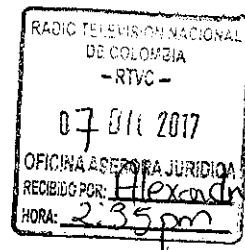


Bogotá, D.C., 06 de diciembre de 2017

Señores:

Radio Televisión Nacional de Colombia – RTVC
Coordinación de Procesos de Selección
Oficina Asesora Jurídica
Carrera 45 No. 26 – 33 Ciudad



Referencia: Subsanacones Invitación Abierta N°15 de 2017



Respetados señores:

RTVC - No 2017-256-016027-2
Asunto: SUBSANACIONES INVITACIÓN ABIERTA
Fecha Radicado: 07/12/2017 10:48:08
Usuario Radicador: TMARTINEZ
Destino: COORDINACION DE PROCESOS DE SELECCIÓN
Remitente (PN): DIELCOM Mauricio Herrera
Sistema de Gestión - DitecGpi

En atención a las observaciones realizadas en la evaluación publicada en la pagina WEB el 4 de diciembre de 2017 y recibidas por correo electrónico el día de hoy 6 de diciembre de 2017, nos permitimos presentar los documentos requeridos en aras de que nuestra propuesta sea tenida en cuenta:

REQUERIMIENTOS JURIDICOS

2.1 Se allegó copia de autorización al representante legal para celebrar un contrato con RTVC, sin embargo, revisada el acta 009 de la Asamblea Extraordinaria de Accionistas la misma tenía por objeto autorizarlo para "firmar con la empresa CONSORCIO INTERVENTORIA ANTV el Contrato por un total de TRES MIL OCHOCIENTOS CUARENTA Y UN MILLONES CUATROCIENTOS CINCUENTA Y DOS MIL CUATROCIENTOS OCHENTA Y NUEVE PESOS (\$3.841.452.489) incluido IVA, valor que incluye todos los costos directos e indirectos, así como impuestos de carácter nacional o distrital".

Se debe corregir el asunto por el cual se celebró la asamblea extraordinaria y es importante precisar que la autorización debe referirse a la autorización para suscribir un contrato con RTVC y no con el consorcio ANTV.

RPTA DIELCOM: Se adjunta copia de Acta 010 de Junta de Accionistas corrigiendo y complementando Acta 009 de Junta de Accionistas.

2.2. Se solicita la modificación de la póliza de seriedad de la oferta ya que se hizo en favor de entidades estatales (Decreto 1082 de 2015) cuando debe hacerse según régimen privado de contratación. Adicionalmente, en el objeto de la garantía se indica que es para la Invitación Abierta No. 15 de 2017 y se incluye al Canal Regional de Televisión Andina - TEVEANDINA LTDA., cuando ellos no hacen parte de este proceso.

Adicionalmente, se solicita la modificación de la póliza de seriedad de la oferta ya que no establece en el cuadro de aclaraciones los amparos solicitados en el documento de las reglas de participación (No. 3.2.1.1.6).

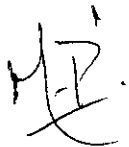
RPTA DIELCOM: Se adjunta modificación de la póliza expedida el 05 de diciembre de 2017, realizando los ajustes solicitados.

REQUERIMIENTO TECNICO

ELEMENTO o EQUIPO	SOLICITUD	RESPUESTA DIELCOM
CONSOLA DIGITAL ESTUDIO	Se solicita aclarar, en el catálogo ofertado a folio 98-105 de su propuesta, si este ítem cumple con la función N-X o N-1 (Mix Minus).	Se encuentra en la página 99, se adjunta hoja técnica en la página 7 se menciona el control mix-minus y en la página 8 se menciona en la funcionalidad la configuración N-1.
SISTEMA DE MONITOREO PERSONAL INALAMBRICO	Se requiere el oferente aporte, según lo requerido en las especificaciones técnicas mínimas para este ítem, el manual, catálogo o certificación donde se pueda verificar el cumplimiento de dichos requisito.	Se adjunta lo solicitado: Transmisor SR 300 G3 stereo transmitter: Receptor EK 300 G3 stereo diversity receiver:
BASES DE MESA RECTAS PARA MICRÓFONO	Teniendo en cuenta que el oferente manifestó la aceptación de lo requerido en el ANEXO 02- ESPECIFICACIONES TÉCNICAS MINIMAS, mediante el ANEXO No. 03- CARTA DE ACEPTACIÓN ESPECIFICACIONES TÉCNICAS MINIMAS se solicita al proponente aporte los manuales, catálogos o certificaciones que soporten las especificaciones del equipo ofrecido.	Por favor revisar pag 139 de nuestra oferta, corresponde a lo descrito en la hoja técnica como Base Bushing.
COMPUTADOR DE ESCRITORIO (GAMA MEDIA)	Se requiere el oferente aclare si el equipo ofertado (folio 146-147) contiene todas las especificaciones técnicas mínimas requeridas por la entidad, si es así, por favor acreditar manuales, catálogos o certificaciones donde se pueda verificar el mismo.	El equipo ofertado contiene las especificaciones técnicas mínimas requeridas, se adjunta ficha técnica adicional.

M.P.

ENLACE FM (ANALÓGICO)	Se solicita indicar cuál de los modelos presentados a folios 171 a 175 de su propuesta son los que está ofreciendo, para este ítem.	El modelo es: Transmisor: KE/4B / Receptor: KV/4B Información de potencia de salida y frecuencia de trabajo en folio 172.
SWITCH DE RED	Se solicita indicar cuál de los modelos incluidos a folio 207-213 de su propuesta es el que está ofreciendo, para este ítem.	Se oferta un JG960A HP1950-24G
TRANSMISOR FM	Se solicita indicar cuál de los modelos de transmisor FM de los incluidos a folio 255-264 de su propuesta es el que está ofreciendo, para este ítem.	Se oferta Excitador DDS de 30 Watts: Modelo DDS-30 PAG 255 Amplificador de RF: Modelo PFG 3k Página 261
ANTENA TVRO	Se solicita indicar cuál de los modelos incluidos a folio 276 de su propuesta es el que está ofreciendo, para este ítem.	Se oferta antena TVRO modelo es la 1374, en folio 276
RECEPTOR SATELITAL IRD BAJO ESTÁNDAR DVB – T2	Teniendo en cuenta que el oferente manifestó la aceptación de lo requerido en el ANEXO 02- ESPECIFICACIONES TÉCNICAS MINIMAS, mediante el ANEXO No. 03- CARTA DE ACEPTACIÓN ESPECIFICACIONES TÉCNICAS MINIMAS se solicita al proponente aporte los manuales, catálogos o certificaciones que soporten las especificaciones del equipo ofrecido para este ítem.	Adjuntamos TEST para Homologación FCC y Manuales.
MEZCLADOR AUTOMÁTICO MICRÓFONO / LÍNEA	Se requiere el oferente aclare si el equipo ofertado (folio 114-115) contiene control lógico de activación de micrófonos, si es así, por favor acreditar manuales, catálogos o certificaciones donde se pueda verificar el mismo.	Dispone conector MIC/PHN/LINE SWITCH se puede ver folio 115.





MICRÓFONOS INALÁMBRICOS	Se requiere el oferente aclarar el modelo y la capsula del micrófono que oferta para este ítem (folio 122-132).	El modelo del Micrófono es: SKM 100 G3 Capsula REFERENCIA E 935.
----------------------------	---	---

Atentamente,

MAURICIO ENRIQUE HERRERA PEREZ.

CC No 19.290.436 de Bogotá.

REPRESENTANTE LEGAL DIELCOM S.A.S.

NIT:900.086.511-6

DIRECCIÓN: CII 24 C No 44ª-70

TELÉFONO: 7469800 – 3124336735 - 3143810351

FAX: 7469800

CORREO ELECTRÓNICO: gerente@dielcom.com.co; gerenciaoperaciones@dielcom.com.co

ACTA 010 ASAMBLEA EXTRAORDINARIA DE ACCIONISTAS DIELCOM S.A.S.

El día 4 días del mes de Diciembre, a las 4:30 PM en el domicilio principal de la sociedad en la calle 24 C No 44 A 70 de la ciudad de Bogotá, D.C., los accionistas de DIELCOM SAS se reunieron para efectuar la corrección al acta 009 de Accionistas, aprobar y autorizar al representante legal (Mauricio Enrique Herrera) a firmar con la empresa RTVC el Contrato por un total de TRES MIL OCHOCIENTOS CUARENTA Y UN MILLONES CUATROCIENTOS CINCUENTA Y DOS MIL CUATROCIENTOS OCHENTA Y NUEVE PESOS M/CTE (\$ 3.841.452.489) incluido IVA, valor que incluye los costos directos e indirectos, así como impuestos de carácter nacional o distrital.

A continuación, la asamblea aprobó el siguiente orden del día:

1. Verificación del quórum.
2. Elección de presidente y secretario de la reunión.
3. Análisis, aprobación y autorización firma del contrato con la empresa RTVC. 2017
4. Lectura y aprobación del Acta de la reunión

1. Verificación del quórum.

ACCIONISTA	ACCIONES	%
HERRERA PEREZ MAURICIO ENRIQUE	624	26%
BOHORQUEZ RINCON RONAL JAMID	624	26%
VITOLA OYAGA JAIME	624	26%
BEJARANO LOBERA LIBIA	528	22%
TOTAL	2400	100%

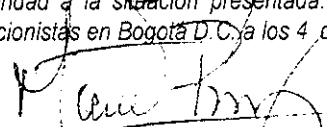
2. Elección de presidente y secretario de la asamblea.

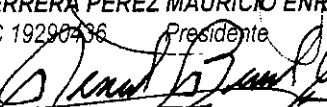
Por unanimidad fueron elegidos para esta asamblea como Presidente y Secretario los Señores Mauricio E. Herrera Pérez y Jaime Vitola Oyaga, respectivamente. Los mencionados señores de común acuerdo asumieron las funciones indicadas en la reunión y moderaron la misma con el fin de cumplir los objetivos considerados dentro del orden del día.

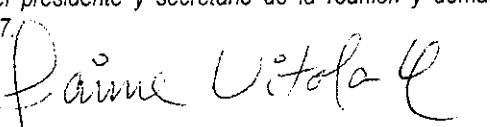
3. La presente reunión de Accionistas desea aclarar en Acta que se firma hoy, que el Acta 010, firmada el día 27 de noviembre de 2017 en su encabezado se refirió de manera equivocada erróneamente al Consorcio Interventoría ANTV y la frase correcta es RTVC. En segundo lugar, se aprueba y autoriza a la firma del contrato que se suscriba en caso de ser adjudicada la propuesta presentada dentro del proceso 015 de 2017 con la empresa RTVC, la adquisición, instalación y puesta en funcionamiento de la descentralización y expansión de las emisoras de la Subgerencia de Radio en las ciudades Ituango (Antioquia), Chaparral (Tolima), Valledupar (Cesar), Quibdó (Chocó) y Nazareth (Guajira), de conformidad con las especificaciones técnicas mínimas solicitadas por RTVC, al señor Mauricio Enrique Herrera con C.C.19290436 de la ciudad de Bogotá que actúa como Representante Legal de la sociedad. En caso de ser necesario, también quedará autorizado a firmar los modificatorios o adiciones que resulten en dicho contrato. Se autoriza un valor de inicio de TRES MIL OCHOCIENTOS CUARENTA Y UN MILLONES CUATROCIENTOS CINCUENTA Y DOS MIL CUATROCIENTOS OCHENTA Y NUEVE PESOS M/CTE (\$ 3.841.452.489) incluido IVA

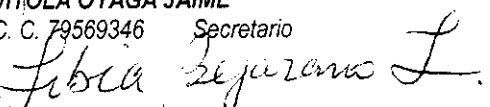
8. Lectura y aprobación del Acta de la reunión.

Una vez elaborada y leída el acta, es aprobada por unanimidad. Se debe enviar copia de la misma a RTVC para dar claridad a la situación presentada. Para constancia se firma por el presidente y secretario de la reunión y demás accionistas en Bogotá D.C. a los 4 días del mes de Diciembre de 2017.


HERRERA PEREZ MAURICIO ENRIQUE
 CC 19290436 Presidente


BOHORQUEZ RINCON RONAL JAMID
 C.C. 79744214


VITOLA OYAGA JAIME
 C. C. 79569346 Secretario


BEJARANO LOBERA LIBIA
 C.C. 35.463.115 de Bogotá

SUCURSAL: 01. CENTRO ANDINO USUARIO: ARIASD TIP CERTIFICADO: Modificación FECHA DD MM AAAA 05 12 2017

TOMADOR/GARANTIZADO: DIELCOM S.A.S. **C.C. O NIT:** 900086511 6
DIRECCIÓN: CL 24 C 44 A 70 PAREDES **CIUDAD:** BOGOTA
E-MAIL: **TELÉFONO:** 7469800
ASEGURADO: RADIO TELEVISION NACIONAL DE COLOMBIA - RTVC **C.C. O NIT:** 900002583 6
DIRECCIÓN: CR 45 26 33 **CIUDAD:** BOGOTA D.C. **TEL.** 2200700
BENEFICIARIO: RADIO TELEVISION NACIONAL DE COLOMBIA - RTVC **C.C. O NIT:** 900002583 6
DIRECCIÓN: CR 45 26 33 **CIUDAD:** BOGOTA D.C. **TEL.** 2200700

VIGENCIA								VALOR ASEGURADO EN PESOS		
DD MM AAAA				DD MM AAAA				ANTERIOR	ESTA MODIFICACIÓN	NUEVA
DESDE	05	12	2017	HASTA	10	03	2018	384,145,248.90	0.00	384,145,248.90

INTERMEDIARIO		COASEGURO				PRIMA			
%PART	NOMBRE	COMPANIA	%	PRIMA	VALOR ASEGURADO	TRM	2,993.49	MONEDA	VALORES
100.00	FRASEG ASESORES DE SEGUROS								
						PRIMA		PESOS	0.00
						GAST. EXPED.		PESOS	0.00
						IVA		PESOS	0.00
						TOTAL			0.00

AMPAROS		VIGENCIA		VALOR ASEGURADO ANTERIOR EN PESOS	VALOR ASEGURADO NUEVO EN PESOS	VALOR PRIMA EN PESOS	DEDUCIBLE	
Desde	Hasta						%	Mínimo
SERIEDAD DE LOS OFRECIMIENTOS	05-12-2017	10-03-2018		384,145,248.90	384,145,248.90	0.00	0.00	0.00

OBJETO DE LA MODIFICACION: POR MEDIO DEL PRESENTE CERTIFICADO Y SEGUN EL PLIEGO DE CONDICIONES, SE ACLARA QUE LA PRESENTE POLIZA SE EMITE A FAVOR DE ENTIDADES PUBLICAS CON REGIMEN PRIVADO DE CONTRATACION Y SE ACLARA EL OBJETO COMO SE DESCRIBE A CONTINUACION. LOS DEMAS TERMINOS Y CONDICIONES CONTINUAN VIGENTES.

