the globe, CityTouch combines international project expertise with local know-how. With Philips' over 120 years of experience in the lighting industry and a keen, developed focus on street lighting, CityTouch is the lighting partner that you can rely on.

More future-proof – with software solutions that grow with you.

Choose a product for tomorrow that can do more than you get today. CityTouch isn't just a short-term improvement – it's a long-term solution. It brings urban lighting management to a new level and grows with you as your business requirements change. Ready for future applications that you can add over the years, the extensible CityTouch platform features the highest level of security, including completely encrypted user sessions and regular data backups.



Light brings life to cities, making them more attractive. Lighting that is adjusted to the specific needs of the city reduces costs, improves safety, and lifts the spirit – wherever you live.

6.56 P.M.: ON THE WAY BACK FROM SHOPPING WITH A FRIEND

“ How will you guys from the city make our neighborhood safer for me and my friends?

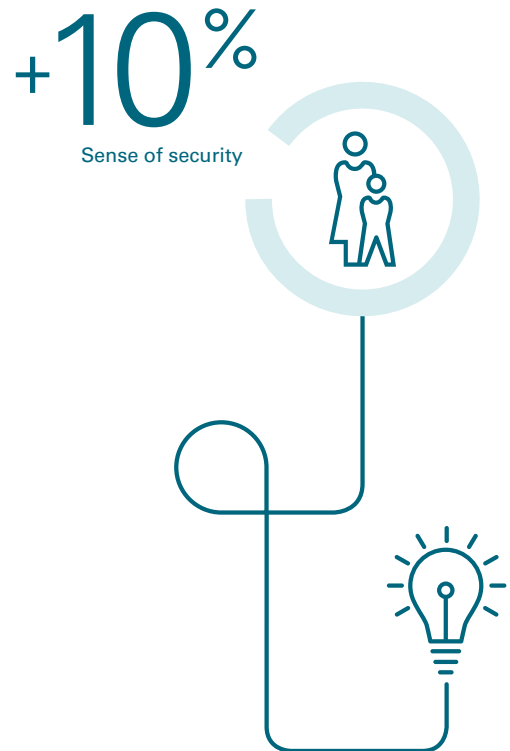
With the right light. CityTouch illuminates dark and unsafe areas with light levels targeted precisely to your needs.

Regardless of age, citizens demand pleasant places to work and live in and expect a lot from their cities and the organizations that run them.

CityTouch can help you to better meet the demands of the city's life. A bright, lively, and varied cityscape increases citizens' sense of security and well-being. Flexible public lighting can help to improve road and street safety by illuminating "dark corners", individual roads and streets, and increasing light levels at junctions and pedestrian crossings.

With CityTouch, you can transform a city's nightscape, creating an inviting ambience for visitors as well as for inhabitants. You can easily integrate cultural events into your lighting management scheme and therefore enhance citizens' sense of security during busy city events.

In the German town of Rietberg, CityTouch has successfully combined the traditional and the contemporary, highlighting the historic townscape with the aid of cutting-edge technology.



Source:
Municipal Street Lighting
Consortium, City of L.A. (2012)

RIETBERG / GERMANY



THE CHALLENGE

Inadequate illumination of the historic townscape due to antiquated equipment.

THE SOLUTION

Installation of energy-efficient Philips LED technology along with a flexible lighting management software from CityTouch to provide greater sense of security and to revitalize the historic town center.

THE RESULT

A more welcoming environment and improved purchasing power. Significant savings in maintenance and energy costs with reduction in annual energy consumption of almost 50%. First prize in the international city.people.light awards in 2013.

“ How can I improve my lighting management while simplifying it?

With well designed software. CityTouch lets you manage your city lighting dynamically, interactively, and flexibly, all with a user-friendly and reliable software solution.

