RVR ELETTRONICA TEX-LCD Series FM Transmitters User Manual

Contents

RVR ELETTRONICA TEX-LCD Series FM Transmitters

Revision History

- **File Name:** AUDIGIN-TEX_ING_1.0.indb
- **Version:** 1.0
- **Date:** 04/03/2022

Date	Version	Reason	Editor
04/03/2022	1.0	First edition	J. H. Berti

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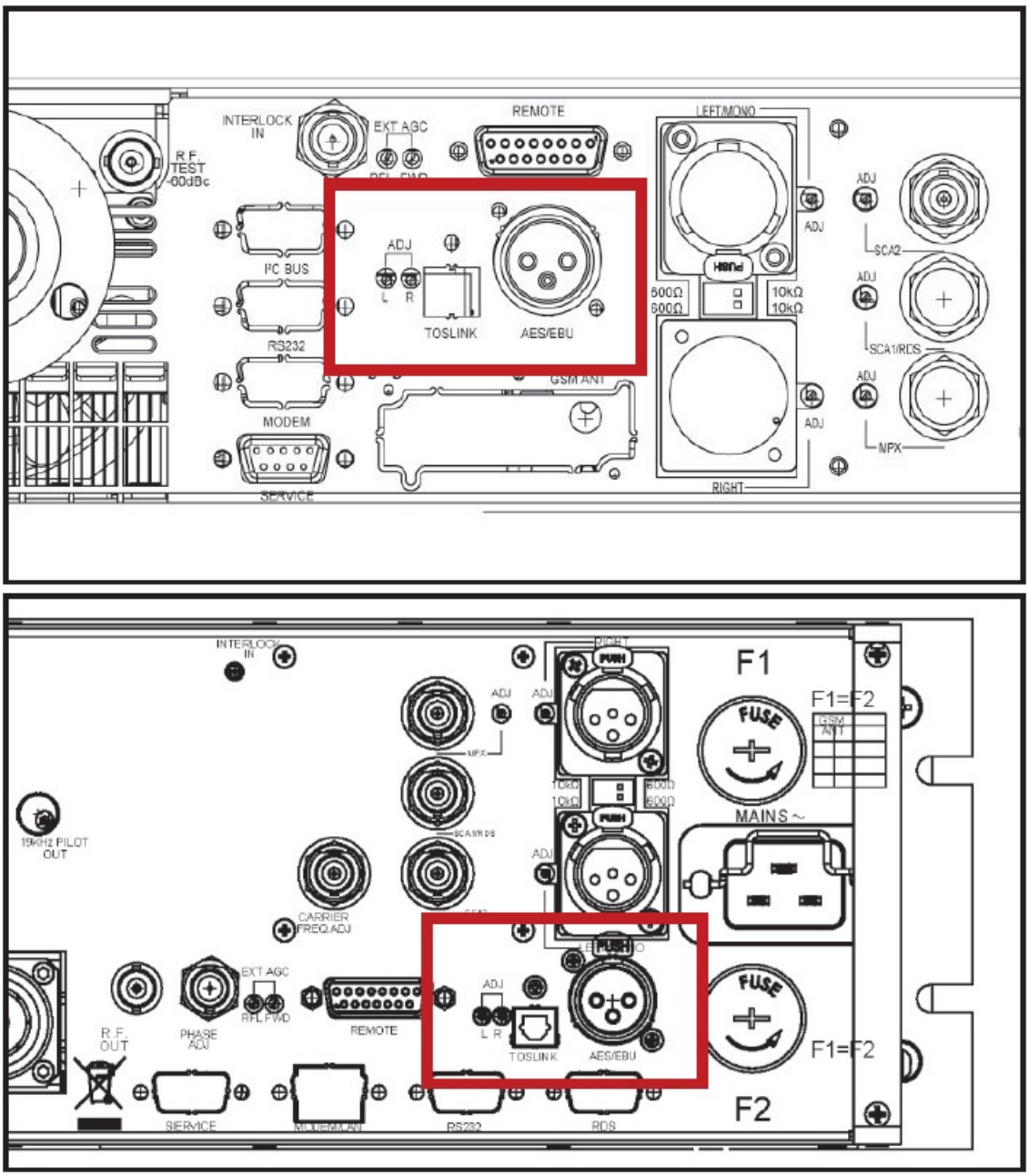
Introduction

