

Theatre Control Panels

Improving Workflow in the Operating Room



starkstrom
a **Progenity** company
Powering Healthcare

Starkstrom's Theatre Control Panels

Starkstrom's Theatre Control Panels (TCP), sometimes called Surgeon's Control Panels or Operating Room Panels are typically wall mounted, flush metal enclosures that provide a focal point for monitoring and controlling the operating room environment. Clinical staff can adjust the controls of medical equipment and the operating room environment, and be alerted to any problems via alarms. Technical staff can easily inspect and maintain several different subsystems with minimum disruption to wall integrity. Stored information such as operating manuals or historic temperature and humidity levels can be easily viewed.



Theatre Control Panels should be considered if a hospital area has two or more of the following: (1) user control ventilation; (2) medical gas alarms or AGSS control panels; (3) power monitoring alarm panels such as IPS and UPS; (4) operating or exam lights with battery backup and/or wall mounted controls.

Benefits to hospital staff for Starkstrom's Theatre Control Panels are:

- **Improved Workflow** – provide a convenient single point to store and access information, alert user to status information if an alarm sounds and for cable routing during installation.
- **Infection Prevention and Hygiene** – Starkstrom's eTCP and wTCP fascias are designed with a membrane overlay allowing the surface to be wiped clean without being hindered by recesses or other dirt traps. During maintenance, the panels can be accessed from the front or rear – rear access via an unsterile corridor is often preferred to help keep the operating room clean.
- **Bespoke Solutions** – panels can be customised and designed from a wide choice of styles and functions to meet a hospital's specific requirements, and offer a degree of future proofing and flexibility to accommodate enhancements. Available in portrait or landscape orientation.

Electronic Touch Screen Panel (eTCPI7)

Modern flexible 'electronic' operating room control panel offers:

- Easy-to-clean hard coat polyester membrane overlay promoting infection prevention.
- 17" touch screen and Programmable Logic Controller (PLC) can be linked to the Building Management System for easy access to the operating room domain.
- Choice of analogue or digital time of day clock with digital elapsed time clock.
- Access information, such as stored operating manuals, room temperature and humidity measurements.
- Control of operating lights (main, satellite), general lights and illuminated warning signs.
- Integration of other manufacturer's equipment controls, e.g. IPS and UPS, operating tables, ventilation, audio, laser interlocks
- Two distinct alarms – Standard Alarm and Medical Gas Alarm for faults on medical gases. Alarm Mute feature also available for use during maintenance.
- Easy to accommodate new theatre innovations with software upgrades, reducing operating room downtime.



eTCP



wTCP



sTCP



hTCP

Membrane Panel (wTCP)

Modern, contemporary 'wipe clean' operating room control panel offers:

- Easy-to-clean hard coat polyester membrane overlay promoting infection prevention.
- PLC can be linked to Building Management System for easy access to the operating room domain.
- Uses pushbuttons and indicators as its primary user interface.
- Choice of analogue or digital time of day clock with digital elapsed time clock.
- Control of operating lights (main, satellite), general lights and illuminated warning signs.
- Integration of other manufacturer's equipment controls, e.g. AGSS, ventilation, IPS and UPS.
- Two distinct alarms – Standard Alarm and Medical Gas Alarm for faults on medical gases. Alarm Mute feature also available for use during maintenance.

Stainless Steel Panel (sTCP)

Traditional 'stainless steel' operating room control panel offers:

- Choice of brushed grain or powder painted stainless steel finish.
- Screwless fastenings ensure a smooth easy-to-clean fascia surface.
- Choice of analogue or digital time of day clock with digital elapsed time clock.
- Access information, such as stored operating manuals, room temperature and humidity measurements.
- Control of operating lights (main, satellite), general lights and illuminated warning signs.
- Integration of other manufacturer's equipment controls, e.g. operating tables, ventilation, audio.
- Future proofed at design stage, to enable some upgrades with minimal disruption.



Hybrid Touch Screen Panel (hTCP)

Modern 'hybrid' operating room control panel offers:

- A combination of a Theatre Control Panel with a PACS Viewing Station with infection control friendly membrane keyboards, X-Ray Viewer or AV Monitor.
- Examples include:
 - eTCP matched with a PACS Viewing Station.
 - eTCP matched with an AV Monitor.
 - wTCP matched with an X-Ray Viewer (1, 2, 3 or 4 screens).

Audio System

Starkstrom's Theatre Control Panels can be designed to allow the user to listen to music, via a 3.5mm microphone jack or audio Bluetooth wireless connectivity for most smart devices, preventing the need to have a separate audio system.

Speakers can be mounted in the ceiling and usually four are recommended in an operating room.

Starkstrom's touch screens offer the user the additional option to have access to the audio player enabling track selection, volume control and the ability to change the base and treble settings.



Audio Player Touch Screen on eTCP



Laser Interlock System Touch Screen on eTCP

Laser Safety Interlock Systems

Starkstrom's Laser Interlock Systems enable hospitals to comply with best practice when providing clinicians with a safe environment in which to operate hazardous lasers.

Designed for maximum safety and efficiency, Starkstrom's Laser Interlock Systems are configured to provide restricted areas with automatic shut-off of the laser beam if safety doors, covers or blinds are opened.

Starkstrom's Laser Interlock Systems are optional and are available in two models:

- ICS-5e: fully integrated into a Starkstrom eTCP providing touch screen control.
- ICS-5s: standalone enclosure which can be flush mounted in an sTCP with an LED control panel.

Starkstrom's Laser Interlock Systems are able to operate laser interlocks, laser power, beam shutters and warning signs. They can be fitted with entry/exit overrides and emergency stop switches. A passcode prevents unauthorised entry.

Technical Specification

TCP Measurement		eTCP	wTCP	hTCP (typical)	sTCP (typical)
Panel Size Back Box	Height	897mm	897mm	1200mm	1200mm
	Width	597mm	597mm	1700mm	1700mm
Panel Size Fascia	Height	927mm	927mm	1250mm	1250mm
	Width	627mm	627mm	1750mm	1750mm
Back Box Wall Depth	Front Access	150mm	150mm	260mm	260mm
	Rear Access	250mm	250mm	260mm	260mm
Fully Assembled TCP Weight	Front Access	50kg	50kg	200kg	200kg
	Rear Access	80kg	80kg	250kg	250kg

Standards & Guidelines

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| 1. Requirements for Electrical Installations (BS 7671) | 4. Medical Gases (HTM 02-01) |
| 2. Electrical Services Supply and Distribution (HTM 06-01) | 5. Facilities for Surgical Procedures (HBN 26 Volume I) |
| 3. Specialised Ventilation for Healthcare Premises (HTM 03-01) | 6. Guidance on the safe use of lasers, IPLs and LEDs (MHRA DB 2008 (03)) |

S-equipTM Turnkey Solution

The S-equipTM Turnkey Solution is for critical areas in hospitals to improve patient outcomes and workflow efficiencies. By partnering with Starkstrom, you will be supported with a wide range of experts who will design, build, equip, commission and service care area facilities such as Hybrid ORs to meet the needs of stakeholders. To find out more about the S-equipTM Turnkey Solution, please contact us.



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