

X10DR® **LITE**

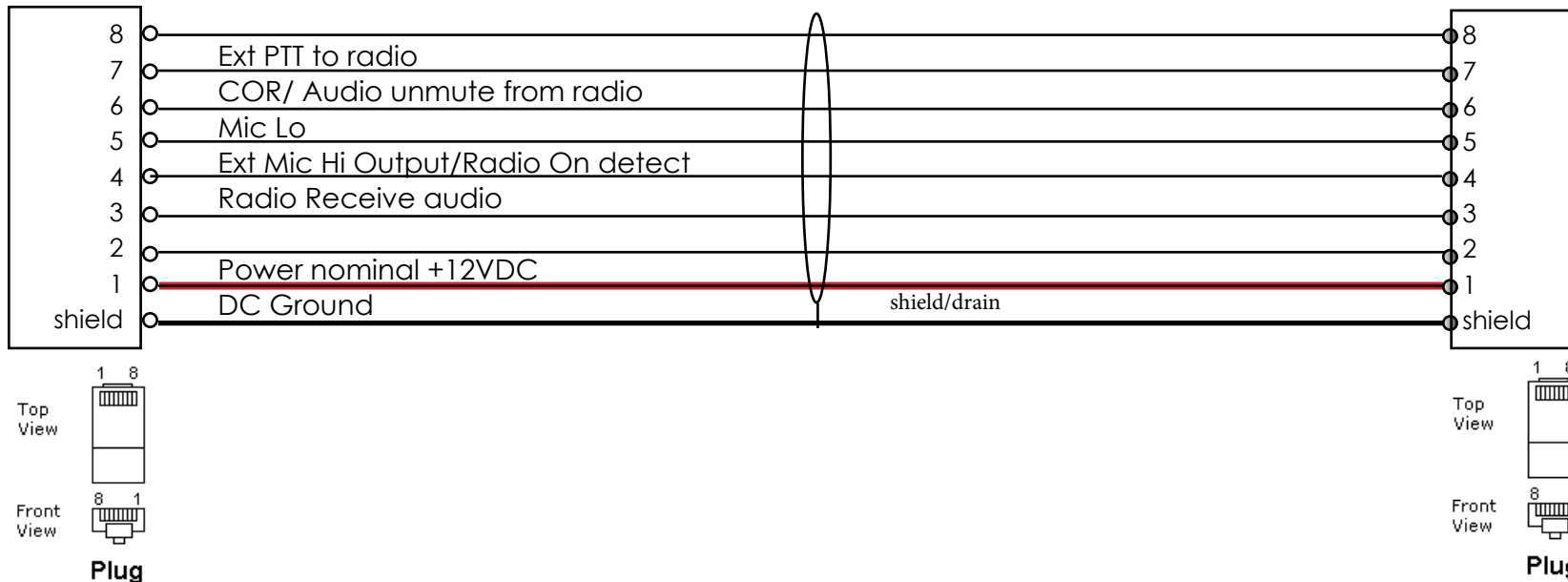
XCA Lite Series Cable Adaptor Wiring Diagrams

XIC-0.5 Interface cable 50cm:
XIC-1.5 Interface cable 150cm:
XIC-6.2 Interface cable 620cm:

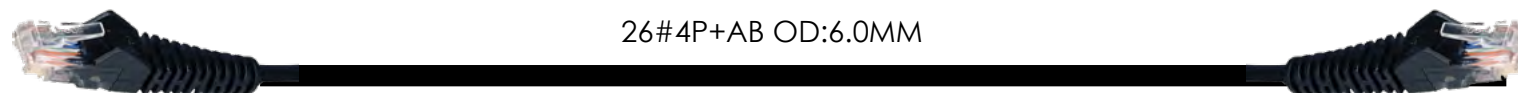


RJ45 shielded male

RJ45 shielded male



50-620 cm



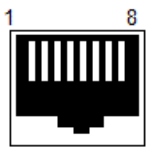
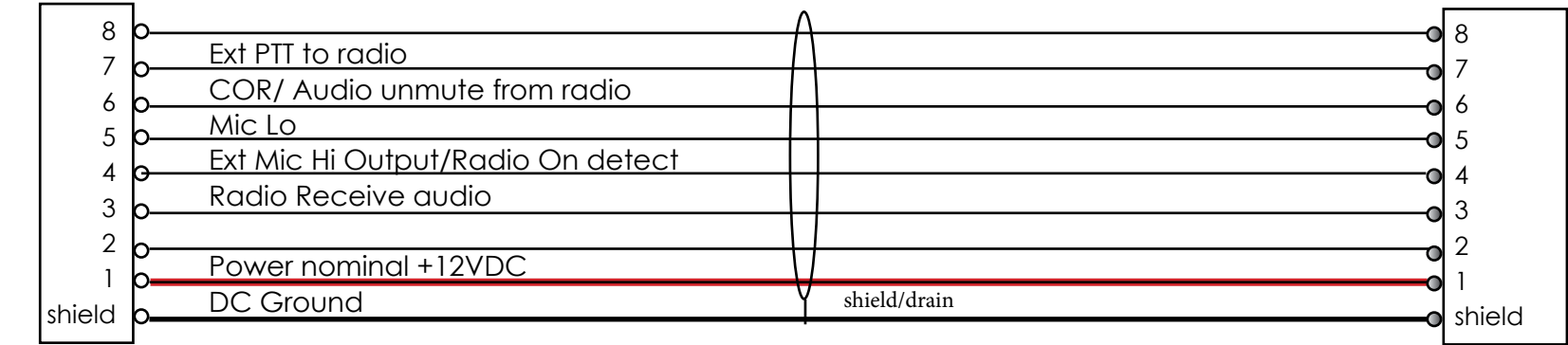
RJ45 shielded male

RJ45 shielded male

XEC-4.5 Extension cable 450cm:

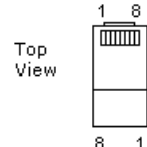


RJ45 shielded female RJ45 shielded male

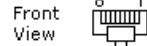


Front View

Receptacle



Top View

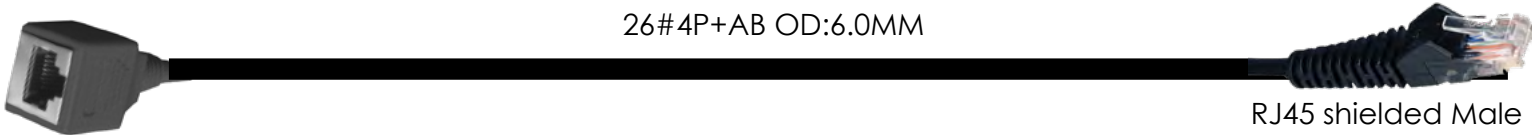


Front View

Plug

450 cm

26# 4P+AB OD:6.0MM



RJ45 shielded Male

RJ45 shielded Female

Cable Adaptors

XCA-M26	Suits Motorola 26 pin Mototrbo	Type 1
XCA-M26T	Suits Motorola 26 pin MTM5400	Type 1
XCA-M16	Suits Motorola 16 pin	Type 1
XCA-K25	Suits Kenwood DB25: NX700/TK5710/TK7180	Type 1
XCA-K25M	Suits Kenwood DB25 TK690	Type 2
XCA-K15M	Suits Kenwood DB15HD for NX720	Type 2
XCA-RJK	Generic Kenwood (uses Radio Mic socket)	Type 3
XCA-I25A	Suits Icom DB25	Type 2
XCA-I25M	Suits Icom DB25 F5400/6400	Type 2
XCA-I15M	Suits Icom DB15HD	Type 2
XCA-V25M	Suits Vertex DB25	Type 2
XCA-T15M	Suits Tait DB15)	Type 2
XCA-H26M	Suits Hytera MD68/78X	Type 2
XCA-JM	Suits EFJohnson VM900 DB25	Type 2
XCA-R25M	Suits RELM DB25	Type 2
XCA-R15M	Suits RELM G/DMH	Type 2
XCA-U25M	Generic RJ45F-DB25M (partially terminated)	Type 2
XCA-U15M	Generic RJ45F-DB15M (partially terminated)	Type 2