OBJETO DE LA GARANTIA:

GARANTIZAR LA SERIEDAD DE OFERTA DE LA INVITACIÓN ABIERTA N° 15 DE 2017, CUYO OBJETO ES CONTRATAR BAJO LA MODALIDAD LLAVE EN MANO, LA ADQUISICIÓN, INSTALACIÓN Y PUESTA EN FUNCIONAMIENTO DE LA DESCENTRALIZACIÓN Y EXPANSIÓN DE LAS EMISORAS DE LA SUBGERENCIA DE RADIO EN LAS CIUDADES ITUANGO (ANTIOQUIA), CHAPARRAL (TOLIMA), VALLEDUPAR (CESAR), QUIBDÓ (CHOCÓ) Y NAZARETH (GUAJIRA), DE CONFORMIDAD CON LAS ESPECIFICACIONES TÉCNICAS MÍNIMAS SOLICITADAS POR RTVC.

ASEGURADO/BENEFICIARIO: RADIO TELEVISIÓN NACIONAL DE COLOMBIA - RTVC NIT No. 900.002.583-6

LA GARANTÍA DE SERIEDAD DE LA PROPUESTA CONTIENE LOS SIGUIENTES AMPAROS:

- LA NO SUSCRIPCIÓN DEL CONTRATO DE SIN JUSTA CAUSA POR PARTE DEL PROPONENTE SELECCIONADO.
- LA NO AMPLIACIÓN DE LA VIGENCIA DE LA GARANTÍA DE SERIEDAD DE LA OFERTA CUANDO EL TÉRMINO PREVISTO EN EL PLIEGO DE CONDICIONES, LOS TÉRMINOS DE REFERENCIA, EL ESTUDIO PREVIO Y/O LAS REGLAS DE PARTICIPACIÓN, SE PRORROGUE O CUANDO EL TÉRMINO PREVISTO PARA LA SUSCRIPCIÓN DEL CONTRATO SE PRORROGUE, SIEMPRE Y CUANDO ESAS PRORROGAS NO EXCEDAN UN TÉRMINO DE TRES (3) MESES.
- EL RETIRO DE LA OFERTA DESPUÉS DEL TÉRMINO FIJADO PARA LA PRESENTACIÓN DE LAS PROPUESTAS.
- LA FALTA DE OTORGAMIENTO POR PARTE DEL PROPONENTE SELECCIONADO DE LA GARANTÍA DE CUMPLIMIENTO EXIGIDA POR LA ENTIDAD PARA AMPARAR EL INCUMPLIMIENTO DE LAS OBLIGACIONES DEL CONTRATO.

ESTA POLIZA SE EXPIDE EN CONSIDERACION A LAS DECLARACIONES HECHAS POR EL TOMADOR EN CUALQUIER DOCUMENTO APORTADO PARA LA EXPEDICION, LOS CUALES FORMAN PARTE INTEGRANTE DE ESTA POLIZA. LAS CARTULAS ENVIADAS VIA MAIL TIENEN FIRMA AUTORIZADA Y UN CERTIFICADO DIGITAL, CUALQUIER ALTERACION A SU CONTENIDO ACARREARA LAS SANCIONES ESTIPULADAS EN LA LEY. CON LA FIRMA Y/O EL RECIBO A SATISFACCION DE LA PRESENTE POLIZA, DECLARO DE MANERA EXPRESA EN MI CALIDAD DE TOMADOR, QUE CONOCI DE MANERA ANTICIPADA EL CLAUSULADO Y ME FUERON EXPLICADOS SUFICIENTEMENTE LOS EFECTOS Y ALCANCE DE LAS CONDICIONES GENERALES, DE LA COBERTURA, DE LAS EXCLUSIONES Y DE LAS GARANTIAS DE LA MISMA. TAMBIEN ME INFORMARON QUE PUEDO CONSULTAR TODOS LOS CONDICIONADOS DE MANERA PREVIA Y PERMANENTEMENTE EN LA PAGINA WEB WWW. CONFIANZA.COM.CO Y RECIBIR EXPLICACIONES DE LOS MISMOS CON MI INTERMEDIARIO DE SEGUROS ASI COMO EN CUALQUIERA DE LAS OFICINAS Y SUCURSALES DE CONFIANZA S.A EN TODO EL PAIS. "VER NOTIA" EN LOS CASOS EN QUE EL VALOR ASEGURADO SEA EXPRESADO EN MONEDA EXTRANJERA, CON FUNDAMENTO EN LO DISPUESTO EN EL ARTICULO 2.31.2.1.1 DEL DECRETO 2555 DE 2010, LOS PAGOS DE LA PRIMA SOLO SE PODRAN REALIZAR MEDIANTE TRANSFERENCIA ELECTRONICA O CHEQUE, SUJETANDOSE INTEGRALMENTE A LAS DISPOSICIONES VIGENTES EN MATERIA CAMBIARIA, SEGUN LO SEÑALADO POR EL ARTICULO 2.31.2.1.4 DEL MISMO ORDENAMIENTO, EL VALOR DE LA PRIMA NETA SE HARA EFECTIVO A LA TASA REPRESENTATIVA DEL MERCADO EN EL DIA DE SU PAGO, EL VALOR DEL IVA Y LOS GASTOS SE LIQUIDARAN A LA TASA REPRESENTATIVA DEL MERCADO VIGENTE EN LA FECHA DE EXPEDICION. SI ESTA POLIZA SE CONSTITUYE MEDIANTE UN INTERMEDIARIO, LA PRIMA DE ESTA POLIZA INCLUYE EL VALOR DE LA COMISION QUE CORRESPONDE AL INTERMEDIARIO DE SEGUROS. EL INTERMEDIARIO DE SEGUROS PUEDE RECIBIR REMUNERACION ADICIONAL DEL ASEGURADOR BASADO EN ESTA POLIZA, DICHA REMUNERACION ES CONFORME CON LAS LEYES Y REGULACIONES APLICABLES. LA PRESENTACION DE ESTA POLIZA ANTE EL ASEGURADO, EN MI CALIDAD DE TOMADOR IMPLICA MI ACEPTACION Y AUTORIZACION PARA QUE EN EL EVENTO EN QUE INCUMPLA LAS OBLIGACIONES QUE EMANAN DEL PRESENTE CONTRATO DE SEGURO, MI NOMBRE Y LAS CIRCUNSTANCIAS Y CARACTERISTICAS DE MI INCUMPLIMIENTO, SEAN REPORTADAS A LAS CENTRALES DE DATOS EXISTENTES EN EL PAIS. LA PRESENTE GARANTIA NO EXPIRARA POR FALTA DE PAGO DE LA PRIMA DE LA POLIZA O DE LOS CERTIFICADOS O ANEXOS QUE SE EXPIDA CON FUNDAMENTO EN ELLA O POR REVOCACION UNILATERAL POR PARTE DEL TOMADOR O DE LA COMPANIA, DE CONFORMIDAD CON LO PREVISTO EN EL NUMERAL 19 DEL ARTICULO 25 DE LA LEY 80 DE 1993. AUTORIZACION DATOS PERSONALES: DE MANERA EXPRESA MANIFIESTO Y ACEPTO QUE EN MI CALIDAD DE: I) TOMADOR Y/O, II) ASEGURADO Y/O BENEFICIARIO, QUE EL HECHO DE TOMAR, ACEPTAR Y/O RECIBIR LA PRESENTE POLIZA EN LAS CALIDADES ANTES MENCIONADAS, CONSTITUYE UNA CONDUCTA INEQUIVOCADA DE LA CUAL SE CONCLUYE MI AUTORIZACION EXPRESA PARA EL TRATAMIENTO DE MIS DATOS PERSONALES POR PARTE DE CONFIANZA S.A INCLUIDOS LOS SENSIBLES, ASI COMO MI AUTORIZACION PARA LA TRANSFERENCIA Y TRANSMISION NACIONAL E INTERNACIONAL DE MIS DATOS, POR LAS PERSONAS, PARA LAS FINALIDADES Y EN LOS TERMINOS QUE ME FUERON INFORMADOS EN EL AVISO DE PRIVACIDAD PUBLICADO EN WWW.CONFIANZA.COM.CO Y CONFORME CON EL MANUAL DE PROTECCION DE DATOS PERSONALES PUBLICADO EN EL MISMO PORTAL.

RES. DIAN NO. 187520025567-1 20/04/2017 NUMERACION AUTORIZADA DEL SEG. 100001 AL 200000 NUMERACION HABILITADA DE SEG. 125701 AL 200000 CODIGO ACTIVIDAD 6511

TOMADOR
 NIT: 900.086.511-6
 57709998911901(8020)

COMPANIA ASEGURADORA DE FIANZAS S.A. FIRMA AUTORIZADA



FORUM IP

AEQ FORUM IP



10 MADI Multichannel connectivity

1000 I/O DIGITAL
AUDIO MIXING CONSOLE



Outstanding Features

- Compact digital audio mixing console for On-Air broadcast applications.
- Modular construction aiming at high level of availability and ease of maintenance.
- Two different size chassis: Up to 12 and 20 channel fader.
- Up to 64 local Input and Output channels
 - Up to 9 Mic/Line channels with phantom power (Mic. Level).
 - Analog, Digital and USB Input and Output audio channels.
 - Up to two fully integrated (on-board) digital telephone hybrids.
- Up to 64 remote channels through multichannel links
 - AoIP I/O boards for 32 or 64 channels with DANTE™ Audinate technology and compatible with AES 67: allows to receive and send audio channels from and to other network nodes in the IP network
 - Synchronous Audio I/O boards AES 10, MADI for 64 channels: allows interconnecting with audio routers or other audio mixing consoles.
- Audio Processing: three band parametric equalizer, filters and dynamics.
- Up to 32 mixing buses for program outputs, auxiliary, monitoring and clean feed. Possibility to send each input to several outputs without using a mixer bus.
- Optional FORUM SCREEN that facilitates the visualization simplifies and speeds up the operation and control of for example audio parameters, filters and dynamics. Full advantage of the software is obtained if operated on a touch screen.
- Optional VIRTUAL FORUM allows for the remote control from a parallel control surface represented on a computer screen, tablet or iPad.

Main Features

The **FORUM IP** is a self-contained digital audio mixing console specifically designed to meet the most rigorous demands of the radio and television broadcast industry. Its flexible design allows it to readily be adapted to any ON-AIR application.

FORUM IP incorporates all of the features necessary for use in environments requiring: automatic monitor speaker cut-off, cough muting, fader start, control signaling, interface signaling for automation of external equipment, external communications management, intercom, etc.

Thanks to its self-contained modular design and reduced footprint, FORUM adapts perfectly to any environment: auto-control, studio control, television production, sound production, mixed configurations, integration in large installations, etc.

One of the primary features which sets the FORUM IP apart is its internal routing capability: any combination of 64 inputs/outputs of microphones, analog lines, AES 3 digital lines, S/PDIF digital lines or USB digital lines, plus an additional 64 input / output signals via a AoIP or MADI multi-channel link.

Simplicity and control are combined in FORUM IP to satisfy ease of operation - from the most basic to the most advanced requirements. The control surface can be configured with a minimum of 4 faders, and easily expanded to 8 or even 12 channels. (up to 16 and 20 channels with the FRGRAND chassis).

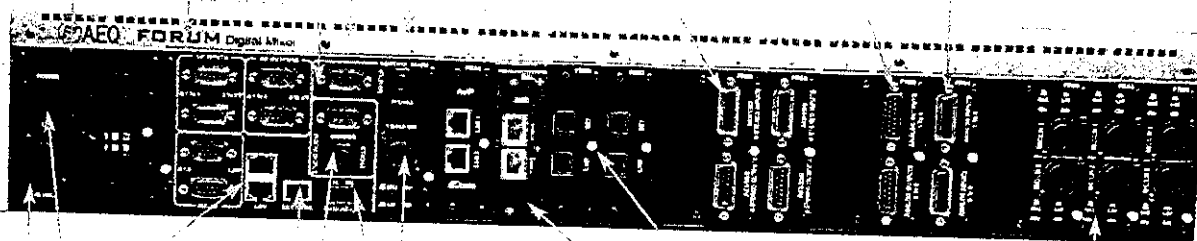
Each of FORUM IP's basic functions such as setup, level adjustment, and signal routing have their own specific control for each channel, while lesser used settings are grouped into contextual controls common to all channels and are accessible by just one or two button pushes: simplicity and ease of use makes for very dynamic system control with little chance of operator error. FORUM IP's configuration allows any signal present within the system to be freely assigned to any control channel, and signal distribution configuration is done on the control surface itself.

