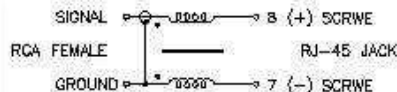
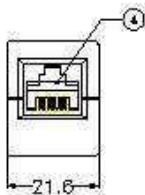
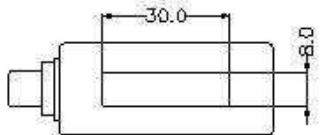
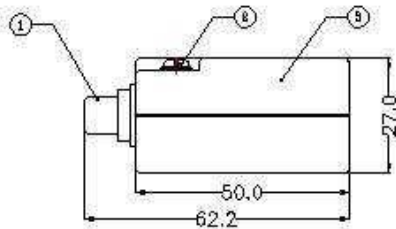
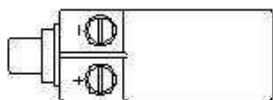


FILE NO.



TECHNICAL SPECIFICATION :

- TRANSMISSION BANDWIDTH DC (50Hz) TO 8MHz
- TRANSMISSION DISTANCE 800 METRES(24 AWG UTP) MAX.
- INSERTION LOSS < 2 dB
- SIGNAL RETURN LOSS  $\geq -15$ dB
- COMMON MODE REJECTION  $\geq -40$ dB @ 8MHz
- SIGNAL VOLTAGE 0.5 TO 1.5V rms

5	1 SET	TRANSFORMER 1:1	
4	1 SET	RJ45 JACK, GOLD SLD/ PAC WIRE 26 AWG UL-1041	
3	1 SET	PLASTIC SET(TOP, BOTTOM/SIDE COVER)	ABS UL94V-0
2	2 PCS	CAP HEAD TYPE SCREW	
1	1 SET	RCA FEMALE SOLDER TYPE	

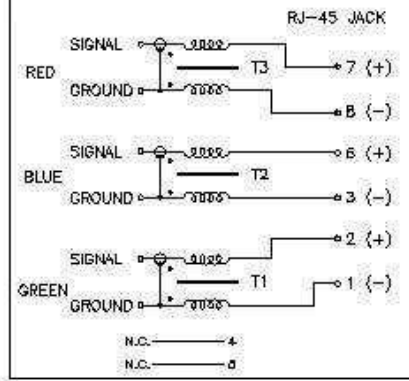
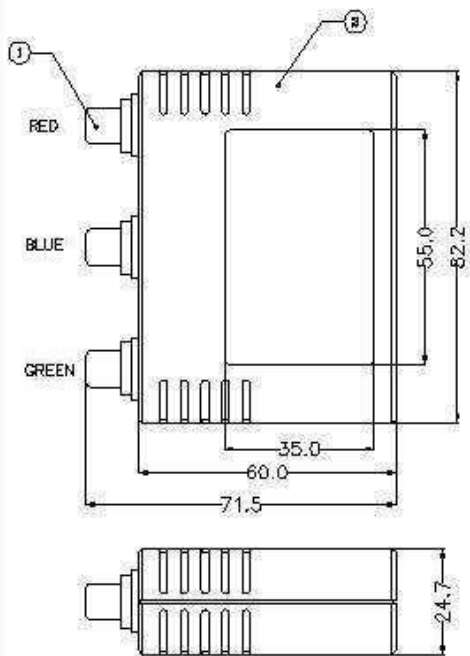
UNIT: mm	
TOLERANCE	
Ø	±0.25
mm	±0.1
ANGLES	±0.5°

TITLE: DCTV  
VIDEO BALUN (75 Ω : 100 Ω)  
RCA PLUG TO RJ45 UNSHIELDED JACK WITH SCREEN

MCM Custom Audio  
50-7710

DES NO.	03-4011-11	DRW	Stephen-Lin	DATE	May/30/2003
SCALE	1/1	SHEET	of	REVISION	DATE

FILE NO.



**SPECIFICATION:**

- Bandwidth : Video DC TO 3MHz
- Video Input : 1.1 Vp-p max.
- Insertion Loss : ≤ 2dB over the frequency range from DC to 8 MHz
- Return Loss : ≥15dB over the frequency range from DC to 8 MHz
- Common Mode Rejection : ≥40dB at 8 MHz
- Impedance : 75 ohms(Video)
- Cable-UTP : 24 gauge or lower solid copper twisted pair wire  
Impedance: 100 ohms at 1MHz  
Max. Capacitance: 20 pf/ft  
Attenuation: 6.6 dB/1000ft at 1 MHz
- Transmission Distotance : (Color) 330 feet (Cat 3 UTP) 500 feet (Cat 5 UTP)

