

ZÄHL Commentator's Unit CSX-11

analogue add-on unit with fail-safe functionality for RIEDEL ARTIST Standard Control Panel DCP-1016E



- system redundancy in combination with DCP-1016E
- automatic switch over to stand-alone/emergency operation
 - smart link to RIEDEL ARTIST logic

- including new functions for units from 08.2007 -





Joint venture

Joining CSX-11 and DCP-1016E together results in a functional unit as well as a mechanical unit: The front-panel of your DCP-1016E is extended thus providing additional controls. The rear panel is covered, whereat the most important connection ports are still available on the rear panel of the CSX-11.

Typical operation (Link mode, LED "1016 LINK" on)

Connect your commentator's headset to the MIC/PHONES connectors of your CSX-11.

Assumed, your ARTIST system is configured appropriately, a commentator operates ON AIR, MIC MUTE (cough button) und TALKBACK (main talkback) straight at the CSX-11.

More talkback lines can be made available - if part of the ARTIST configuration - on the DCP-1016E control panel.

Monitor audio signals provided by the ARTIST system are available at the headphone stage of the CSX-11. Overall headphones level and local microphone monitor level can be controlled at a clearly laid out Phones Monitor Mix section of the CSX-11.

Stand-alone/emergency mode operation (Unlink mode, LED "1016 LINK" off)

In case of failure within the ARTIST system - e.g. loss of connection in between DCP-1016E and ARTIST Matrix - one of the DCP-1016E's GPI-outputs will report this status to CSX-11. Stand-alone/emergency mode will be established immediately (This mode can also be set manually by a switch on the rear panel of the CSX-11.).

ON AIR and TALKBACK audio signals are available at two XLR outputs of the CSX-11. XLR inputs AUX IN and TALKBACK IN feed the Phones Monitor Mix and thus replace the monitor signals normally provided by the ARTIST system. In case these XLR audio ports are connected to an alternative transmission line (e.g. telephone line with codec) there will be no significant audio break in your program.



... Features

- high quality microphone preamplifier with 48V supply, transformer input, +6dBu Limiter and level meter
- large illuminated pushbutton switches for ON AIR, TALKBACK und MIC MUTE
- high quality headphone amplifier with monitor mix section: 3 source level controls and overall level
- all line inputs electronically balanced, all line outputs transformer balanced
- quick and easy assembling of CSX-11 and DCP-1016E

... CSX-11 proves to be a self-contained commentator's unit

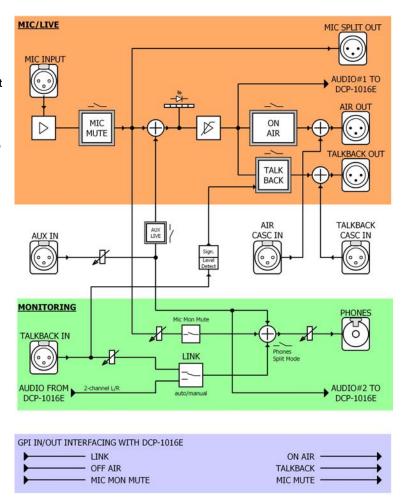
- An audio signal present at the TALKBACK input will cause the illuminated TALKBACK switch to flash for about 30 sec or until TALKBACK is activated (stand-alone/emergency mode only).
- AUX IN / AUX LIVE: Audio AUX IN feeds to the phones monitor mix. Use AUX LIVE to feed this signal to
 the ON AIR and TALKBACK stages as well. AUX LIVE is assured against unintentional activation by an
 enable switch on the rear panel.
- MIC SPLIT OUT: Feed the local microphone signal, post preamplifier but pre limiter and pre ON AIR- / TALKBACK-logic to an alternative transmission line.
- AIR CASCADE IN / TALKBACK CASCADE IN: Cascade several CSX-11 and make use of common ON AIR- und TALKBACK-lines.

... Encores

- Phones Split Mode: When activated, the local microphone signal is fed to left channel, monitor signals to right channel.
- AUX IN audio signal is available at DCP-1016E audio input #2 and may be made available - if configured appropriately - within the ARTIST system.

