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Features

- Open duplex
- Push-to-talk
- Headset interface
- Speech key control via footswitch
- Music input
- Recording possibility
- AEC (Automatic echo cancellation)
- NR (Noise reduction)
- NG (Noise gate)
- Individual volume control for loudspeaker / microphone/ headset / audio via +/- keys
- Balanced microphone inputs

Technical Data

Voltage/power.....	15VDC/700mA
Maximum power consumption (limited by power supply)	<15W
Power consumption in OFF-mode	<0.15W
Maximum output impedance (no continuous operation) at 8Ω/channel	5W
Minimum loudspeaker impedance.....	8Ω
Audio IN-input level/input impedance	30mV ⁽¹⁾ /47kΩ
REC OUT-output level/output impedance	20mV ⁽²⁾ /10kΩ
Temperature :.....	10 - 40 °C
Humidity:	20 % to 75 % (non condensing)
Air pressure:	700 hPa to 1060 hPa

⁽¹⁾Connect Audio IN to the headphone jack of the audio source.
 Tune output level of the audio source in such a way that in case of maximum volume overmodulation of the intercom system is avoided.

⁽²⁾This value depends on the volume set, on the speech volume and on the distance to the microphone.



PUBLIC IV
Intercom Ceiling LED

Service and Installation Instructions



Delivery Contents Intercom System



Intercom console
colour RAL 7035
labels 32.054.015.004, 32054013002_ETL 40.054.440.005



Connection Hub
label 32.054.014.004 40.054.443.003



Surface mounted loudspeaker 6W / 20Ω
colour RAL 9010, labels 32.054.005.004, 32.054.062
cable outlet top/bottom (40.006.174) 40.006.173.002



Omnidirectional microphone EM 258 in ABS housing
colour RAL 9010, LED-Ring, label 32.054.007.004,
1m cable with RJ45 plug 40.054.470, label
32.054.046.001, wall/ceiling holder 40.005.094,
cover plate 06.054.06 40.005.171.001



FOX12 Medical Power Supply, 100-240V~/50-60Hz, 1.8m
cable, labels 32.054.803.003, 32.054.008.004 40.054.803.004



Primary adapter ROW 08.052.05.001



Power cable *EU*, 2m
labels 32.054.032.001, 32.054.032.002 40.054.834.001



Power cable *USA*, 2m
labels 32.054.032.001, 32.054.032.002 40.054.835.001



Power cable *UK*, 2m
labels 32.054.032.001, 32.054.032.002 40.054.836.001



Patch cable KAT5e, 3m
labels 32.054.036.001, 32.054.036.002 40.054.327.002



RJ45 connector, label 32.054.009.004 40.054.841.002



Microphone extension cable KAT5e, 20m
Labels 32.054.045 .001 and 32.054.045.002 40.054.842.001



Loudspeaker cable KAT5e, 20m
Labels 32.054.043.001, 32.054.043.002 40.054.843.001



Audio cable, 2m (2x) 11.054.02

Delivery Contents Footswitch⁽³⁾



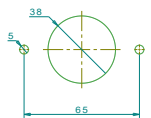
Footswitch STEUTE KF 1S
with 2m cable and RJ45 plug
Labels 32.054.065.002, 32.054.040.001 40.054.819.002

⁽³⁾ For AX the footswitch is included in the delivery of the intercom system and should be connected.
For XP the footswitch can be obtained as an optional accessory.

Delivery Contents Mounting Material



Service and Installation Instructions
 German 35.054.440.006
 English 35.054.440.007



Mounting material for microphone ceiling fixation:
 drilling template 35.054.006
 2 counter-sunk head screws 3,5x30mm + 2 wall plugs 40.054.844
 5x25mm



U

Mounting material for connection hub 40.054.830.001
 1 hook-and-loop fasteners⁽⁴⁾



N

Mounting material for loudspeaker 40.054.827
 4 screws 3,5x35mm, 4 wall plugs 5x25mm 40.054.831
 2 screws 2,9x16mm, 2 decorative caps 40.054.832
 cable ties 100mm



V

Mounting material for power supply 40.054.830.002
 hook-and-loop fastener⁽⁴⁾

Positioning of the Components Microphone, Loudspeaker and Intercom Console



Microphone

- ceiling fixation
- as close to the user's working position as possible
- avoid collision with other components suspended from the ceiling



Loudspeaker

- Mounting on the ceiling above the user,
- or on the wall below the ceiling behind the user



Intercom Console

- the intercom console has to be placed as far from the control room door as possible
- Maximum speech distance to the microphone: 10cm

⁽⁴⁾Use hook-and-loop fasteners only on suitable surfaces (adhesion)!