NO.	QTY	MATERIAL	NOTE
4	1 Set	PCB SET (TRANSFORMER 1:1) x 3	
3	1 Set	PCB TYPE SHIELDED JACK, GOLD 50u"	
2	1 Set	PLASTIC SET(DR, BOTTOM SIDE COVER)	AS ULMW-0
1	3 PCS	RCA FEMALE SOLDER TYPE	

UNIT: mm  
 TOLERANCE:  
 DIMENSIONS:  
 ANGLES:  
 TITLE: RGB Video Balun  
 3 x RCA Female TO 1 x RJ45 Jack

**MCM Custom Audio**  
 50-7720

DWG NO. 03-R403-00  
 SCALE 1/1  
 DESIGNED BY Stephen-Lin  
 DATE 10/14/2004

FILE NO. \_\_\_\_\_

**1** **2** **3**

**4** **5** **6** **7** **8**

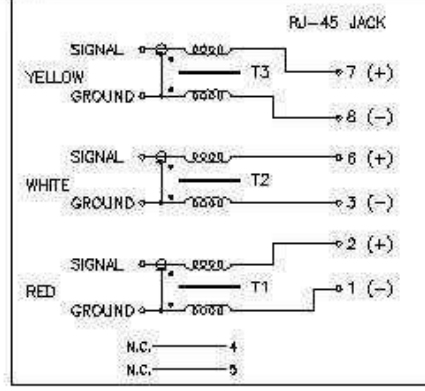
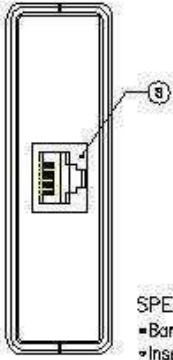
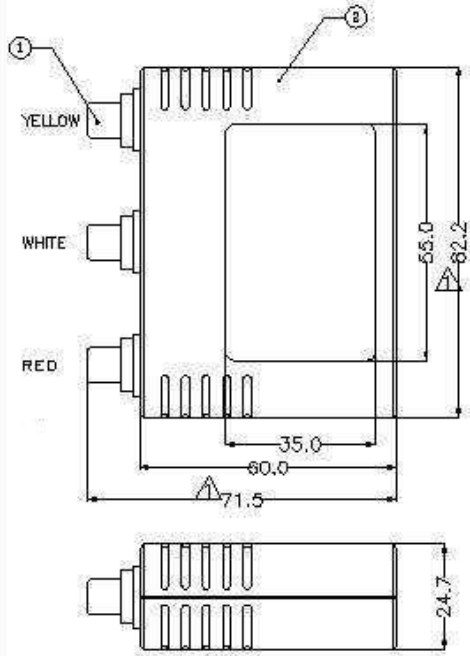
**SPECIFICATION:**

- Bandwidth : 10Hz to 50KHz  $\pm 3$  dB
- Impedance : 600:600 ohms (Audio) , unbalanced to balanced
- Connectors : two RCA to one RJ45
- Isolation : 500 V
- Nominal Level : 1.0 volts
- Insertion Loss : < 1dB
- Common Mode Rejection : Greater than 40 dB
- Cable-UTP : UTP:24 gauge or lower solid copper  
UTP : Impedance: 100 ohms at 1MHz  
Max. Capacitance: 20 pf/ft  
Attenuation: 6.6 dB/1000 ft at 1 MHz
- Max. Distance : 2500feet (Cat 6)
- Temperature : Operating: 0° to 55° C  
Storage: -20° to 85° C  
Humidity: up to 95%

NO.	NAME	QTY	MATERIAL	NOTE
4	P.C.B.	1 Set	TRANSFORMER 1d x 2	
3	RJ45 JACK	1 Set	PCB TYPE SHIELDED JACK, GOLD GAV	
2	PLASTIC SET	2 Set	TOP, BOTTOM, SIDE COVER-ABS (USAN-0 or EQUIVALENT)	
1	RCA CONNECTOR	2 Set	RCA FEMALE SOLIDER TYPE(RED,WHITE COLOR)	

UNIT: mm	TITLE: RCA AUDIO BALLUN DOUBLE RCA PLUG TO RJ45 SHIELED JACK	MCM Custom Audio 50-7725	REV. NO. 03-4049-00	DESIGNER: Stephan-Lin	DATE: 08/26/2002
TOLERANCE: DIM: .25, .1 HOLE: .05			SCALE: 1/1		

FILE NO.