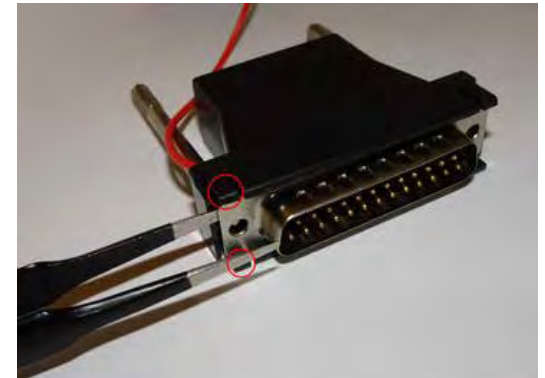
XCA-**M Modification Instructions

The XCA type 2 Interface adaptors may be modified to change or add custom wiring to suit specialised applications or to use with radios not currently supported for mass production of This document shows how to perform such modifications.

Step 1 : Separate the connector from the housing:
Slide a pair of tweezers or small flat blade screwdriver behind the connector while, at the same time opening the clips either side of the housing – as shown below:

Once one side is loose, do the same for the other side.

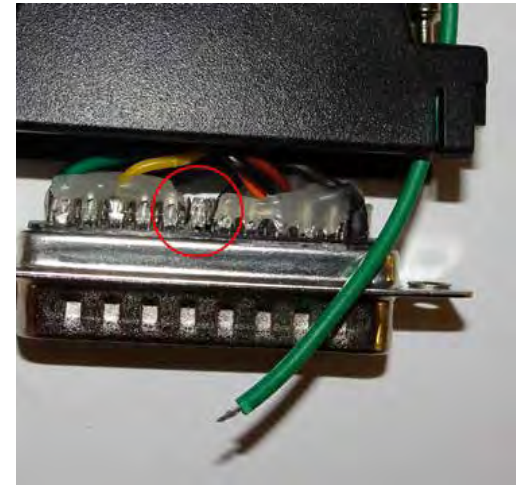
Then carefully pull out the connector to expose the pins.
Take care not to pull the connector assembly out too far and break any connections:



XCA-**M Modification Instructions (cont)

Step 2 : Thread wire and prepare Thread the new wire through one of the access holes either side of the thumbscrews. Leave about 40mm (1½") inside the connector. Remove the hot melt glue from the desired pin:

Step 3 : Solder, Re-apply Glue and Re-assemble: Solder (or change) desired wire(s), then apply hot-melt glue over the contact and wire to ensure joints remain secure in heavy vibration environments:



Complete

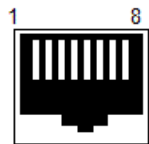
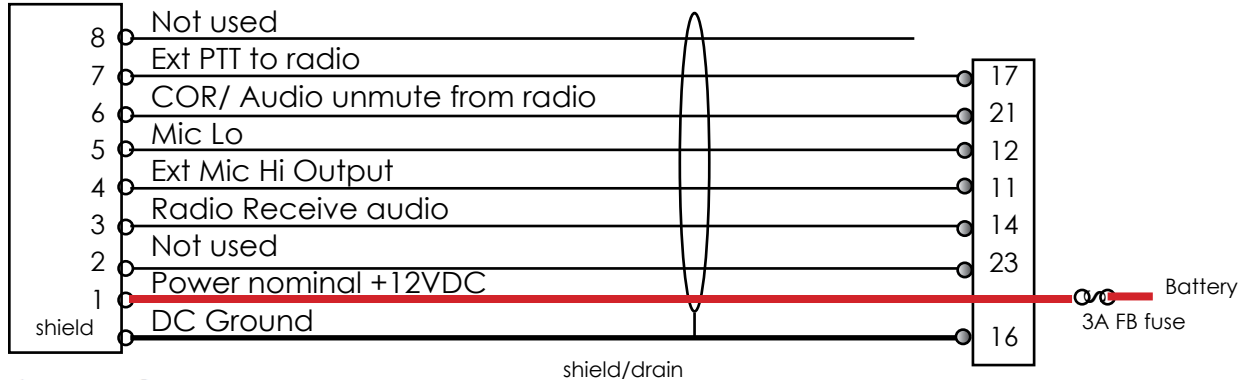


XCA-M26 Cable Adaptor: for Motorola Trbo XPR and DM3600 etc series



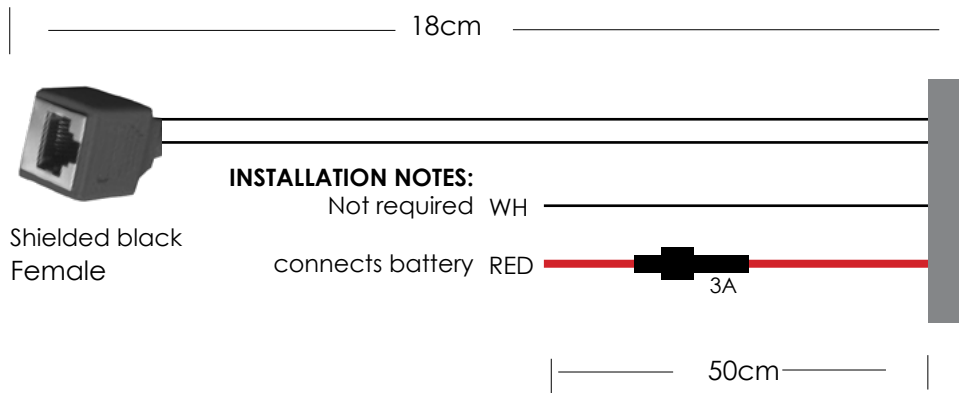
Female RJ45 shielded

Motorola Trbo 26 Pin



Front View

Receptacle



INSTALLATION NOTES:

Not required WH

connects battery RED

50cm

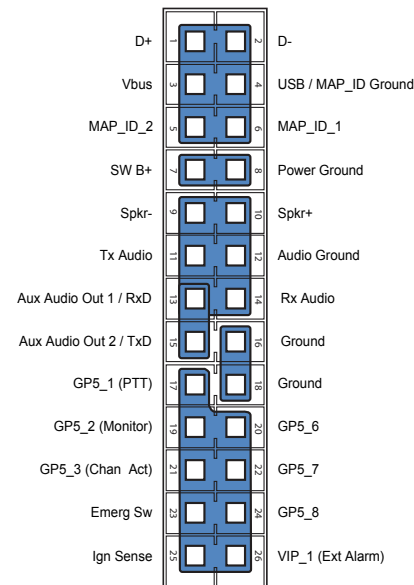
Do NOT ground white wire

Always check the radio service manual and radio programming guide details to ensure the right connections are provided on the designated pins*.

Note: some radios require standard jumpers to be fitted to allow External Mic Audio to be enabled.