... DCP-1016E "normal" use

 One of the standard headset ports of DCP-1016E is available on the rear-panel of CSX-11. This and the DCP-1016E front-panel mic input provide standard operation within the ARTIST system.





Notes on linking logic functions

CSX-11 evaluates 3 GPI outputs of DCP-1016E: LINK (GPI Out#1, Type normally closed), OFF AIR (GPI Out#2, Type normally open) and MIC MON MUTE (GPI Out#3, Type normally open)

- LINK serves to signalize ready-to-operate status of DCP-1016E.
 In the ARTIST configuration, select the "always" function to operate this GPI. If DCP-1016E loses connection to its Matrix or a fatal error occurs out of other reasons, the control output of the DCP1016E will release thus forcing CSX-11 into stand-alone/emergency mode.
- 2. OFF AIR serves to deactivate CSX-11 ON AIR function from the ARTIST system. You can also use this GPI to link talkback logic of CSX-11 and ARTIST system: Within CSX-11, ON AIR and TALKBACK functions are interlocked, i.e. when you press the TALKBACK button, ON AIR will be deactivated. The same should happen, when you press a talkback button on the DCP1016E. So in the ARTIST configuration select this GPI Out for each switch which is used for talkback.
- 3. MIC MON MUTE serves to disable local microphone signal in PHONES MONITOR. Usually the operator controls the local microphone signal by the MIC level potentiometer of the PHONES MONITOR. Only in case MIC MUTE button is pressed, the local signal is not present. Some operators prefer the microphone signal to be present only, when they are ON AIR. Others want it to be present at any state in which they are active, i.e. also in TALKBACK state. These individual settings can be evaluated within the ARTIST configuration and then be used to drive MIC MON MUTE GPI.

CSX-11 sends 3 GPI outputs to DCP-1016E GPI inputs: ON AIR, TALKBACK und MIC MUTE (GPI In #1...3, Type normal)

- 1. GPI output ON AIR is active, when CSX-11 ON AIR function is active (ON AIR button illuminated).
- GPI output TALKBACK is active, when CSX-11 TALKBACK function is active (TALKBACK button illuminated).
 - Note: Local microphone audio signal and AUX LIVE audio signal are fed to DCP-1016E audio input, regardless of ON AIR and TALKBACK state within the CSX-11. So both, GPIs ON AIR and TALKBACK are required by the ARTIST logic in order to route the audio signal within the ARTIST system according to the active function.
- GPI output MIC MUTE is active, when CSX-11 MIC MUTE button is pressed. In this state local microphone signal is not present at the audio input of DCP-1016E.

Specifications

- linear power supply, switchable 115V/230V +10%/-15%, 50-60Hz
- transformer balanced microphone preamplifier with switchable 48V phantom power, switchable 20dB pad, 10...70dB gain, max. input level +6dBu, input related noise (flat RMS) typ. 126 dBu at 200Ω source
- audio line inputs electronically balanced, imp. ≥10KΩ, ref. level +6dBu, max. level +18dBu, THD+N <0,01% at max. level
- audio line outputs transformer balanced, imp. ≤50Ω, ref. level +6dBu, max. level +18dBu, THD+N
 <0,02% at max. level@1kHz, < 0,2% at max. level@40 Hz
- limiter +6dBu for ON AIR und TALKBACK signal, headroom pre limiter 20dB
- headphone amplifier for loads ≥25Ω, max. level open circuit >18dBu, +15dBu at 100Ω

form factor

CSX-11 is designed to match DCP-1016E. CSX-11 attached to DCP-1016E adds a maximum of 12 cm to the depth measure of a DCP-1016E. The assembly can be done by an experienced technician considering all mounting instructions and safety regulations that apply when dealing with mains voltage.

If used with a DCP-1016E up to 2005 (year of manufacture), no technical or mechanical modifications of your DCP-1016E are required. If used with the current version, two metal profiles need to be permanently mounted to your DCP1016E. Profiles can be supplied as an accessory kit. Mount the profiles by yourself or ask us for a quote.