



**CENTRE OF TESTING SERVICE
INTERNATIONAL**

OPERATE ACCORDING TO ISO/IEC 17025

LVD TEST REPORT

TEST REPORT NUMBER : CGZ3140813-02845-L-D



CTS (Ningbo) Testing Service Technology Co., Ltd.
Fl.2 South Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park,
Ningbo, China

Table of contents

1.	General Information	2
1.1	Notes	2
1.2	Tester	3
1.3	Testing laboratory	4
1.4	Application details	4
1.5	Test item description	5
1.6	Test standards	6
2.	Technical test	7
2.1	Summary of test results	7
2.2	Test environment	7
2.3	Conformity verification - Summary of inspection	8
3.	Test Results	9
3.1	Particulars: test item vs. test requirements	9
3.2	General requirements and results	11
3.3	Annex as stated in the standards	29
3.4	Tables	32
	Manufacturer/ Approval holder Declaration	38
	Attachments	39

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service

1 General Information

1.1 Notes

The purpose of conformity testing is to increase the probability of adherence to the essential requirements or conformity specifications, as appropriate.

The complexity of the technical specifications, however, means that full and thorough testing is impractical for both technical and economic reasons.

Furthermore, there is no guarantee that a test sample which has Passed all the relevant tests conforms to a specification (only telecommunication products).

Neither is there any guarantee that such a test sample will interwork with other genuinely open systems.

The existence of the tests nevertheless provides the confidence that the test sample possesses the qualities as maintained and that its performance generally conforms to representative cases of communications equipment.

The test results of this test report relate exclusively to the item tested as specified in 1.5.

The test report may only be reproduced or published in full.

Reproduction or publication of extracts from the report requires the prior written approval of the Centre of Testing Service

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

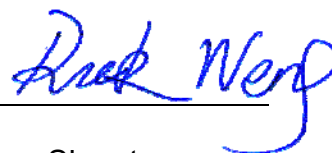
See Reverse For Terms And Conditions of Service

1.2 Tester**Tested by:**15 August 2014Kate Zhang

Date

Name

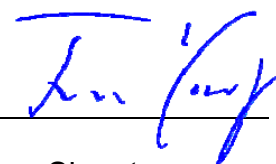
Signature

Reviewed by:15 August 2014Rock Weng

Date

Name

Signature

Approved by:15 August 2014Jun Yang

Date

Name

Signature



Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service

1.3 Testing laboratory

1.3.1 Location

CTS (Ningbo) Testing Service Technology Co., Ltd.
Fl. 2 South Huoju Building, No. 181. Canghai Rd., Jiangdong High-tech Park,
Ningbo, China

Telephone: + 86-574-87912121

Telefax : + 86-574-87907993

1.3.2 Test location, where different from CTS:

Name: ./.

Street: ./.

Town: ./.

Country: ./.

Telephone: ./.

Fax: ./.

Teletex: ./.

1.4 Client details

1.4.1 Details of applicant

Name : Guangzhou BaoLun Electronics Co., Ltd.

Street : No.1 Building, Zhongcun Industrial B Zone,

Town : Zhongcun Street, Panyu, Guangzhou,

Country : China

Telephone : +86-020-84548170

Fax : +86-020-39907268

Teletex : /

Contact : /

Telephone : /

1.4.2 Details of manufacturer

Name : Guangzhou BaoLun Electronics Co., Ltd.
Street : No.1 Building, Zhongcun Industrial B Zone,
Town : Zhongcun Street, Panyu, Guangzhou,
Country : China
Telephone : +86-020-84548170
Fax : +86-020-39907268
Teletex : /

Contact : /
Telephone : /

1.4.3 Details of factory

Name : Guangzhou BaoLun Electronics Co., Ltd.
Street : No.1 Building, Zhongcun Industrial B Zone,
Town : Zhongcun Street, Panyu, Guangzhou,
Country : China

1.4.4 Dates of application

Date of receipt of application : 25 November 2013
Date of receipt of test item : 25 November 2013
Date of test : 25 November – 17 December 2013

1.5 Test item Description**1.5.1 Description of test item**

Type of product : Mixer Amplifier
Model/Type reference : TI-60U
Serial number : ---

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



1.5.2 Test item particulars

Test item	Mixer Amplifier
Trade Mark	ITC
Appliance Mobility	<input checked="" type="checkbox"/> PORTABLE APPARATUS; <input type="checkbox"/> TRANSPORTABLE APPARATUS; <input type="checkbox"/> Others: N/A
Protection Class.....	<input checked="" type="checkbox"/> Class I; <input type="checkbox"/> Class II; <input type="checkbox"/> Others:
RATED SUPPLY VOLTAGE (Range).....	220-230Vac
Rated MAINS Frequency	<input type="checkbox"/> 50Hz; <input type="checkbox"/> 60Hz; <input type="checkbox"/> 50/60Hz; <input type="checkbox"/> DC; <input checked="" type="checkbox"/> Other: 50-60 Hz
Rated Power(Current) CONSUMPTION.....	100 W
Degree of Protection.....	<input checked="" type="checkbox"/> IP20; <input type="checkbox"/> IP24; <input type="checkbox"/> Other:
Fed from	<input checked="" type="checkbox"/> MAINS; <input type="checkbox"/> SUPPLY APPARATUS FOR GENERAL USE; <input type="checkbox"/> SPECIAL SUPPLY APPARATUS; <input type="checkbox"/> Batteries; <input type="checkbox"/> REMOTE POWER FEEDING; <input type="checkbox"/> Other: N/A
Mass of Equipment	7,0 Kg
Dimension of Equipment.....	---
Instructions language.....	<input checked="" type="checkbox"/> English; <input type="checkbox"/> French; <input type="checkbox"/> Other:

(all informations was provided by the applicant or detected at the sample)
Please see also attachment

1.6 Test standards

EN 60065: 2002 + A1: 2006 + A11: 2008 + A2: 2010 + A12: 2011
 Audio, video and similar electronic apparatus- Safety requirements
 (IEC 60065: 2001 + A1: 2005 + A2: 2010)

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

2 Technical test

2.1 Summary of test results

No deviations from the technical specification(s) were ascertained in the course of the tests performed.

2.2 Test environment

Temperature:	15 ... 35 °C
Relative humidity content:	20 ... 75 %
Air pressure:	86 ... 103 kPa
Details of power supply:	220-240V, AC
Other parameters:	---

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service

2.3 Conformity verification - Summary of inspection

Clause	Summary of inspection	Test result		
		N.A.	Pass	Fail
3	General requirements	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4	General test conditions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	Marking and instructions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	Hazardous radiations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Heating under normal operating conditions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	Constructional requirements with regard to protection against electric shock	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9	Electric shock hazard under normal operating conditions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	Insulation requirements	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11	Fault conditions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12	Mechanical strength	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13	Clearances and creepage distances	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14	Components	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15	Terminals	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16	External flexible cords	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17	Electrical connections and mechanical fixings	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
18	Mechanical strength of picture tubes and protection against the effects of implosion	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	Stability and mechanical hazards	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
20	Resistance to fire	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Annexes		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Test case verdicts

N.A.: Test case does not apply to the test object

Pass: Test item does meet the requirement

Fail: Test item does not meet the requirement

3 Test results basic standard(s)

3.1 Particulars: test item vs. Test requirements

IEC 60065 and/or EN 60065 Audio, video and similar electronic apparatus- Safety requirements	
Possible test case verdicts:	
- test case does not apply to the test object.....	N(N.A.)
- test object does meet the requirement.....	P(Pass)
- test object does not meet the requirement.....	F(Fail)
Test specification:	
Standard	<input checked="" type="checkbox"/> IEC 60065: 2001 (Seventh Edition) + am1: 2005 + am2: 2010 <input checked="" type="checkbox"/> EN 60065:2002 + A1: 2006 + A11: 2008 + A2: 2010+ A12: 2011
Test procedure	LVD DOC approval.
Non-standard test method.....	N/A
Test Report Form No.	IECEN 60065_A
Test Report Form(s) Originator	Centre of Testing Service
Master TRF.....	Dated Jan 2012
Copyright blank test report	Centre of Testing Service

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service

General remarks:

“(see remark #)” refers to a remark appended to the report.

“(see appended table)” refers to a table appended to the report.

Throughout this report a comma is used as the decimal separator.

The test results presented in this report relate only to the object tested.

This report shall not be reproduced except in full without the written approval of the testing laboratory.

Product description :

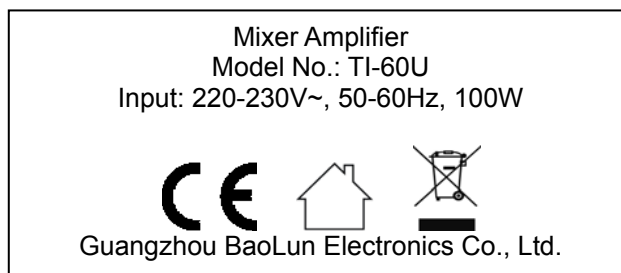
- The equipment is designated as a professional apparatus by manufacturer, and intended for indoor use, but not intended for sale to the general public.
- The equipment can be supplied by AC mains only via detachable power cord set, the mains plug and mains cord shall be evaluated within the national approval.
- All models covered by this report are identical, except their model designation and appearance, all tests were conducted on the model TI-60U.

Special description:

This is an additional report which is base on original report CGZ3131204-03622-L-R1 and tested model TI-60U.

There are no any difference among the original model except for the applicant name.