FORUM IP has built-in memory where each signal's settings are stored: signal distribution via the control surface, output bus routing, setup parameters, effects, etc. This allows the console to easily be adapted to different programming needs and unique technical requirements.

The two Ethernet connectors are providing external connectivity for the "AEQ FORUM Setup" software application. Further, these can be used to for the optional "VIRTUAL FORUM" software application that renders the console with a very powerful remote control.

Two Ethernet control connectors enables external connectivity for the "AEQ FORUM Configuration" software application. Further, these ports can also be used for the optional software application "VIRTUAL FORUM", that provides the AEQ FORUM with a powerful remote control. The AoIP ports can share or not the audio network with the ports for the control network.

Connectivity & Flexibility



A major consideration in the design of the FORUM IP was its ease of installation and configuration. Hence it is self-contained and has a low profile format – it can be countersunk flush into a work surface, or simply placed on top of it.

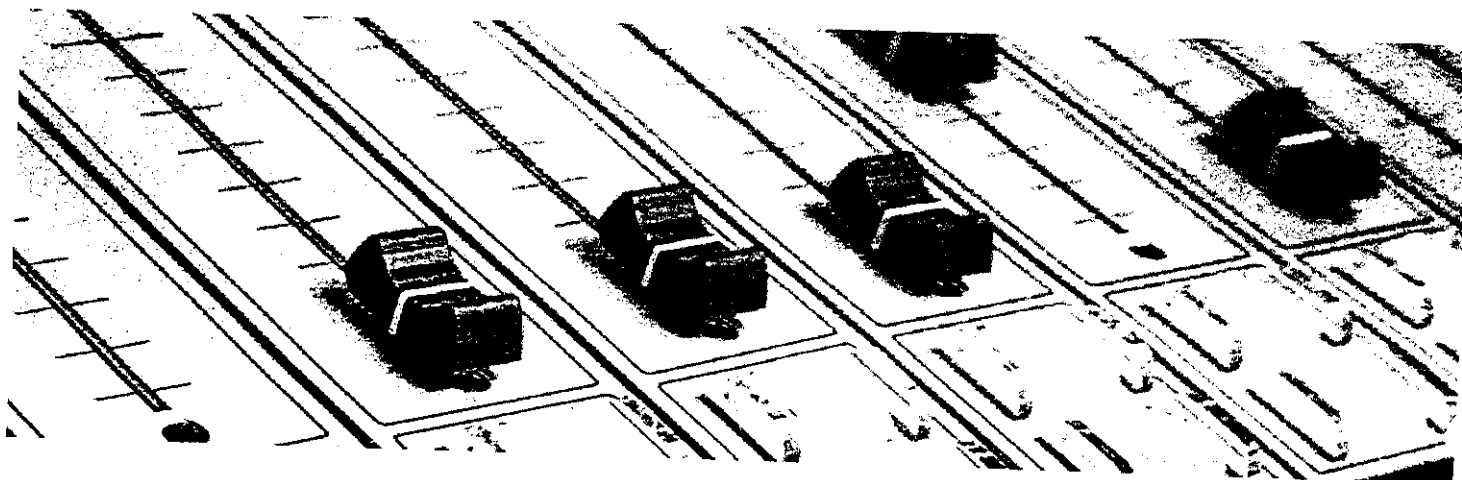
FORUM IP's flexible I/O capabilities allows for the interfacing with external devices for cough muting, device remote control, ON-AIR lights, etc. by using its 8 monitor inputs (GPI), 8 control outputs (GPO), and 4 output control relays.

For monitoring and control, FORUM IP's mainframe has built-in outputs for both studio and control room headphones and speakers, and a microphone input for auto-control or coordination.

FORUM IP's mainframe also has two built-in Ethernet ports for configuration and control.

For general purpose audio inputs and outputs, FORUM IP has 14 slots to accommodate input / output modules including: digital, analog, microphone/line, TELCO hybrids and multichannel AoIP boards (the option of AES 10 MADI interface does not occupy any slot for the I/O boards).

To facilitate cabling, optional audio and data cables with mating DB connectors are available.



Control Surface (Channels)

FORUM IP's control surface is modular. Each fader module contains 4 independent faders. The control surface can accommodate a basic 4 fader, an intermediate 8 fader, or a fully populated 12 fader channel configuration. (up to 16 and 20 channels with the FRGRAND chassis).

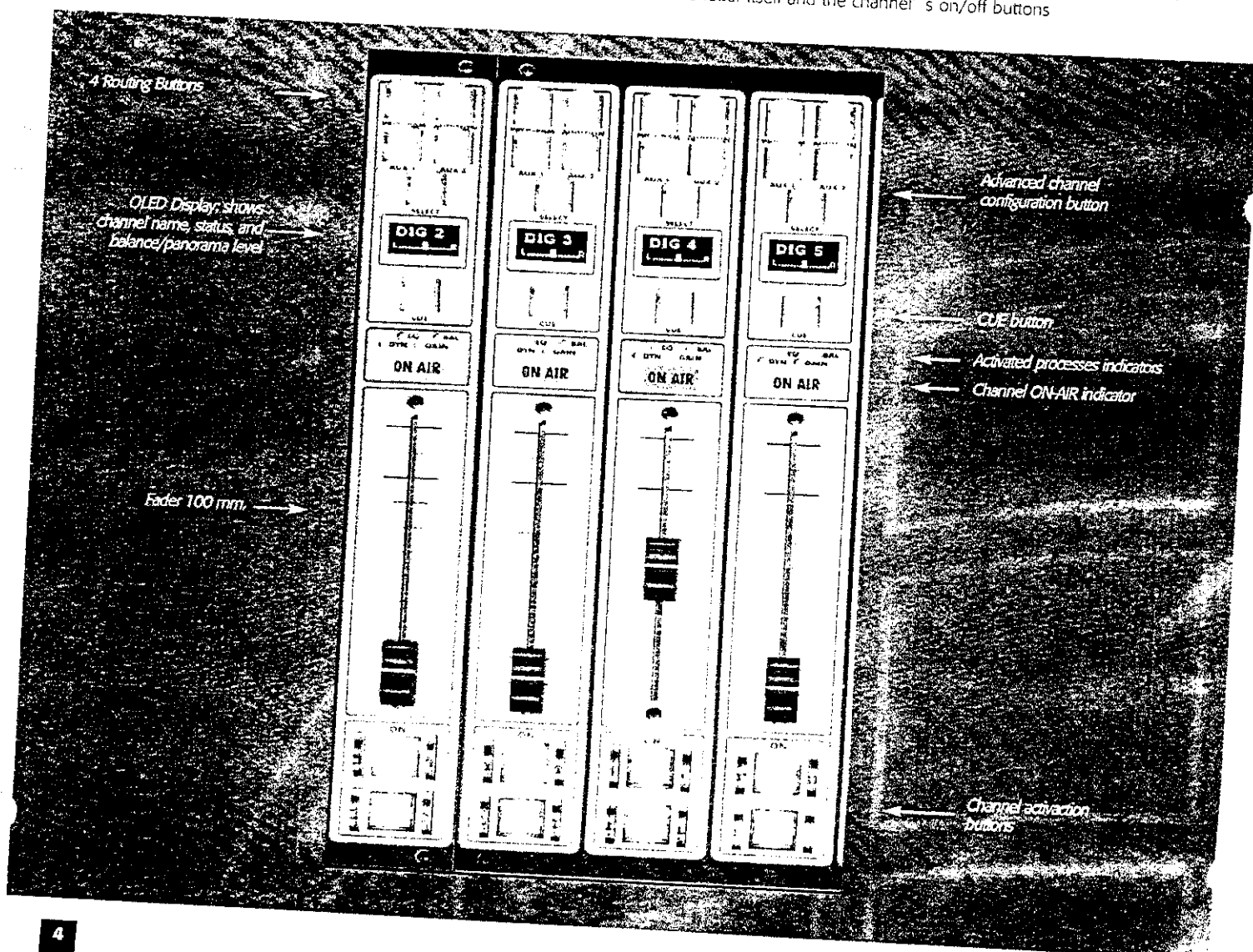
All of FORUM IP's signal channels are completely user-definable. System signals can be assigned to channels so a particular channel can control one signal now, and a different signal later on. This facilitates unique signal to channel distribution, and allows FORUM to easily be adapted to distinct programming requirements and to suit different operator's needs.

In addition, signal/channel configurations can be stored in memory allowing any configuration to easily be recalled for use in a particular scenario or by a particular operator.

FORUM IP packs a tremendous amount of power and flexibility into its small footprint. In addition to signals present on the control surface which can be mixed, processed, and sent to any output channel, FORUM can adjust the level and routing of up to 128 x 128 embedded audio signals.

At the top of each channel section are 4 routing buttons and 1 channel selection button which are used to assign common advanced configuration parameters: (gain, dynamics, equalization and balance).

Next is an OLED display screen which shows the channel's name and status as well as the balance level. Beneath it is a CUE button, along with 4 LEDs which indicate activity or instability on equalization, balance, dynamics, gain, and finally an illuminated ON-AIR status indicator. The channel section ends with the fader itself and the channel's on/off buttons.



Control Surface (Settings, Programming, Monitoring and Talk-Back)



ADDITIONAL FUNCTIONALITY

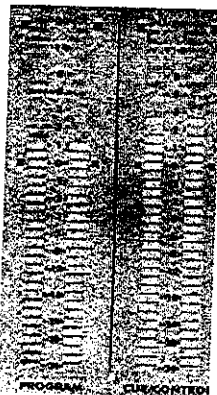
FORUM IP allows the user to program pre-defined special functions such as: defining GPIs and GPOs, controlling hybrids and codecs, sending signals to the VU meters, or setting up additional intercom routing. 20 programmable keys are provided to enable/disable the programmed function assigned to that key.

ADVANCED CONFIGURATION DISPLAY AND CONTROLS

Each of FORUM IP's fader channels has an advanced settings button. Configuration is carried out by using the multi-function integrated OLED display in the monitor and control section on the right side of the console. The rotary encoder associated with the display is used to scroll through the contextual graphics menus.

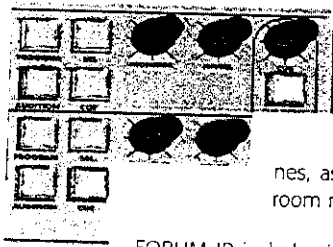


General functionality includes adjustment and instantaneous activation of audio effects: equalization, filters, limiters, etc., memory management and configuration, general effects disconnect, timer, stopwatch, phase change, test signal insertion, etc.



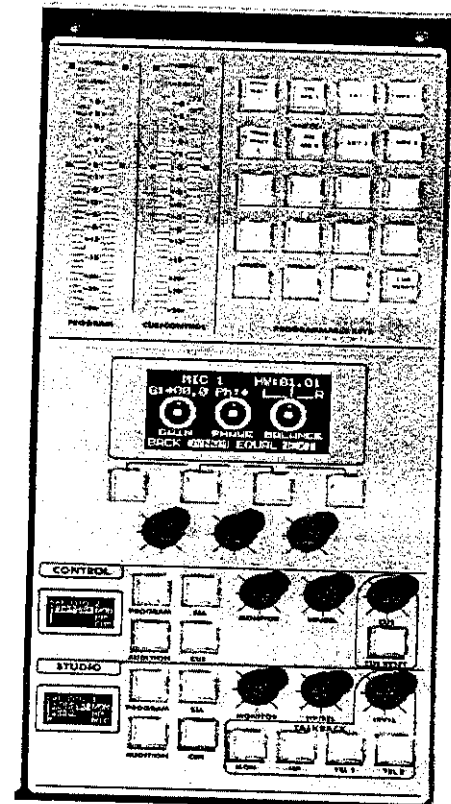
MONITORING

The control surface also has two integrated high precision digital stereo VU meters, each of which can be assigned to display either Master 1 or Master2/CUE outputs.



FORUM IP has two sections for the independent monitoring of the control room and the studio. There are separate level controls for control room speakers, studio speakers, and headphones, as well as FORUM IP's built-in CUE speaker. FORUM IP's studio and control room monitor sections each have an OLED display where selections can be seen.

FORUM IP includes independent and centralized control of ON-AIR signalling, signals assigned to speakers and headphones and their levels, cough muting, PFL cuts, etc.



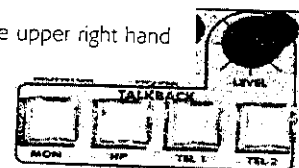
TALK-BACK

FORUM IP has independent pre-set intercom paths between the console and the studio for speakers and headphones.

Additional intercom lines can be established to facilitate management of communication within the system. For example, you can send the talk-back microphone signal to individual hybrid and audio codec returns.

Also, other intercom locations can be programmed to any of the 20 programmable keys located in the upper right hand corner of the control surface.

The talk-back microphone can be also used as the auto-control microphone if so designated.





System Components

AEQ's FORUM IP Digital Console was designed to be completely modular to simplify system expansion and allow modifications to accommodate your changing work environment and system demands.

BUILT-IN COMPONENT FEATURES: FRIP 01 / FRIP GRAND

MAINFRAME

The standard frame FR IP 01 will accommodate up to 12 faders. Channels are grouped into 4 faders per module, and up to 3 fader modules per control surface, along with the monitoring and control module.



The frame FRIP GRAND can accommodate up to 20 faders. Channels are grouped into 4 faders per module, and up to 5 fader modules per control surface, along with the monitoring and control module.

