

An Introduction to the Promoveo Platform

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Including datasheets for:

Promoveo Server (PTS-1)

Promoveo In-Wall Touch Panels (PTT-10, 12, 15, and 19)

Promoveo Wireless Touch Panel (PTW-1)

“An energy management system with home automation for every home connecting the IP world and the KNX world offering the best design and user experience within just hours of configuration”



Worlds End Studios, 132-134 Lots Road, Chelsea, London, SW10 0RJ, United Kingdom

Promoveo Technology Ltd. Registered in England number: 06105418. Registered Office: 132-134 Lots Road, London, SW10 0RJ, United Kingdom

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Contact Training, Sales & Support:

training@promoveo-technology.com

sales@promoveo-technology.com

support@promoveo-technology.com

Phone: +44 (0)20 7349 7060

Fax: +44 (0)20 7349 7061

1 Introduction to the Promoveo Platform

Thank you for your interest in the new Promoveo Platform. The Promoveo Platform has been developed with the system integrator in mind with the ambition of providing the best tool available for simple, intuitive and time saving installations. You should be confident that when installing the Promoveo Platform you will deliver the home owner the best user interface which is designed by designers and looks good every time.

The user experience enables your customers to fully recognise and enjoy the home technology you have specified and installed to meet their needs.

The Platform consists of the:

- The Promoveo Server (PTS-1) including the Promoveo Configuration Tool
- The Promoveo Touch (PTT-10, PTT-12, PTT-15, PTT-19 where the last two digits refer to the screen size of the touch screen)
- The Promoveo Touch-W (PTW-1) which is the wireless client

2 The Promoveo Platform Installation Schematics and Compatibility

The Promoveo Platform is an IP based client server solution. The schematic below illustrates the communication mechanisms between the Promoveo components and external systems. At the heart of the system is the Promoveo Server connected to an IP Switch/Router, which is also connected to the KNX Bus system via a KNX IP Gateway. The Promoveo Server manages all communications between end-user Client displays and external devices such as lights, blinds & cameras.