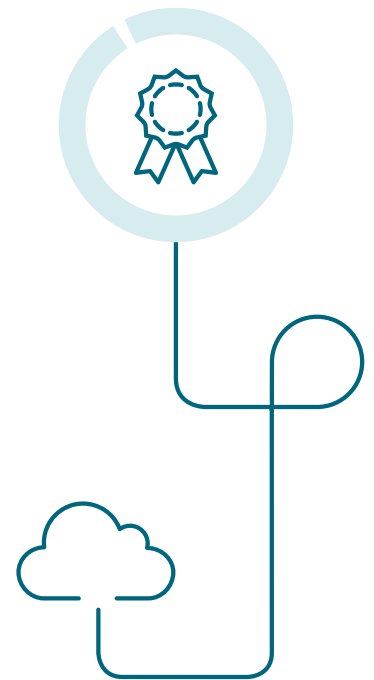
Today's users expect tomorrow's lighting management software to be highly user-friendly and intuitive. It must be simple to understand while offering robust data management capabilities, a full range of control functions, automatic updates, and boundless scalability. Above all, the system must be fully available and reliable.

CityTouch has been developed specifically to meet these demands. It offers perfect control over all street lighting assets and a full overview of all relevant data and facts. As a result, you get superior transparency and clarity, along with extremely high system stability and availability – crucial factors in urban planning and municipal services.

In megacity Buenos Aires, the lighting management solutions from CityTouch have made the city's lighting more flexible and efficient to manage.

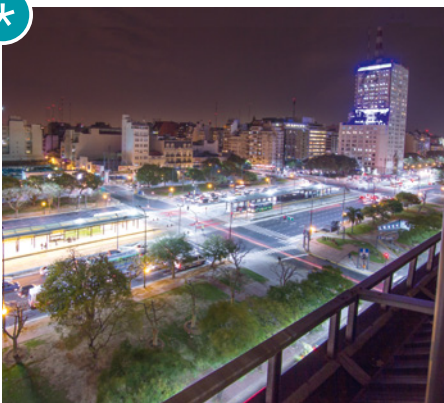
99.9%

System availability



Source:
Availability report,
CityTouch (2011-2013)

BUENOS AIRES / ARGENTINA



THE CHALLENGE

Reposition and establish this growing, South American metropolis as a sustainable, environment-friendly, safe and livable city.

THE SOLUTION

A flexible and future-proof lighting system comprising CityTouch's intelligent light management platform and efficient, long-life LED technology. The ability to monitor, activate, and control each individual light point in the network in line with requirements.

THE RESULT

A flexible, fully integrated lighting solution. Significant electricity cost savings and massively reduced CO₂ emissions. Optimized maintenance management through monitoring and diagnosis of public lighting. Optimal management of energy consumption peaks due to flexible lighting levels.

Bring light into your lighting operations – with CityTouch LightPoint.

CityTouch

LightPoint

- Simple. Transparent. Efficient.
- Entire city lighting at your fingertips
- Easy-to-use asset management, designed for lighting
- Optimum transparency through clear map-based data visualization
- Reports and analyses that support decision-making with robust data