Both frames, and in addition to the built-in inputs and outputs, have slots for 14 audio input and output modules, each of which can be configured according to the user's specific requirements and working situation. An integrated CUE speaker is also included.

INTERNAL DC POWER MODULE AND STANDARD EXTERNAL POWER SUPPLY



Internal DC power module and standard external Power Supply, auto-ranging 100-240 V. 50/60 Hz. Noiseless ventilation through natural convection.

BUILT-IN INPUTS AND OUTPUTS

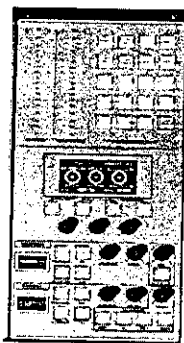
Features found on the rear of FORUM IP's chassis include:

- MIC/LINE input for talk-back and auto-control
- Studio and control room speaker and headphone outputs
- 8 GPI (inputs) and 8 GPO (outputs) (both opto-isolated) and 4 GPO relay outputs.
- 2 Ethernet 10/100 T ports.
- 1 external time sync port.



CONTROL SURFACE MONITOR AND CONTROL SECTION

- Includes two Stereo VU meters.
- 20 programmable function keys
- OLED multi-function display and associated rotary encoders and selection keys.
- Independent STUDIO and CONTROL room monitoring sections.
- Intercom to STUDIO and External Lines.



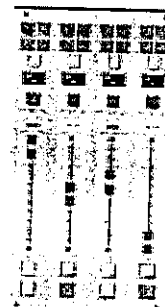
ADDITIONAL COMPONENTS DEPENDING ON YOUR PARTICULAR NEEDS

FRIP CH: FADERS MODULES

(1, 2 or 3 are required per console with FRIP 01 Chassis - up to 5 with the FRIP GRAND Chassis)

4 channels per module - includes:

- 100 mm faders with CHANNEL ON/OFF and CUE buttons.
- built-in multi-function OLED display on each channel displays type of input, channel name, and balance/panorama.
- 4 hotkeys for routing to prevalent outputs.
- Advanced configuration access button.



FRIP 20 : BLANK FADER MODULE COVER

Covers unused fader module areas on the control surface. Control.

OPTIONAL REDUNDANT POWER SUPPLY FR90

2 RU chassis containing dual hot-swappable power supply modules.

ANALOG AND DIGITAL INPUT AND OUTPUT MODULES (14 maximum per console)

FR02: DIGITAL INPUT/OUTPUT MODULE

- 4 AES/EBU Digital stereo inputs.
- 4 AES/EBU Digital stereo outputs.
- SRC on all inputs.
- Digital Audio formats supported AES-EBU or SPDIF

FR03: MICRO/LINE INPUT MODULE

- 2 MICRO or LINE inputs - switch selectable.
- 48 volt Phantom Power ON/OFF - switch selectable on each input.
- 4 maximum per console

FR04: ANALOG INPUT MODULE

- 8 line level mono inputs, electronically balanced.
- Configurable as 4 stereo inputs.

FR05: ANALOG OUTPUT MODULE

- 8 line level mono outputs, electronically balanced.
- configurable as 4 stereo outputs.

FR 11: SYNCHRONOUS MULTICHANNEL AUDIO LINK AES 10 MADI

Handles up to 64 audio channels in each direction allowing FORUM to communicate with another console or a router hundreds of meters away using a simple pair of fiber-optic lines. Two bi-directional fiber-optic ports (input and output).

The SFP chassis with ports are built into the console and does not occupy an I/O slot. Can not be used simultaneously with the FR14 module (AoIP).

FR14: MULTICHANNEL AoIP NETWORK LINK, DANTE™ or AES 67

Provides connectivity for the FORUM Console of 32 or 64 AoIP Input and Output channels to/from any other Console, equipment or network node.

- Two RJ45 connectors (for redundant or Daisy chain operation).
- Up to two modules (64 channels) can be installed per console. Can not be used simultaneously with the FR11 module (MADI).

FR22: USB DIGITAL INPUT/OUTPUT MODULE

- 4 USB Digital stereo Inputs/Outputs
- SRC on all inputs.
- "USB audio standard device" implementation for computer operating systems.

FR33: DIGITAL TELEPHONE HYBRID MODULE

- Telephone line connector.
- Telephone set connector.

FR21: BLANK INPUT/OUTPUT MODULE COVER

Covers unused input and output module slots on the rear of the chassis.

CABLING ACCESSORIES

To make your installation smooth and easy, the console can be ordered with our pre-made data and audio cables. The standard cables comes in the length of 4 m with DB type connectors on the console side and open-end on the other. The un-terminated end can be soldered into your patch panel, have terminals lugs installed, or used in a punch-down block.

FR CAB GPI

DB9 male connector for GPIs.

FR CAB GPO

DB9 female connector for GPOs or relay contacts.

FR CAB MON

DB9 female connector for 2 monitoring outputs.

FR CAB INP

Male DB15 connector for 4 inputs channels.

FR CAB OUT

Female DB15 connector for 4 output channels.



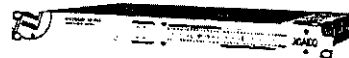
Cables terminated with connectors on both ends and of other lengths can be supplied upon request.

EXTERNAL EQUIPMENT WITH AoIP INPUT AND OUTPUTS – NETWORK NODES

NetBOX Audio interfaces

Multichannel AoIP Interface that allows for the insertion or extraction of analog or digital audio channels from remote locations to the AoIP Network. These network nodes increases the overall amount of local and remote audio with IP network connectivity..

NETBOX 32 AD features 32 input and 32 output channels organized in 16 mono analog or 8 stereo pairs + 8 stereo digital channels. Its high input and output capacity, it is especially suitable and also to increase or distribute the capacity of a large FORUM IP console.



NETBOX 8 AD features 8 inputs and 8 outputs, organized in 4 mono analog and 2 digital stereo channels. Stereo digital ones can be configured as AES/EBU or SPDIF. The second digital stereo channel can also be switched to a USB connector to enable the connection to an audio workstation. A really useful piece of equipment when you want to increase the I/O capacity to FORUM IP consoles, for recording cabins, studios or any other auxiliary location.

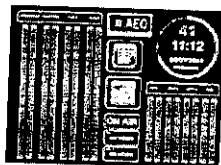


OPTIONAL SOFTWARE

FOIP SC: MONITORING APPLICATION SOFTWARE FORUM IP SCREEN

Software designed for Touch-screen operation on Windows or iOS. Simplifies the control and operation of the console's different functions:

The main screen is presenting the Vu-/peak-meters for the most important signals on the console are transmitted through TCP/IP. Further, indications with regards to the routing of the different signals to the phone and mix-minus buses, the status of each phone line, system date and time plus On-air signalling.

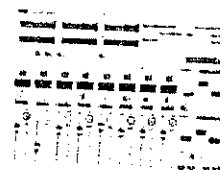


If you click on a channel selection key, you are provided with quick access to the screens for control and configuration of the audio parameters, such as equalizers, high-, low- and band-pass filters, compressors/limiters, noise gates...

FOIP VI: MIXER SOFTWARE APPLICATION FORUM IP VIRTUAL

This application is a fantastic complement to the AEQ FORUM IP digital audio mixing console. The application faithfully reproduces every detail of the control surface and all the operational features of switches, rotary encoders and faders. The complete functionality of the physical control surface available on a SW application and can run in parallel with or substitute the control surface, temporarily or permanently, locally or remotely. You have full control and can open and close channels, move faders, activate and modify eq., gain, balance or pan., save and load memory settings, activate the special or preset functions of the programmable keys and even handle the phone calls if the console has been equipped with either the fully the integrated digital telephone hybrids or associated ones.

The FORUM IP SCREEN and VIRTUAL APPs are available at the Apple Store. The Windows versions is available through your local dealer or distributor.





TECHNICAL SPECIFICATIONS

Functionality

- Cough mute, studio and control room ON-AIR signaling, fader start, remote PFL, talk-back, automatic speaker cut-off.
- N-1 output configuration.
- Integrated external equipment control (AEQ hybrids and codecs) via programmable key section.
- Option of pre-fader / post-fader for all routing.
- Control communication via 10/100 Ethernet connection using TCP/IP protocol.
- Selectable boot-up — using last used settings or default settings.
- System signals can be assigned to any control channel.
- System settings are stored in the on-board memory: 1 default basic factory configuration and 6 user defined configurations.

General Features

- Configurable monitoring for all system signals.
- 4 direct-routing buttons on each channel.
- Easily removable control surface modules for easy maintenance.
- Built-in pre-fader monitor speaker.
- Silent operation by convection cooling. FORUM IP is ideally suited for self-operated applications.
- Integrated talk-back microphone input.
- Built-in headphone outputs.
- 2 precision stereo VU meters.
- Test tone generator.
- Clock (allows for external synchronisation), timer and stopwatch.
- Redundant power supply (optional).

Inputs And Outputs

- Supports a maximum of 14 input/output modules: 4 can be dual MICRO / LINE modules, 2 can be AoIP and 2 can be digital hybrids.
- Integrated MICRO/LINE input for talk-back and self-operation.
- Integrated studio and control room speaker and headphone outputs.
- Integrated CUE output with built-in speaker.
- Phantom power and electronic balancing on microphone inputs.
- Electronically balanced analog line inputs and outputs.

- Transformer balanced digital inputs and outputs.
- Sample Rate Converters (SRC) on digital inputs.
- Supports AES/EBU, S-PDIF and USB digital formats.
- MADI bi-directional fiber-optic connection for 64 digital audio channels (optional).
- IP Connection through 1 or 2 AoIP Multi-channel modules (32 channels each) using DANTE™.
- 8 GPI and 8 GPO (opto-isolated) and 4 GPO relay outputs.

System Processing Capabilities

- 48 kHz, 24 bit internal sampling frequency.
- ± 12 dB gain control (analog and digital signals).
- Selectable balance/panorama control on all channels.
- Selective phase inverter.
- Audio processing for 20 stereo signals.
- Pre-defined audio processing that allows manual adjustment.
- Available audio effects: 3 band equalizer, high pass and low pass filters, compressor/limiter, and noise gate.
- Audio gain adjustment for up to 128 inputs, including those embedded.

Physical Characteristics

Self-contained chassis FRIP 01 with the following dimensions:

- Width: 702 mm (27 5/8").
- Depth: 548 mm (21 1/2").
- Height: 135 mm (5 3/8").
- Weight: ~15 kilos (~33 lbs) (depending upon configuration).

Self-contained chassis FRIP GRAND with the following dimensions:

- Width: 702 mm (27 5/8").
- Depth: 548 mm (21 1/2").
- Height: 135 mm (5 3/8").
- Weight: ~22 kilos (~48 lbs) (depending upon configuration).



INTERNATIONAL SALES

Margarita Salas, 24 · 28919 · Leganés · Madrid · Spain
Phone: +34 91 686 13 00 · Fax: +34 91 686 44 92
e-mail: aeqsales@aeq.es · website: www.aeq.eu

AEQ USA

USA Phone: +1 954-581-7999
Toll Free: 1-800-728-0536 (US only) Fax: +1 954-581-7733
e-mail: sales@aeqbroadcast.com
website: www.aeqbroadcast.com

 **SENNHEISER**

evolutionwireless 

SR 300 IEM



Instruction manual

Contents

Important safety instructions	2
The evolution wireless series ew 300 IEM G3	4
The SR 300 IEM G3 rack-mount transmitter	4
The frequency bank system	4
Delivery includes	5
Product overview	6
Overview of the SR 300 IEM G3 transmitter	6
Overview of the displays	7
Putting the transmitter into operation	8
Setting up the transmitter on a flat surface	8
Mounting the transmitter into a 19" rack	9
Connecting an audio source to the input sockets	11
Connecting an audio source to the output sockets	11
Daisy chaining audio signals	11
Connecting a remote antenna to the BNC socket	12
Connecting the AC 3 antenna combiner to the BNC socket	12
Connecting transmitters in a network	12
Connecting the mains unit	13
Using the transmitter	14
Switching the transmitter on/off	14
Deactivating the lock mode temporarily	15
Activating/deactivating the RF signal	16
Monitoring the audio signal via headphones	16
Synchronizing transmitters and receivers via the infra-red interface	16
Using the operating menu	19
The buttons	19
Overview of the operating menu	20
Working with the operating menu	22
Adjusting settings via the operating menu	24
The main menu "Menu"	24
The extended menu "Advanced Menu"	28
Synchronizing the transmitter with an EK 300 IEM G3 receiver	33
Synchronizing the transmitter with an EK 300 IEM G3 receiver – individual operation	33
Synchronizing transmitters with EK 300 IEM G3 receivers – multi-channel operation	33
Cleaning the transmitter	35
Recommendations and tips	35
Accessories and spare parts	36
Specifications	38
Manufacturer Declarations	40
Index	41

Important safety instructions

- Read this instruction manual.
- Keep this instruction manual. Always include this instruction manual when passing the product on to third parties.
- Heed all warnings and follow all instructions in this instruction manual.
- Only clean the product when it is not connected to the mains. Use a cloth for cleaning.
- Never open the product, otherwise you can receive an electric shock. If products are opened by customers in breach of this instruction, the warranty becomes null and void.
- Refer all servicing to qualified service personnel.
Servicing is required if the product has been damaged in any way, liquid has been spilled, objects have fallen inside, the product has been exposed to rain or moisture, does not operate properly or has been dropped.
- **WARNING:** To reduce the risk of fire or electric shock, do not use the product near water and do not expose it to rain or moisture. Do not place objects filled with liquids, such as vases or coffee cups, on the product.
- Only use the supplied mains unit.
- Unplug the mains unit from the wall socket
 - to completely disconnect the product from the mains,
 - during lightning storms or
 - when unused for long periods of time.
- Only operate the mains unit from the type of power source specified in the chapter "Specifications" (see page 38).
- Ensure that the mains unit is
 - in a safe operating condition and easily accessible,
 - properly plugged into the wall socket,
 - only operated within the permissible temperature range,
 - not covered or exposed to direct sunlight for longer periods of time in order to prevent heat accumulation (see "Specifications" on page 38).
- Do not block any ventilation openings. Install the product and the mains unit in accordance with the instructions given in this instruction manual.
- Do not install the product near any heat sources such as radiators, stoves, or other devices (including amplifiers) that produce heat.
- Only use attachments/accessories specified by Sennheiser.
- Do not overload wall outlets and extension cables as this may result in fire and electric shock.