1 > Intercom Cleaner Socket
< Intercom Power Supply

1a > Intercom Power Supply
< Intercom Cleaner Socket

1b > Intercom Connection Hub (6)
(DC Power)
< Intercom Power Supply
15V \approx /700mA

2 > Intercom Console (1)
< Intercom Connection Hub (1)

2a > Intercom Connection Hub (1)
< Intercom Console (1)

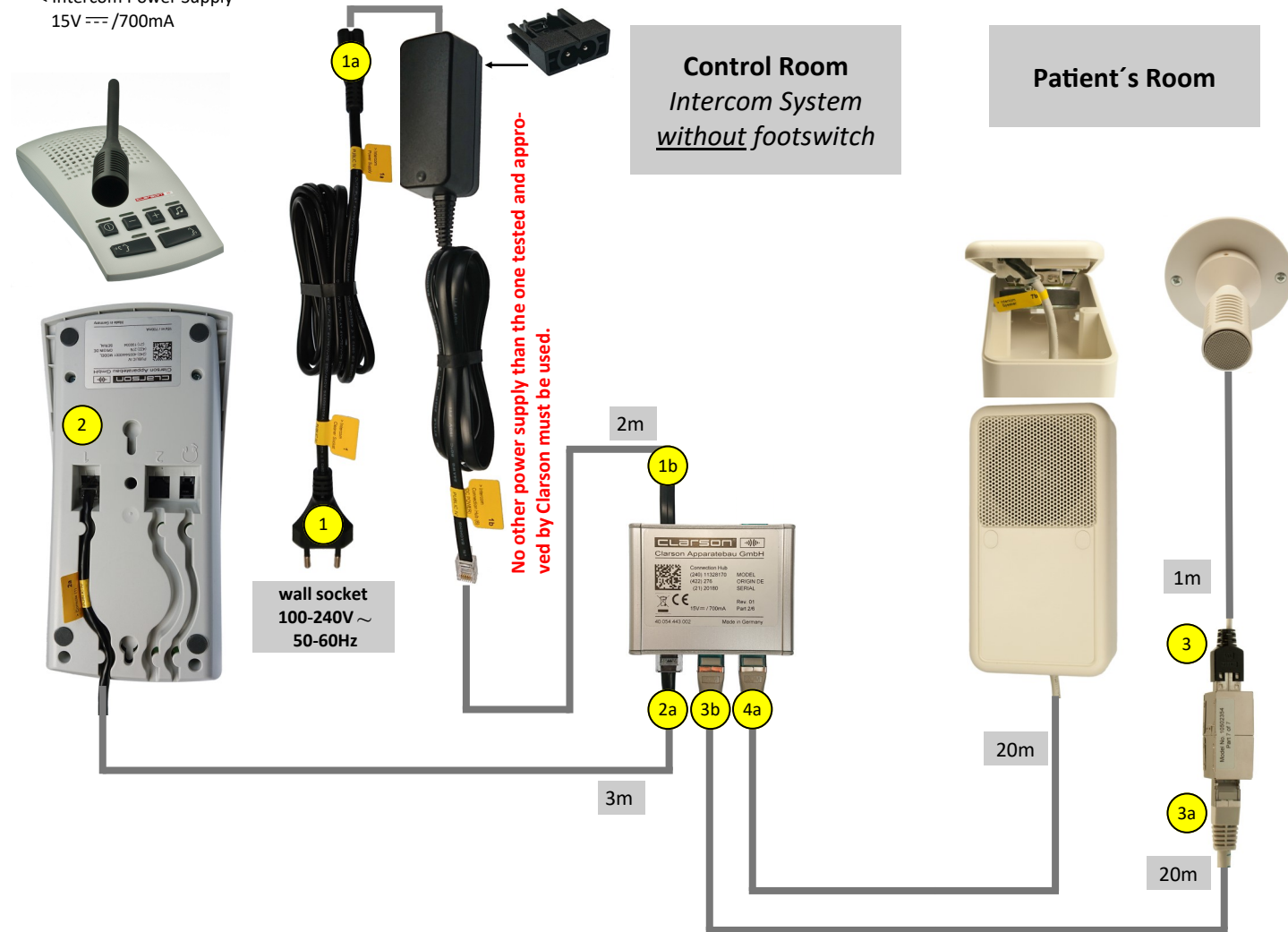
3 > Intercom RJ45 Connector (1)
< Intercom Microphone

