Table of Contents

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 ....20V[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 Direct LED

Service and Installation Instructions

Delivery Contents Intercom System

	Intercom console colour RAL 7035 labels 32.054.015.003, 32054013002_ETL	40.054.440.003
	Connection Hub label 32.054.014.003	40.054.443.002
	Surface mounted loudspeaker 6W / 20Ω colour RAL 9010, labels 32.054.005.003, 32.054.062 cable outlet top/bottom (40.006.174)	40.006.173.001
	Gooseneck microphone Microphone EM400Z1 in ABS housing color RAL 9010, LED-Ring, label 32.054.007.003, 0.58m cable with RJ45 plug, label 32.054.046.001, flexible tube 300mm with white heat shrink tubing and mounting for flexible tube, extension for mounting 06.017.08, washer 14.054.08, hexagon nut M18x1 13.054.001	40.005.176.002
	FOX12 Medical Power Supply, 100-240V~/50-60Hz, 1.8m cable, labels 32.054.803.003, 32.054.008.003	40.054.803.003
	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 32.054.009.003	40.054.841.001
	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	35.054.440.004
	English	35.054.440.005
T **S**	Mounting material for gooseneck microphone:	
	Hexagon nut galvanized, M18x1, 4mm thick, washer galvanized, D=34mm, d=19mm, 3mm thick	40.054.873
	Extension for mounting, natural anodized	40.054.872
U	Mounting material for connection hub	40.054.830.001
	1 hook-and-loop fasteners[4]	
2x C **H** **N**	Mounting material for loudspeaker	
	4 screws 3,5x35mm, 4 wall plugs 5x25mm	40.054.827
	2 screws 2,9x16mm, 2 decorative caps	40.054.831
	cable ties 100mm	40.054.832
V	Mounting material for power supply	
	hook-and-loop fastener[4]	40.054.830.002

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

Positioning of the Components Microphone, Loudspeaker and Intercom Console

Gooseneck microphone
-Mounted on DCS

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

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)
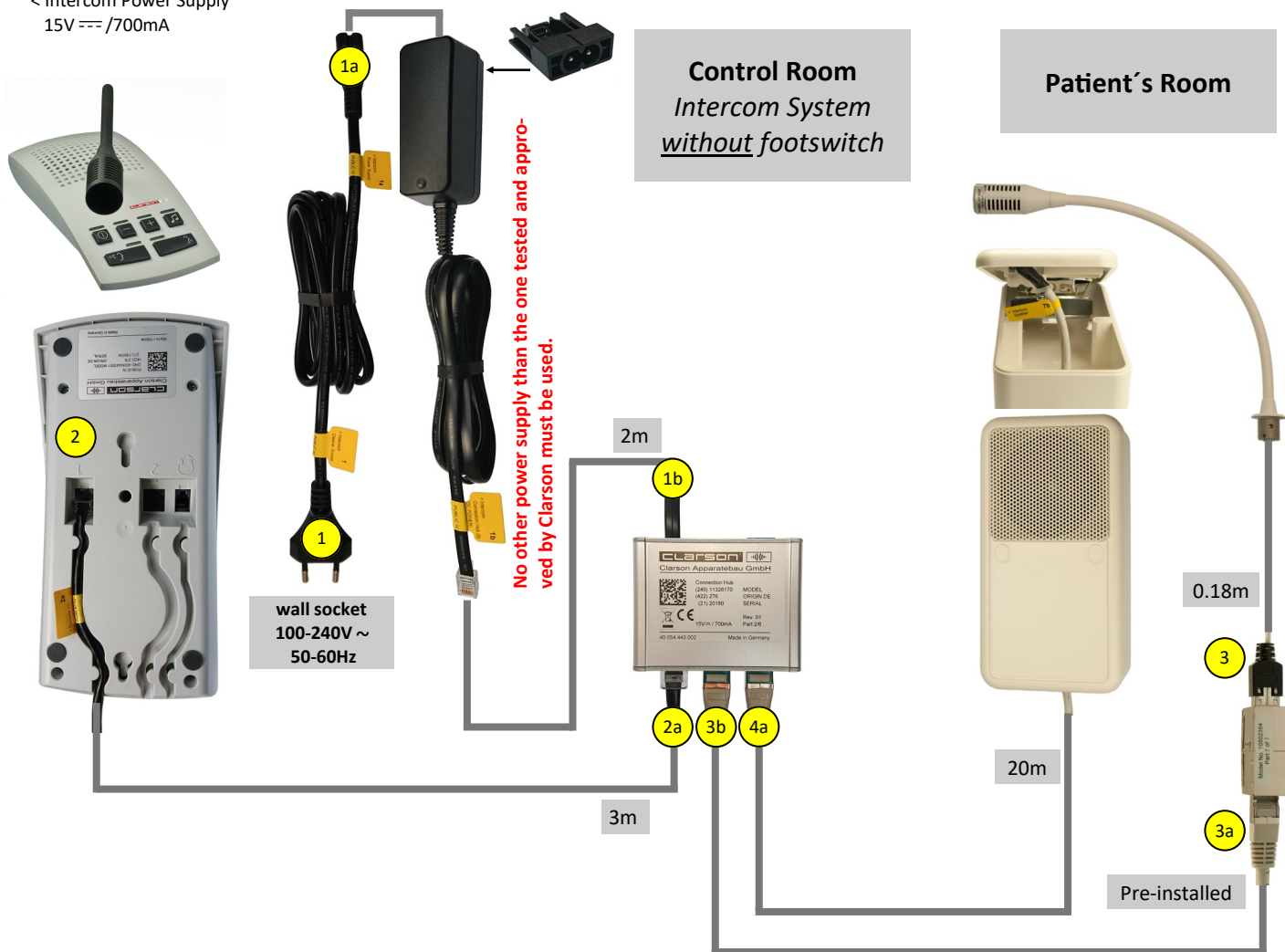< Intercom Connection Hub (1)