Main Highlights

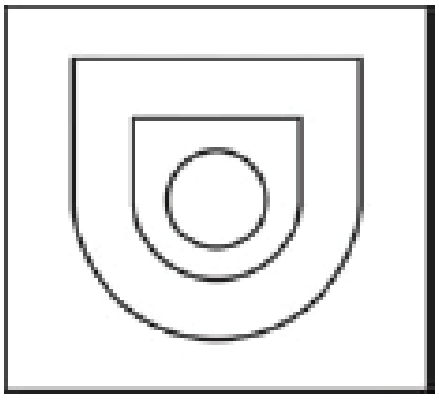
- The card allows to TEX-LCD exciters the integration into those systems that use digital audio distribution. It is located on rear panel of the TEX-LCD and is internally connected to the audio motherboard using a 10-pin flat connector.
- The card allows the conversion of digital signals into “Left” and “Right” analog signals and then delivers it to the modulator.
- This card can be added without requiring any special adjustments to the typical analog audio input section; by updating it there is no need to change the exciter firmware.
- The system provides for twelve cyclical queries that allow you to immediately find the active channel and put it on the air. If a digital input is present, then it is automatically selected by the included logic. The automatic exchange takes place to select the digital input between balanced (AES/EBU) or optical (TOSLINK).
- Through the two trimmers, it is possible to adjust the converted digital input level, to normalize the R and L signals with respect to the adjusted level for the analog input.
- The D/A conversion is performed automatically by 24-bit converters using a sampling frequency from 32 to 96 KHz.
- This card supports S/PDIF, AES/EBU, IEC958, and EIAJ CP340/1201 data formats.