3a > Intercom R45 Connector (2)
< Intercom Connection Hub (2)

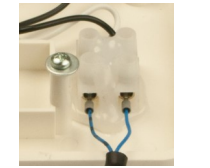
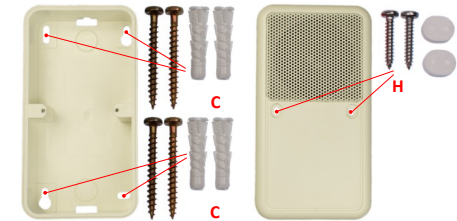
3b > Intercom Connection Hub (2)
< Intercom R45 Connector (2)

4 > Intercom Speaker
< Intercom Connection Hub (3)

4a > Intercom Connection Hub (3)
< Intercom Speaker



Installation Loudspeaker



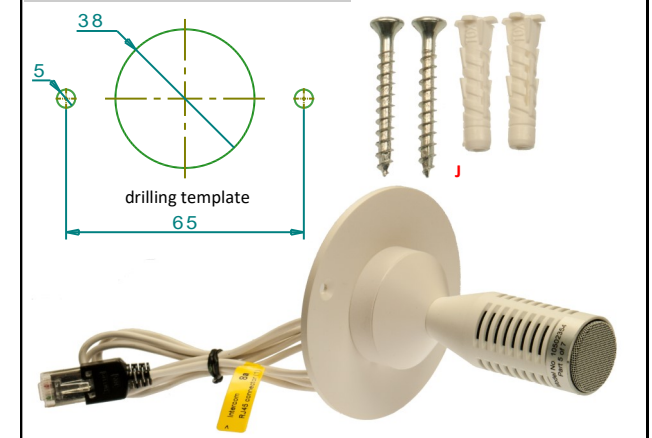
Important for Installation Planning:

Dimensions microphone cable :
Length 1m, \varnothing 3,1mm
Extension cable length 20m, \varnothing 5,5mm
Clearance hole for RJ45 connector
minimum \varnothing 16mm.
Observe drilling template!

Dimensions loudspeaker cable:
Length 20m, \varnothing 5,5mm
Clearance hole for RJ45 connector
minimum \varnothing 17mm.

Dimensions mounting material
see page 4

Ceiling installation microphone



1 > Intercom Cleaner Socket
< Intercom Power Supply

1a > Intercom Power Supply
< Intercom Cleaner Socket

1b > Intercom Connection Hub (6)
(DC Power)
< Intercom Power Supply
15V --- /700mA

2 > Intercom Console (1)
< Intercom Connection Hub (1)

2a > Intercom Connection Hub (1)
< Intercom Console (1)