Replacement parts

When replacement parts are required, be sure the service technician uses replacement parts specified by Sennheiser or those having the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

Danger of hearing damage due to high volumes

This product is also intended for professional use. Commercial use is subject to the safety-at-work regulations. Sennheiser, as the manufacturer, is therefore obliged to expressly point out possible health risks arising from use.

This product is capable of producing sound pressure exceeding 85 dB(A). 85 dB(A) is the sound pressure corresponding to the maximum permissible volume which is by law (in some countries) allowed to affect your hearing for the duration of a working day. It is used as a basis according to the specifications of industrial medicine. Higher volumes or longer durations can damage your hearing. At higher volumes, the duration must be shortened in order to prevent hearing damage. The following are sure signs that you have been subjected to excessive noise for too long a time:

- You can hear ringing or whistling sounds in your ears.
- You have the impression (even for a short time only) that you can no longer hear high notes.

Intended use

Intended use of the product includes:

- having read this instruction manual, especially the chapter "Important safety instructions" on page 2,
- using the product within the operating conditions and limitations described in this instruction manual.

"Improper use" means using the product other than as described in these instructions, or under operating conditions which differ from those described herein.

The evolution wireless series ew 300 IEM G3

This transmitter is part of the evolution wireless series generation 3 (ew G3). With this series, Sennheiser offers high-quality state-of-the-art RF transmission systems with a high level of operational reliability and ease of use. Transmitters and receivers are designed for monitoring applications and permit wireless transmission with studio-quality sound.

The SR 300 IEM G3 rack-mount transmitter

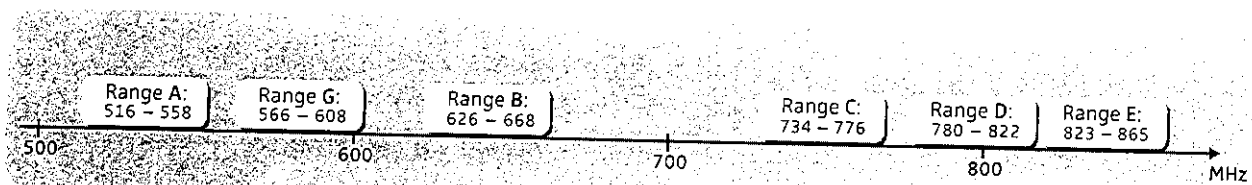
With the SR 300 IEM G3 2-channel/stereo monitoring transmitter, musicians, video and sound amateurs, reporters/broadcasters, etc. can directly monitor the received sound signals without troublesome cables or monitor speakers being required. In addition, it can also be used for any application where talkback signals are to be transmitted.

Features of the SR 300 IEM G3 transmitter:

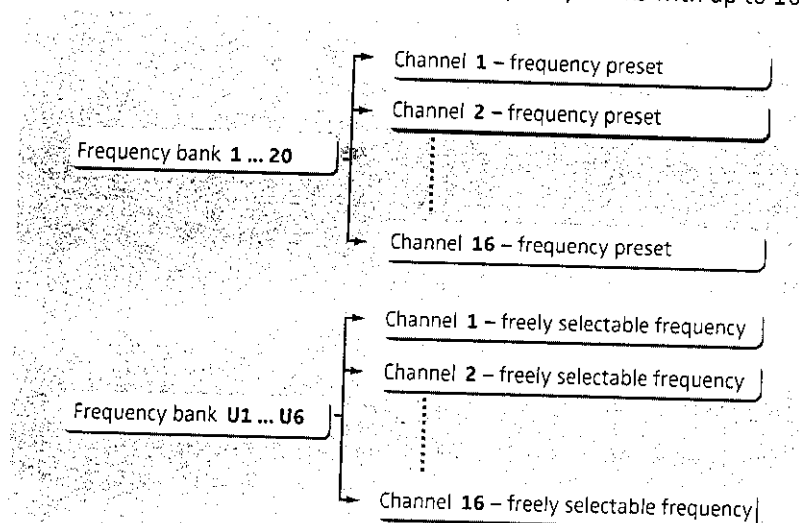
- Optimized PLL synthesizer and microprocessor technology
- Stereo/mono selection
- HDX noise reduction system
- Switching bandwidth of 42 MHz
- Safe configuration of a multi-channel system using the "Wireless Systems Manager" (WSM)
- Easy setup of a multi-channel system using the Easy Setup Sync function

The frequency bank system

The transmitter is available in 6 UHF frequency ranges with 1,680 transmission frequencies per frequency range:



Each frequency range (A–E, G) offers 26 frequency banks with up to 16 channels each:



Each of the channels in the frequency banks "1" to "20" has been factory-preset to a fixed transmission frequency (frequency preset). The factory-preset frequencies within one frequency bank are intermodulation-free. These frequencies cannot be changed.

For an overview of the frequency presets, please refer to the supplied frequency information sheet. Updated versions of the frequency information sheet can be downloaded from the corresponding product page on our website at www.sennheiser.com.

The frequency banks "U1" to "U6" allow you to freely select and store transmission frequencies. It might be that these transmission frequencies are not intermodulation-free (see page 34).

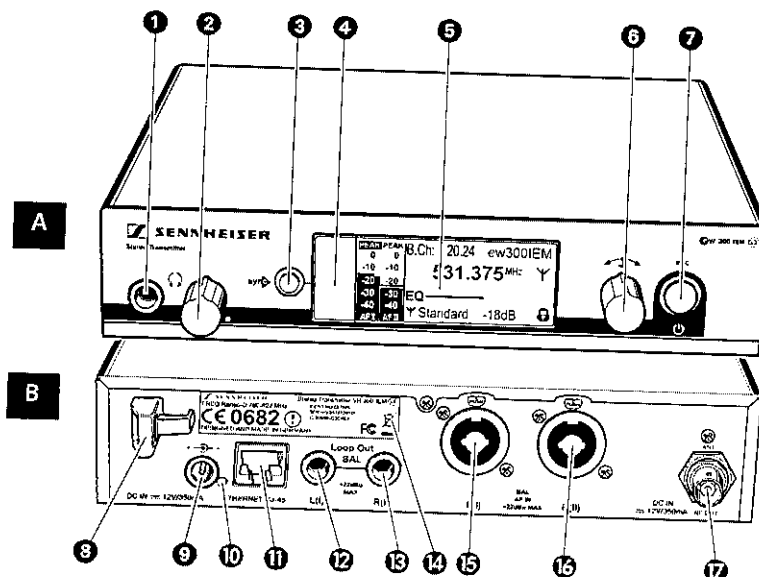
Delivery includes

The packaging contains the following items:

- 1 SR 300 IEM G3 rack-mount transmitter
- 1 NT 2-3 mains unit with one country adapter
- 1 rod antenna
- 1 GA 3 rack adapter
- 1 instruction manual
- 1 frequency information sheet
- 1 RF licensing information sheet
- 4 device feet

Product overview

Overview of the SR 300 IEM G3 transmitter



A Operating elements – front panel

- 1 Headphone output, 1/4" (6.3 mm) jack socket
- 2 Headphone volume control
- 3 **syn** button, backlit
- 4 Infra-red interface
- 5 Display panel, backlit in orange
- 6 Jog dial
- 7 **STANDBY** button with operation indication (red backlighting); ESC function (cancel)

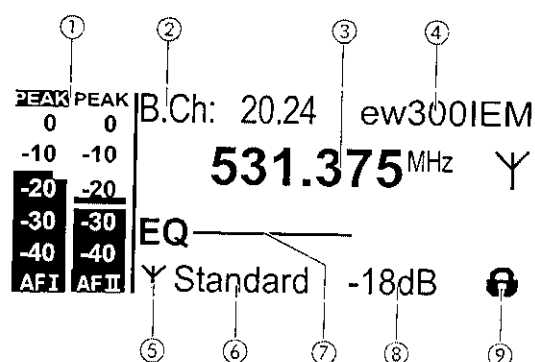
* During mono operation, the signal from the left audio input (1/4" (6.3 mm) jack/XLR-3 combo socket 15) is transmitted.

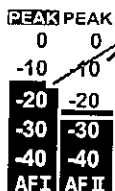
B Operating elements – rear panel

- 8 Cable grip for power supply DC cable of the NT 2-3 mains unit
- 9 DC socket (DC IN) for connection of NT 2-3 mains unit
- 10 LED (yellow) for network activity indication
- 11 LAN socket (ETHERNET RJ 45)
- 12 Audio output left (LOOP OUT BAL L(I)), 1/4" (6.3 mm) jack socket
- 13 Audio output right (LOOP OUT BAL R(II)), 1/4" (6.3 mm) jack socket
- 14 Type plate
- 15 Audio input left (BAL AF IN L(I)), 1/4" (6.3 mm) jack/XLR-3 combo socket)*
- 16 Audio input right (BAL AF IN R(II)), 1/4" (6.3 mm) jack/XLR-3 combo socket
- 17 Antenna output (RF OUT) with remote power supply input, BNC socket

Overview of the displays

After switch-on, the transmitter displays the standard display.



Display	Meaning
① Audio level "AF IN L(I)" and "AF IN R(II)" (AF = Audio Frequency)	 Modulation of the left (I) and right (II) audio channel with peak hold function When the level displays for audio level show full deflection, the audio input level is excessively high. When the transmitter is overmodulated frequently or for extended periods of time, the "PEAK" display is shown inverted.
② Frequency bank and channel	Current frequency bank and channel number
③ Frequency	Current transmission frequency
④ Name	Freely selectable name of the transmitter
⑤ Transmission icon	RF signal is being transmitted
⑥ Transmission power	Current transmission power
⑦ Equalizer setting	Current equalizer setting
⑧ Input sensitivity	Current input sensitivity for the audio signal available at the audio input sockets BAL AF IN L (I) ⑮ and BAL AF IN R (II) ⑯.
⑨ Lock mode icon (see page 15)	Lock mode is activated

Putting the transmitter into operation



When using more than one transmitter, we recommend connecting remote antennas and, if necessary, using Sennheiser antenna accessories. For more information, visit the ew G3 product page at www.sennheiser.com.

Setting up the transmitter on a flat surface

Place the transmitter on a flat, horizontal surface. Please note that the device feet can leave stains on delicate surfaces.

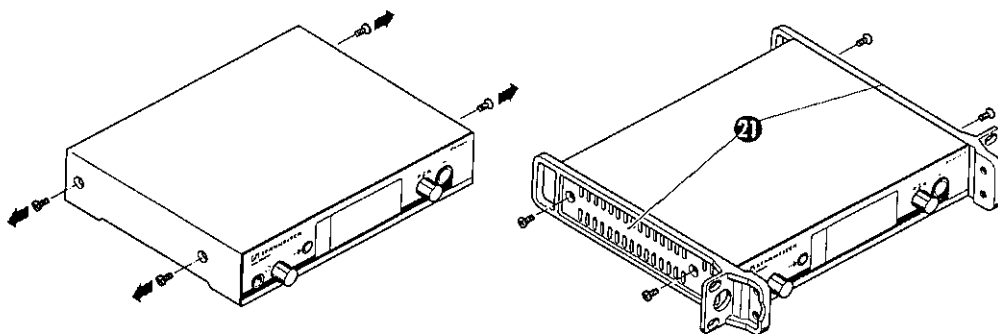


The rack mount "ears" are designed to help protect the operating elements from damage or deformation, e.g. if the transmitter is dropped. Therefore, fasten the rack mount "ears", even if you do not want to rack mount your transmitter.

Mounting the rack
mount "ears"

To fasten the rack mount "ears" ②:

- ▶ Unscrew and remove the two recessed head screws (M4x8) on each side of the transmitter (see left-hand diagram).
- ▶ Secure the rack mount "ears" ② to the sides of the transmitter using the previously removed recessed head screws (see right-hand diagram).



Fitting the device feet

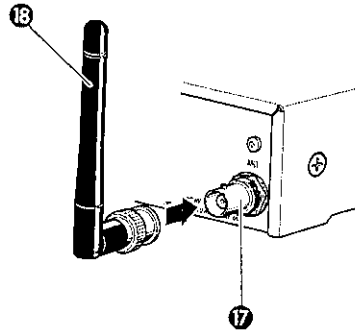


Do not fit the device feet when mounting the transmitter into a 19" rack.

- ▶ Clean the base of the transmitter where you want to fix the device feet.
- ▶ Fit the device feet to the four corners of the transmitter.

Connecting the
rod antenna

- The supplied rod antenna ⑬ is suitable for use in good reception conditions.
- ▶ Connect the rod antenna ⑬ (see diagram on page 9).



Mounting the transmitter into a 19" rack



Do not fit the device feet when mounting the transmitter into a 19" rack.

CAUTION!