* also refer x10dr lite service manual at:

www.x10dr.com/lite page 12..



XCA-M26T Cable Adaptor: for Motorola MTM5400 TETRA radio etc series



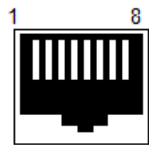
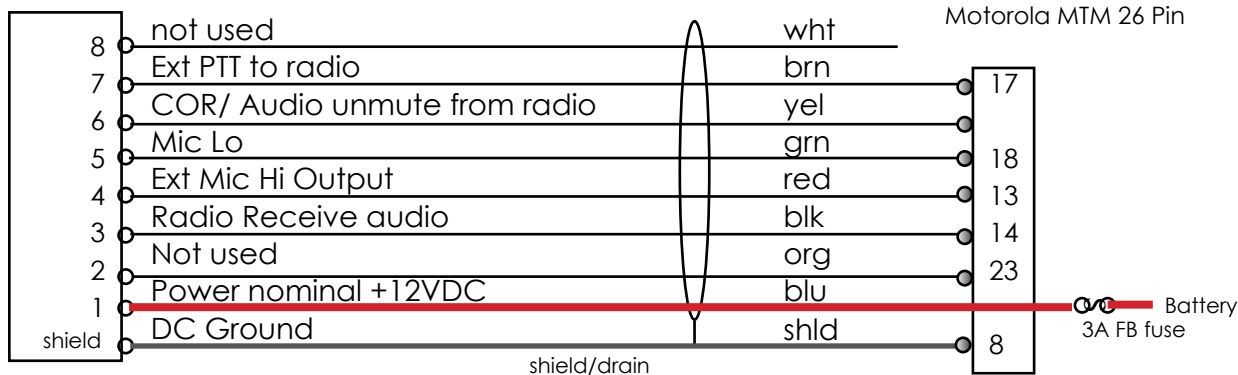
Always check the radio service manual and radio programming guide details to ensure the right connections are provided on the designated pins*.

Note: some radios require standard jumpers to be fitted to allow External Mic Audio to be enabled.

* also refer x10dr lite service manual at:

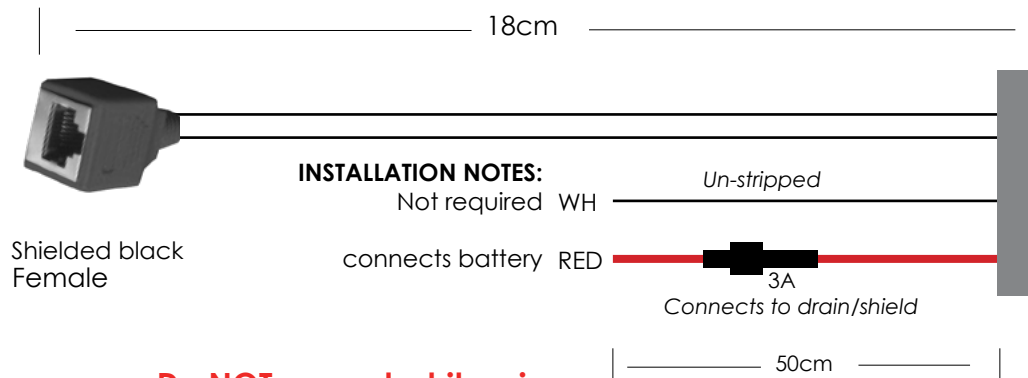
www.x10dr.com/lite page 12.

Female RJ45 shielded

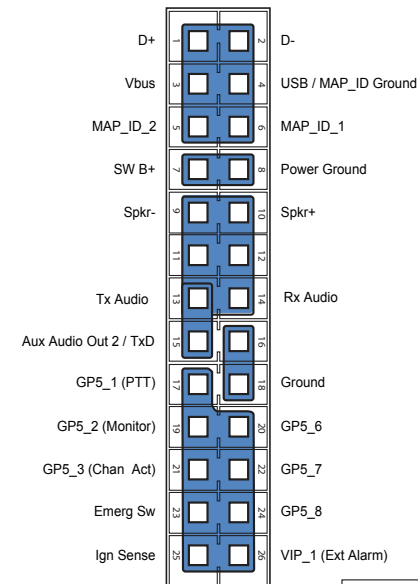


Front View

Receptacle



Do NOT ground white wire



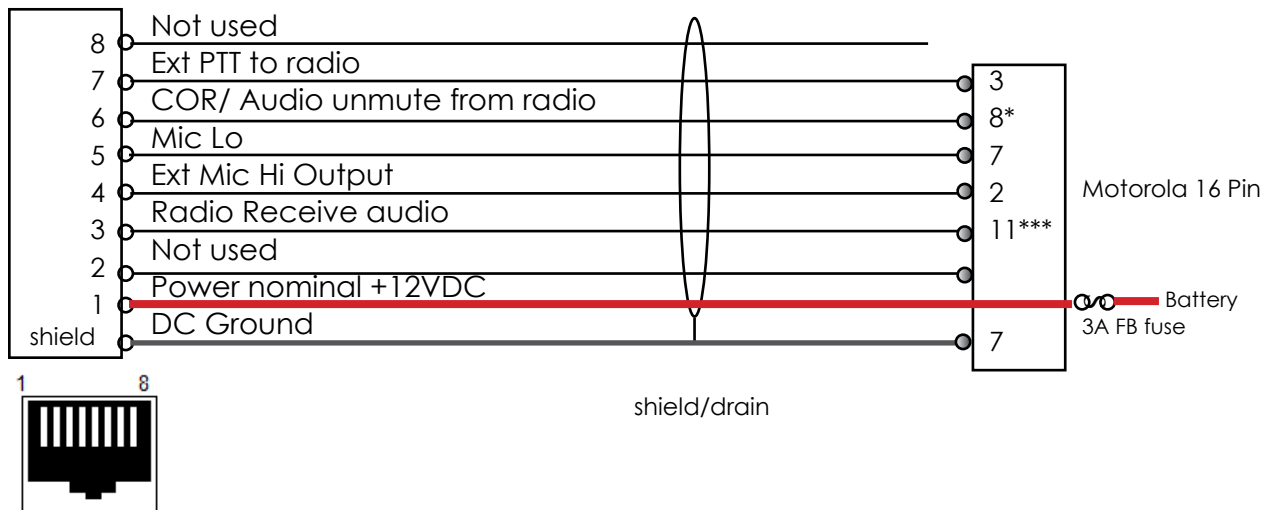
Company Confidential Proprietary

Date: May12th 2017 Revision: 2

XCA-M16 Cable Adaptor: For Motorola GM360/MCX/PM400/CDM etc

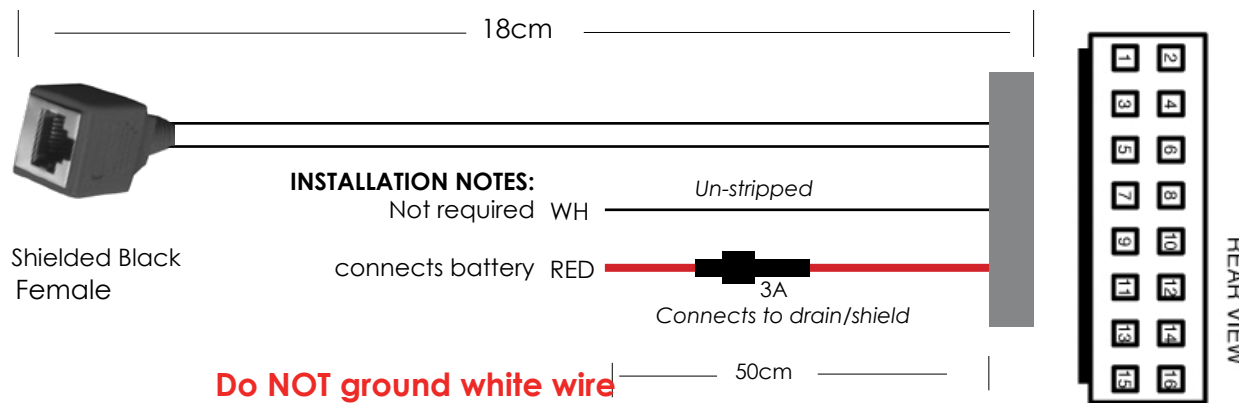


Female RJ45 shielded



Front View

Receptacle



Do NOT ground white wire

Always check the radio service manual and radio programming guide details to ensure the right connections are provided on the designated pins*.