3 > Intercom RJ45 Connector (1)
< Intercom Microphone

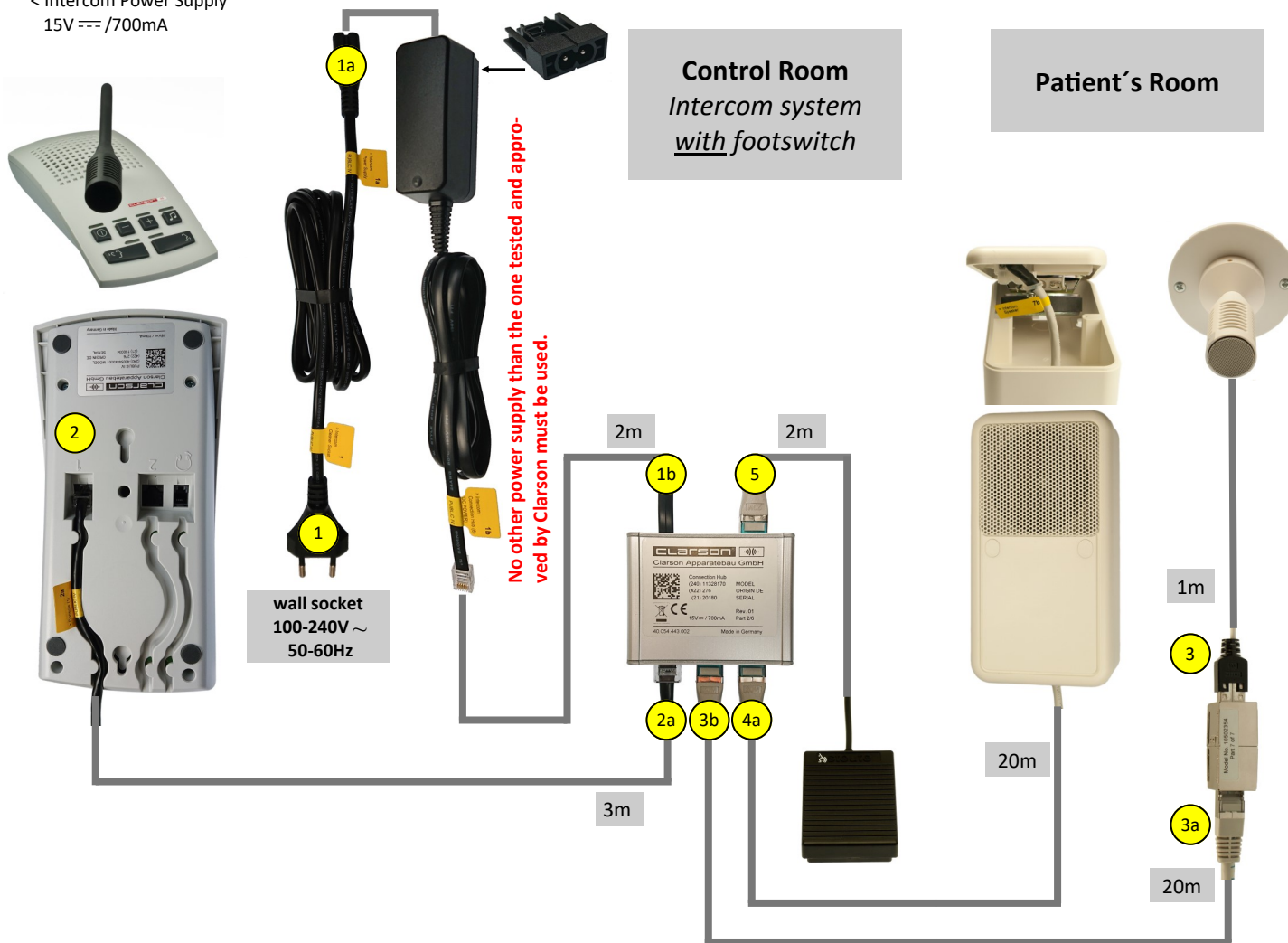
3a > Intercom R45 Connector (2)
< Intercom Connection Hub (2)

3b > Intercom Connection Hub (2)
< Intercom R45 Connector (2)

4 > Intercom Speaker
< Intercom Connection Hub (3)

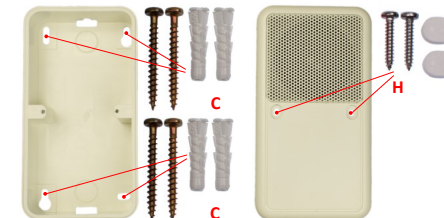
4a > Intercom Connection Hub (3)
< Intercom Speaker

5 > Intercom Connection Hub (4)
< Footswitch (4)



