

## Internet connected bell & clock controller



User-friendliness by application of today's technology



## **Feature overview APOLLO® III** Large touch screen Optimal user-friendliness LAN internet connection Remote programming and service **Carillon and** chimes control **Compatible with** PC, tablets and smartphone IOS, Windows, Android **Tower clock** Time sync with NTP server control Auto DST switchover DCF or GPS receiver **Bus system for** tower equipment Π UTP cable, fiberoptic, radio waves. Church bell control Respect for local **Compatible with** traditions international standards MIDI, USB, LAN, NTP, VNC, (S)FTP **Sound files** Programmable messaging



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#### **•** FEATURE OVERVIEW

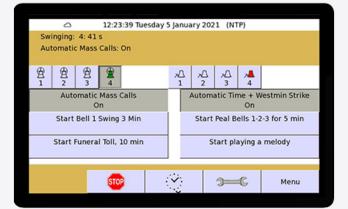
## Large touch screen: 7 inch / 18 cm

**Optimal user-friendliness** 

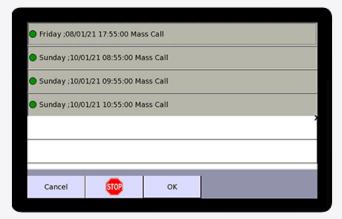
**Command table:** to ensure easy operation, the touch screen command table shows the real bell configuration of the tower, and its real time activity. The ongoing bell ringing events are shown on the bell symbols and also by displaying their sequence names.

**Function keys:** the installer provides an end-user menu composed of up to 66 custom-made keys that are chosen according to local ringing traditions.

**Diary function key:** when pressed, the next upcoming automatic bell executions are listed in chronological order, and may be edited.







Diary



Large touch screen





LAN internet connection



Church bell control



PC, tablets and smartphone



Tower clock control



Time sync with NTP server



Carillon and chimes control



Bus system for tower equipment





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**FUNCTIEOVERZICHT** 

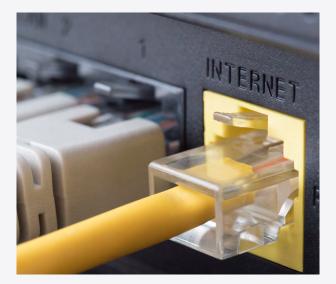
## LAN internet connection

Remote programming and service

**The LAN internet connection (option)** of the Apollo III allows the installer to offer remote technical service for program changes, technical analysis...

The end-user has **full access** to all functions to program or manually control the bells.

The Apollo III can **connect to the Internet** by means of any router, wired internet or by wireless modems.





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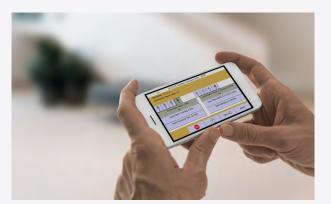
### **Compatible with PC, tablets and smartphones**

iOS, Windows, Android

Remote control and remote service using internet or local network communication









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### Time sync with NTP server, DCF or GPS receiver

Synchronized internal time base

The **internal time base** of the Apollo III may be synchronized with the most common standard time bases:

- DCF radio receiver (coverage: Western Europe)
- GPS satellite receiver (coverage: worldwide)
- NTP Network Time Protocol server (Internet connection required)

All tower clocks and slave clocks are synchronized by the Apollo III.

Worldwide automatic DST changeover





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#### **FUNCTIEOVERZICHT**

### **Bus system for tower equipment**

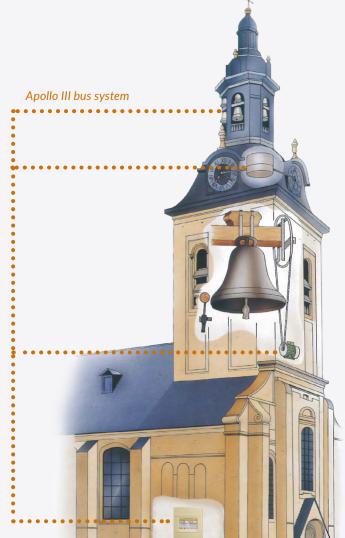
UTP cable, fiberoptic, radio waves

Communication between the Apollo III and other devices in the church:

- classical wiring, compatibility with any existing devices.
- Apollo III bus by UTP wire (ethernet type). Wiring is discrete (preservation of historical buildings) and low cost.
- Apollo III bus by Fiber Optic: immune to lightning surges.
- Apollo III bus by Radio Waves: e.g. in between separate buildings, when hardwiring is not possible/allowed.