**SPECIFICATION:**

- Bandwidth : Video DC TO 6MHz Audio 20Hz to 50KHz
- Insertion Loss :  $\leq 2\text{dB}$  over the frequency range from DC to 8 MHz
- Return Loss :  $\geq 15\text{dB}$  over the frequency range from DC to 8 MHz
- Common Mode Rejection :  $\geq 40\text{dB}$  at 8 MHz
- Impedance : RCA side 75 ohms (Video), 600 ohms (Audio)
- Cable : 24 gauge or lower solid copper twisted pair wire  
Impedance: 100 ohms at 1MHz  
Max. Capacitance: 20 pf/ft  
Attenuation: 6.6 dB/1000ft at 1MHz
- Transmission Distance : 500 feet (Cat 5 UTP)

4	1 Set	PCB SET (TRANSFORMER 14) x 3	
3	1 Set	PCB TYPE SHIELDED JACK GOLD 30A7	
2	1 Set	PLASTIC SET(TOP, BOTTOM)SIDE COVER	AB 1044-0
1	3 PCS	RCA FEMALE SOLDER TYPE	

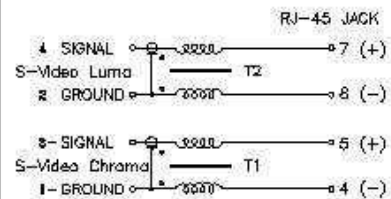
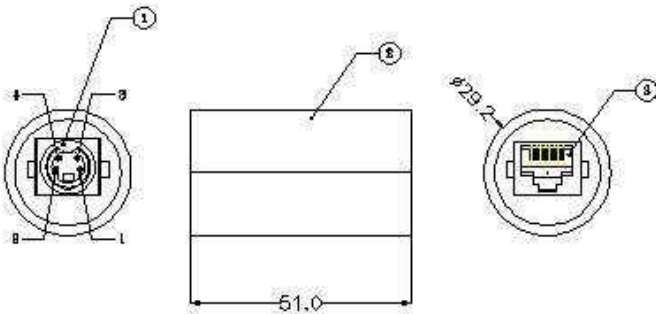
UNIT: mm	
TOLERANCE	
∅	±0.25
∅	±0.1
∅	±0.25
ANGLES	±1°

TITLE: CCTV  
 TRANSCIVER BOX (2A+D)  
 3 x RCA Female TO 1 x RJ45 Jack

MCM Custom Audio  
 50-7730

DES NO.	03-B259-00	ENGR	Stephen-Lin	DATE	04/20/2004
REV	1/1	CHKD		DATE	
REV		DESIGN DATE		DATE	
					11/03/2004

FILE NO.



**SPECIFICATION:**

- Bandwidth : Video DC to 6MHz Audio 105 Hz to 20 KHz
- Max. Input-Audio or Video : 1.1 Vp-p
- Insertion Loss :  $\leq 2dB$  over the frequency range from DC to 6 MHz
- Return Loss :  $\geq 15dB$  over the frequency range from DC to 6 MHz
- Common Mode Rejection :  $\geq 40dB$  at 6 MHz
- Impedance : S-Video 75 ohms , 600 ohms (Audio)
- Cable-UTP : 24 gauge or lower solid copper twisted pair wire  
Impedance: 100 ohms at 1MHz  
Max. Capacitance: 20 pf/ft  
Attenuation: 6.6 dB/1000ft at 1MHz
- Transmission Distance : 1000 feet (Cat 5 UTP)
- Temperature : Operating: 0° to 55° C  
Storage: -22° to 85° C  
Humidity: up to 95%

4	1 Set	PCB SET (TRANSFORMER 1:1) x 2	
3	1 Set	PCB TYPE SHIELDED JACK, GOLD 50*	
2	1 Set	PLASTIC SET(XP, BOTTOMSIDE DRYER)	MS UGH-0
1	1 PCS	S-VIDEO FEMALE SOLDER TYPE	

UNIT: mm



TITLE:

SUPER VALUE BALLUN  
S-Video Female TO RJ45 Jack

MCM Custom Audio  
50-7735

DES. NO.