installation just a bit easier

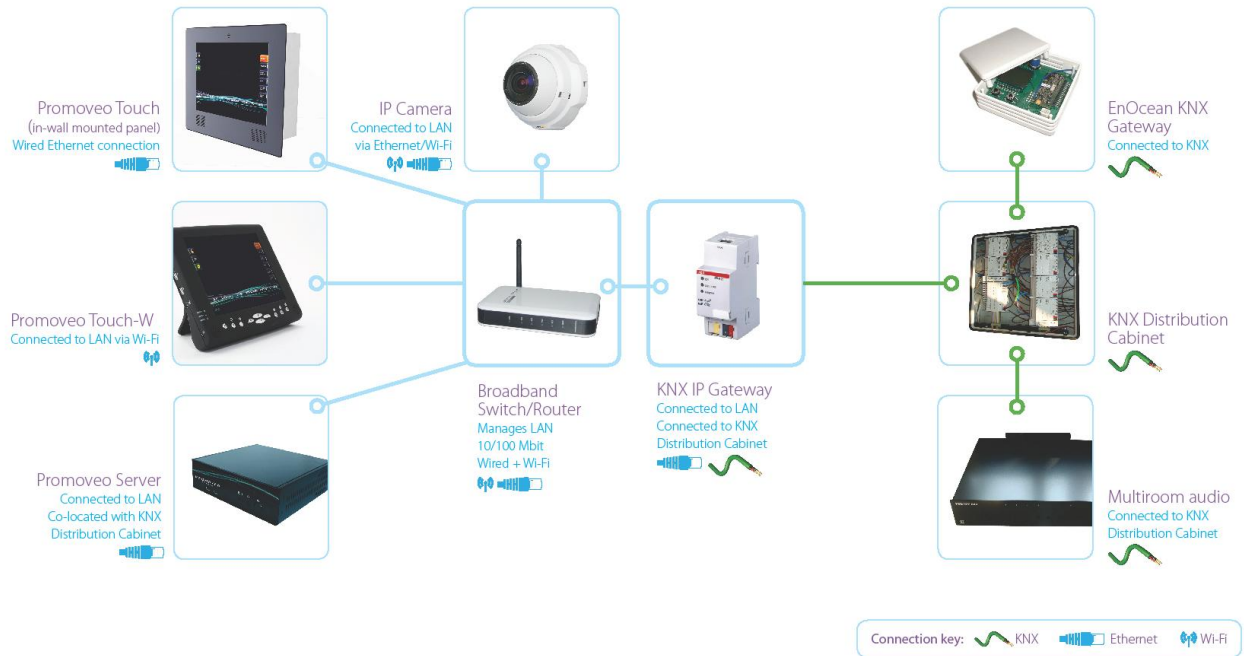


Figure 1 Installation Schematics of the Promoveo Platform

The Promoveo Server software is compatible with the following technologies/manufacturers:

- KNX Bus System
- EnOcean devices via gateway (e.g. window and door sensors)
- Axis cameras, model 207(W) and 212PTZ
- WHD Audio system, model AM840 and DAM 6000
- KNX Weather Station
- Energy Meter with KNX connection

3 The Promoveo Server (PTS-1)

The PTS-1 contains both the Server application and the Promoveo Configuration Tool. This chapter gives you an introduction to:

- The Configuration Tool functionality
- The Server Application functionality
- The Promoveo Server specification (“Data Sheet”)

The Config Tool is supported by a full user manual detailing how to configure the Promoveo Platform.



Figure 2 The Promoveo Server (PTS-1) - Front

3.1 The Configuration Tool Functionality

The Promoveo Configurator provides a simple and intuitive tool to configure the Promoveo system. The Configuration Tool is used to configure the Promoveo Server which determines which information will be displayed in the client UI. After ETS data is imported, the tool provides drag and drop functionality and red and green flags as a step-by-step user guide to determine current status of the configuration. A typical project (e.g. a four bedroom house) will be fully configured within hours. No visualisation is required by the integrator.