No need to conduct any test.

Copy of marking plate:**Remarks:**

- The above markings are the minimum requirements required by safety standard. For the final production, the additional markings which do not give rise to misunderstanding may be added.
- The marking label was silk-screened or labeled on rear enclosure.
- The CE marking and WEEE symbol should be at least 5,0 mm and 7,0 mm respectively in height.
- The model no. can be replaced by others listed in this report.

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



3.2 General requirements and results

IEC 60065 and/or EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
3	GENERAL REQUIREMENTS		—
	Safety class of the apparatus	Class I apparatus.	P

4	GENERAL CONDITIONS OF TESTS		—
4.1.4	Ventilation instructions require the use of the test box	No test box used The appliance is positioned in accordance with the instructions for use provided by the manufacturer.	P

5	MARKING		—
	Comprehensible and easily discernible	Yes / No	P
	Permanent durability against water and petroleum spirit	Yes / No Tested and complied with.	P
5.1	Identification, maker, model	See marking plate.	P
	Class II symbol if applicable		N
	Rated supply voltage and symbol	See marking plate.	P
	Frequency if safety dependant	See marking plate.	P
	Rated current or power consumption for apparatus supplied by supply apparatus for general use	AC mains directly supplied apparatus.	N
	Measured current or power consumption		N
	Deviation % (max 10%)		N
	Rated current or power consumption for apparatus intended for connection to an a.c. mains supply.....	100W, 220-230V~	P
	Measured current or power consumption	(see appended table 7.1)	P
	Measured current or power consumption for Television set		N
	Deviation % (max 10%)	(see appended table 7.1)	P
5.2	Earth terminal	Symbol marked.	P
	Hazardous live terminals	Symbol marked.	P
	Supply output terminals (other than mains)	No such parts.	N
5.3	Use of triangle with exclamation mark	Marked in circuit diagram and mentioned in user manual.	P

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



IEC 60065 and/or EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
5.4	Instructions for use	Marking and instruction for use provided in English. Version of other languages will be provided when it is submitted for national approval.	P
5.4.1	Mains powered equipment not exposed to dripping or splashing. Warning concerning objects filled with liquid, etc.	Indoor use and mentioned in instruction manual.	P
	Hazardous live terminals, instructions for wiring	This Information with regard to the safety is given in an instruction for installation or use.	P
	Instructions for replacing lithium battery	No battery used	N
	Instructions for modem if fitted		N
	Class I earth connection warning	Connected to a MANS socket outlet with a protective earthing connection.	P
	Instructions for multimedia system connection	Provided in user's manual.	P
	Special stability warning for fixed installation		N
5.4.2	Disconnect device: plug/coupler or all-pole mains switch location, accessibility and markings	An appliance coupler / inlet provided and remain readily operable.	P
	Instructions for permanently connected equipment	Not permanently connected equipment.	N
	Marking, signal lamps or similar for completely disconnection from the mains		N

6	HAZARDOUS RADIATION		—
6.1	Ionizing radiation < 36 pA/kg (0,5 mR/h)	No ionizing radiation	N
	European Council Directive 96/29/Euratom of 13 May 1996 10cm from outer surface of apparatus <1µSv/h (0,1mR/h)		N
6.2	Laser radiation, emission limits to IEC 60825-1	No laser radiation	N
	Emission limits under fault conditions		N

7	HEATING UNDER NORMAL OPERATING CONDITIONS		—
7.1	Temperature rises not exceeding specified values, no operation of fuse links	(see appended table)	P

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



IEC 60065 and/or EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
7.1.1	Temperature rise of accessible parts	(see appended table)	P
7.1.2	Temperature rise of parts providing electrical insulation	(see appended table)	P
7.1.3	Temperature rise of parts acting as a support or as a mechanical barrier	No such parts.	N
7.1.4	Temperature rise of windings	(see appended table)	P
7.1.5	Parts not subject to a limit under 7.1.1 to 7.1.4	(see appended table)	P
7.2	Softening temperature of insulating material supporting parts conductively connected to the mains carrying a current > 0,2 A at least 150°C	No such parts.	N

8	CONSTRUCTIONAL REQUIREMENTS WITH REGARD TO THE PROTECTION AGAINST ELECTRIC SHOCK		—
8.1	Conductive parts covered by lacquer, paper, untreated textile oxide films and beads etc. considered to be bare	No shock hazard.	P
8.2	No shock hazard when changing voltage setting device, fuse-links or handling drawers etc.	Tools are required.	N
8.3	Insulation of hazardous live parts not provided by hygroscopic material	No hygroscopic materials used as the insulation.	P
8.4	No risk of electric shock following the removal of a cover which can be removed by hand	Tools are required.	N
8.5	Class I equipment		P
	Basic insulation between hazardous live parts and earthed accessible parts	Considered and complied with.	P
	Resistors bridging basic insulation complying with 14.1 a)	No such parts.	N
	Capacitor or RC-unit bridging basic insulation complying with 14.2.1 a)	No such parts.	N
8.6	Class II equipment and Class II constructions within Class I equipment	Class II constructions within class I equipment.	P
	Reinforced or double insulation between hazardous live parts and accessible parts	Hazardous live parts to accessible parts are separated by either reinforced or double insulation.	P
	Components bridging reinforced or double insulation complying with 14.1 a) or 14.3		N
	Basic and supplementary insulation each being bridged by a capacitor complying with 14.2.1 a)		N

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



IEC 60065 and/or EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
	Reinforced or double insulation being bridged with 2 capacitors in series complying with 14.2.1 a)		N
	Reinforced or double insulation being bridged with a single capacitor complying with 14.2.1 b)		N
	Basic insulation bridged by components complying with 14.3.4.3		N
8.7	This clause is void		---
8.8	Basic or supplementary insulation > 0,4 mm (mm) :		N
	Reinforced insulation > 0,4 mm (mm) :		N
	Thin sheet insulation	See below.	P
	Basic or supplementary insulation, at least two layers, each meeting 10.3		N
	Basic or supplementary insulation, three layers any two of which meet 10.3		N
	Reinforced insulation, two layers each of which meet 10.3	Two layers insulation tape between primary and secondary winding of transformers used as reinforced insulation. Each of two layers can withstand dielectric strength test specified in 10.3 (test voltage; 4240Vpeak).	P
	Reinforced insulation, three layers any two which meet 10.3		N
8.9	Adequate insulation between internal hazardous live conductors and accessible parts		P
	Adequate insulation between internal hazardous live parts and conductors connected to accessible parts		P
8.10	Double insulation between conductors connected to the mains and accessible parts	Class I apparatus.	N
8.11	Detaching of wires		P
	No undue reduction of creepages or clearance distances if wires become detached	Conductors with mechanical securing and quick connection. Primary and secondary lead wires separated by cable ties.	P
	Vibration test carried out :	See sub-clause 12.1.2.	P

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



IEC 60065 and/or EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
8.12	This clause is void		---
8.13	Adequate fastening of windows, lenses, lamp covers etc. (pull test 20 N for 10 s)	No access to hazardous live parts.	P
8.14	Adequate fastening of covers (pull test 50 N for 10 s)	No access to hazardous live parts.	P
8.15	No risk of damage to the insulation of internal wiring due to hot parts or sharp edges	Internal lead wire cannot touch hot parts or sharp edges.	P
8.16	Only special supply equipment can be used	Supplied from mains only, No such apparatus.	N
8.17	Insulated winding wire without additional interleaved insulation	No such winding.	N
8.18	Endurance test as required by 8.17		N
8.19	Disconnection from the mains	See below.	P
8.19.1	Disconnect device	Appliance coupler used.	P
	All-pole switch or circuit breaker with >3mm contact separation	No such device used as disconnect device.	N
8.19.2	Mains switch ON indication		N
8.20	Switch not fitted in the mains cord	Fitted in front enclosure.	P
8.21	Bridging components comply with clause 14	No such parts.	N
8.22	Non-separable thin sheet material	No such material.	N

9	ELECTRIC SHOCK HAZARD UNDER NORMAL OPERATING CONDITIONS		---
9.1	Testing on the outside		P
9.1.1	For voltages >1000 V ac or >1500 V dc complies with clause 13.3.1 for basic insulation	No such high voltage.	N
9.1.1.1	Open circuit voltages	All audio output terminals less than 120V for professional equipment.	P

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



IEC 60065 and/or EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
	Touch current measured from terminal devices using the network in annex D	- Between L/N and metallic enclosure with the protective earthing connection disconnected: U1: max. 40,2Vpeak U2: max. 2,1Vpeak (limited: Touch current to earth $\leq 3,5\text{mA rms.}$) Formula: measured $(2,1\text{Vpeak}/500)/1,414=$ 2,97mA rms. $<3,5\text{mA}$ - Between L/N and accessible secondary terminals: U1: max. 1,02Vpeak U2: max. 0,256Vpeak (Limited: $U1 \leq 35\text{Vpeak}$ and $U2 \leq 0,35\text{Vpeak}$)	P
	Discharge not exceeding 45 μC	Less than 45 μC .	P
	Energy of discharge not exceeding 350 mJ		N
9.1.1.2	Test with test finger and test probe	No access to hazardous live parts.	P
9.1.2	No hazardous live shafts of knobs, handles or levers	No access to hazardous live parts.	P
9.1.3	Ventilation holes and other holes tested by means of 4 mm x 100 mm test pin	No access to hazardous live parts.	P
9.1.4	Terminal devices tested with 1 mm x 20 mm test pin (10 N); test probe D of IEC 61032	No access to hazardous live parts.	P
	Terminal devices tested with 1 mm x 100 mm straight wire (1 N); test probe D of IEC 61032	No access to hazardous live parts.	P
9.1.5	Pre-set controls tested with 2.5 mm x 100 mm test pin (10 N); test probe C of IEC 61032	No such control.	N
9.1.6	No shock hazard due to stored charge on withdrawal of the mains plug; voltage (V) after 2 s :	No such parts.	N
	If C is not greater than 0,1 μF no test needed		N
9.1.7	Enclosure sufficiently resistant to external force		P
	Test probe 11 of IEC 61032 for 10 s (50 N)	No damage to the enclosure.	P
	Test hook of fig. 4 for 10 s (20 N)	No damage to the enclosure.	P
	30 mm diameter test tool for 5 s (100 or 250 N):	250N applied at choose of manufacturer.	P