AUDIGIN-TEX Option



Digital Input

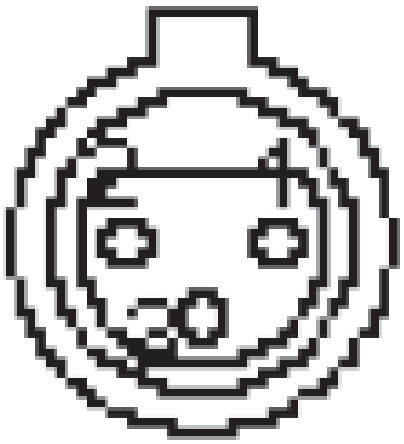
- **Type:** TOS-LINK Female



Left (MONO) / Right

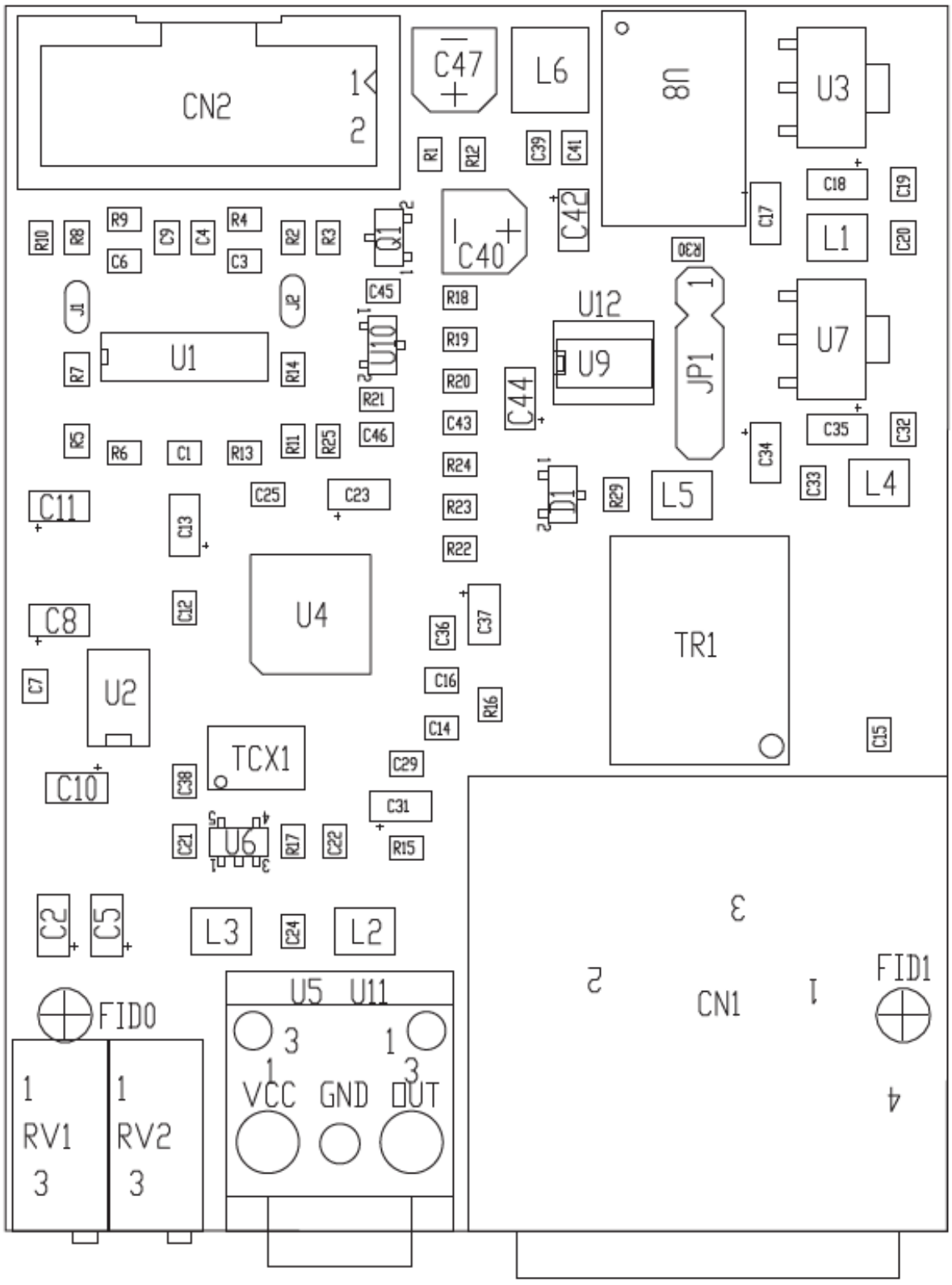
Type: XLR Female

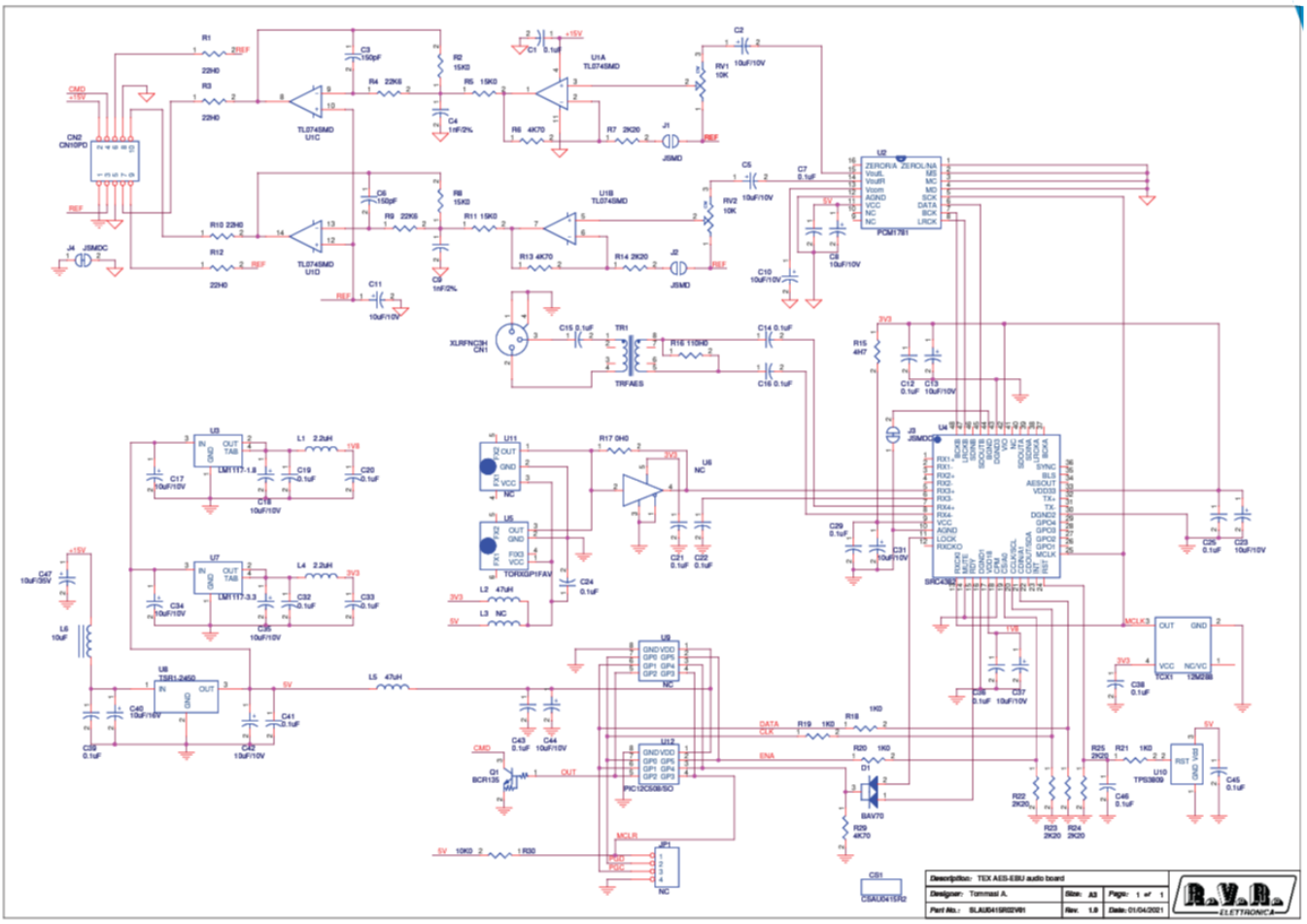
1. GND
2. Positive
3. Negative



Technical Annex

AES/EBU Audio Card – SLAU0415R02V01


CN2
C47
L6
U8
U3
R1
R12
C39
C41
C18
C19
C42
C17
L1
C20
C40
R30
R10
R8
R9
C9
C4
R4
R2
R3
Q1
C6
C3
C45
R18
U12
U9
JP1
U7
J1
J2
U10
R19
U1
R7
R14
R20
C44
C21
C43
C35
C32
R5
R6
C1
R13
R11
R25
C46
R24
C34
C33
L4
C11
C25
C23
R29
L5
R23
C13
R22
TR1
U4
C8
C12
C36
C37
C7
U2
C16
R16
C14
C15
TCX1
C29
C10
C38
C31
U6
R17
C22
R15
C2
C5
L3
C24
L2
U5 U11
FID1
CN1
FID0
VCC GND OUT
RV1
RV2