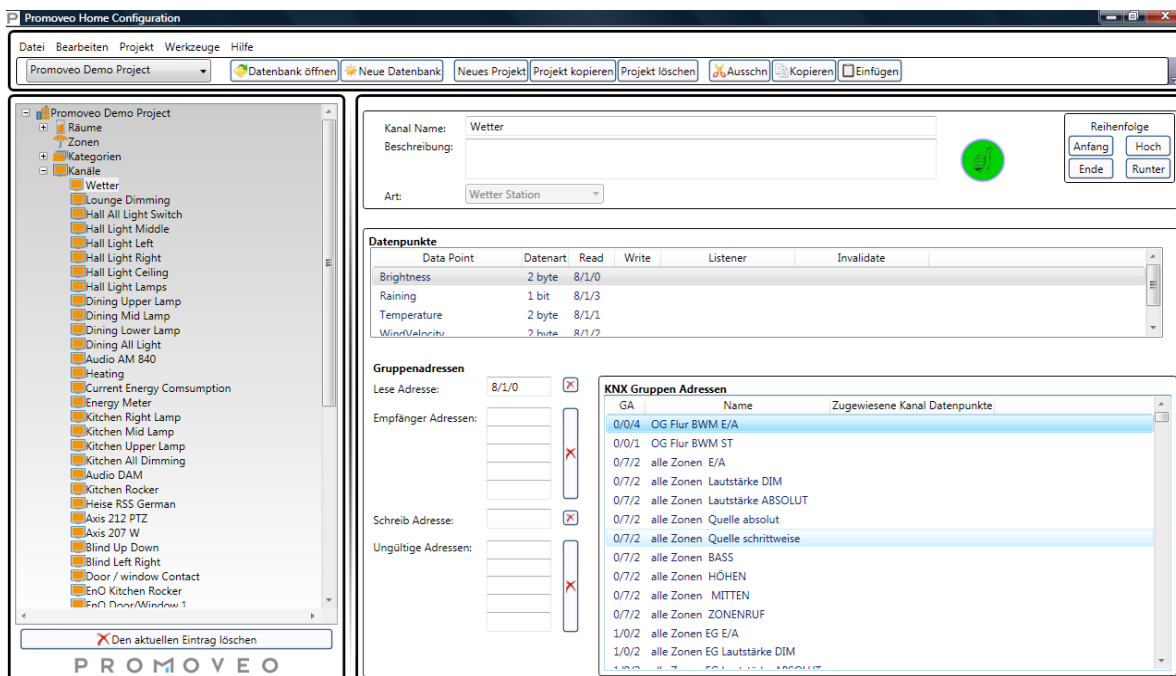


Figure 3 Screen shot from the Configuration Tool

3.1.1 The Configuration Process

1. Create a new project to import ETS data by a simple "import function" as a "*.csv file"
2. Entering the configuration Elements
 - a. Rooms (e.g. "Living room")
 - b. Channels (e.g. dimmable lights)
 - c. Scenes (e.g. "Evening")
 - d. Categories (e.g. lights or blinds)
3. Edit the Elements
 - a. Assign ETS addresses to the correct channels
 - b. e.g. Allocate dimmable light channels to the living room or create an evening scene containing blinds shut and all lights in the living room at 90%
4. Upload to server which then automatically allows the Client Application to populate the user interface based on the configuration.

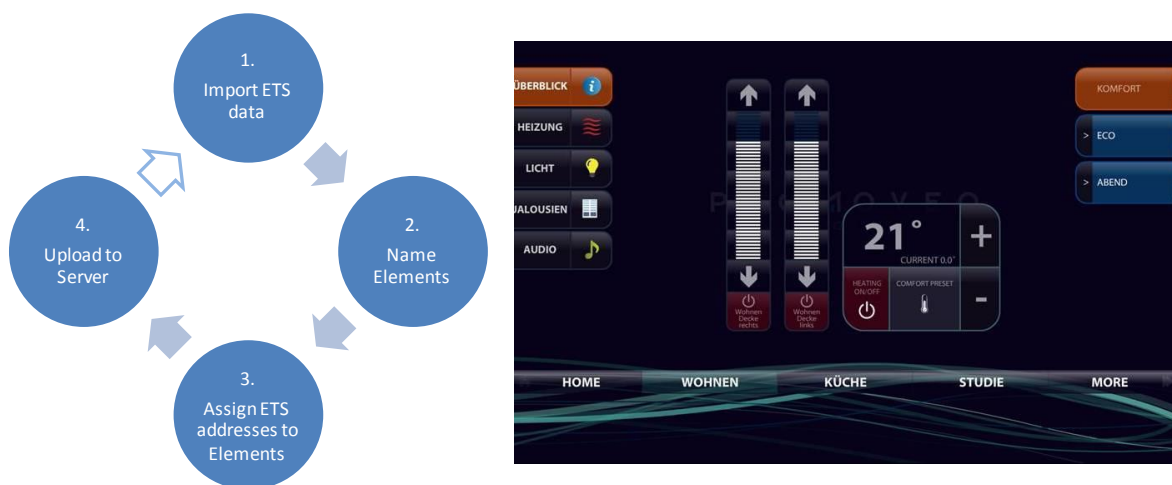


Figure 4 Configuration Process and Example of User Interface Based on the Integrator's Configuration

NB. the arrow between "4. Upload to Server" and "1. Import ETS data" in Figure 3 becomes relevant if you implement changes in the KNX installation, e.g. add functionality through an audio system or cameras and wish to upload the revised *.CSV file containing the new device addresses.

3.2 The Server Application Functionality

3.2.1 Control Functionality

- Lighting – both at individual and group level, on/off and dimming control
- Climate – Heating control per room, including individual temperature control and pre-settings like frost protection, comfort, night and standby
- Multiroom Audio – volume control and source change
- Blinds – fully controllable in all 3 dimensions
- Cameras - including pan, tilt and zoom, taking snap shots, saving to library, seeing multiple cameras at the same time
- Devices – on/off control

3.2.2 Reading Functionality

- Energy meter/electricity consumption – comes as integrated part of the Promoveo Energy Management System and the Eco Dashboard. Graphical presentation of electricity consumption per day, week, month and year. “Motivation” bar which benchmarks your usage toward “best”, “worst” and “average” period relative to current status.
- Weather station – graphical presentation of weather and temperature, rain sensor, and wind velocity
- Security sensors - e.g. window and door sensors
- RSS news feed – the end user can choose from a list of configured RSS news feeds which can be displayed on request