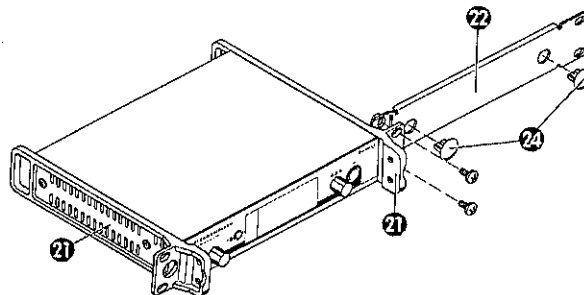
Risks when rack mounting the transmitter!

When installing the device in a closed or multi-rack assembly, please consider that, during operation, the ambient temperature, the mechanical loading and the electrical potentials will be different from those of devices which are not mounted into a rack.

- ▶ Make sure that the ambient temperature within the rack does not exceed the permissible temperature limit specified in the SR 300 IEM G3 specifications. If necessary, provide additional ventilation.
- ▶ Make sure that the mechanical loading of the rack is even.
- ▶ When connecting to the power supply, observe the information indicated on the type plate. Avoid circuit overloading. If necessary, provide overcurrent protection.
- ▶ When rack mounting, please note that intrinsically harmless leakage currents of the individual mains units may accumulate, thereby exceeding the allowable limit value. As a remedy, ground the rack via an additional ground connection.

Rack mounting one transmitter

- ▶ Secure the rack mount "ears" (21) of the supplied GA 3 rack adapter to the transmitter as described on page 8.
- ▶ Secure the blanking plate (22) to one of the rack mount "ears" using two recessed head screws (M 6x10) (see diagram).



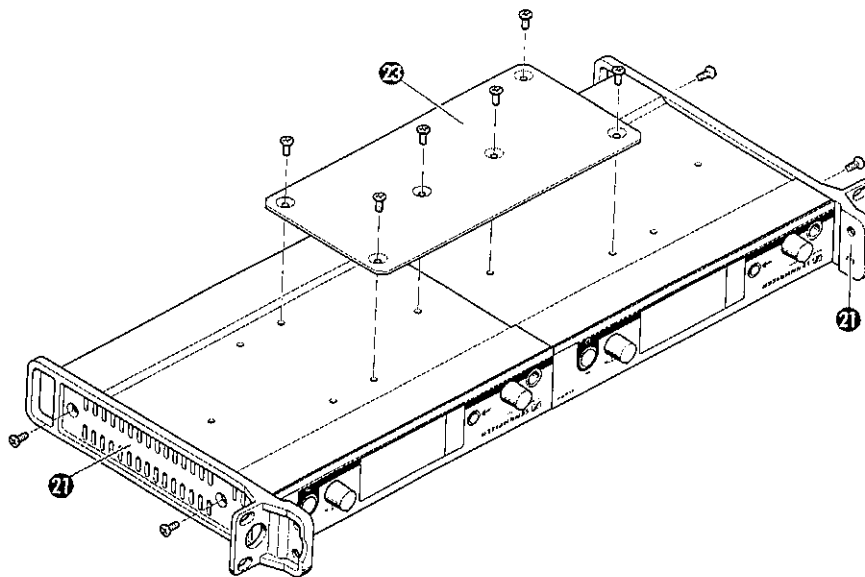
Putting the transmitter into operation

- ▶ Connect the antenna. You have the following options:
 - You can connect the supplied rod antenna 18 to the rear of the transmitter (see page 8). In this case, insert the two blanking plugs 24 into the holes of the blanking plate (see diagram on page 9).
 - You can use the AM 2 antenna front mount kit (see "Accessories and spare parts" on page 36) and mount the rod antenna to the blanking plate 22.
 - You can use a remote antenna, if necessary in conjunction with the AC 3 antenna combiner.
- ▶ Slide the transmitter with the mounted blanking plate 22 into the 19" rack.
- ▶ Secure the rack mount "ear" 21 and the blanking plate 22 to the 19" rack.

Rack mounting two transmitters

To mount two transmitters into a rack using the GA 3 rack adapter:

- ▶ Place the two transmitters side by side upside-down onto a flat surface.



- ▶ Secure the jointing plate 23 to the transmitters using six recessed head screws (M 3x6).
- ▶ Secure the rack mount "ears" 21 to the transmitters as described on page 8.

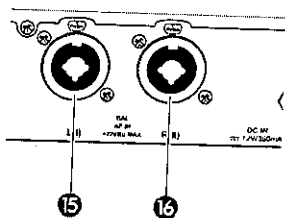
To mount the transmitters into the rack:

- ▶ Use remote antennas, if necessary in conjunction with the AC 3 antenna combiner.
For more information, visit the ew G3 product pages at www.sennheiser.com.

To mount the transmitters into the rack:

- ▶ Slide the transmitters into the 19" rack.
- ▶ Secure the rack mount "ears" to the 19" rack.

Connecting an audio source to the input sockets



- ▶ Use a suitable cable to connect the output of an audio source (e.g. a mixing console or an additional SR 300 IEM G3) to the input socket BAL AF IN L(I) 15 and/or BAL AF IN R(II) 16 (see also page 11).
- ▶ Adjust the output level of your external device.
- ▶ Via the operating menu, adjust the transmitter's input sensitivity.
The input sensitivity is adjusted via the "Sensitivity" menu item and is common for both inputs (see page 20).



The input amplifier of the SR 300 IEM G3 is designed for line level input.

Connecting an audio source to the output sockets

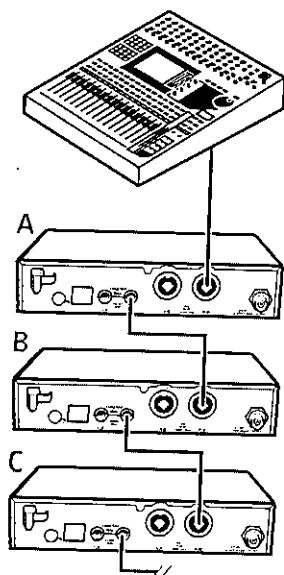
- ▶ Use a suitable cable to connect the audio input of an external device (e.g. a mixing console or an additional SR 300 IEM G3) to the output socket LOOP OUT BAL L(I) 12 and/or LOOP OUT BAL R(II) 13 (see also page 11).



The signal received from the AF input sockets BAL AF IN L(I) 15 and BAL AF IN R(II) 16 is actively buffered and then routed to the output sockets LOOP OUT BAL L(I) 12 and LOOP OUT BAL R(II) 13. The AF output sockets will therefore work only when the transmitter is switched on and powered.

Daisy chaining audio signals

The output sockets LOOP OUT BAL L 12 and/or LOOP OUT BAL R 13 allow you to daisy chain a signal that is to be transmitted to all receivers from an audio source (e.g. a mixing console) to one transmitter and then to the other transmitters.



To daisy chain an audio signal from one transmitter to the next:

- ▶ Route a signal from the mixing console to the input socket (in this example: BAL AF IN R 16) of transmitter A.
- ▶ Connect the output socket LOOP OUT BAL R 13 of transmitter A to the input socket BAL AF IN R 16 of transmitter B.
- ▶ Connect the output socket LOOP OUT BAL R 13 of transmitter B to the input socket BAL AF IN R 16 of transmitter C.
- ▶ Repeat for the other transmitters.



The AF output sockets LOOP OUT BAL L(I) 12 and/or LOOP OUT BAL R(II) 13 will work only when the transmitter is switched on and powered (see page 11).

Connecting a remote antenna to the BNC socket

Use a remote antenna when the transmitter position is not the best antenna position for optimum transmission. You can choose between two antennas:

- A 2003 UHF passive directional antenna
 - A 1031 passive omni-directional antenna
- Use a low-attenuation 50-Ω cable to connect the antenna to the transmitter.
- If possible, use a short antenna cable and as little connections as possible, since long cables and many connectors lead to an attenuation of the antenna signal.
- Position the antenna in the same room in which the transmission takes place.
- Observe a minimum distance of 1 m between the antenna and metal objects (including reinforced concrete walls).

Connecting the AC 3 antenna combiner to the BNC socket

To make multi-channel systems, you should use the AC 3 antenna combiner (see "Accessories and spare parts" on page 36). The AC 3 allows you to operate up to four transmitters with a single antenna without virtually any intermodulation.

In addition, the AC 3 incorporates DC distribution to enable simultaneous powering of up to four transmitters via its BNC sockets.

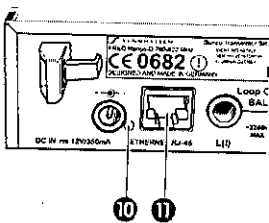
- Connect the AC 3 antenna combiner to the BNC socket ⑪.

Connecting transmitters in a network

You can connect several transmitters in a network. The transmitters are remote controlled via a PC running the "Wireless Systems Manager" (WSM) software. This software will assist in the quick and safe configuration of multi-channel systems.



The "Wireless Systems Manager" (WSM) software can be downloaded from our website at www.sennheiser.com.



- Connect a standard network cable (at least Cat 5) to the LAN socket ⑪ of the transmitter.
- Connect your transmitter to an Ethernet switch.
- Connect the other transmitters to the Ethernet switch.
- Connect a PC to the Ethernet switch.
- When a transmitter is properly connected to the Ethernet switch or the PC, the yellow LED ⑩ at the rear of the transmitter lights up.

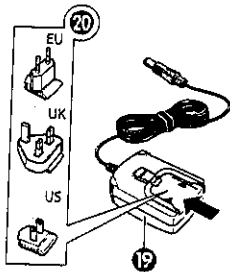
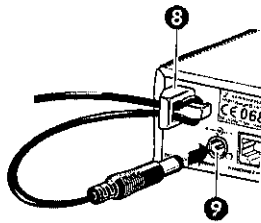


For further information on network operation using the WSM, refer to page 33.

Connecting the mains unit

Only use the supplied mains unit. It is designed for the transmitter and ensures safe operation.

- ▶ Insert the yellow connector of the NT 2-3 mains unit into the yellow socket 9 of the transmitter.
- ▶ Pass the cable of the mains unit through the cable grip 8.
- ▶ Slide the supplied country adapter 20 onto the mains unit 19.
- ▶ Plug the mains unit 19 into a wall socket.
The STANDBY button 7 is backlit in red.



The AC 3 antenna combiner incorporates DC distribution to enable simultaneous powering of up to four transmitters via its BNC sockets. These transmitters do not require their individual power supply (see also page 12).

Using the transmitter

To establish a transmission link, proceed as follows:

1. Switch the transmitter on (see next section).
2. Switch the receiver on (see the instruction manual of the receiver).
The transmission link is established.



It is vital to observe the notes on frequency selection on page 33.

If you cannot establish a transmission link between transmitter and receiver:

- Make sure that transmitter and receiver are set to the same frequency bank and to the same channel.
- If necessary, read the chapter "If a problem occurs ..." on page 37.

Switching the transmitter on/off

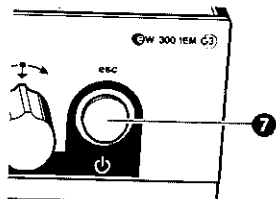
To switch the transmitter on (online operation):



- Briefly press the STANDBY button ⑦.
The transmitter switches on and the standard display appears.
The transmitter transmits an RF signal and the transmission icon ⑤ is displayed.



You can switch the transmitter on and deactivate the RF signal on switch-on. For more information, refer to page 15.



To switch the transmitter to standby mode:

- If necessary, deactivate the lock mode (see page 15).
- Keep the STANDBY button ⑦ pressed until "OFF" appears on the display panel.
The display panel switches off.



When in the operating menu, pressing the STANDBY button ⑦ will cancel your entry (ESC function) and return you to the standard display.

The STANDBY button ⑦ is backlit in red both during operation and in standby mode.

To completely switch the transmitter off:

- Disconnect the transmitter from the mains by unplugging the mains unit from the wall socket.
The backlighting of the STANDBY button ⑦ goes off.

To switch the transmitter on and to deactivate the RF signal on switch-on (offline operation):



- ▶ Keep the STANDBY button ⑦ pressed until "RF Mute On?" appears on the display panel.



- ▶ Press the jog dial.

The transmission frequency is displayed but the transmitter does not transmit an RF signal. The transmission icon ⑤ is not displayed. In addition, the display backlighting changes from orange to red and "RF Mute" flashes in alternation with the standard display.



Use this function to prepare a transmitter for use during live operation without causing interference to existing transmission links.

To activate the RF signal:



- ▶ Briefly press the STANDBY button ⑦.
"RF Mute Off?" appears on the display panel.



- ▶ Press the jog dial.
The transmission icon ⑤ is displayed again.

Deactivating the lock mode temporarily

You can activate or deactivate the automatic lock mode via the "Auto Lock" menu item. If the lock mode is activated, you have to temporarily deactivate it in order to be able to operate the transmitter:



- ▶ Press the jog dial.
"Locked" appears on the display panel.



- ▶ Turn the jog dial.
"Unlock?" appears on the display panel.



- ▶ Press the jog dial.
The lock mode is temporarily deactivated:

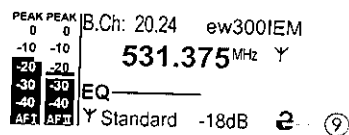
When you are in the operating menu

The lock mode remains deactivated until you exit the operating menu.

When the standard display is shown

The lock mode is automatically activated after 10 seconds.

The lock mode icon ⑨ flashes prior to the lock mode being activated again.



Activating/deactivating the RF signal

To deactivate the RF signal:

-  ▶ When the standard display is shown on the display panel, briefly press the STANDBY button.
"RF Mute On?" appears on the display panel.
-  ▶ Press the jog dial.
The RF signal is deactivated. The transmission icon ⑤ is not displayed. In addition, the display backlighting changes from orange to red and "RF Mute" flashes in alternation with the standard display.