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



IEC 60065 and/or EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
9.2	No hazard after removing a cover by hand	Tools are required.	N

10	INSULATION REQUIREMENTS		—
10.1	Insulation resistance (MΩ) at least 2 MΩ min. after surge test for basic and 4 MΩ min. for reinforced insulation	Measured greater than 4 MΩ after surge test, between other terminals and mains supply terminals.	P
10.2	Humidity treatment 48 h or 120 h	48h, 30°C, 93%RH	P
10.3	Insulation resistance and dielectric strength	(see appended table 10.3)	P

11	FAULT CONDITIONS		—
11.1	No shock hazard under fault condition	Accessible voltage remained non-hazardous live.	P
11.2	Heating under fault condition	No fire hazard, no excessive temperature.	P
	Flames extinguish within 10 seconds	No flame.	N
	No hazard from softening solder	No hazards	N
	Soldered terminations not used as protective mechanism		N
11.2.1	Measurement of temperature rises	(see appended table)	P
11.2.2	Temperature rise of accessible parts	(see appended table)	P
11.2.3	Temperature rise of parts, other than windings, providing electrical insulation	(see appended table)	P
11.2.4	Temperature rise of parts acting as a support or mechanical barrier	No such parts	N
11.2.5	Temperature rise of windings	(see appended table)	P
11.2.6	Temperature rise of printed circuit boards (PCB) exceeding the limits of table 3 by max. 100 K for max. 5 min	PCB temperature rise did not exceed the limits of table 3.	N
	Printed circuit board (PCB) classified as V-0 according to 60695-11-10 or clause G.1 may exceed the limited in table 3 in case a) and b):		N
	a) Temperature rise of printed circuit boards (PCB) to 20.1.3, exceeding the limits of table 3 by not more than 100 K for an area not greater than 2 cm ²		N

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



IEC 60065 and/or EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
	b) Temperature rise of printed circuit boards (PCB) to 20.1.3 up to 300 K for an area not greater than 2 cm ² for a maximum of 5 min		N
	Meets all the special conditions if conductors on printed circuit boards are interrupted		N
	Class I protective earthing maintained		P
11.2.7	Temperature rise of parts not subject to the limits of 11.2.1 to 11.2.5	(see appended table)	P

12	MECHANICAL STRENGTH		—
12.1.1	Bump test where mass >7 kg	No damage after the test.	P
12.1.2	Vibration test	No damage after the test.	P
12.1.3	Impact hammer test	No damage after the impact test.	P
	Steel ball test	No damage after the steel ball test.	P
12.1.4	Drop test for portable apparatus where mass < 7 kg	No portable apparatus.	N
12.1.5	Thermoplastic enclosures strain relief test	Metallic enclosure.	N
12.2	Fixing of knobs, push buttons, keys and levers	No damage.	P
12.3	Remote controls with hazardous live parts	No such parts.	N
12.4	Drawers (pull test 50 N, 10 s)	No such parts.	N
12.5	Antenna coaxial sockets providing isolation	No such parts.	N
12.6	Telescoping or rod antennas construction	No such parts.	N
12.6.1	Telescoping or rod antennas securement	No such parts.	N

13	CLEARANCE AND CREEPAGE DISTANCES		—
13.1	Clearances in accordance with 13.3	Pollution degree: 2	P
	Creepage distances in accordance with 13.4	Pollution degree 2 and material group IIIb.	P
13.2	Determination of operating voltage		P
13.3	Clearances		P
13.3.2	Circuits conductively connected to the mains comply with table 8 and, where applicable, table 9	(see appended table)	P
13.3.3	Circuits not conductively connected to the mains comply with table 10		N

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



IEC 60065 and/or EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
13.3.4	Measurement of transient voltages		N
13.4	Creepage distances		P
	Creepage distances greater than table 11 minimum values.	(see appended table)	P
13.5	Printed boards	No such PCB.	N
13.5.1	Clearances and creepage distances between conductors on printed circuit boards, one of which may be conductively connected to the mains, as in fig. 10		N
13.5.2	Type B coated printed circuit boards complying with IEC 60664-3 (basic insulation only)		N
13.6	Conductive parts along uncemented joints clearances and creepage distances comply with 13.3 and 13.4	No such component.	N
	Conductive parts along reliably cemented joints comply with 8.8		N
13.7	Enclosed, enveloped or hermetically sealed parts: not conductively connected to the mains: clearances and creepage distances as in table 12	No such component.	N
13.8	Parts filled with insulating compound, meeting the requirements of 8.8	No such component.	N

14	COMPONENTS		—
14.1	Resistors		N
	a) Resistors between hazardous live parts and accessible metal parts	No such component.	N
	b) Resistors, other than between hazardous live parts and accessible parts		N
	b) Resistors separately approved		N
14.2	Capacitors and RC units		N
	Capacitors separately approved		N
14.2.1	Y capacitors tested to IEC 60384-14, 2nd edition		N
14.2.2	X capacitors tested to IEC 60384-14, 2nd edition ..		N
14.2.3	Capacitors operating at mains frequency but not connected to the mains: tests for X2	No such component.	N

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



IEC 60065 and/or EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
14.2.5	Capacitors with volume exceeding 1750 mm ³ , where short-circuit current exceeds 0,2 A: compliance with IEC60384-1, 4.38 category B or better		N
	Capacitors with volume exceeding 1750 mm ³ , mounted closer to a potential ignition source than table 5 permits: compliance with IEC 60 384-1, 4.38 category B or better		N
	Shielded by a barrier to V-0 or metal		N
14.3	Inductors and windings		P
	Comply with IEC 61558-1, IEC 61558-2 (as relevant) and clause 20.1.4		N
14.3.1	Transformers and inductors marked with manufacturer's name and type	Marked on transformers.	P
	Transformers and inductors separately approved ..	Tested with appliance.	N
14.3.2	General		P
14.3.3	Constructional requirements		P
14.3.3.1	Clearances and creepage distances comply with clause 13	See appended table.	P
14.3.3.2	Transformers meet the constructional requirements		P
14.3.4	Separation between windings		P
14.3.4.1	Class II transformers have adequate separation between hazardous live parts and accessible parts (double or reinforced insulation)	Transformer insulation tape used as reinforced insulation provided between primary windings and secondary windings.	P
	Coil formers and partition walls > 0,4 mm		N
14.3.4.2	Class I transformers, with basic insulation and protective screening only if all 7 conditions of 14.3.4.2 are met		N
14.3.4.3	Separating transformers with at least basic insulation		N
14.3.5.1	Class II transformers have adequate insulation between hazardous live parts and accessible parts (double or reinforced insulation)	See sub-clause 14.3.4.1.	P
	Coil formers and partition walls > 0,4 mm		N

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



IEC 60065 and/or EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
14.3.5.2	Class I transformers have adequate insulation between hazardous live parts and accessible conductive parts or those conductive parts or protective screens connected to a protective earth terminal	Class II transformer used.	N
	Winding wires connected to protective earth have adequate current-carrying capacity		N
14.4	High voltage components	No high voltage components.	N
	High-voltage components and assemblies: U > 4 kV (peak) separately approved		N
	Component meets category V-1 of IEC 60707		N
14.4.1	High voltage transformers and multipliers tested as part of the submission		N
14.4.2	High voltage assemblies and other parts tested as part of the submission		N
14.5	Protective devices		P
	Protective devices used within their ratings		P
	External clearances and creepage distances meet requirement of clause 13 for the voltage across the device when opened	(see appended table 13.)	P
14.5.1.1	a) Thermal cut-outs separately approved	No such parts.	N
	b) Thermal cut-outs tested as part of the submission		N
14.5.1.2	a) Thermal links separately approved		N
	b) Thermal links tested as part of the submission		N
14.5.1.3	Thermal devices re-settable by soldering		N
14.5.2.1	Fuse-links in the mains circuit according to IEC 60127	Approved fuse-link used. (see appended table 14)	P
14.5.2.2	Correct marking of fuse-links adjacent to holder ... :		P
14.5.2.3	Not possible to connect fuses in parallel		P
14.5.2.4	Not possible to touch hazardous live parts when replacing fuse-links without the use of a tool	Complied with.	P
14.5.3	PTC-S thermistors comply with IEC 60730-1	None.	N
	PTC-S devices (15 W) category V-1 or better		N
14.5.4	Circuit protectors have adequate breaking capacity and their position is correctly marked		N
14.6	Switches	Approved mains switch used.	P