3.2.3 Server Support Functionality

- Scene settings, both house wide and room specific. Scenes can be triggered by events (e.g. time, sunset/sunrise, motion/presence detectors, temperature, brightness etc) or by the end user.
- Multiple simultaneous Client display panels
- Client specific user interface, e.g. that the touch panels in the guest room can only control functions in the guest room
- Multiple KNX IP Gateways if the situation were to require it
- Multicast (routing) and Unicast (tunnelling)
- Ability to import ETS3 data
- Event logging
- Multilingual user interface
- Managing up to 1000 channels/devices
- Remote access for diagnostics, service and support

3.3 The Promoveo Server specification (PTS-1 Data Sheet)



Figure 5 Promoveo Server (PTS-1) - Back

Processor	Intel Atom 1.6GHz
Memory	1Gb 533MHz
Storage	160Gb 2.5 SATA HD
Standard/Integrated interfaces	
Network	2 x LAN 10/100/1000 MBit/s
USB	2 x USB 2.0 ports Front 4 x USB 2.0 ports Back
	1 x VGA
	1 x DVI
	2 x COM
	Audio
Software	
Operating system	Windows XP Embedded
Power	100 – 230 VAC (external)
Certifications	CE Mark Reduction of Hazardous Substance (RoHS)
Dimensions	
Height	65 mm
Width	230 mm
Depth	215 mm
Mounting	Standalone or 19" Rack Mountable

4 The Promoveo In-Wall Touch Client (PTT-10", 12", 15", and 19")

The Promoveo In-Wall Touch clients come with an in-wall back box, the touch panel and 100 different frames to choose from.

The clients come with all software pre-installed and all you as an integrator has to do is to point the client to the server's IP address.

As all changes and updates are done on the server the client will always display the current status of the installation and all changes will automatically be updated without having to do any changes on the clients.

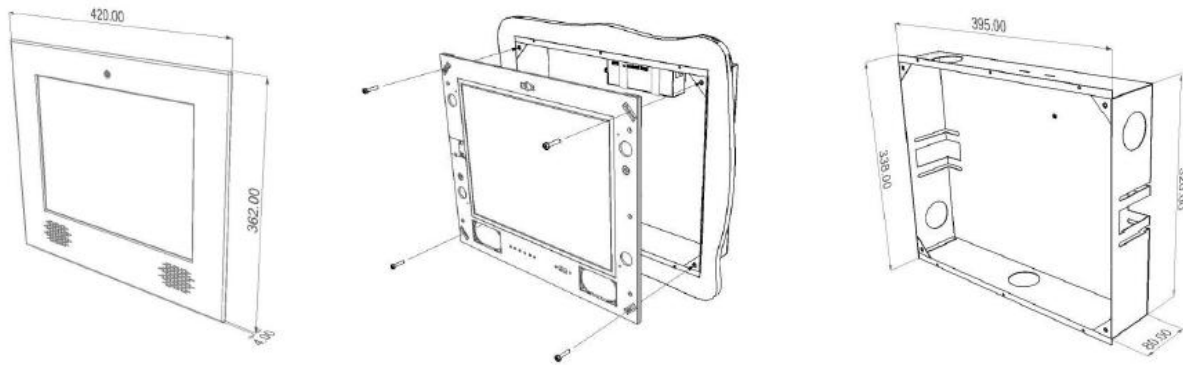


Figure 6 Promoveo In-Wall Touch back-box, touch-panel, and frame



Figure 7 The Promoveo Frame comes in 100 different colours and in different materials