TEX AES-EBU audio board

- Revised: Thursday, April 01, 2021 SLAU0415R02V01
- Revision: 1.0

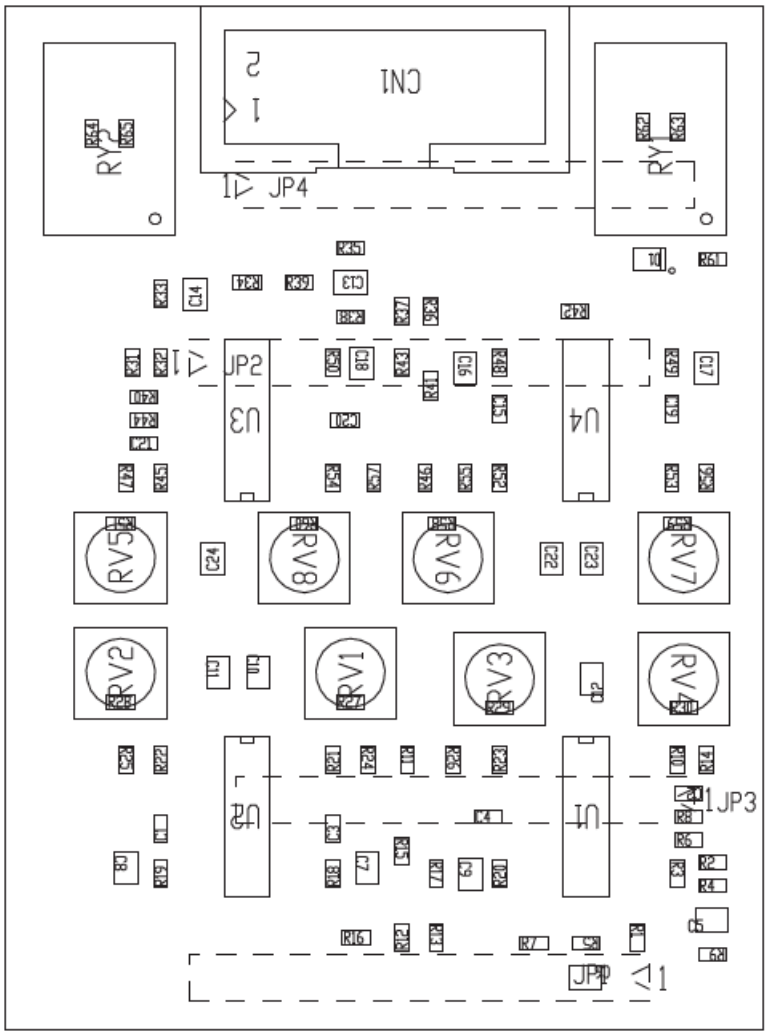
Tommasi A.

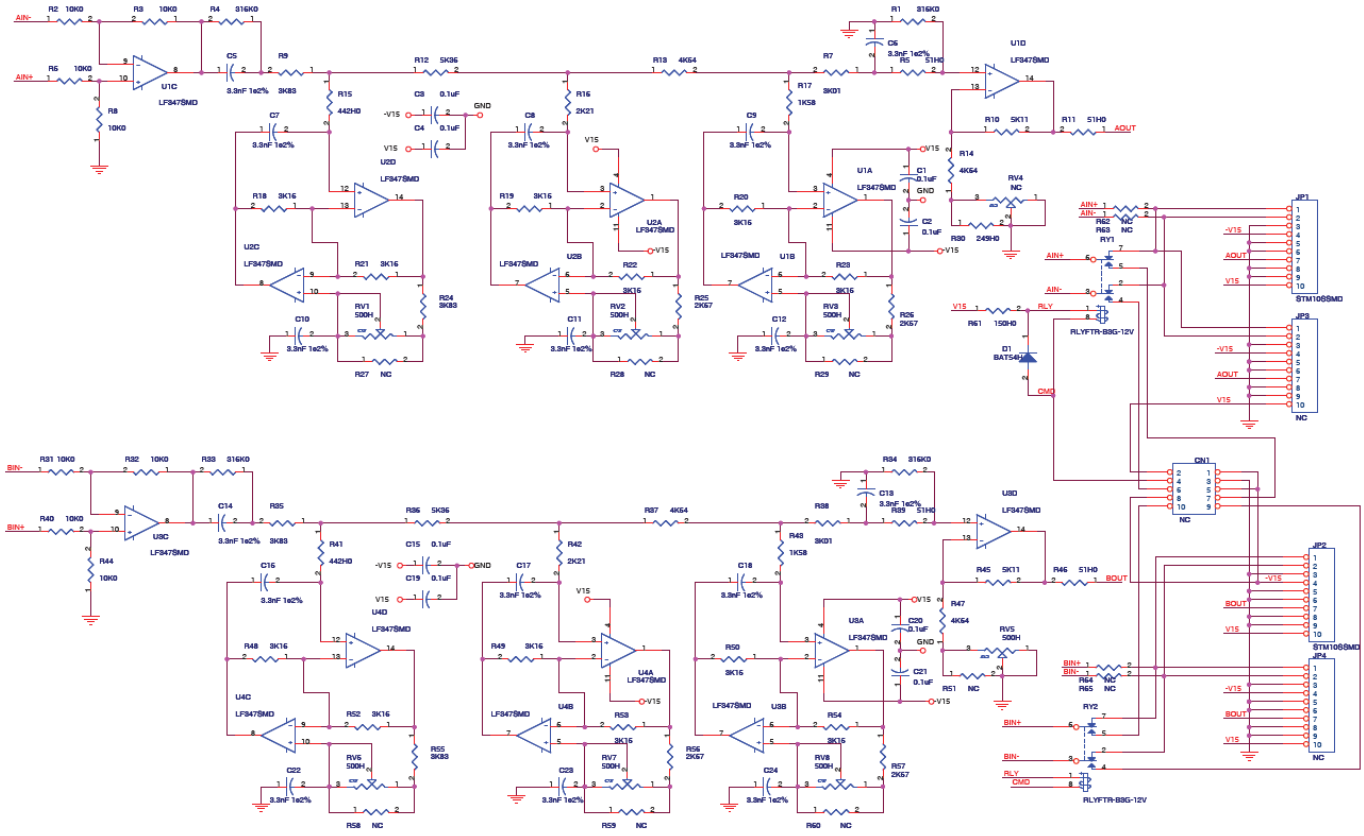
Item	Quantity	Reference	Part	Description
1	1	CN1	XLRFNC3H	Connettore XLR NC3 femm. cs 90°
2	1	CN2	CN10PD	Connettore 10 poli Flat cs
3	1	CS1	CSAU0415R2	Circuito stampato
4	22	C1, C7, C12, C14, C15, C16, C19, C20, C21, C22, C24, C25, C29, C32, C33, C36, C38, C39, C41, C43, C45, C46	0.1uF	Cond. SMD 0805
5	15	C2, C5, C8, C10, C11, C13, C17, C18, C23, C31, C34, C35, C37, C42, C44	10uF/10V	Cond. Elett. SMD tant. size A
6	2	C3, C6	150pF	Cond. SMD 0805 COG