Apollo III bus: serial communication by UTP wire allows remote programming and diagnosis of all connected devices.

The Apollo III includes a messaging system by email in case of malfunction, for instant technical supervision of the bell installation, which ensures optimal security.





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Sound files



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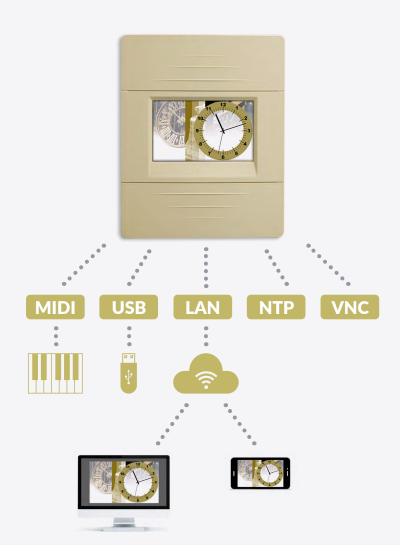
#### **FUNCTIEOVERZICHT**

## **Compatible with international standards**

MIDI, USB, LAN, NTP, VNC, (S)FTP

The Apollo III system allows interconnection and integration by its compatibility with international standards.

- **MIDI (option):** Musical Instrument Digital Interface, for connecting keyboards, PC's, etc.
- USB ports: backup memory
- LAN: networking (internet)
- **NTP (option):** Network Time Protocol, for time sync by internet servers.
- VNC (option): Virtual Network Computing. The Apollo III's touch screen can be transmitted to other devices (PC's, tablets, smartphones) for remote operation and programming.
- **(S)FTP:** (Secured) File Transfer Protocol (Filezilla), industry standard for transport of files over a network (for backup, melody library...)





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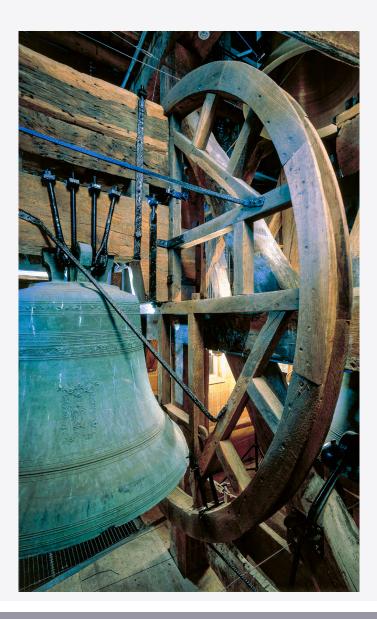
#### **Church bell control**

Respect for local traditions

User-friendly programming, traditional bell-ringing programs are identified by their proper names. Introduction of customized ringing and tolling actions in the user screen for optimal user-friendliness. Any traditional ringing sequence can be entered as a sequence in the Apollo III, to preserve local traditions.

The start-up and stop sequence of a bell swing peal is automatically calculated by the Apollo III, following a set of parameters filled in by the installer. The first/last clapper stroke of each bell come up in a controlled and aesthetical sequence similar to hand bell ringing.

	1			3	84						
Start hours					Start minutes				Start seconds		
	- 12				- 0		-		- 0	+	
Day - S +					Month:			April			+
1	2	3	4	5	6	7	8	9	0	•	•
Cancel			STO		1	OK			1 +	RET	DEL





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#### **FUNCTIEOVERZICHT**

#### **Tower clock control**

Auto DST switchover

The Apollo III is capable to control up to 4 tower clock movements independently.

All worldwide standards of tower clock control are supported.

DST switchover is fully automatic.

Automatic synchronization of each clock after power failure.