Note: some radios require standard jumpers to be fitted to allow External Mic Audio to be enabled.

* also refer x10dr lite service manual at:
www.x10dr.com/lite page 12.

Note:

Motorola have over the years used the 16 pin connector on a wide variety of models. You should check the radio programming and/or jumpering to ensure correct operation of the X10DR unit.

* Pin 8 or Pin 4: COR availability depends on model. Connect ONLY if available

** Pin 9: may need programming for Emergency.

*** Pin 11: Audio should be set for pre-emphasis and gated where applicable by either programming or hardware jumper as applicable. If gated audio is not available, turn OFF VOX function on X10DR gateway is only other option however COR MUST be connected, be aware occasional noise burst may sound in Secure Mic depending on radio's COR performance.

BEWARE:

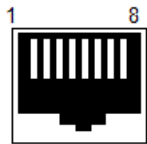
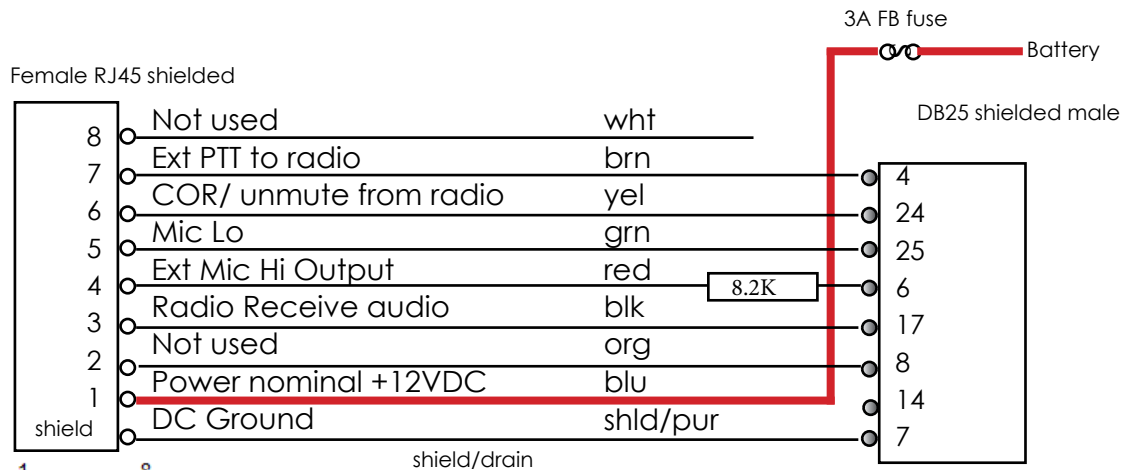
before attempting connection for GTX/LTS refer their specific service manual.



Company Confidential Proprietary

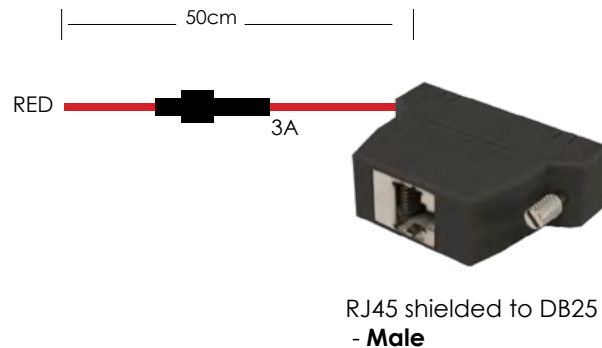
Date: Jan12th 2018 Revision:2

XCA-K25A cable adaptor: for Kenwood NX700 / TK5710, TK5720, TK8180 etc



Front View

Receptacle



Always check the radio service manual and radio programming guide details to ensure the right connections are provided on the designated pins*.

Note: some radios require standard jumpers to be fitted to allow External Mic Audio to be enabled.

* also refer x10dr lite service manual at:

www.x10dr.com/lite page 12.

Notes:

Program radio pins :

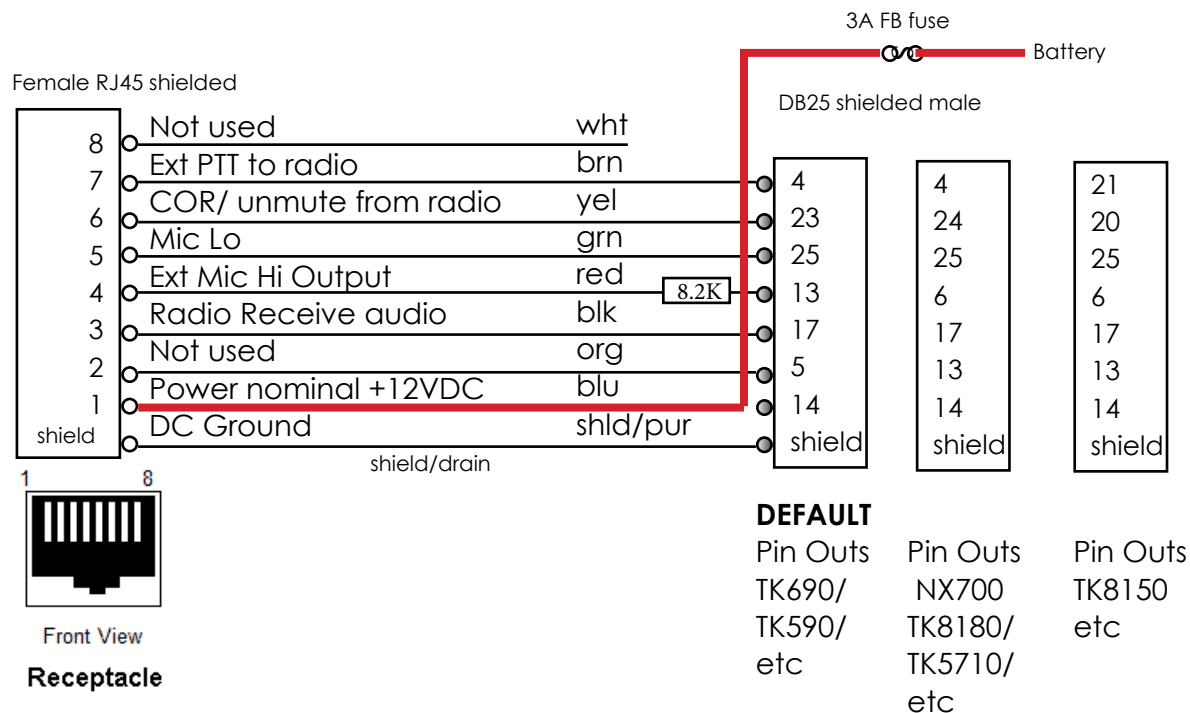
4 : PTT

24 : Squelch indicate

XCA-K25M Modifiable cable adaptor:

As standard suits TK690/790 etc

Modification for other Kenwood radios



Always check the radio service manual and radio programming guide details to ensure the right connections are provided on the designated pins*.