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



IEC 60065 and/or EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
14.6.1 a)	Separate testing to IEC 61058 including: 10 000 operations Normal pollution suitability Resistance to heat and fire level 3 and V-0 compliance with annex G, G.1.1		P
14.6.1 b)	Tested in the apparatus:		N
	Switch controlling > 0.2A with open contact voltage > 35 V (peak)/24 V dc complying with 14.6.3, 14.6.4 and V-0 in annex G, G.1.1		N
	Switch controlling > 0.2A with open contact voltage < 35 V (peak)/24 V dc complying with 14.6.3 and V-0 in annex G, G.1.1		N
	Switch controlling < 0.2A with open contact voltage > 35 V (peak)/24 V dc complying with 14.6.4 and V-0 in annex G, G.1.1		N
14.6.2	Switch tested to 14.6.1 b) constructed to IEC 61058-1 subclause 13.1 and has making/breaking action independent of speed of actuation		N
14.6.3	Switch tested to 14.6.1 b) compliant with IEC 61058-1 subclause 16.2.2 d) and m) not attaining excessive temperatures in use		N
14.6.4	Switch tested to 14.6.1 b) has adequate dielectric strength		N
14.6.5	Mains switch controlling mains socket outlets additional tests to IEC 60058-1	No such switch used.	N
	Socket outlet current marking correct		N
14.7	Safety interlocks	None.	N
	Safety interlocks to 2.8 of IEC 60950		N
14.8	Voltage setting devices		N
	Voltage setting device not likely to be changed accidentally		N
14.9	Motors	No such parts	N
14.9.1	Endurance test on motors		N
	Motor start test		N
	Dielectric strength test		N
14.9.2	Not adversely affected by oil or grease etc.		N
14.9.3	Protection against moving parts		N
14.9.4	Motors with phase-shifting capacitors, three-phase motors and series motors meet clause. B.8, B.9 and B.10 of IEC 60950, Annex B		N

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



IEC 60065 and/or EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
14.10	Batteries		N
14.10.1	Batteries mounted with no risk of accumulation of flammable gases		N
14.10.2	No possibility of recharging non-rechargeable batteries		N
14.10.3	Recharging currents and times within manufacturers limits		N
	Lithium batteries discharge and reverse currents within the manufacturers limits		N
14.10.4	Battery mould stress relief		N
14.10.5	Battery drop test		N
14.11	Optocouplers		N
	Optocouplers comply with Cl. 8		N
	Internal and external dimensions to 13.1. or alternatively 13.6 (jointed insulation)		N
14.12	Surge suppression varistors		N
	Comply with IEC 61051-2		N
	Not connected between mains and accessible parts except for earthed parts of permanently connected apparatus		N
	Complies with the current pulse, fire hazard and thermal stress requirements of 14.12		N

15	TERMINALS		—
15.1.1	Mains plug, appliance inlet, interconnection couplers and mains socket-outlet meet the appropriate standard	(see appended table 14)	P
	Overloading of plugs or appliance inlets prevented if the apparatus has mains socket outlets		N
	Overloading of internal wiring prevented if the apparatus has mains socket outlets		N
15.1.2	Connectors for antenna, earth, audio, video or data:		P
	No risk of insertion in mains socket-outlets	Mismatch of connector is prevented by its incompatible form or location.	P
	No risk of insertion into audio or video: outlets marked with the symbol of 5.2	No outlets marked with the symbol of 5.2.	N

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



IEC 60065 and/or EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
15.1.3	Output terminals of a.c. adaptors or similar devices not compatible with household mains socket-outlets	No such output terminal.	N
15.2	Provision for protective earthing		P
	Accessible conductive parts of Class I equipment reliably connected to earth terminal, within equipment	Complied with.	P
	Protective earth conductors correctly coloured	Green/yellow	P
	Equipment with non-detachable mains cord provided with separate protective earth terminal near mains input	Detachable mains cord provided.	N
	Protective earth terminal resistant to corrosion		P
	Earth resistance test: < 0,1 Ω at 25 A	Measured: 0,05 Ω	P
15.3	Terminals for external flexible cords and for permanent connection to the mains supply		N
15.3.1	Adequate terminals for connection of permanent wiring		N
15.3.2	Reliable connection of non-detachable cords:		N
	Not soldered to conductors of a printed circuit board		N
	Adequate clearances and creepage distances between connections should a wire break away		N
	Wire secured by additional means to the conductor		N
15.3.3	Screws and nuts clamping conductors have adequate threads: ISO 261, ISO 262 or similar		N
15.3.4	Soldered conductors wrapped around terminal prior to soldering or held in place by additional means		N
	Clamping of conductor and insulation if not soldered or held by screws		N
15.3.5	Terminals allow connection of appropriate cross-sectional area of conductors, for the rated current of the equipment		N
15.3.6	Terminals to 15.3.3 have sizes required by table 16		N
15.3.7	Terminals clamp conductors between metal and have adequate pressure		N
	Terminals designed to avoid conductor slipping out when tightened or loosened		N

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



IEC 60065 and/or EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
	Terminals adequately fixed to avoid loosening when the clamping is tightened or loosened and stress on internal wiring is avoided		N
15.3.8	Terminals carrying a current more than 0,2 A: contact pressure not transmitted by insulating material except ceramic		N
15.3.9	Termination of non-detachable cords: wires terminated near to each other		N
	Terminals located and shielded: test with 8 mm strand		N
15.4	Devices forming a part of the mains plug		N
15.4.1	No undue strain on mains socket-outlets		N
15.4.2	Device complies with standard for dimensions of mains plugs		N
15.4.3	Device has adequate mechanical strength (tests a,b,c)		N

16	EXTERNAL FLEXIBLE CORDS		—
16.1	Mains cords sheathed type, complying with IEC 60227 for PVC or IEC 60245 for synthetic rubber cords	Approved power cord used.	P
	Non-detachable cords for Class I have green/yellow core for protective earth	Intended for use with detachable power cord.	N
16.2	Mains cords conductors have adequate cross-sectional area for rated current consumption of the equipment	At least 3x0,75mm ²	P
16.3	a) Flexible cords not complying with 16.1, used for interconnections between separate units of equipment used in combination and carrying hazardous live voltages, have adequate dielectric strength	No such cord.	N
	b) Flexible cords not complying with 16.1, withstand bending and mechanical stress (3.2 of IEC 60227-2)		N
16.4	Flexible cords used for connection between equipment have adequate cross-sectional areas to avoid temperature rise under normal and fault conditions		N
16.5	Adequate strain relief on external flexible cords	Detachable power supply cord is used.	N

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



IEC 60065 and/or EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
	Not possible to push cord back into equipment		N
	Strain relief device unlikely to damage flexible cord		N
	For mains cords of Class I equipment, hazardous live conductors become taut before earth conductor		N
16.6	Apertures for external flexible cord: no risk of damage to the cord during assembly or movement in use		N
16.7	Transportable musical instruments and amplifiers fitted with detachable cord set with appliance inlet to IEC 60320-1		N
	Transportable musical instruments and amplifiers fitted with detachable cord sets or with means of stowage to protect the cord		N

17	ELECTRICAL CONNECTIONS AND MECHANICAL FIXINGS		—
17.1	Torque test to table 20:		P
	- screws into metal: 5 times	Metal screw with diameter 3 mm for fastening of metallic enclosure.	P
	- screws into non-metallic material: 10 times		N
17.2	Correct introduction into female threads in non-metallic material		N
17.3	Cover fixing screws: captive	No reduction of clearance or creepage distance.	P
	Non-captive fixing screws: no hazard when replaced by a screw whose length is 10 times its diameter	No hazard when replaced by a screw whose length is 10 times nominal diameter.	P
17.4	No loosening of conductive parts carrying a current > 0,2 A	All conductive parts are fixed on PCB by at least two soldering points.	P
17.5	Contact pressure not transmitted through plastic other than ceramic for connections carrying a current > 0,2 A	Complied with.	P
17.6	Stranded conductors of flexible supply cords carrying a current > 0,2 A with screw terminals not consolidated by solder		N
17.7	Cover fixing devices other than screws have adequate strength and their positioning is unambiguous	No cover fixing devices.	N

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



IEC 60065 and/or EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
17.8	Fixing devices for detachable legs or stands provided	No detachable legs or stands.	N
17.9	Internal pluggable connections, affecting safety, unlikely to become disconnected	Internal pluggable connections have mechanical securing.	P

18	MECHANICAL STRENGTH OF PICTURE TUBES AND PROTECTION AGAINST THE EFFECTS OF IMPLOSION		—
	Picture tube separately approved to IEC 61965:	No CRT	N
	Picture tube separately approved to 18.1		N
18.1	Picture tubes > 16 cm intrinsically protected		N
	Non-intrinsically protected tubes > 16 cm used with protective screen		N
18.2	Intrinsically protected tubes: tests on 12 samples		N
18.2.1	Samples subject to ageing: 6		N
18.2.2	Samples subject to implosion test: 6		N
18.2.3	Samples subject to mechanical strength test (steel ball): 6		N
18.3	Non-intrinsically protected tubes tested to 18.3		N

19	STABILITY AND MECHANICAL HAZARDS		—
	Mass of the equipment exceeding 7 kg	Measured weight: max. 7Kg.	P
	Apparatus intended to be fastened in place – suitable instructions		N
19.1	Test on a plane, inclined at 10° to the horizontal	No hazard, No damage after the test.	P
19.2	100 N force applied vertically downwards	No hazard, No damage after the test.	P
19.3	Apparatus mass > 25 kg or height > 1 M or supplied with cart or stand		N
19.4	Edges or corners not hazardous	No sharp edges.	P
19.5	Glass surfaces with an area exceeding 0,1 m ² or maximum dimension > 450 mm, pass the test of 19.5.1	No such parts.	N
19.6	Wall or ceiling mountings adequate		N