Large touch screen





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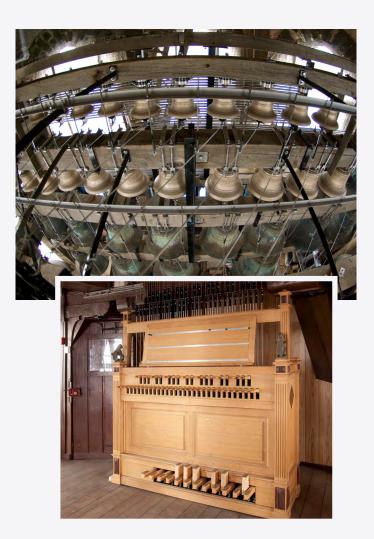
## **Carillon and chimes control**

#### Manage music remotely

Music is stored in the Apollo III as MIDI files. These files are stored in a PC compatible file structure (Windows and IOS). File exchange is possible by LAN (SFTP, Filezilla) or by standard USB storage media. Thus, the carillonneur can remotely manage the automatic music played on his carillon.

A MIDI file may be recorded from a MIDI keyboard (e.g. baton carillon practice keyboard) or generated by means of a MIDI software package in a computer.







Large touch screen





LAN internet connection



Church bell control ...-

PC, tablets and smartphone



Tower clock control



Time sync with NTP server



Carillon and chimes control



Bus system for tower equipment







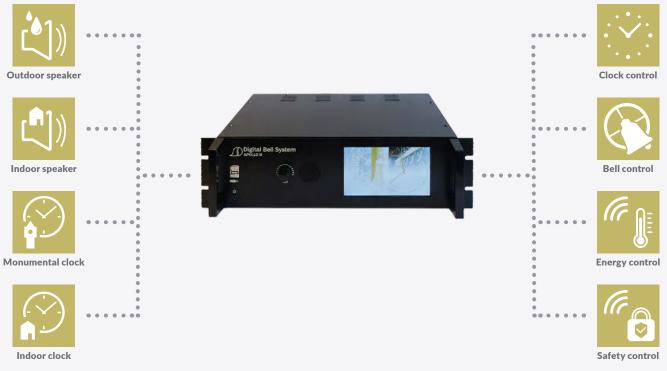
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### **Sound files**

Userfriendly programmable messaging



#### **Typical applications:**

- Background music in a building
- Pre-recorded programmed voice messages for schools, public spaces or industries
- Energy control: heating and cooling

- Safety control: programmable messaging & access control
- Master clock and programmable relay outputs







LAN internet connection



Church bell control



PC, tablets and smartphone



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**Carillon and chimes** control



Bus system for tower equipment



Sound files





## 

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#### FUNCTIEOVERZICHT

• 4x USB, 1x LAN, 1x SD card slot, 1x audio out

20 swinging bells, 104 strikers, 10 continuous out-

puts, 100 sequences, 100 playlists (2 players), 66

4x300 permanent / 4x24 one-time programs for:

• continuous outputs (lights, automatic doors...)

• MIDI: 100.000 internal memory, 10.000.000 SD

• MP3: 300 minutes internal memory, 30.000

sequences (combined executions)

• Min. 10, max. 125 outputs and 100 inputs

(by modular extension, bus system)

### **Electrical and mechanical specifications**

#### **Electrical and mechanical specifications**

- Power supply: 100 240 VAC
- Power consumption: max. 25 W
- Network connection: RJ45, IEEE 802.3i / 802.3u compatible, 10/100 Mbit/s autonegotiation
- Network Protocols supported: Avahi, Network Time Protocol (NTP), SFTP (ports 22 and 2222), http (port 80), VNC (port 5900)
- Battery: maintenance-free rechargeable battery, autonomy 10 months
- Housing: Wall mount: ABS/PC UL94-V0 (self-extinguishing), 250x310x83 mm Rack mount: standard 19" - 3 rack units

#### **CE Standard**

The device complies with the following standards: Security standard:

• EN 609505

Electromagnetic compatibility:

- EN 50081-2: Generic Emission Standard EN 55022
- EN 50082-2: Generic Immunity Standard
- EN 61000-4-2: Electrostatic Discharge (ESD)
- EN 61000-4-3: Radiated Electromagnetic Field
- EN 61000-4-4: Electrical Fast Transient/Burst
- EN 61000-4-5: Surge Immunity













Hardware

Software

**Programs** 

melodies

card

swinging bell

Number of melodies

minutes SD card

user function keys







Tolling

Hour strike

Swinging bells

Angelus

**Funeral tolls** 

Tower clock control Lighting control

Climat control

CAMPA, products of outstanding quality, available in your area



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