To activate the RF signal:

-  ▶ Press the STANDBY button.
"RF Mute Off?" appears on the display panel.
-  ▶ Press the jog dial.
The RF signal is activated and the transmission icon ⑤ is displayed. The display backlighting changes from red to orange.



You can also deactivate the RF signal on switch-on. For more information, refer to the chapter "Switching the transmitter on/off" on page 14.

Monitoring the audio signal via headphones

You can monitor the audio signal via the headphone output.

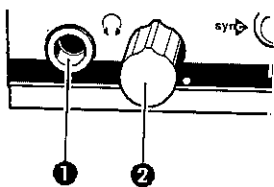
CAUTION!



Danger of hearing damage!

Listening at high volume levels for long periods can lead to permanent hearing defects.

- ▶ Set the headphone volume control ② to the minimum position before putting the headphones on.
- ▶ Do not continuously expose yourself to high volumes.



- ▶ Set the headphone volume control ② to the minimum position.
- ▶ Connect headphones with a 1/4" (6.3 mm) stereo jack plug to the headphone output ①.
- ▶ Gradually increase the volume and monitor the audio signal with the lowest possible volume.

sync Synchronizing transmitters and receivers via the infra-red interface

Easy Setup Sync function (EK 300 IEM G3 -> SR 300 IEM G3)

Once you have performed a frequency preset scan with your EK 300 IEM G3 receiver (see the instruction manual of the receiver), you can use the Easy Setup Sync function to transfer unused frequency presets from the receiver to several transmitters via the infra-red interface. The receiver transfers the first unused channel from the current frequency bank to the first transmitter and the next unused channel to the second transmitter and so on.

Sync function (SR 300 IEM G3 -> EK 300 IEM G3)

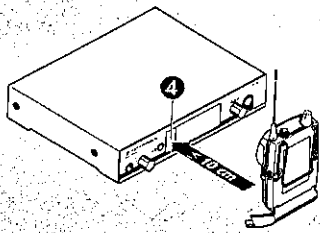
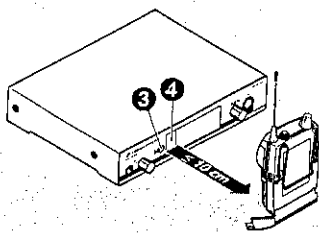
On the other hand, you can use the Sync function to adjust settings for your EK 300 IEM G3 portable receiver directly on your SR 300 IEM G3 rack-mount transmitter and transfer these settings to the receiver via the infra-red interface (see page 30).



When carrying out the Sync function, the transmitter's current frequency bank and channel setting is automatically transferred to the receiver via the infra-red interface.

Carrying out an Easy Setup Sync or a Sync function

The following assumes that you are using the Easy Setup Sync function for setting up a multi-channel system. You can also use the Easy Setup Sync function for establishing a transmission link between one transmitter and one EK 300 IEM G3 receiver.

Easy Setup Sync	Sync
▶ Switch all rack-mount transmitters and one portable receiver on. ▶ On all transmitters, call up the "Easy Setup" menu item. The text "Easy Setup Sync" and the  icon appear on the display panels of the transmitters. The RF signal of the transmitters is automatically deactivated. ▶ Use your EK 300 IEM G3 portable receiver to perform a frequency preset scan. ▶ Select a frequency bank with a sufficient number of unused channels (see the instruction manual of the receiver).	▶ Switch your rack-mount transmitter and your portable receiver on. ▶ Press the  button ③ on the transmitter. The  icon appears on the display panels of the transmitter.
 ▶ Place the infra-red interface of the receiver (see the instruction manual of the receiver) in front of the infra-red interface ④ of the first transmitter. The first unused frequency preset is transferred from the receiver to the transmitter.	 ▶ Place the infra-red interface of the receiver (see the instruction manual of the receiver) in front of the infra-red interface ④ of your transmitter. The parameters adjusted via the "Sync Settings" menu item are transferred from the transmitter to the receiver. In addition, the current frequency bank and channel setting is transferred.

Easy Setup Sync	Sync
When the transfer is completed, the display panel of the transmitter displays the numbers of the transferred frequency bank and channel. Please note that the transmitter does not automatically store the frequency bank and channel setting.	When the transfer is completed, "✓" appears on the display panel of the transmitter. The transmitter then switches back to the standard display. The transferred parameters are automatically adjusted and stored by the receiver. The transmission link between transmitter and receiver is now established.
▶ Place the infra-red interface of the portable receiver in front of the infra-red interfaces of the remaining transmitters, one after the other. In each case, the next unused frequency preset is transferred from the receiver to the transmitter. ▶ Store the frequency bank and channel setting by pressing the jog dial on your transmitters. The RF signal is activated. You can carry out the Sync function (see right-hand column) at a later time to establish a transmission link between transmitters and receivers.	— —
OR: ▶ Immediately synchronize your receivers with your transmitters by carrying out the Sync function (see right-hand column). This establishes a transmission link between transmitters and receivers. The  icon in the left lower corner of the transmitter display indicates that the Sync function can be carried out.	—
	To cancel the transfer: ▶ Press the STANDBY button  on the transmitter. "X" appears on the display panel of the transmitter. "X" also appears if no suitable receiver was found.

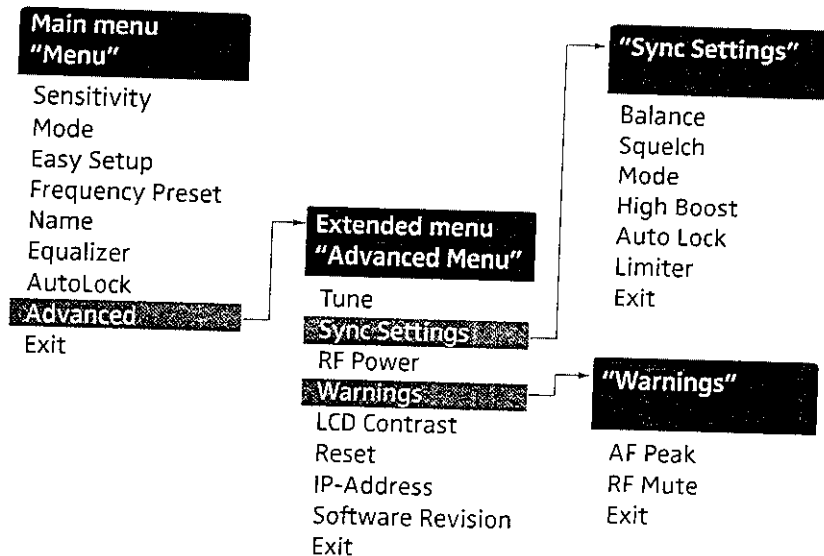
Using the operating menu

A special feature of the Sennheiser ew G3 series is the consistent, intuitive menu structure of transmitters and receivers. As a result, adjustments to the settings can be made quickly – even in stressful situations, for example on stage or during a live show or presentation.

The buttons

Button	Function of the button
Press the STANDBY button 	• Switches the transmitter on and off • Cancels the entry and returns to the standard display (ESC function) • Activates/deactivates the RF signal (special function, see page 16)
Press the jog dial 	• Changes from the standard display to the operating menu • Calls up a menu item • Enters a submenu • Stores the settings and returns to the operating menu
Turn the jog dial 	• Changes to the next/previous menu item • Changes the setting of a menu item

Overview of the operating menu



When the standard display is shown on the display panel, you can get into the main menu by pressing the jog dial. The extended menu "Advanced Menu" and the other menus can be accessed via the corresponding menu items.

Display	Function of the menu item	Page
Main menu "Menu"		24
Sensitivity	Adjusts the input sensitivity (0 to -42 dB in steps of 3 dB)	24
Mode	Selects mono or stereo operation	25
Easy Setup	Deactivates the RF signal and activates the Easy Setup Sync function (see page 16)	26
Frequency Preset	Sets the frequency bank and the channel	26
Name	Enters a freely selectable name	26
Equalizer	Changes the frequency response of the output signal using a graphic equalizer (+/- 12 dB in steps of 2.4 dB)	27
AutoLock	Activates/deactivates the automatic lock mode	28
Advanced	Calls up the extended menu "Advanced Menu"	28
Exit	Exits the operating menu and returns to the standard display	
Extended menu "Advanced Menu"		
Tune	Sets the transmission frequencies for the frequency banks "U1" to "U6"	28
	Sets the frequency bank, the channel and the transmission frequency (frequency banks "U1" to "U6")	29
Sync Settings	Adjusts the receiver parameters and activates/deactivates their transfer to the receivers	30

Display	Function of the menu item	Page
RF Power	Adjusts the transmission power ("Low" or "Standard")	31
Warnings	Calls up "Warnings" (see below)	31
LCD Contrast	Adjusts the contrast of the display panel (adjustable in 16 steps)	31
Reset	Resets the settings made in the operating menu	31
IP-Address	Adjusts the IP address of the transmitter	32
Software Revision	Displays the current software revision	32
Exit	Exits the extended menu "Advanced Menu" and returns to the main menu	
"Sync Settings"		
Balance, Squelch, Mode, High Boost, Auto Lock, Limiter		
For a detailed overview of the settings, refer to page 30.		30
Exit	Exits "Sync Settings" and returns to the extended menu "Advanced Menu"	
"Warnings"		
Activates/deactivates warnings (color change and warning messages)		
AF Peak	Audio overmodulation	
RF Mute	RF signal is deactivated	
Exit	Exits "Warnings" and returns to the extended menu "Advanced Menu"	31

Working with the operating menu



If the lock mode is activated, you have to deactivate it in order to be able to work with the operating menu (see page 15).

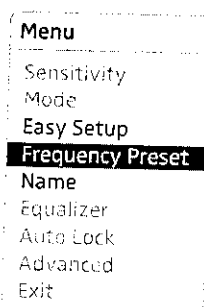
By way of example of the "Frequency Preset" menu, this section describes how to use the operating menu.

Changing from the standard display to the operating menu



► Press the jog dial.

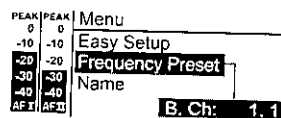
The standard display is replaced by the main menu. The last selected menu item is displayed.



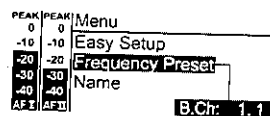
Selecting a menu item



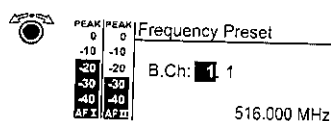
► Turn the jog dial to change to the "Frequency Preset" menu item.
The current setting of the selected menu item is displayed:



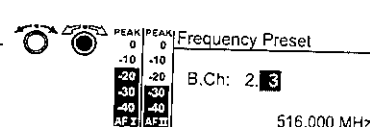
Changing and storing settings



Call up "Frequency Preset"



Select the frequency bank and confirm



Select the channel; store the setting

"Stored"



► Press the jog dial to call up the menu item.



► Turn the jog dial to set the frequency bank.



► Press the jog dial to confirm your selection.



► Turn the jog dial to set the channel.



► Press the jog dial to store the setting.



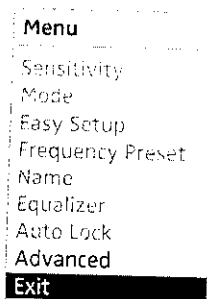
By briefly turning the jog dial to the left or right, the display jumps either forwards or backwards to the next menu item or setting. If you turn the jog dial to the left or right and hold it in this position, the display cycles continuously ("fast search" function).

Canceling an entry

- ▶  Press the STANDBY button to cancel the entry.
The standard display appears on the display panel.

To subsequently return to the last edited menu item:

- ▶  Press the jog dial repeatedly until the last edited menu item appears.



Exiting a menu item

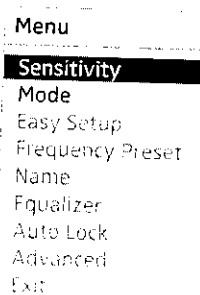
- ▶  Change to the "Exit" menu item.
- ▶  Confirm your selection.
You return to the next higher menu level or you exit the operating menu and return to the standard display.

To directly return to the standard display:

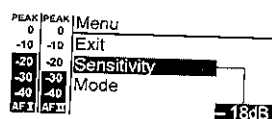
- ▶  Press the STANDBY button.

Adjusting settings via the operating menu

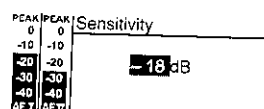
The main menu "Menu"



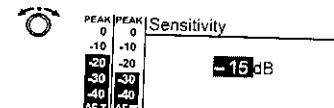
Adjusting the input sensitivity – "Sensitivity"



Call up
"Sensitivity"



Select the desired
setting



Store the setting

"Stored"



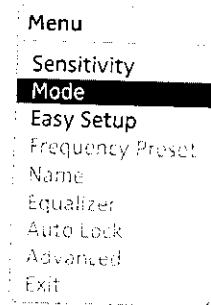
Adjustment range: 0 to -48 dB, adjustable in steps of 3 dB

Via the "Sensitivity" menu item, you can adjust the transmitter's input sensitivity to the output signal of the audio source. The adjusted input sensitivity is common for both audio inputs of the transmitter.