20	RESISTANCE TO FIRE		—
----	--------------------	--	---

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



IEC 60065 and/or EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
20.1	Electrical components and mechanical parts		P
	a) Exemption for components contained in an enclosure of material V-0 to IEC 60707 with openings not exceeding 1 mm in width	Metallic enclosure provided.	N
	b) Exemption for small components as defined in 20.1		P
20.1.1	Electrical components meet the requirements of Clause 14 or 20.1.4		P
20.1.2	Insulation of internal wiring working at voltages > 4 kV or leaving an internal fire enclosure, not contributing to the spread of fire	No such high voltage.	P
20.1.3	Material of printed circuit boards on which the available power exceeds 15 W at a voltage between 50 V and 400 V (peak) a.c. or d.c. meets V-1 or better to IEC60707, unless used in a fire enclosure		N
	Material of printed circuit boards on which the available power exceeds 15 W at a voltage >400 V (peak) a.c. or d.c. meets V-0 to IEC 60707	V-0 PCB used.	P
20.1.4	Components and parts not covered by 20.1.1, 20.1.2 and 20.1.3 (other than fire enclosures) mounted nearer to a potential ignition source than the distances in Table 21 comply with the relevant flammability category in Table 21	(see appended table 14)	P
	Components and parts as above but shielded from a potential ignition source, with the barrier area in accordance with Table 21 and fig. 13		N
	Apparatus with voltages >4Kv under normal operating conditions and distances to the enclosure exceed those specified Table 21, flammability classification HB40 or better is required for the enclosure.		N
20.2	Fire enclosure		N
20.2.1	Potential ignition sources with open circuit voltage > 4 kV (peak) a.c. or d.c. contained in a fire enclosure to V-1	Less than 4 KV.	N
20.2.2	Internal fire enclosures with openings not exceeding 1 mm in width and with openings for wires completely filled		N
20.2.3	Requirements of 20.2.1 and 20.2.2 met by an internal fire enclosure		N

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service

3.3 Annex as stated in the standards

IEC 60065 and/or EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict

A	APPENDIX A, ADDITIONAL REQUIREMENTS FOR APPARATUS WITH PROTECTION AGAINST SPLASHING WATER		—
A.5.1	j) Marked with IPX4 (IEC 60529), 5.4.1 a) does not apply		N
A.10.2.1	Enclosure provides protection against splashing water		N
A.10.2.2	Humidity treatment carried out for 7 days		N

B	APPENDIX B, APPARATUS TO BE CONNECTED TO THE TELECOMMUNICATION NETWORKS		—
	Complies with IEC 62151 clause 1		N
	Complies with IEC 62151 clause 2		N
	Complies with IEC 62151 clause 3 but with 3.5.4 modified to 2.4.10 of this standard		N
	Complies with IEC 62151 clause 4 but with 4.1.2, 4.1.3 and 4.2.1.2 modified in accordance with annex B of this standard		N
	Complies with IEC 62151 clause 5 but with 5.3.1 modified in accordance with annex B of this standard		N
	Complies with IEC 62151 clause 6		N
	Complies with IEC 62151 clause 7		N
	Complies with IEC 62151 annex A, B and C		N

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



IEC 60065 and/or EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
ZB	ANNEX ZB TO EN 60 065, SPECIAL NATIONAL CONDITIONS		—
2.6.1	DK: certain types of Class I apparatus, see 15.1.1, may be provided with a plug not establishing earthing continuity when inserted in Danish socket-outlets		N
13.3.1	NO: In Norway, due to IT power distribution system used, the a.c. MAINS supply voltage is considered to be equal to the line-to-line voltage, and will remain 230V in case of a single earth fault.		P
15.1.1	DK: mains cord for single-phase equipment having a rated current not exceeding 10 A shall be provided with a plug according to Heavy Current Regulations Section 107-2-D1		N
	DK: Class I equipment with socket-outlets with earthing contact, or which are intended to be used in locations where protection against indirect contact is required shall be provided with a plug in compliance with Standard Sheet DK 2-1a		N
	DK: socket-outlets for providing power to Class II equipment with a rated current of 2,5 A shall have dimensions according to the drawing on page 131 of EN 60 065:98 other dimensions shall be to IEC 60 083 Standard Sheet C 1a for portable socket-outlets		N
	DK: mains socket-outlets with earthing contact shall comply with Heavy Current Regulations Section 107-2-D1, Standard Sheet DK 1-3a, DK 1-5a or DK 1-7a		N
	GB: equipment fitted with a flexible cable or cord provided with a 13A BS 1363 plug as in Statutory Instrument 1768:94		N
	IE: equipment fitted with a flexible cable or cord provided with a 13 A plug in accordance with Statutory Instrument 525:97		N
	NO: mains socket-outlets on Class II equipment meet CEE Publication 7 with the following amendments:		N
	- dimensions 2,5 A, 250 V socket-outlets shall comply with Standard Sheet 1 page 132 of EN 60 065:98	No socket-outlet provided.	N
	- mechanical strength 2,5 A, 250 V socket-outlets tested as specified in EN 60 065, 12.1.3	No socket-outlet provided.	N

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



IEC 60065 and/or EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
	- protecting rim also tested		N
	NO: method b) of 8.1 is not permitted. Double or reinforced insulation is required between parts connected to the mains and parts connected to the public telecommunications network		N
J.2	NO: In Norway, due to IT power distribution system used, the a.c. MAINS supply voltage is considered to be equal to the line-to-line voltage, and will remain 230V in case of a single earth fault.		N

ZC	ANNEX ZC TO EN 60 065, A-DEVIATIONS		—
5	DE: additional markings required in German language:		N
	- cathode ray tubes with an accelerating voltage between 20 kV and 30 kV (marking on the tube)	No CRT.	N
	- TV receivers whose picture tube has an accelerating voltage between 20 kV and 30 kV	No TV receivers.	N
	- TV receivers whose picture tube has an accelerating voltage greater than 30 kV	No TV receivers.	N
	- TV receivers whose picture tube has an accelerating voltage less than 20 kV	No TV receivers.	N
5.1	IT: additional markings on the outside of the TV receiver in Italian language	No TV receivers.	N
	IT: user instructions in Italian language including a conformity declaration	No TV receivers.	N
	IT: certification number on the back cover	No TV receivers.	N
14	SE: Switches containing mercury such as thermostats, relays and level controllers are not allowed.	No such parts.	N

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



3.4 Tables

IEC 60065 and/or EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
7.1	TABLE: temperature rise measurements		P
	Power consumption in the OFF/Stand-by	---	N
	Position of the functional switch (W)	---	—
Operating conditions			
A 1kHz sinusoidal waveform signal was applied to the input of the audio amplifier. The apparatus was operated to deliver one-eighth of the non-clipped output power.			
Un (V)	In (A)	Pn (W)	Pout (W)
198/50Hz	1,50	98,0	---
198/60Hz	1,50	98,0	---
220/50Hz	1,36	96,5	---
220/60Hz	1,36	96,5	---
230/50Hz	1,30	96,0	---
230/60Hz	1,30	96,0	---
253/50Hz	1,10	92,0	---
253/60Hz	1,10	92,0	---
	Loudspeaker impedance (Ω)	16 ohms max.	—
	Several loudspeaker systems	---	N
	Marking of loudspeaker terminals	See attachments	N
Monitored point:		dT (K)	
		Limit dT (K)	
Test voltage		198V, 60Hz /	253V, 50Hz

Power cord		5,7	5,5
			60
Inlet near Line		23,9	22,8
			35
Power switch		9,9	10,3
			65
Internal input wires		18,8	18,4
			70
PCB under AC in		34,2	31,9
			85
PCB under F1		33,3	32,8
			85
C18 body		33,9	33,7
			50
Mains transformer windings		67,8	69,5
			85
Metallic enclosure		8,6	8,8
			40

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

F1.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



IEC 60065 and/or EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict

Knob body	6,0	6,2	50
Ambient	25,7	27,2	---

Notes:

- 1) The temperatures for the EUT was measured under worst case normal mode.
- 2) The max. temperature rise is calculated as follows which based upon maximum working ambient of 35°C:

Winding components:

- insulated with polyurethane resins -> ΔT max=85K

User accessible parts with:

- Metallic enclosure -> ΔT max =40 K
- Knobs -> ΔT max =50 K

Winding temperature rise measurements					N
Ambient temperature t1 (°C)			---	---	
Ambient temperature t2 (°C)			---	---	
Temperature rise dT of winding:	R1 (Ω)	R2 (Ω)	dT (K)	Limit dT (K)	Insulation class
Primary winding of mains transformer	---	---	---	---	---
Secondary winding of mains transformer	---	---	---	---	---

7.2	TABLE: softening temperature of thermoplastics			N
Temperature T of part	T - normal conditions (°C)	T - fault conditions (°C)	T softening (°C)	
---	---	---	---	

10.3	TABLE: insulation resistance measurements		P
Insulation resistance R between:		R (MΩ)	Required R (MΩ)
Different poles of mains		200	Min.2
Live parts of mains and metallic enclosure		200	Min.2
Live parts of mains and accessible secondary terminals		200	Min.4
Mains transformer: Primary and secondary windings		200	Min.4