Note: some radios require standard jumpers to be fitted to allow External Mic Audio to be enabled.

* also refer x10dr lite service manual at:

www.x10dr.com/lite page 12.

Radio Programming Notes:

Set external Mic sensitivity for "low" when available in the field programmer.

NX700/TK8180 /etc Program radio I/O pins :

4 : PTT
13 : Emergency
24 : Squelch indicate

TK8150 /etc Program radio I/O pins :

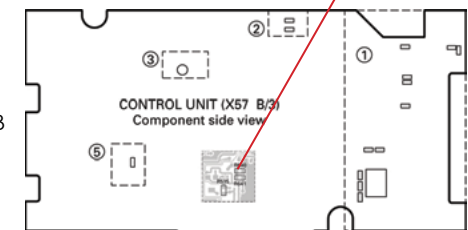
21 : PTT
13 : Emergency
20 : Squelch indicate

TK690/790/etc Program radio I/O pins :

4 : PTT
5 : Emergency.

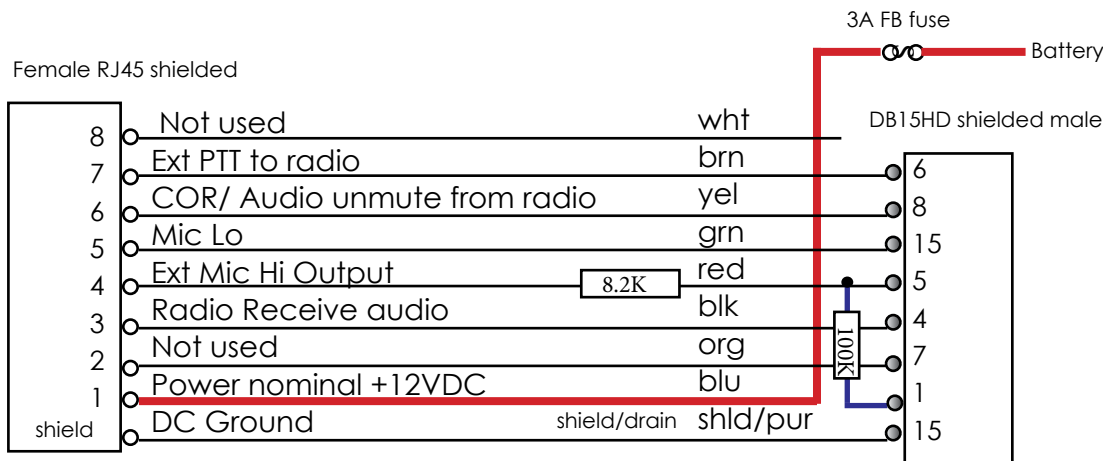
Refer Kenwood TK690 service manual.

Pin 13 ships from the factory as a Data input. Swapping the 0 ohm resistor from R641 to R640 changes pin 13 to the required analog Mic Hi input.



Date: 6th June 2017 Revision: 1

XCA-K15M Cable Adaptor: for Kenwood DB15 cable NX720/TK7360/ TK-D840



Always check the radio service manual and radio programming guide details to ensure the right connections are provided on the designated pins*.

Note: some radios require standard jumpers to be fitted to allow External Mic Audio to be enabled.

* also refer x10dr lite service manual at:
www.x10dr.com/lite page 12.

NOTES:

Program Radio connector

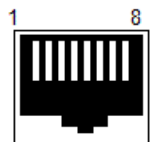
8- I/O COR out

6 - I/O Ext PTT In

OTHER INSTALL REQUIREMENTS:

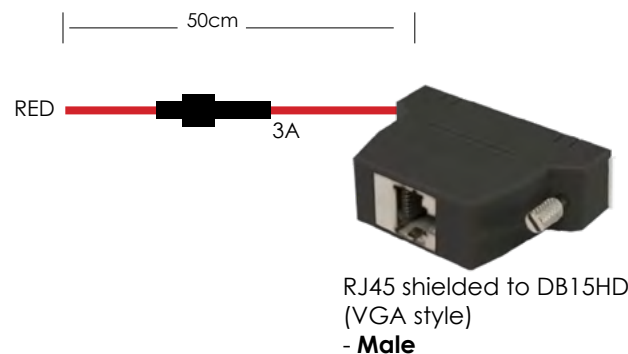
NX720/ TK-D840/ TK7360 Radios

Move radio chip jumper R796 to R798 and move radio chip jumper R797 to R799



Front View

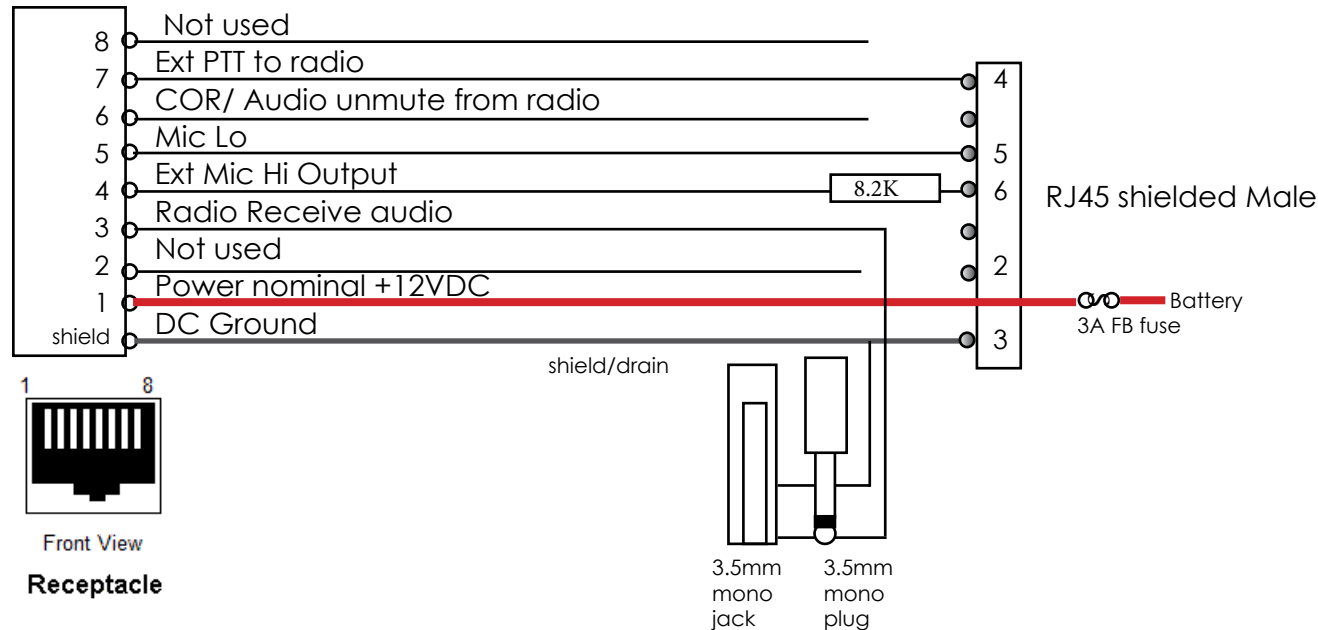
Receptacle



XCA-RJK Cable Adaptor: for Kenwood simple low end radios using front RJ45 Microphone socket



RJ45 shielded Female



Always check the radio service manual and radio programming guide details to ensure the right connections are provided on the designated pins*.