03-6001-00

DESIGN

Stephen-Lin

DATE 04/20/2004

SCALE

1/1

SHEET

of

DESIGN DATE

11/03/2004

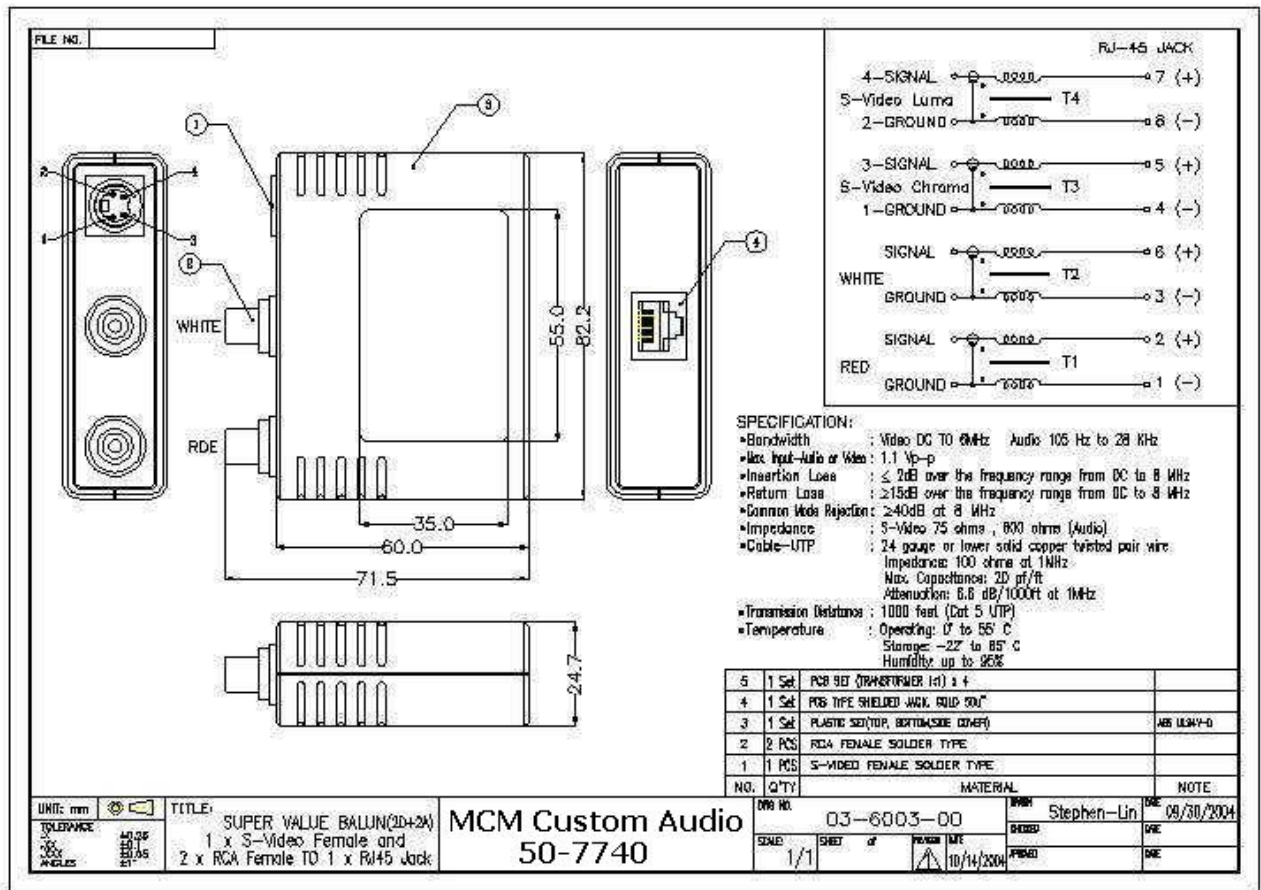
REVISION

BY

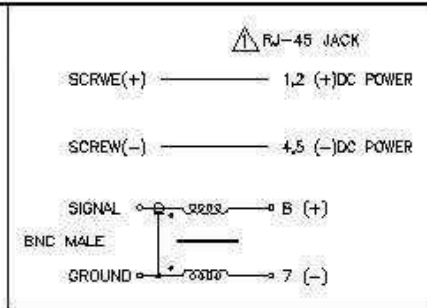
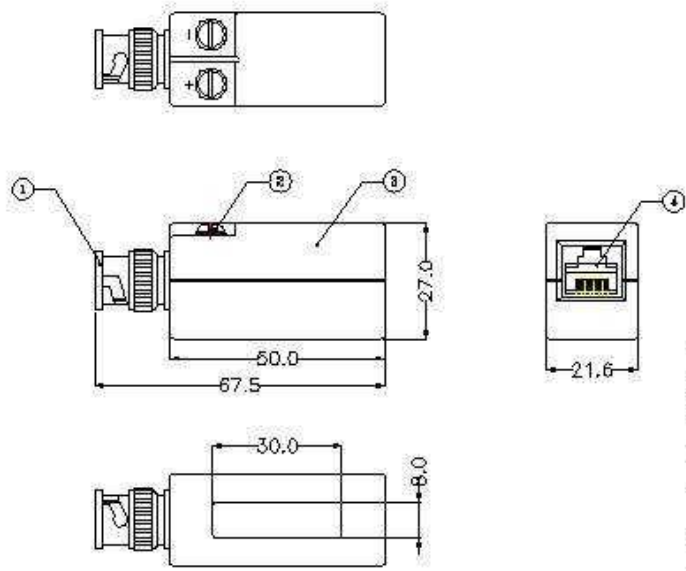
DATE

BY

DATE



FILE NO.