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

3 > Intercom RJ45 Connector (1)
< Intercom Microphone

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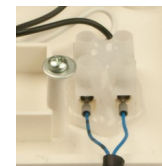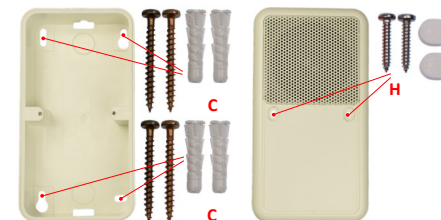< Intercom Connection Hub (2)

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

4 > Intercom Speaker
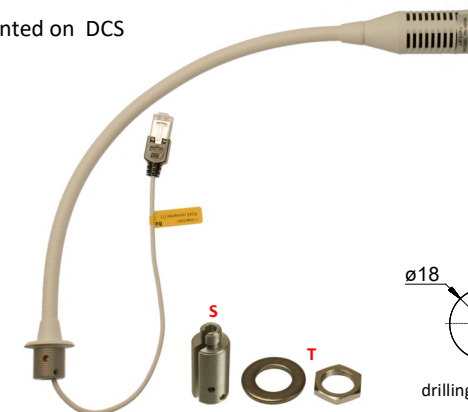< Intercom Connection Hub (3)

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

Control Room
Intercom System
without footswitch

Patient´s Room

No other power supply than the one tested and approved by Clarson must be used.

2m

wall socket
**100-240V ~
50-60Hz**

3m

2m

20m

0.18m

Pre-installed

Installation Loudspeaker

C

H

C

Important for Installation Planning:

Dimensions loudspeaker cable:
Length 20m, Ø 5,5mm
Through-hole for RJ45 connector
at least Ø17mm.