10.3	TABLE: insulation strength measurements		P
Test voltage applied between:		Test voltage (Vpeak)	Breakdown

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



IEC 60065 and/or EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict

Different poles of mains		2120	No
Live parts of mains and metallic enclosure		2120	No
Live parts of mains and accessible secondary terminals		4240	No
Mains transformer: Primary and secondary windings		4240	No
One layer of insulation tape		2120	No

11.2	TABLE: summary of fault condition tests		P
	Voltage (V) 0,9 or 1,1 times rated voltage	253V	—
	Ambient temperature (°C)	25,7	—
Monitored point: Under fault conditions specified below		dT (K)	Limit dT (K)
Mains transformer output (+VCC to GND), shorted-circuit, 15min, 207V, I=1,5A->2,80->0,05A, the fuse-link (F2) opened, the test was carried out three times using new components , No higher temperature rise exceeding its limit occurred. No hazard,		Mains transformer windings: 135,5 K PCB: 100,0 K	Mains transformer windings: 150 K PCB:110 K
Mains transformer output (+VCC to GND), shorted-circuit, 15min, 253V, I=1,1A->0,05A, the fuse-link (F2) opened, the test was carried out three times using new components , No higher temperature rise exceeding its limit occurred. No hazard,		Mains transformer windings: 135,5 K PCB: 100,0 K	Mains transformer windings: 150 K PCB:110 K
100% max. Non-clipped output power to the rated load impedance, 4h, 207V, I=2,05A, unit operated normally, No hazard.		Mains transformer windings: 80,2 K PCB: 50,0 K	Mains transformer windings: 150 K PCB:110 K
100% max. Non-clipped output power to the rated load impedance, 4h, 253V, I=1,90A, unit operated normally, No hazard.		Mains transformer windings: 80,2 K PCB: 50,0 K	Mains transformer windings: 150 K PCB:110 K
Mains transformer output (+VCC to GND), overloaded, 4h, 207V, I=1,5A->2,0A->2,4A->2,75A->0A , the fuse-link (F2) opened, the test was carried out three times using new components , No higher temperature rise exceeding its limit occurred. No hazard,		Mains transformer windings: 145,2 K PCB: 105,0 K	Mains transformer windings: 150 K PCB:110 K

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



IEC 60065 and/or EN 60065			
Clause	Requirement – Test	Result - Remark	Verdict
	Mains transformer output (+VCC to GND), overloaded, 4h, 253V, I=1,1A->2,0A->2,4A->2,75A->0A , the fuse-link (F2) opened, the test was carried out three times using new components , No higher temperature rise exceeding its limit occurred. No hazard,	Mains transformer windings: 145,0 K PCB: 104,0 K	Mains transformer windings: 150 K PCB:110 K
	Ventilation-blocked, 4h, 207V, I=1,5A, No higher temperature rise exceeding its limit occurred. No hazard.	Mains transformer windings: 70,3 K PCB: 35,0 K	Mains transformer windings: 150 K PCB:110 K
	Ventilation-blocked, 4h, 253V, I=1,1A, No higher temperature rise exceeding its limit occurred. No hazard.	Mains transformer windings: 70,0 K PCB: 34,7 K	Mains transformer windings: 150 K PCB:110 K
	DC fan-stalled, 4h, 207V, I=1,75A, No higher temperature rise exceeding its limit occurred. No hazard	Mains transformer windings: 80,6 K PCB: 48,7 K	Mains transformer windings: 150 K PCB:110 K
	DC fan-stalled, 4h, 253V, I=1,37A, No higher temperature rise exceeding its limit occurred. No hazard	Mains transformer windings: 80,6 K PCB: 48,7 K	Mains transformer windings: 150 K PCB:110 K
Note(s): 1) Winding components: Mains transformer windings->T max=150K. PCB-> T max=110K 2) After each above fault condition tests, the apparatus complied with insulation resistance and dielectric strength test as described in clause 10.3.			

13.1	TABLE: Clearances and creepage distances in accordance with 13.2					P
Rated supply voltage: 230V		Pollution degree: II		Material Group: IIIb		
2 N force on internal parts applied				Internal parts		P
30N force outside of conductive enclosure applied				Enclosure		P
Clearance cl and creepage distance dcr at/of:	Upeak (V)	U r.m.s (V)	Required cl (mm)	cl (mm)	Required dcr (mm)	dcr (mm)
Line to neutral (B)	420	230	2,0	3,0	2,3	3,0

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



IEC 60065 and/or EN 60065						
Clause	Requirement – Test			Result - Remark		Verdict
Connections of fuse (F1, F2) (B)	420	230	2,0	3,0	2,3	3,0
Hazard parts to accessibility metallic enclosure (B)	420	230	2,0	3,0	2,3	3,0
Mains transformer primary to secondary winding (R)	535	250	4,4	6,0	5,0	6,0
T1 secondary winding to iron core (R)	535	250	4,4	6,0	5,0	6,0
Hazard parts to secondary parts (R)	420	230	4,0	6,0	4,6	6,0
Note(s): 1. B=Basic insulation, S=Supplementary insulation, D=Double insulation, R=Reinforced insulation, Min=minimum required. 2. Cl= Clearance, Cr= Creepage distance. 3. Internal basic insulated wires fixed by cable tie and can not be removed when applied 2N on it. 4. No separate between primary and core , the core is considered as primary part. 5. There are at least two layers of insulation tape wrapped between primary winding and secondary winding of mains transformers.						

14	TABLE: list of critical components and materials					P
Component	Manufacturer/ trademark	Type/model	Value / rating	Standard	Mark(s) of conformity ¹⁾	
Power cord	YONG RUI	Plug: YR-102 Wire: H05VV-F Connector: YR-030	10A, 250Vac, 3 X 0,75mm ²	EN 50075 VDE 0281-5 EN 60320-1	VDE	
AC inlet with integrated fuse-holder	DongGuan NarKen Industry Investment Co.,Ltd.	XD-102	10A, 250Vac	IEC 60320-1 IEC 60127-6	VDE	
Mains fuse	WALTER ELECTRONIC CO.,LTD	TSD	T2AL, 250Vac	IEC 60127-2	VDE	
Secondary fuse(F1, F2)	WALTER ELECTRONIC CO.,LTD	TSD	T6,3AL, 250Vac	IEC 60127-2	VDE	
Power switch	SOKEN	RKI-01	16A, 250Vac, 10E3, 100°C	IEC/EN 61058-1	VDE	
Internal input wire	XIY	1672	16AWG, VW-1, 300V, 105°C	UL 758	UL	

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

F1.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



IEC 60065 and/or EN 60065					
Clause	Requirement – Test		Result - Remark		Verdict
Component	Manufacturer/ trademark	Type/model	Value / rating	Standard	Mark(s) of conformity ¹⁾
Alternative	CHENG XING	1015	16AWG, VW-1, 600V, 105°C	UL 758	UL
Metal enclosure	--	--	Min. 1.0 mm	IEC/EN 60065	Tested with appliance
PCB	Various	Various	V-0 or better, 130°C	UL796	UL
Transformer	RTD	BP-00006	I/P: 230V O/P: 30V, 14,5V, 11V.	IEC/EN 60065	Tested with appliance
- Magnet wire	Various	Various	130°C	IEC/EN 60065	Tested with appliance
- Insulation tape	JINGJIANG YAHUA PRESSURE SENSITIVE GLUE CO.,LTD	PZ, CT	130°C	IEC/EN 60065	Tested with appliance
DC fan	XINRUILIAN	RDM8025B	12Vdc, 0,15A	IEC/EN 60065	Tested with appliance
Heat-shrinkable tube	Various	Various	600V, 125°C, VW-1.	UL 224	UL
Supplementary information: - an asterisk indicates a mark which assures the agreed level of surveillance					

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service

Manufacturer/ Approval holder Declaration

The following identical model(s):

T-30C	T-60C	T-10AP	T-120C	T-20AP
T-40AP	T-60AP	T-120AP	T-30CA	T-60CA
T-120CA	T-60	T-120	T-240	T-350
T-550	T-650	T-60B	T-120B	T-240B
T-350B	T-550B	T-650B	T-60FP	T-120FP
T-240FP	T-350FP	T-500FP	T-60E	T-120E
T-240E	TI-60	TI-120	TI-240	TI-350
TI-550	TI-650	TI-60B	TI-120B	TI-240B
TI-350B	TI-550B	TI-650B	TI-120S	TI-240S
TI-350S	TI-500S	T-318	T-60U	T-120U
T-240U	T-60BU	T-120BU	T-240BU	TI-120U
TI-240U	TI-60BU	TI-120BU	TI-240BU	T-30T
T-60T	T-120T	T-61500		
T-40AP,	T-20AP,	T-10AP		

belong to the tested device:

Product description: **Mixer Amplifier**
Model name: **TI-60U**

No additional models were tested.