Note: some radios require standard jumpers to be fitted to allow External Mic Audio to be enabled.

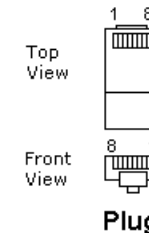
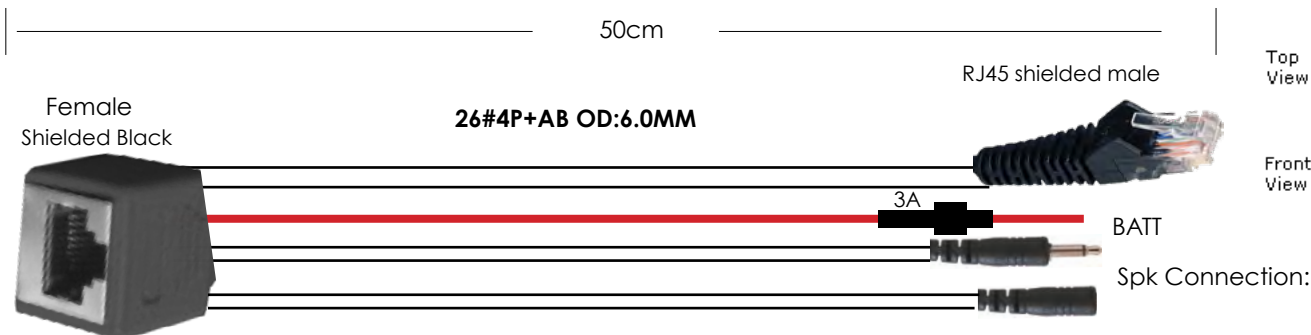
* also refer x10dr lite service manual at:
www.x10dr.com/lite page 12.

Notes:

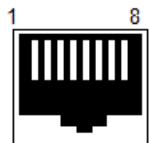
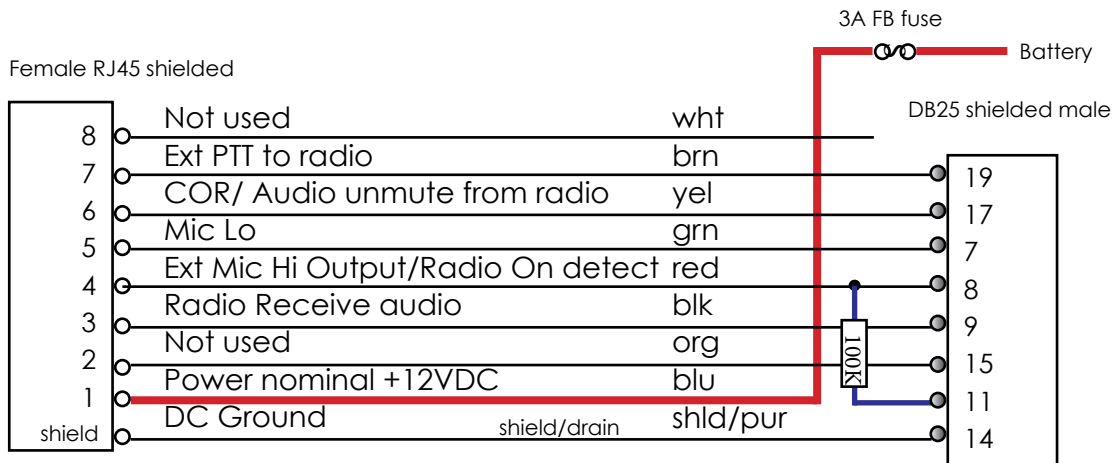
Program X10DR for Speaker NOT muted when placed in cradle. (except if you wish to use external speaker - as below)
Uses radio receive Vox for COR detect.

Requires External Speaker

Plug 3.5mm plug into radio speaker socket.
Plug radio external spk into cable 3.5 jack.
Set Radio volume control for normal listening level, then adjust X10DR Rx audio level on gateway cradle for desired listening level from X10DR Spk Mic.

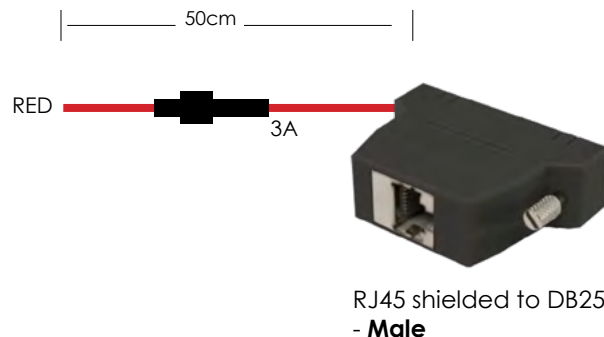


XCA-i25B Cable Adaptor: for Icom IC-F9511/9521/ 5061/5062 etc



Front View

Receptacle



Always check the radio service manual and radio programming guide details to ensure the right connections are provided on the designated pins*.

Note: some radios require standard jumpers to be fitted to allow External Mic Audio to be enabled.

* also refer x10dr lite service manual at:
www.x10dr.com/lite page 12.

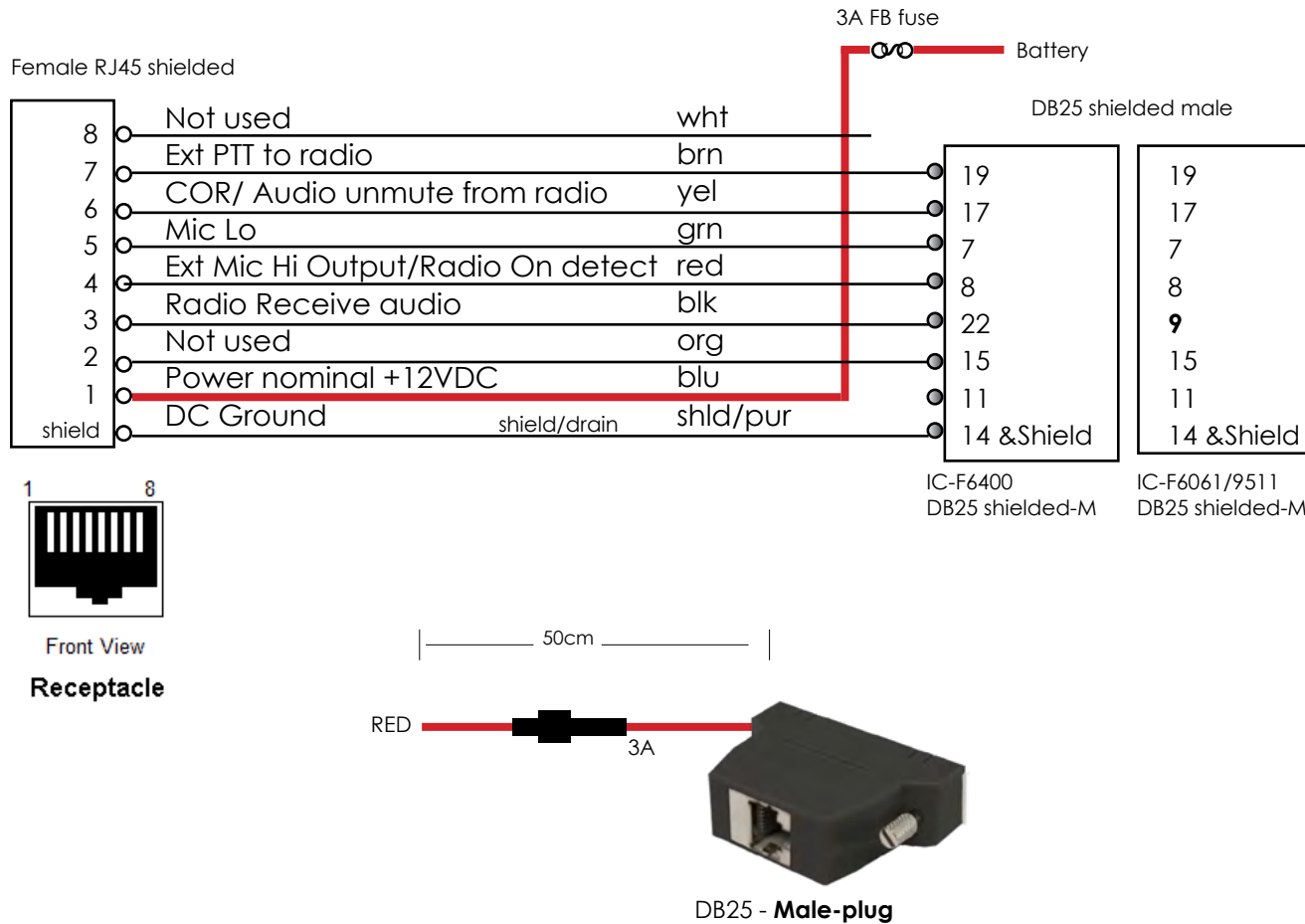
Notes:

Program Radio connector
Pin 17 : Busy
Pin 19: EPTT
COR not connected

IC-F9511/9521 models
'coffee bean" N must be fitted on radio main board to enable Mic audio go to Pin 8.

IC-F5061/6062 models
remove coffee bean F and fit coffee bean D.

XCA-i25M Modifiable cable adaptor: default config for IC-F6400 (Move wire from RJ45-3 to DB25 Pin 9 for IC-F9511/F6061 etc)



Always check the radio service manual and radio programming guide details to ensure the right connections are provided on the designated pins*.

Note: some radios require standard jumpers to be fitted to allow External Mic Audio to be enabled.

* also refer x10dr lite service manual at:
www.x10dr.com/lite page 12.

Notes:

Program F6400 Radio connector

Pin 17 : Busy

Pin 19: EPTT

(Busy=Radio speaker unmute-active grd)

IC-F9511/9521 models

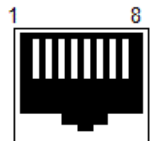
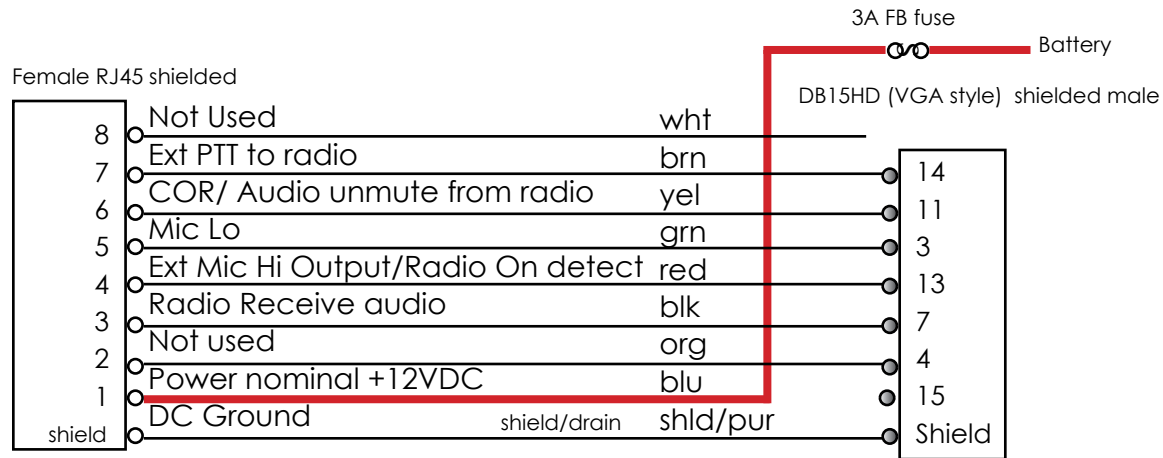
'coffee bean" N must be fitted on radio main brd to enable Mic audio to connect to Pin 8.

IC-F5061/6062 models

remove coffee bean F and fit coffee bean D.

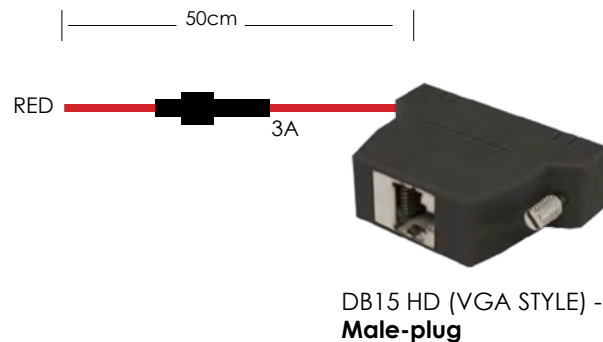
Refer top service manual if COR/Busy needs to be moved for IC9511/5061/6062

XCA-i15M Cable Adaptor: for Icom OPC-1939 adaptor cable for F5011/F6011/ F5021/F6021/F5121D



Front View

Receptacle



Always check the radio service manual and radio programming guide details to ensure the right connections are provided on the designated pins*.

Note: some radios require standard jumpers to be fitted to allow External Mic Audio to be enabled.

* also refer x10dr lite service manual at:

www.x10dr.com/lite page 12.

Notes:

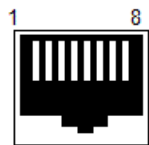
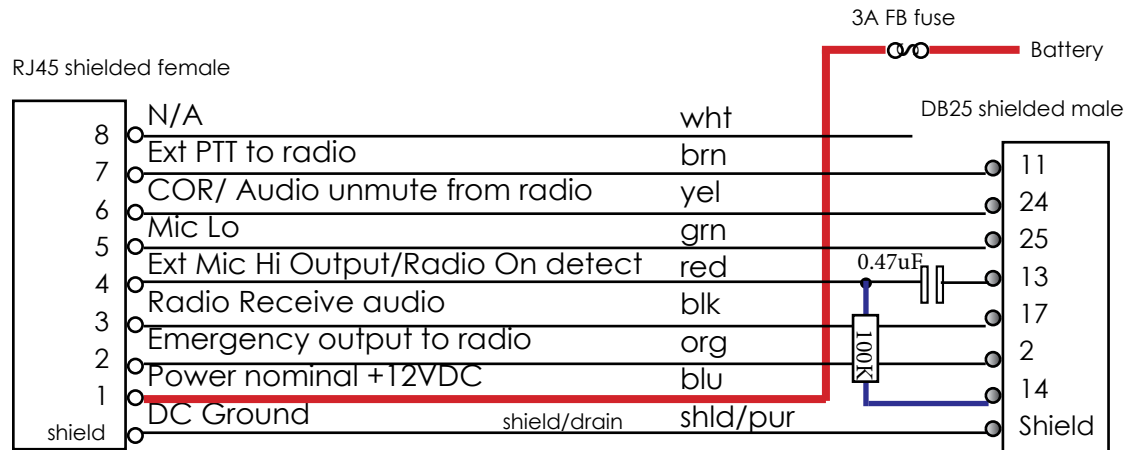
Program radio pins :