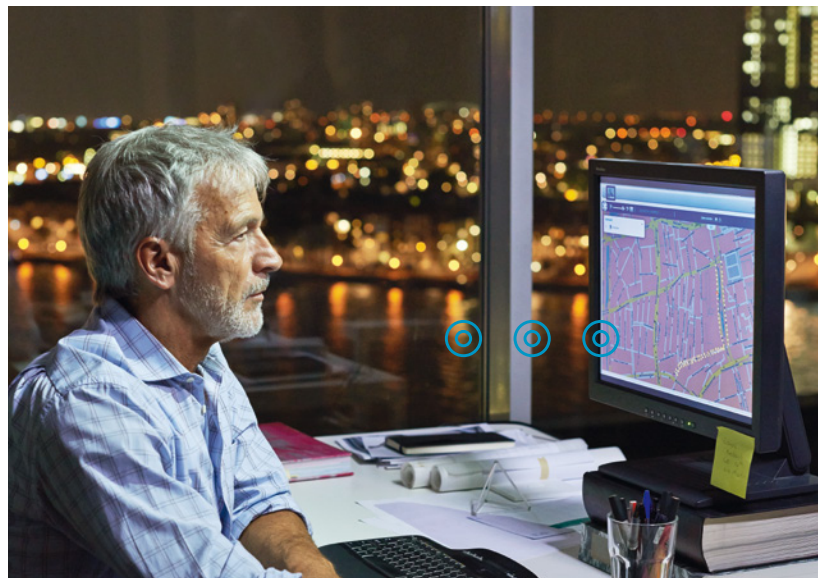
Simplicity, transparency, efficiency – these are key words when it comes to advanced lighting management. LightPoint, the asset management software solution from CityTouch, makes planning, analyzing, and managing your lighting infrastructure very simple. With its intuitive user interface, map-based visualizations, and simple charts and diagrams, CityTouch LightPoint gives you visibility into every single asset in your lighting infrastructure. This level of transparency leads to important insights that can improve your decision making. It also facilitates workflow-based maintenance, allowing you to conveniently and efficiently manage light failures.

With insights from CityTouch LightPoint, you can quickly identify energy saving potentials, reduce operational and maintenance costs, and make fact-based investment decisions.



“We quickly realized how important and valuable it can be to have a perfect overview and full control when dealing with operating and maintenance costs, safety on our roads, and the safety of our citizens.”

Traffic and systems engineer, municipality of Holbæk in Denmark



Stay in touch with your street lights – with CityTouch LightWave.

CityTouch

LightWave

- Dynamic. Automatic. Flexible.
- Remote control of each individual light point
- Calendar-based planning of light levels and dimming schedules
- Auto-notification of faults and outages
- Configurable fault types with different levels of severity
- Accurate energy metering down to the level of each individual light point

CityTouch LightWave gives you the power to make the lighting in your city dynamic, intelligent, and totally flexible. It's a web-based remote lighting management software solution that connects your street lights with the CityTouch platform. With just a few simple mouse clicks, you can adjust the lighting in your city, monitor it, and control it. You are automatically informed when a failure occurs, enabling you to immediately initiate the work process.

The intuitive user interface allows you to easily adjust lighting levels to respond to changing requirements. You can boost light levels to improve safety and visibility, or dim them to save energy and prevent light pollution.

You can monitor, control, and program lighting levels for individual light points, streets, or an entire district, allowing you to deliver precisely the right amount of light at any place or time.



"I need a repair."

Street light no. 05357

"I am dimmed to 90% of my full light capacity."

Street light no. 05359

"I consumed only 30 kWh of energy last month."

Street light no. 05361



Always stay on the safe side: The CityTouch Platform.

More security – for your data

Your data deserves to be protected from external influences. CityTouch ensures maximum security.

Hacker-proof – thanks to state-of-the-art security technology.

Professional networks must be able to withstand deliberate attacks from outside. To this end, an external agency regularly conducts audits on CityTouch. By performing special penetration tests – a process known as “ethical hacking” – we are able to quickly detect and eliminate potential security holes. With 128-bit SSL encryption and two-factor authentication, the software meets the most stringent security standards.

Disaster-proof – thanks to automation.

To protect you against potential failures or accidents, the system automatically generates backups and stores them in different locations. In the event of a failure, a system recovery routine is automatically activated so that the system is up and running again in next to no time.

More security – for your planning

As an open and flexible platform, CityTouch ensures the long-term security of your investments and plans.

Future-proof – thanks to continuous innovations.

The rate of change in the IT space is continually increasing. CityTouch keeps pace with new developments through continuous innovations and improvements – and remains future-proof as a result. CityTouch shields you from unwelcome surprises, such as technology phase-outs or switchovers.

Open – thanks to interfaces.

At CityTouch we use application programming interface (API) technology to allow exchanging data with third party systems. Our CityTouch AssetLink is designed for connecting an already existing asset management system with LightWave, the remote management solution of CityTouch.