4.1 The Promoveo In-Wall Touch specification (PTT-10, 12, 15, and 19 Datasheets)

	PTT-10	PTT-12	PTT-15	PTT-19
Display	10.4" TFT-LCD	12.1" TFT-LCD	15" TFT-LCD	19" TFT-LCD
Resolution	1024 x 768 (XGA)	1024 x 768 (XGA)	1024 x 768 (XGA)	1280 x 1024 (SXGA)
Viewable area	212 x 159 mm	245 x 182 mm	304 x 228 mm	376 x 301 mm
Viewing angle	176° surrounding	160° surrounding	150° surrounding	160° surrounding
Brightness	400 cd/m2	400 cd/m2	250 cd/m2	300 cd/m2
Colours	16.2 Mio.	262K	16.2 Mio.	16.2 Mio.
Contrast (Typical)	1200:1	500:1	500:1	1000:1
Response time	6ms	8ms	6ms	8ms
MTBF Backlight	50.000h	50.000h	50.000 h	50.000 h
OSD Keyboard	No	No	Yes	Yes
Touch-sensor	Analogue resistive (5-wire)	Analogue resistive (5-wire)	Analogue resistive (5-wire)	Analogue resistive (5-wire)
Touch-controller	USB	RS232 (or USB)	USB	USB
Processor	1.6GHz Intel Atom	Intel ATOM N270 1.6GHz	VIA C7 1.5GHz	VIA C7 1.5GHz
RAM	1GB	1GB	1GB	1GB
Flash ROM	4Gb	1GB (CF-Card)	1GB	1GB
Interfaces	1 x RS232 2 x LAN 2 x USB internal, 1 x USB external WLAN Optional 1 x PS/2	1 x RS232 1 x LAN 10/100 Mbit/s RJ45 2 x USB 2.0	1 x RS232 1 x LAN 10/100 Mbit/s RJ45 4 x USB 2.0 (one free)	1 x RS232 1 x LAN 10/100 Mbit/s RJ45 4 x USB 2.0 (one Free)
Speaker	Not integrated	Not integrated	2 x 4W (8 Ohm), USB	2 x 4W (8 Ohm), USB
Microphone	Not integrated	Not integrated	30 - 16000 Hz, jack 3,5 mm	30 - 16000 Hz, jack 3,5 mm
Power	110 - 240VAC or 12VDC	110 - 240VAC or 12VDC	110 - 240VAC or 12VDC	110 - 240VAC or 12VDC

Power consumption	approx. 30W (max.)	approx. 41W (max.)	approx. 30W (max.)	approx. 47W (max.)
Current	max 130mA (with 230VAC)	max 179mA (with 230VAC)	max 140mA (with 230VAC)	max. 250mA (with 230VAC)
Working Temp.	0°-40°C	0°-40°C	0° - 40°C	0° - 40°C
Storage Temp.	-20°C - 60°C	-20°C - 60°C	-20°C - 60°C	-20°C - 60°C
Humidity	Max. 80% (not condensing)	Max. 80% (not condensing)	Max. 80% (not condensing)	Max. 80% (not condensing)
Cooling	Passive (fanless)	Passive (fanless)	Passive (fanless)	Passive (fanless)
RoHs compliant	Yes	Yes	Yes	Yes
OS	XP	XP	XP	XP
Weight	approx. 7KG	approx. 7KG	approx. 8KG	approx. 11KG

5 The Promoveo Wireless Touch Client (PTW-1)

The Promoveo Touch-W is a touch screen wireless control device and communicates with the Promoveo Server (PTS-1). The Promoveo Client Software comes pre-installed and has been developed with maximum flexibility, reliability and user friendliness in mind.

The user experience enables your customers to fully recognise and enjoy the home technology you have specified and installed to meet their needs.

5.1 The Promoveo Touch-W Specification (PTW-1 Datasheet)



Figure 8 Promoveo Touch-W (PTW-1) – Sides and Top

- | | |
|------------------|--------------------------|
| 1. PCMI slot | 7. DC In Port |
| 2. Modem Port | 8. Serial Port Converter |
| 3. Ethernet Port | 9. USB Port |
| 4. Power Button | 10. Headphone Jack |
| 5. USB Port | 11. Microphone Jack |
| 6. USB Port | |

Processor	VIA C7M 1.2Ghz
Memory	1GB DDR RAM
Storage	80GB hard drive
Communication	Wifi, 802.11
Bluetooth	Integrated
Network	56Kbps V.92 MDC LAN Realtech 10/100 Base-T
Sound	AC-97 Audio on board, 16 bit stereo

Operating System

Windows XP Home Edition

Display

8.4" Touch Screen TFT

Battery

Removable Lion Standard Battery Pack (up to 3 hours)

Weight

1.19 KG (with battery)

Dimensions

231mm * 192mm * 42mm

AC Adapter

Input: AC 100-240V 50/60 Hz

Output: DC 16V, 3.13A



Figure 9 The Promoveo Touch-W (PTW-1)