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service

Attachments

- Photo document
- BOM
- CDF (critical data form)
- Copies of certificates of certified components
- Instruction manual
- Circuit diagram
- Explosion block
- Other: Equipment list

-----End of report-----

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



Equipment list:

No.	Equipment No.	Equipment name	Model	Calibration date	Calibration interval	Due date	Status
1	CS06A2GM-005	Digital Oscilloscope	DS5102C	2012-11-25	2 years	2014-11-24	Passed
2	CS06A2GO-006	Oven	SC101-2 B	2013-6-10	1 year	2015-6-8	Passed
3	CS06A2GM-008	Humid&Temp. meter	TH-31	2013-6-10	1 year	2015-6-8	Passed
4	CS06A2GM-009	Torque tester for appliance plug	LJ-1	2013-10-18	1 year	2014-10-17	Passed
5	CS06A2GM-010	Force gauge	N-20	2013-6-10	1 year	2015-6-8	Passed
6	CS06A2GT-011	Ball pressure test apparatus	QY-1	2013-10-18	1 year	2014-10-17	Passed
7	CS06A2GT-012	Ball pressure test device	QY-1	2013-10-18	1 year	2014-10-17	Passed
8	CS06A2GT-013	Glow wire test apparatus	ZRS-2	2013-6-10	1 year	2015-6-8	Passed
9	CS06A2GT-015	Tracking test Apparatus	LDQ-1	2013-6-10	1 year	2015-6-8	Passed
10	CS06A2GT-016	Barrel test apparatus	GTD-1	2013-6-10	1 year	2015-6-8	Passed
11	CS06A2GT-017	Flexibility tester of power supply cable	QZ-1	2013-6-10	1 year	2015-6-8	Passed
12	CS06A2GM-018	Insulation test meter	LK2679A	2013-6-10	1 year	2015-6-8	Passed
13	CS06A2GM-019	Ground continuity test meter	CS2678	2013-10-18	1 year	2014.10.17	Passed
14	CS06A2GM-030	Temperature recording meter (30 channels)	DWC251 5	2013-6-10	1 year	2015-6-8	Passed
15	CS06A2GM-032	Push and pull meter	SN-300	2013-6-10	1 year	2015-6-8	Passed
16	CS06A2GM-033	Electric balance	BL-600	2013-6-10	1 year	2015-6-8	Passed
17	CS06A2GM-035	Digital callipers	CT200-10 6	2013-6-10	1 year	2015-6-8	Passed

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



No.	Equipment No.	Equipment name	Model	Calibration date	Calibration interval	Due date	Status
18	CS06B2GT-050	Dust-proof and dust tight-test chamber	JYSD-500	2013-10-18	1 year	2014-10-17	Passed
19	CS06B2GT-051	Rain-proof and splash-proof test device	JYBL-C	2013-6-10	1 year	2015-6-8	Passed
20	CS06B2GT-051-4	Water pressure meter	0-0.4MPa	2013-6-10	1 year	2015-6-8	Passed
21	CS06B2GT-051-5	Water pressure meter	0-0.4MPa	2013-6-10	1 year	2015-6-8	Passed
22	CS06B2GT-051-6	Water flowmeter	LZB-15(400L/h)	2012-8-24	2 years	2014-08-23	Passed
23	CS06B2GT-051-7	Water flowmeter	LZB-80(10m ³ /h)	2012-8-24	2 years	2014-08-23	Passed
24	CS06B2GT-052	Drip-proof test device	JYDL-C	2013-6-10	1 year	2015-6-8	Passed
25	CS06B2GT-053	High/low temp.& humid. Test apparatus	JYGDWS/P-100	2013-10-18	1 year	2014-10-17	Passed
26	CS06A2GM-055	Wattage meter	GDW3001	2013-6-10	1 year	2015-6-8	Passed
27	CS06A2GM-058	Digital multi-meter	EM3052	2013-6-10	1 year	2015-6-8	Passed
28	CS06A2GM-060	Angle meter	SLT-100	2013-6-10	1 year	2015-6-8	Passed
29	CS06A2GM-061	Digital calliper	DJT-150	2013-6-10	1 year	2015-6-8	Passed
30	CS06B2GT-066	Needle flame test apparatus	SH5403	2013-6-10	1 year	2015-6-8	Passed
31	CS06A2GT-067	Spring impact hammer (0.35J)	0.35J	2013-9-8	1 year	2014-9-7	Passed
32	CS06A2GT-068	Spring impact hammer (0.5J)	0.5J	2013-6-10	1 year	2015-6-8	Passed
33	CS06A2GT-070	Spring impact hammer (1.0J)	1J	2013-9-8	1 year	2014-9-7	Passed
34	CS06A2GT-081	Test Probe D	Test Probe D	2013-6-10	1 year	2015-6-8	Passed
35	CS06A2GT-082	Test Probe C	Test Probe C	2013-6-10	1 year	2015-6-8	Passed

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



CTS

CENTRE OF TESTING SERVICE

No.	Equipment No.	Equipment name	Model	Calibration date	Calibration interval	Due date	Status
36	CS06A2GT-083	Spring impact hammer (0.2J)	0.2J	2013-6-10	1 year	2015-6-8	Passed
37	CS06A2GT-085	Test Probe 1	Test Probe 1	2013-10-18	1 year	2014-10-17	Passed
38	CS06A2GM-086	Electric balance	BWS-501-150	2013-6-10	1 year	2015-6-8	Passed
39	CS06A2GT-088	Test Probe 11	Test Probe 11	2013-6-10	1 year	2015-6-8	Passed
40	CS06A2GT-089	Test Probe A	Test Probe A	2013-6-10	1 year	2015-6-8	Passed
41	CS06A2GT-090	Test Rod(EN60950)	EN 60950 bild 2C	2013-6-10	1 year	2015-6-8	Passed
42	CS06A2GT-091	Test nail	EN 60335-1	2013-6-10	1 year	2015-6-8	Passed
43	CS06A2GT-095	Stopwatch	--	2013-6-10	1 year	2015-6-8	Passed
44	CS06A2GO-096	Oven	SC101-2 B	2013-6-10	1 year	2015-6-8	Passed
45	CS06B2GT-097	IPX5 Spary nozzle	Nozzle: 6.3mm	2013-6-10	1 year	2015-6-8	Passed
46	CS06B2GT-098	IPX6 Spary nozzle	Nozzle: 12.5mm	2013-6-10	1 year	2015-6-8	Passed
47	CS06B2GT-099	Spray nozzle (For IPX3 and IPX4)	--	2013-6-10	1 year	2015-6-8	Passed
48	CS06B2GT-099-1	Water pressure meter	0-0.6MPa	2013-6-10	1 year	2015-6-8	Passed
49	CS06A2GM-100	Digital multi-meter	VICTOR 89A	2013-6-10	1 year	2015-6-8	Passed
50	CS06A2GM-120	Digital multi-meter	F189	2013-6-10	1 year	2015-6-8	Passed
51	CS06A2GM-121	Digital wattage meter	WT210	2013-6-10	1 year	2015-6-8	Passed
52	CS06A2GM-122	Temperature recording meter	MX100	2013-6-10	1 year	2015-6-8	Passed
53	CS06A2GM-123	Leakage current meter	Simpson 228	2013-6-3	1 year	2015-6-8	Passed

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



No.	Equipment No.	Equipment name	Model	Calibration date	Calibration interval	Due date	Status
54	CS06A2GM-125	Test gague for creepage and clearance test	CK-2	2013-6-10	1 year	2015-6-8	Passed
55	CS06A2GM-126	Test finger with round plate	ZX-11	2013-6-10	1 year	2015-6-8	Passed
56	CS06A2GM-127	Pull and torque test device for power cable	KXT131	2013-6-10	1 year	2015-6-8	Passed
57	CS06A2GM-128	Torque meter	N6LTDK	2013-6-10	1 year	2015-6-8	Passed
58	CS06A2GM-129	Torque meter	N30LTDK	2013-6-10	1 year	2015-6-8	Passed
59	CS06A2GM-130	Steel Ruler	0-500mm	2013-10-18	1 year	2014-10-17	Passed
60	CS06A2GM-131	Probe 41	ZX-12	2013-6-10	1 year	2015-6-8	Passed
61	CS06A2GM-132	Probe 13	ZX-13	2013-6-10	1 year	2015-6-8	Passed
62	CS06A2GM-140	Temp.& Humid recording device	7210-00	2013-6-10	1 year	2015-6-8	Passed
63	CS06A2GM-150	Probe B	ZX-11	2013-6-10	1 year	2015-6-8	Passed
64	CS07A2GM-151	Steel ruler	JC-568E	2013-10-18	1 year	2014-10-17	Passed
65	CS07A2GO-152	Microscope	JC-10	2013-10-18	1 year	2014-10-17	Passed
66	CS07A2GO-153	Frequency adjusting power supply	HPA-1105	2013-10-18	1 year	2014-10-17	Passed
67	CS07A1GT-155	Hi-pot meter	TOS5052	2013-10-18	1 year	2014-10-17	Passed
68	CS07A2GT-156	Test probe 41	--	2013-10-18	1 year	2014-10-17	Passed
69	CS07A2GO-157	Test voltage generator	TVG-950	2013-10-18	1 year	2014-10-17	Passed
70	CS09A2GO-001L	Durability test hot room	HY-DRF	2013-8-12	2 year	2015-8-12	Passed
71	CS09A2GO-003L	Draught-proof enclosure	HY-FFZ	2013-8-12	2 year	2015-8-12	Passed