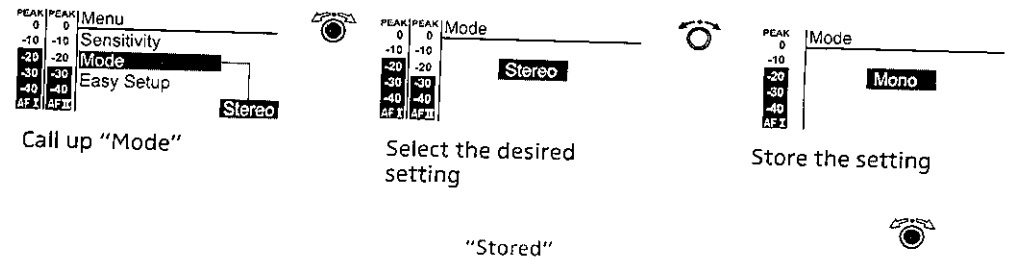


The audio level display "AF" always indicates the audio level, even if the transmitter is muted, e.g. allowing you to check the adjusted sensitivity before live operation.

Input sensitivity is adjusted ...	Effect/display
... too high	Close talking distances, speakers with loud voices or loud music passages cause overmodulation in the transmission link. The audio level display "AF I" and/or "AF II" ① shows full deflection for the duration of the overmodulation.
... correctly	The audio level display "AF I" and/or "AF II" ① shows full deflection only during the loudest passages.
... too low	The transmission link is undermodulated. This results in a signal with high background noise.



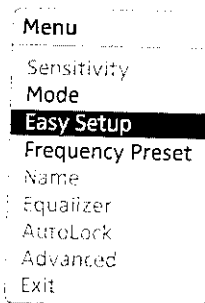
Selecting mono or stereo operation – “Mode”



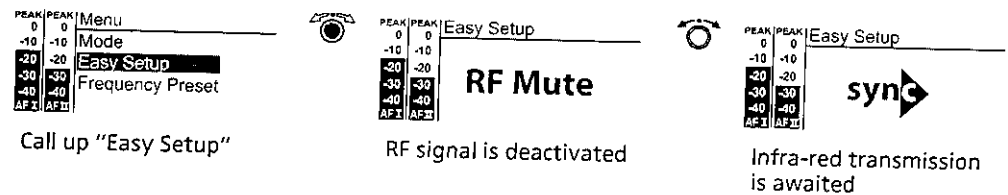
- ▶ Select “Stereo” if you want to transmit the audio signals from the left and right audio input (BAL AF IN L (I) **15** and BAL AF IN R (II) **16**).
- ▶ Select “Mono” if you only want to transmit the audio signal from the left audio input BAL AF IN L (I) **15**.



During mono operation, you have to deactivate the pilot tone evaluation on your EK 300 IEM G3 receiver in order to ensure that the receiver outputs the same signal on channel I and II.



Starting synchronization – “Easy Setup”



- ▶ Call up “Easy Setup” to transfer an unused frequency preset from the EK 300 IEM G3 receiver to the transmitter via the infra-red interface (see page 16). The RF signal of the transmitter is automatically deactivated (“RF Mute” flashes) and the transmitter awaits the data transfer.

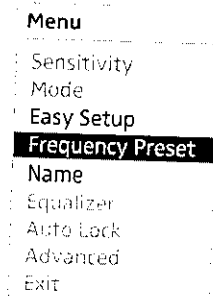
If you do not want to start the transfer or to cancel the transfer:



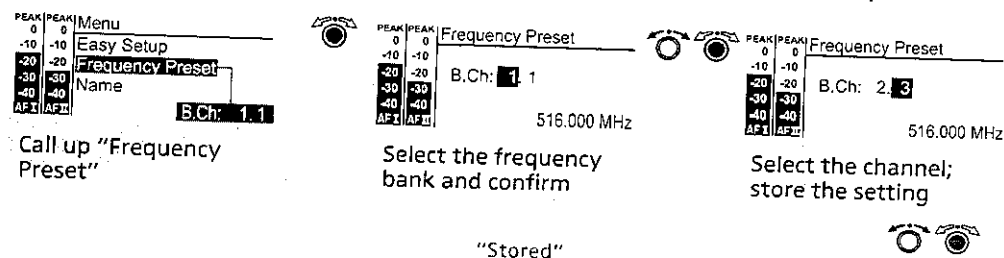
- ▶ Press the STANDBY button.



For a detailed description of the Easy Setup function, refer to the chapter “Synchronizing transmitters and receivers via the infra-red interface” on page 16.



Selecting the frequency bank and the channel manually – “Frequency Preset”



When you are in the “Frequency Preset” menu item, the RF signal is deactivated.

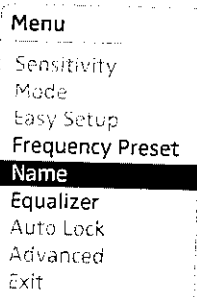
Overview of the frequency banks and channels:

Frequency bank	Channels	Type
“1” to “20”	up to 16 per frequency bank	System bank: frequencies are factory-preset
“U1” to “U6”	up to 16 per frequency bank	User bank: frequencies are freely selectable (see page 28)

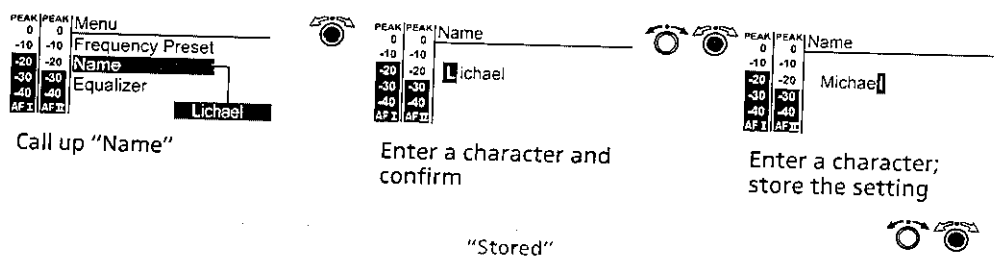


When setting up multi-channel systems, please observe the following:

Only the factory-preset frequencies within one frequency bank (“1” to “20”) are intermodulation-free. It is vital to observe the notes on frequency selection on page 33.



Entering a name – “Name”



Via the “Name” menu item, you can enter a freely selectable name (e.g. the name of the performer) for the transmitter. The name is displayed on the standard display. The name can consist of up to 8 characters such as:

- letters (without pronunciation marks),
- numbers from 0 to 9,
- special characters and spaces.

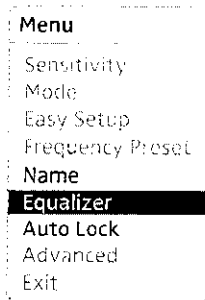
To enter a name, proceed as follows:



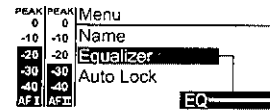
- ▶ Turn the jog dial to select a character.



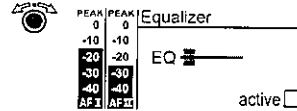
- ▶ Press the jog dial to change to the next segment/character or to store the complete entry.



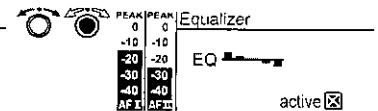
Using the equalizer



Call up "Equalizer"



Select the desired setting and confirm



Activate/deactivate the equalizer; store the setting

"Stored"

Adjustment range: ± 12 dB, adjustable in steps of 2.4 dB

You can change the treble and bass of the audio output signal in 5 frequency ranges.

Display	Frequency range
	20 to 100 Hz
	100 to 300 Hz
	300 Hz to 1 kHz
	1 to 3 kHz
	3 to 10 kHz

To change the treble and bass of the audio output signal, proceed as follows:

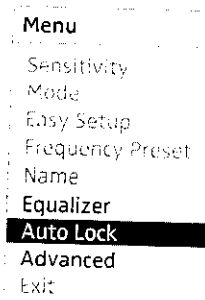


► Turn the jog dial to boost or cut the frequency range.

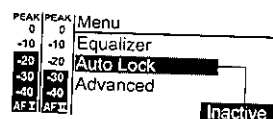


► Press the jog dial to change to the next frequency range or to store the complete entry.

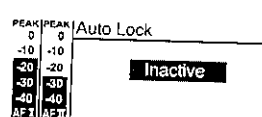
Adjusting settings via the operating menu



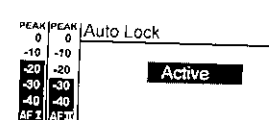
Activating/deactivating the automatic lock mode – “Auto Lock”



Call up “Auto Lock”



Select the desired setting



Store the setting

“Stored”

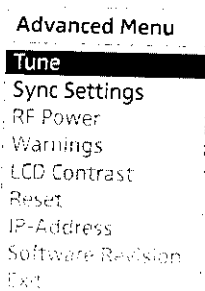


The lock mode prevents that the transmitter is accidentally switched off or programmed during operation. The lock mode icon  on the standard display indicates that the lock mode is activated. For information on how to use the lock mode, refer to page 15.



► Turn the jog dial to select the desired setting.

The extended menu “Advanced Menu”



Setting the transmission frequencies and the frequency banks “U1” to “U6” – “Tune”



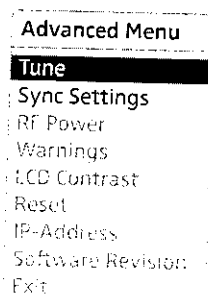
When you have selected one of the system banks and then select the “Tune” menu, the transmitter automatically switches to channel 1 of the frequency bank “U1”. In this case, “U1.1” briefly appears on the display panel.

Upon delivery, the channels of the frequency banks “U1” to “U6” are not assigned a transmission frequency.

When you are in the “Tune” menu item, the RF signal is deactivated.

Via the “Tune” menu item, you can:

1. set a transmission frequency to be stored in the current channel of the selected frequency bank (“U1” to “U6”) or
2. select a frequency bank (“U1” to “U6”) and a channel and assign this channel a transmission frequency.



Setting a transmission frequency for the current channel

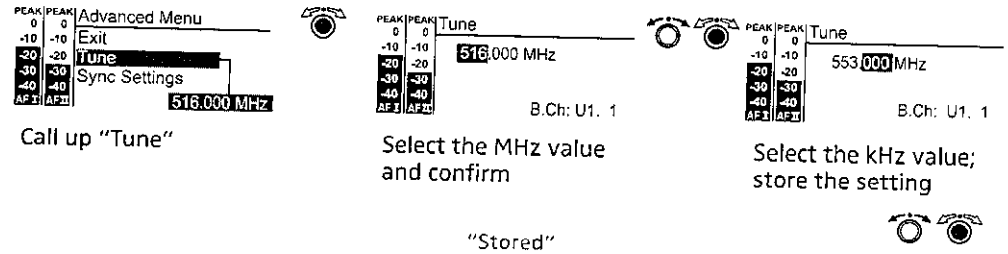


► Turn the jog dial until the “Tune” menu item appears.



► Press the jog dial.
The frequency selection appears.

Adjusting settings via the operating menu



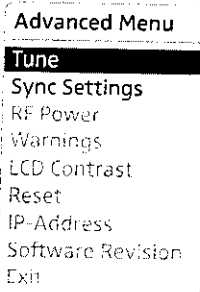
- Set the desired frequency.



- Press the jog dial.
Your settings are stored. You are back to the operating menu.



It is vital to observe the notes on frequency selection on page 33.



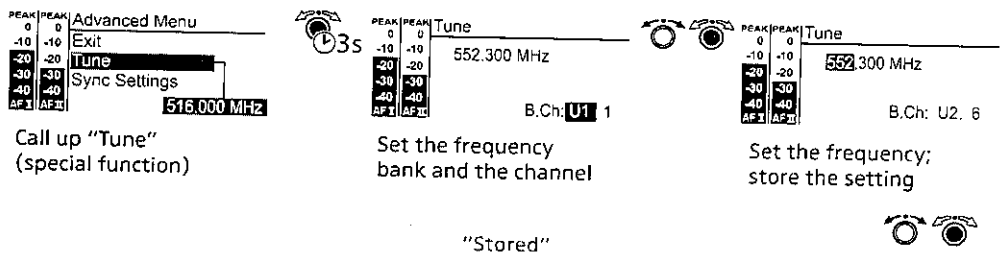
Selecting a frequency bank and a channel and assigning this channel a transmission frequency



- Turn the jog dial until the "Tune" menu item appears.



- Keep the jog dial pressed until the frequency bank selection appears.



- Set the desired frequency bank.



- Press the jog dial.
The channel selection appears.

- Set the desired channel.



- Press the jog dial.
The frequency selection appears.

- Set the desired frequency (MHz and kHz values).



- Press the jog dial.
Your settings are stored. You are back to the operating menu.

Adjusting settings via the operating menu

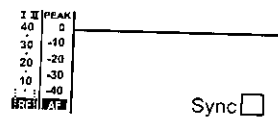
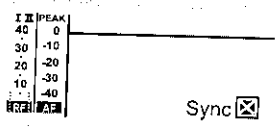
Advanced Menu
Tune
Sync Settings
RF Power
Warnings
LCD Contrast
Reset
IP-Address
Software Revision
Exit

Adjusting the receiver parameters and activating/deactivating their transfer to the receiver – "Sync Settings"

Via the "Sync Settings" submenu, you can adjust the following parameters for the EK 300 IEM receiver:

Menu item	Transferred receiver parameter
Balance	Balance or Focus setting ("–15"/"+15")
Squelch	Squelch setting ("5 dB" ... "25 dB")
Mode	Audio mode setting ("Stereo"/"Focus")
High boost	Treble boost setting for output signal ("flat"/"High boost" (8 dB at 10 kHz))
Auto Lock	Lock mode setting ("active"/"inactive")
Limiter	Limiter setting ("–18 dB", "–12 dB", "–6 dB", "Off")

You can specify for each parameter whether it is to be transferred to the receiver during synchronization.

Parameter	Transfer is ...
	... deactivated
	... activated

By pressing the **sync**  button on the transmitter, the parameters are transferred from the transmitter to the receiver (see page 16).