7	2	C4, C9	1nF/2%	Cond. SMD 0805 COG
8	1	C40	10uF/16V	Cond. Elett. SMD d. 4mm
9	1	C47	10uF/35V	Cond. Elett. SMD d. 4mm
10	1	D1	BAV70	Doppio Diodo SMD SOT23
11	1	JP1	NC	Strip maschio 4 pin
12	2	J1, J2	JSMD	Pad SMD a saldare
13	2	J3, J4	JSMDC	Pad SMD a saldare chiuso
14	2	L1, L4	2.2uH	Induttanza SMD 3225 (1210)
15	2	L2, L5	47uH	Induttanza SMD 3225 (1210)
16	1	L3	NC	Induttanza SMD 3225 (1210)
17	1	L6	10uF	SMD Vertical Ind. WE PD2 s eries
18	1	Q1	BCR135	Trans./Res. NPN SOT23
19	2	RV1, RV2	10K	Trimmer Rg H 3296X
20	4	R1, R3, R10, R12	22H0	Res. SMD 0805 1%
21	4	R2, R5, R8, R11	15K0	Res. SMD 0805 1%
22	2	R4, R9	22K6	Res. SMD 0805 1%
23	3	R6, R13, R29	4K70	Res. SMD 0805 1%
24	6	R7, R14, R22, R23, R24, R25	2K20	Res. SMD 0805 1%
25	1	R15	4H7	Res. SMD 0805 1%
26	1	R16	110H0	Res. SMD 0805 1%
27	1	R17	0H0	Res. SMD 0805 1%
28	4	R18, R19, R20, R21	1K0	Res. SMD 0805 1%
29	1	R30	10K0	Res. SMD 0805 1%
30	1	TCX1	12M288	OSC SMD 5×3.2mm
31	1	TR1	TRFAES	Trasf. SMD AES/EBU
32	1	U1	TL074SM D	Quad Op. SMD SO14
33	1	U2	PCM1781	Stereo DAC
34	1	U3	LM1117-1. 8	Stab. SMD SOT223
35	1	U4	SRC4382	2 ch SRC DIR DIT