Dimensions mounting material
see page 4

N

Gooseneck microphone LED

Mounted on DCS

S

T

ø18

drilling template

6

7

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)
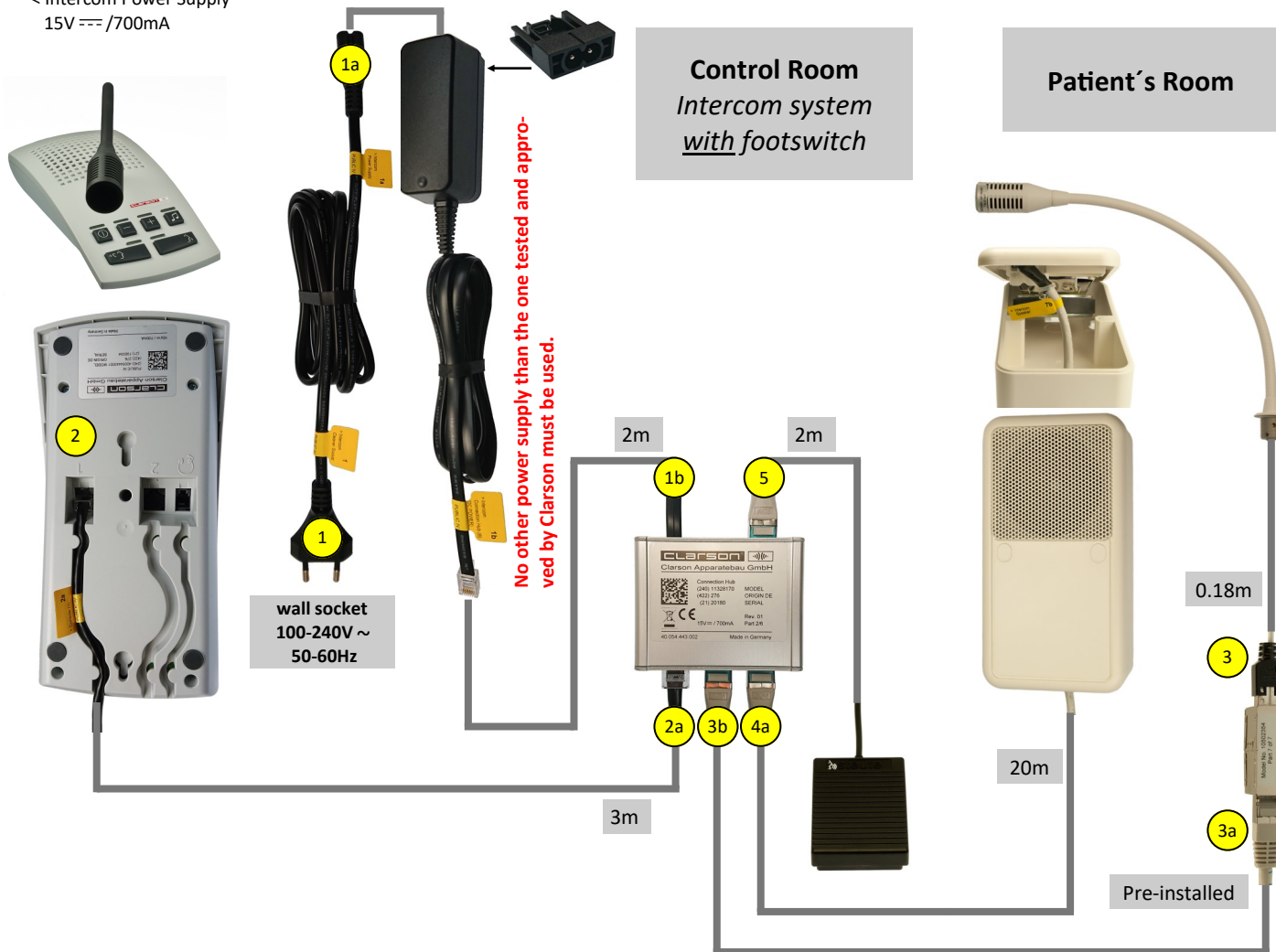< Intercom Console (1)

3 > Intercom RJ45 Connector (1)
< Intercom Microphone

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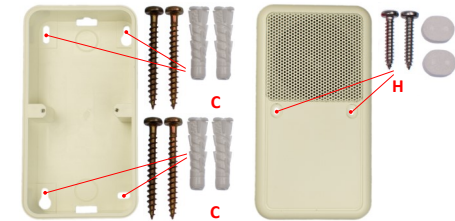< Intercom Connection Hub (2)

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

4 > Intercom Speaker
< Intercom Connection Hub (3)

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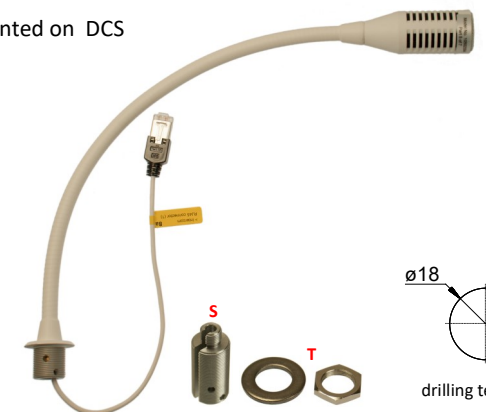< Intercom Speaker

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

Control Room
Intercom system
with footswitch

Patient´s Room

Installation Loudspeaker

C

H

C

Important for Installation Planning:

Dimensions loudspeaker cable:
Length 20m, Ø 5,5mm
Through-hole for RJ45 connector
at least Ø17mm.

Dimensions mounting material
see page 4

N

No other power supply than the one tested and appro-
ved by Clarson must be used.

wall socket
100-240V ~
50-60Hz

2m

2m

0.18m

20m

3m

Pre-installed

Gooseneck microphone

Mounted on DCS

S

T

ø18

drilling template

8

9

Key Functions, External Connections and LED Signalling

Intercom Console

Key	Function	LED State			System Operating Status
⏻	Intercom System ON/OFF	on			ready for use
		off			switched off
		flashes			set-up mode
⌇	Loudspeaker ON/OFF	on			loudspeaker ON
		off			loudspeaker OFF
⌇	Microphone ON/OFF	on			microphone ON
		off			microphone OFF
♩	Audio IN ON/OFF	on			Audio IN ON
		off			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 ⏻ key (approx. 5 sec.) until LED above ⌇ flashes.

Switching off PTT Mode:
Switch the intercom system off
Push and hold ⏻ 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 accomodate 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 ⏻ button to switch the intercom system off, all LEDs will turn off.
- Press the key sequence + ♩ – + ⏻ , the LED above the button ⏻ 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 ⏻ 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