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



No.	Equipment No.	Equipment name	Model	Calibration date	Calibration interval	Due date	Status
72	CS09A2GT-024L	Fluorescent lamp cathode replacement resistance load	HMDL-23 11A	2014-8-12	1 year	2015-8-12	Passed
73	CS09A2GT-036L	Load testing instrument of metal halide lamp	SH3324	2014-8-12	1 year	2015-8-12	Passed
74	CS12B2GO-006	Plug discharge test device	--	2014-8-12	1 year	2015-8-12	Passed
75	CS12B2GM-011	Controller temperature test box for lamps	DJR-1	2014-8-12	1 year	2015-8-12	Passed
76	CS12B2GM-016	Charged winding temperature rise tester	RC2012	2014-8-12	1 year	2015-8-12	Passed
77	CS12A2GT-001	No power roller test unit	/	2014-8-12	1 year	2015-8-12	Passed
78	CS12A2GT-002	Reel test device	JZS-G3	2014-8-12	1 year	2015-8-12	Passed
79	CS12B2GT-003	4mm metal test needle	4mm	2014-8-12	1 year	2015-8-12	Passed
80	CS12B2GT-004	Noise signal generator	DF1681	2014-8-12	1 year	2015-8-12	Passed
81	CS12B2GT-005	Tunable filter	F3760	2014-8-12	1 year	2015-8-12	Passed
82	CS12B2GO-006	Plug discharge test device	/	2014-8-12	1 year	2015-8-12	Passed
83	CS12B2GT-007	Dielectric strength tester	KQ-5	2014-8-12	1 year	2015-8-12	Passed
84	CS12A2GT-008	Steel ball	GQ-40	2014-8-12	1 year	2015-8-12	Passed
85	CS12A2GO-009	5000Ω resistor	5000Ω	2014-8-12	1 year	2015-8-12	Passed
86	CS12A2GO-010	2000Ω resistor	2000Ω	2014-8-12	1 year	2015-8-12	Passed
87	CS12A2GT-017	Vibration table	BZ-H/V	2014-8-12	1 year	2015-8-12	Passed
88	CS12A2GT-018	Scratching needle	THZ-4025	2014-8-12	1 year	2015-8-12	Passed

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service



No.	Equipment No.	Equipment name	Model	Calibration date	Calibration interval	Due date	Status
89	CS12A2GT-020	Test wedge	CX-ET	2014-8-12	1 year	2015-8-12	Passed
90	CS12A2GT-021	Drop plate	DL-50	2014-8-12	1 year	2015-8-12	Passed
91	CS12A2GT-022	30mm circular pressure plane	/	2014-8-12	1 year	2015-8-12	Passed
92	CS12A2GT-023	Test hook	/	2014-8-12	1 year	2015-8-12	Passed

Copyright of this report is owned by Centre of Testing Service and may not be reproduced other than in full except with the written approval of the issuing Company.

CTS (Ningbo) Testing Service Technology Co., Ltd.

Fl.2 south Huoju Building, No.181 Canghai Rd., Jiangdong High-tech Park, Ningbo, China

Tel: +86-574-87912121 (16 lines)

Fax: +86-574-87907993

Complaint line: +86-574-87908003

E-mail: cts@cts-lab.com

See Reverse For Terms And Conditions of Service

Attachment

Page 1 of 7

Type Designation:
Report Number:

Mixer Amplifier, TI-60U
CGZ3140813-02845-L-D



Figure 1 (External view - front)



Figure 2 (External view –rear with terminals cover)

Attachment

Page 2 of 7

Type Designation:
Report Number:

Mixer Amplifier, TI-60U
CGZ3140813-02845-L-D



Figure 3 (External view – rear without terminals cover)



Figure 4 (External view – side & top)

Attachment

Page 3 of 7

Type Designation:
Report Number:

Mixer Amplifier, TI-60U
CGZ3140813-02845-L-D



Figure 5 (External view – side & bottom)



Figure 6 (External terminals)

Attachment

Page 4 of 7

Type Designation:
Report Number:

Mixer Amplifier, TI-60U
CGZ3140813-02845-L-D



Figure 7 (Internal view -1)



Figure 8 (Internal view -2)

Attachment

Page 5 of 7

Type Designation:
Report Number:

Mixer Amplifier, TI-60U
CGZ3140813-02845-L-D



Figure 9 (Protective earthing terminal)

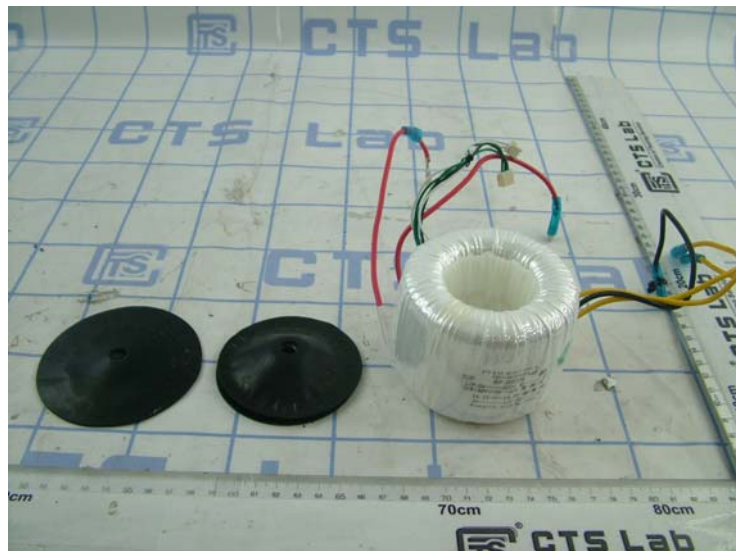


Figure 10 (Components - transformer top)

Attachment

Page 6 of 7

Type Designation:
Report Number:

Mixer Amplifier, TI-60U
CGZ3140813-02845-L-D

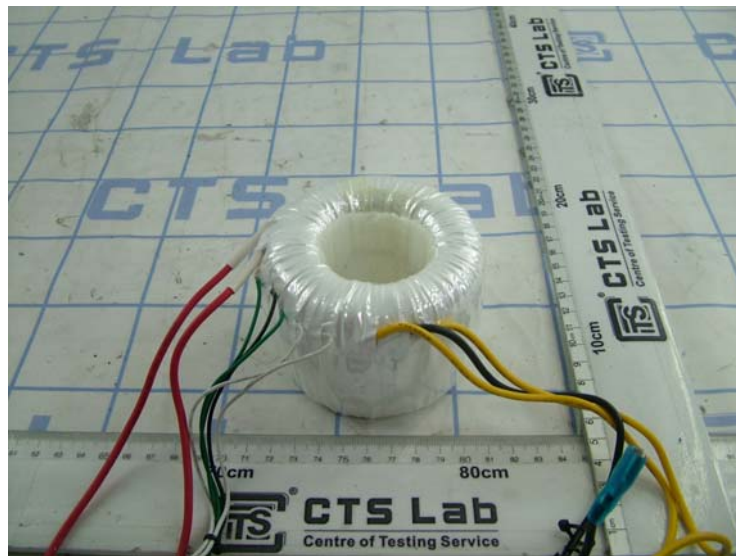


Figure 11 (Components – transformer bottom)

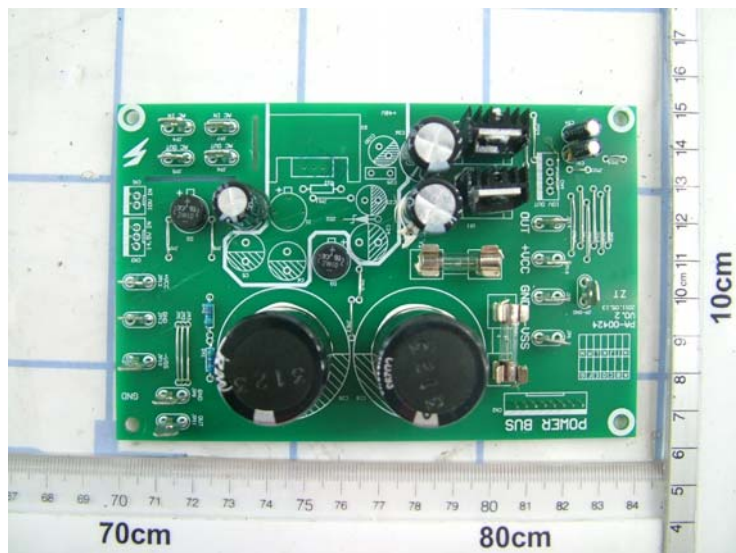


Figure 12 (PCB - components side)

Attachment

Page 7 of 7

Type Designation:
Report Number:

Mixer Amplifier, TI-60U
CGZ3140813-02845-L-D

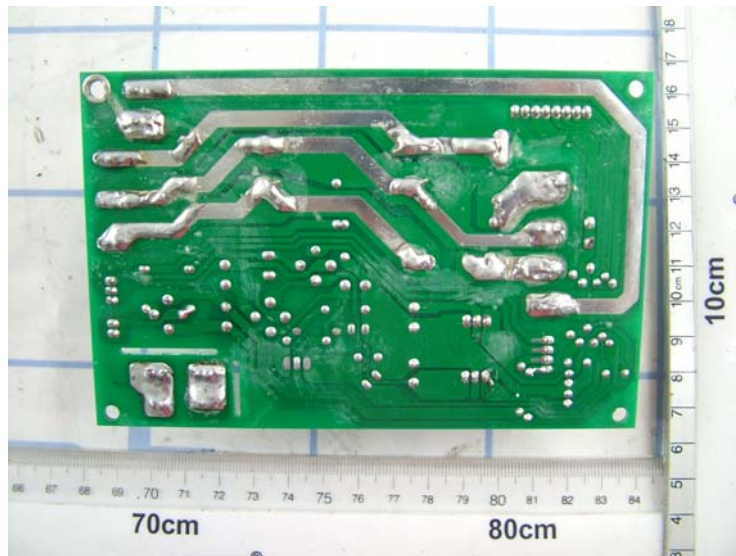


Figure 13 (PCB - solder side)