36	1	U5	TORXGP1 FAV	Ricevitore digitale ottico
37	1	U6	NC	Level translator
38	1	U7	LM1117-3.3	Stab. SMD SOT223
39	1	U8	TSR1-2450	Switching SIP3 regulator
40	1	U9	NC	PIC Microprocessor SMD
41	1	U10	TPS3809	uP supply supervisor
42	1	U11	NC	Ricevitore digitale ottico
43	1	U12	PIC12C508/SO	PIC Microprocessor SMD

15kHz audio filter & AES/EBU card – SLAU0469R01V01





Audio Filter 15Khz TEX w AES/EBU Revised: 17/05/2017 SLAU0469R01V01 Revision: 1.1

A. Tommasi

Item	Quantity	Reference	Part	Description	Code	
1	1	CN1	NC	Conn. 10 poli Flat cs		
2	1	CS1	CSAU0469R1	Circuito stampato	CSAU0469R1	
3	8	C1, C2, C3, C4, C15, C19, C20, C21	0.1uF	Cond. SMD 0603	CCC063104KXC	
4	16	C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C16, C17, C18, C22, C23, C24	3.3nF 1o 2%	Cond. SMD 0805 COG	CCC085332GCB	
5	1	D1	BAT54H	SOD323 SMD Diode	DISBAT54HT1G	
6	2	JP1, JP2	STM10SSMD	Male strip 10 pin SMD	CNTSTMT10SDLS	Precidip 350-10-110-00-106101
7	2	JP3, JP4	NC	Male strip 10 pin SMD		
8	7	RV1, RV2, RV3, RV5, RV6, RV7, RV8	500H	Trimmer SMD V 3314	RVT4X4H0500V	

9	1	RV4	NC	Trimmer SM D V 3314		
10	2	RY1, RY2	RLYFTR -B3G-12 V	Rele' FTR-B 3G	RLM2V12 V2AS	Fujitsu FTR-B3G A 012 o FTR-B3S A 0 12
11	4	R1, R4, R33, R34	316K0	Res. SMD 0 603	RCH063F 0316K	
12	8	R2, R3, R6, R8, R31, R32, R40, R44	10K0	Res. SMD 0 603	RCH063F 0010K	
13	4	R5, R11, R39, R46	51H0	Res. SMD 0 603	RCH063F 0051H	
14	2	R7, R38	3K01	Res. SMD 0 603	RCH063F 03K01	
15	4	R9, R24, R35, R55	3K83	Res. SMD 0 603	RCH063F 03K83	
16	2	R10, R45	5K11	Res. SMD 0 603	RCH063F 05K11	
17	2	R12, R36	5K36	Res. SMD 0 603	RCH063F 05K36	
18	4	R13, R14, R37, R47	4K64	Res. SMD 0 603	RCH063F 04K64	
19	2	R15, R41	442H0	Res. SMD 0 603	RCH063F 0442H	
20	2	R16, R42	2K21	Res. SMD 0 603	RCH063F 02K21	
21	2	R17, R43	1K58	Res. SMD 0 603	RCH063F 01K58	
22	12	R18, R19, R20, R21, R22, R23, R48 , R49, R50, R52, R53, R54	3K16	Res. SMD 0 603	RCH063F 03K16	
23	4	R25, R26, R56, R57	2K67	Res. SMD 0 603	RCH063F 02K67	
24	11	R27, R28, R29, R51, R58, R59, R60 , R62, R63, R64, R65	NC	Res. SMD 0 603		
25	1	R30	249H0	Res. SMD 0 603	RCH063F 0249H	
26	1	R61	150H0	Res. SMD 0 603	RCH063F 0150H	
27	4	U1, U2, U3, U4	LF347S MD	Quad Op. S MD SO14	CILLF347 SMD	

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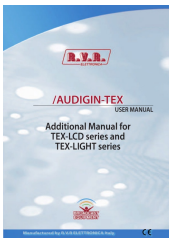
Documents / Resources

	RVR ELETTRONICA TEX-LCD Series FM Transmitters [pdf] User Manual AUDIGIN-TEX, TEX-LCD Series, TEX-LIGHT Series, TEX-LCD Series FM Transmitters, FM Transmitters