TECHNICAL SPECIFICATION :

- TRANSMISSION BANDWIDTH DC (50Hz) TO 8MHz
- TRANSMISSION DISTANCE 800 METRES(24 AWG UTP)MAX.
- INSERTION LOSS < 2 dB
- SIGNAL RETURN LOSS ≥ -15dB
- COMMON MODE REJECTION > -40dB @ 6MHz
- SIGNAL VOLTAGE 0.5 TO 1.5V rms

NO.	Q'TY	MATERIAL	NOTE
5	1 Set	PCB SET (TRANSFORMER 1:1)	
4	1 Set	RJ45 JACK, GOLD SOLDER P/WIRE TO RNC UL-1081	
3	1 Set	PLASTIC SET(TOP, BOTTOM(SIDE COVER))	ABS HIGH-0
2	2 PCS	CAP HEAD TYPE SOLDER	
1	1 Set	BNC MALE SOLDER TYPE	

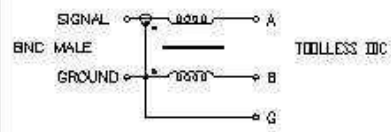
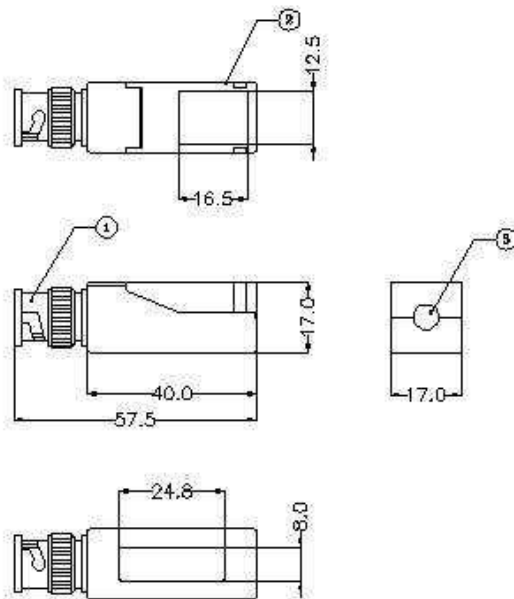
UNITS: mm  
 TOLERANCE: ±0.25  
 ±0.1  
 ±0.25  
 ANGLES: ±1°

TITLE: (for DC POWER)  
 VIDEO BALUN (75Ω : 100Ω)  
 BNC PLUG TO RJ45  
 UNSHIELDED JACK WITH SCREW

**MCM Custom Audio**  
**50-7745**

DWG NO. 03-2111-D3  
 DWG BY Stephen-Lin  
 DATE 10/14/2004  
 SHEET 1/1  
 DATE 02/13/2003

FILE NO.



TECHNICAL SPECIFICATION :

- TRANSMISSION BANDWIDTH DC (50Hz) TO 8MHz
- TRANSMISSION DISTANCE 800 METRES(24 AWG UTP)MAX.
- INSERTION LOSS < 2 dB
- SIGNAL RETURN LOSS ≥ -15dB
- COMMON MODE REJECTION > -40dB @ 8MHz
- SIGNAL VOLTAGE 0.5 TO 1.5V rms

4	1 Set	PCB SET (TRANSFORMER 1:1)	
3	1 Set	TOXLESS IDC	ARS ULM-0
2	1 Set	PLASTIC SET(TOP, BOTTOMSIDE COVER)	ARS ULM-0
1	1 Set	BNC MALE SOLDER TYPE	

UNIT: mm	
TOLERANCE	
±0.1	
±0.2	
±0.5	
±1.0	
±2.0	
±5.0	
±10.0	
±20.0	
±50.0	
±100.0	
±200.0	
±500.0	
±1000.0	

TITLE:  
VIDEO BALUN (75Ω : 100Ω)  
BNC PLUG TO TOXLESS IDC

MCM Custom Audio  
50-7750

DRG NO.	03-2180-71	DRW	Stephen-Lin	DATE	02/14/2004
SCALE	1/1	SHEET	of	PAGES	VAR