Patient's Room

Installation Loudspeaker



4

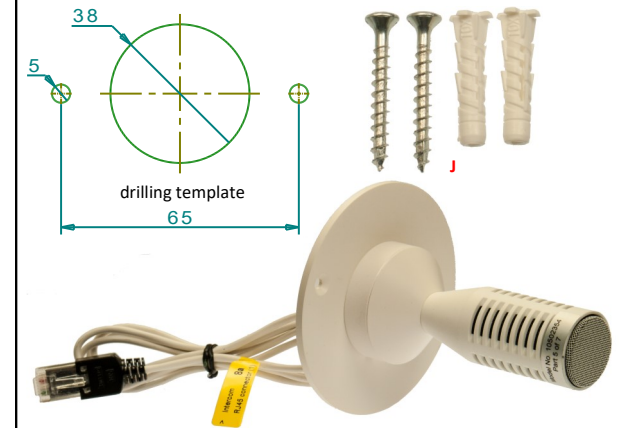
Important for Installation Planning:

Dimensions microphone cable :
Length 1m, \varnothing 3,1mm
Extension cable length 20m, \varnothing 5,5mm
Clearance hole for RJ45 connector
minimum \varnothing 16mm.
Observe drilling template!

Dimensions loudspeaker cable:
Length 20m, \varnothing 5,5mm
Clearance hole for RJ45 connector
minimum \varnothing 17mm.

Dimensions mounting material
see page 4

Ceiling installation microphone



Key Functions, External Connections and LED Signalling



Intercom Console

Key	Function	LED State	System Operating Status
⓪	Intercom System ON/OFF	on off flashes	ready for use switched off set-up mode
⌂	Loudspeaker ON/OFF	on off	loudspeaker ON loudspeaker OFF
🎧	Microphone ON/OFF	on off	microphone ON microphone OFF
🎵	Audio IN ON/OFF	on off	Audio IN ON Audio IN OFF
+	Increase volume	led brightens flashes	maximum volume
-	Reduce volume	led darkens flashes	minimum volume

The corresponding LEDs indicate the operating state of the intercom system. Should external disturbances such as prolonged voltage drops change the operating status, the original state can be restored via control panel.

The volume can only be changed if either ⌂ or 🎧 or 🎵 is switched on.

PTT Mode:

Push and hold 🎧 key to switch the microphone on.

Attention: transmission only takes place when the LED is activated.

Switching on PTT Mode:

Switch the intercom system off

Push and hold ⓪ key (approx. 5 sec.) until LED above 🎧 flashes.

Switching off PTT Mode:

Switch the intercom system off

Push and hold ⓪ key (approx. 5 sec) until LED above 🎧 flashes.

External Connections Central Unit

🎧➔ Connection for audio recorder⁽⁵⁾

External Connections Intercom Console

🎵 Connection for audio player⁽⁵⁾

🎧➔ Connection for headset^{(5) (6)}

After switching on the intercom system the intercom console is activated, regardless of whether the headset microphone is plugged in or not.

Switchover to headset operation is made by removing and re-inserting the headset microphone plug.

Operational Start-up/Service⁽⁷⁾

To avoid poor sound quality and feedback, it may be necessary to adjust the volume range settings to accommodate the acoustic conditions on site.

Maximum volume for both the *Control Room* and the *Patient's Room* is set as follows:

Firstly, PTT turned on (state of delivery), ensure all doors between *Control Room* and *Patient's Room* are open.

- Press the ⓪ button to switch the intercom system off, all LEDs will turn off.
- Press the key sequence + 🎵 - + ⓪, the LED above the button ⓪ flashes.
- Press the ⌂ button, the LED above the button lights up.
- Use the + and - buttons to set the maximum volume for an optimal sound quality at the *Control Room*.
- Press the ⌂ button, the LED above the button turns off.
- Press and hold the 🎧 button, the LED above the button lights up.
- Use the + and - buttons to set the maximum volume for optimal sound quality at the *Patient's Room*.
- Release the 🎧 button, the LED above the button turns off.
- Press the + and - buttons to the same time until LEDs above the buttons flash briefly once to save the new values.
- Press the ⌂ and 🎧 buttons to the same time until LEDs above the buttons lights up | flashes | lights up, to **reset to factory settings**.
- Press the ⓪ button to exit the settings, all LEDs will turn off.

Trouble shooting:

In case of interference, intercom components should be relocated to increase the distance from sources of strong electromagnetic radiation.

⁽⁵⁾Not included in scope of supply

⁽⁶⁾Contact Clarson directly for suitable headsets

⁽⁷⁾Unplug or plug in patch cable only in power-free state