Customizable – thanks to customer-specific settings.

Data can be customized in CityTouch. For example, you can set up special fault categories or variable names for similar data fields. All customer-specific data is saved and stored. You can easily allocate user rights to individual members of staff, contractors, or even local agencies such as the police.

Advanced architecture of lighting management: The CityTouch Eco System.

At CityTouch, we practice advanced lighting management using a special ecosystem, consisting of the following elements:

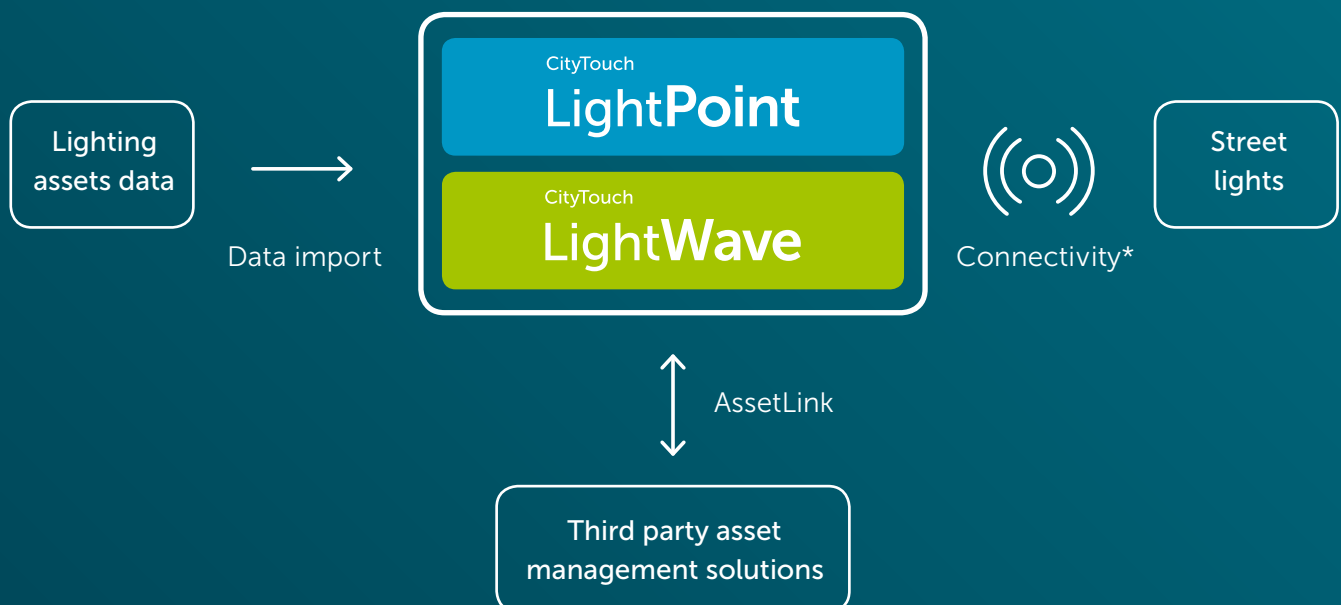
LightPoint, the lighting asset management system from CityTouch is a sophisticated tool for data and maintenance management. It brings transparency over your assets and workflows.

LightWave, the lighting remote management system from CityTouch, acts as the control center for adjusting and monitoring your city lighting.

It communicates with various assets of the lighting system via the public mobile communications network – simply, interactively and reliably.

The CityTouch platform is also open to third party software. For customers who want to combine CityTouch LightWave with their own asset management systems, CityTouch offers AssetLink, a standardized, open integration interface.

CityTouch Eco System



*Only in conjunction with CityTouch LightWave



© 2014 Koninklijke Philips N.V.
All rights reserved.

Philips Technologie GmbH CityTouch
Philipsstr. 8
52068 Aachen
Germany
info@citytouch.com
www.citytouch.com