11 - COR out

7 - AF Audio out

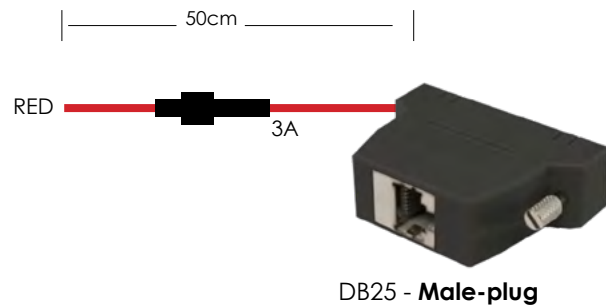
14 - Ext PTT

XCA-V25M Cable Adaptor: for Vertex VX5500 etc High tier mobiles



Front View

Receptacle



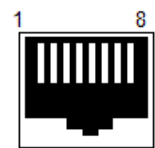
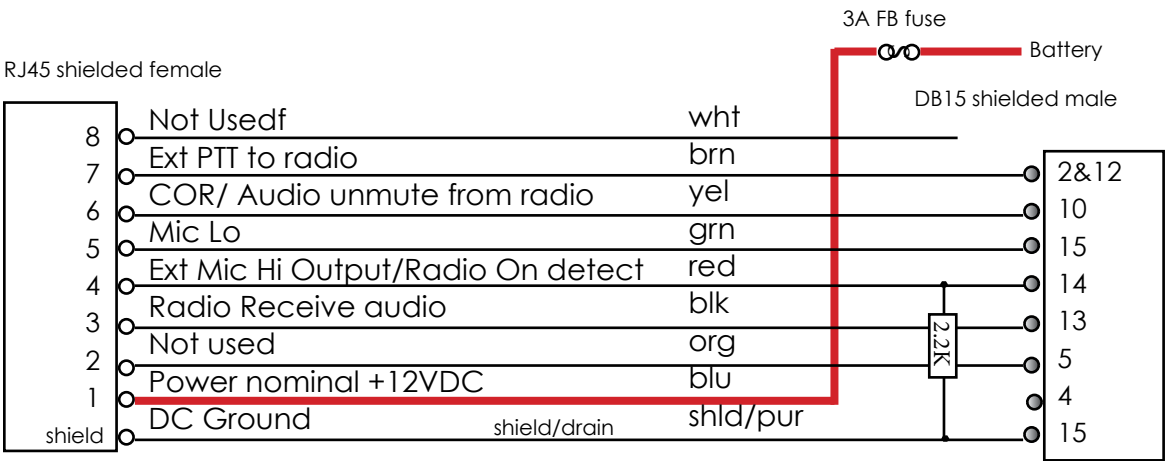
Always check the radio service manual and radio programming guide details to ensure the right connections are provided on the designated pins*.

Note: some radios require standard jumpers to be fitted to allow External Mic Audio to be enabled.

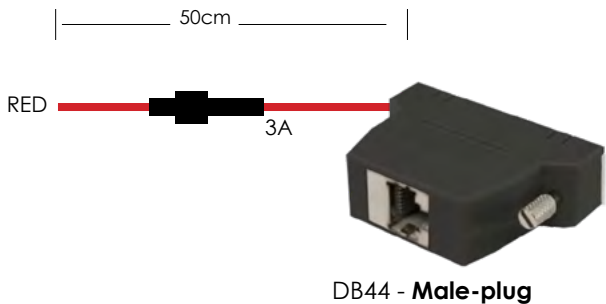
* also refer x10dr lite service manual at:

www.x10dr.com/lite page 12.

XCA-T15M Cable Adaptor: for TM8000/9000 series etc



Front View
Receptacle



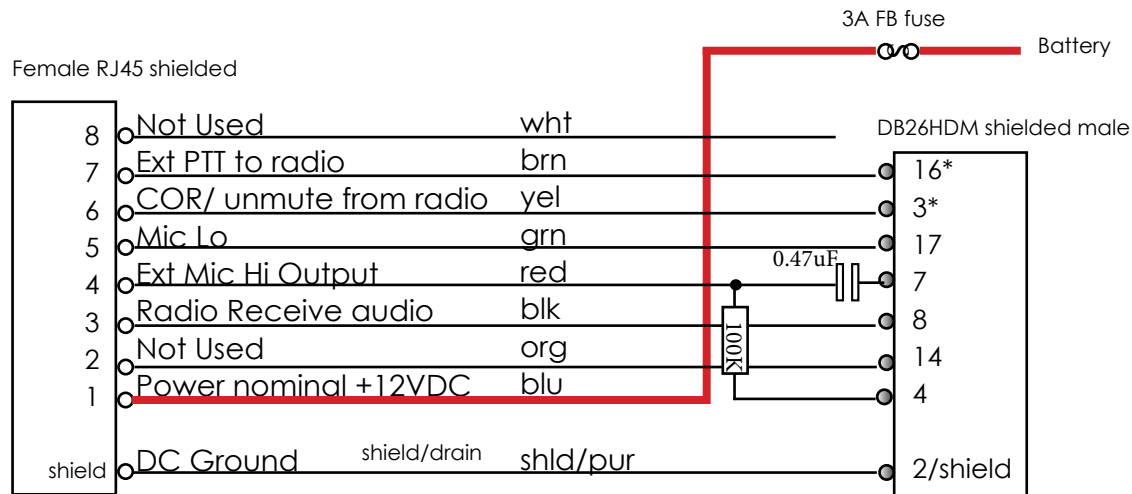
Always check the radio service manual and radio programming guide details to ensure the right connections are provided on the designated pins*.
Note: some radios require standard jumpers to be fitted to allow External Mic Audio to be enabled.

* also refer x10dr lite service manual at:
www.x10dr.com/lite page 12.

- Notes:
Program Radio connector
2- Send Mic to radio spk*
4-
5 -
10 - Busy out
12 - PTT in
13 - Audio tap out
14 - Audio Tap In

* when radio permits

XCA-H26M Interface cable: for Hytera MD68x Tetra & 78x DMR mobiles

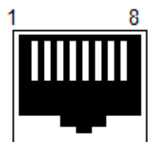


Always check the radio service manual and radio programming guide details to ensure the right connections are provided on the designated pins*.

Note: some radios require standard jumpers to be fitted to allow External Mic Audio to be enabled.

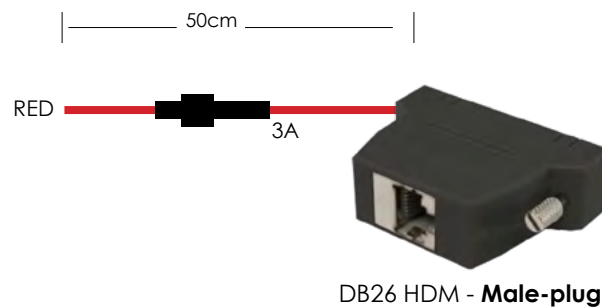
* also refer x10dr lite service manual at:

www.x10dr.com/lite page 12.

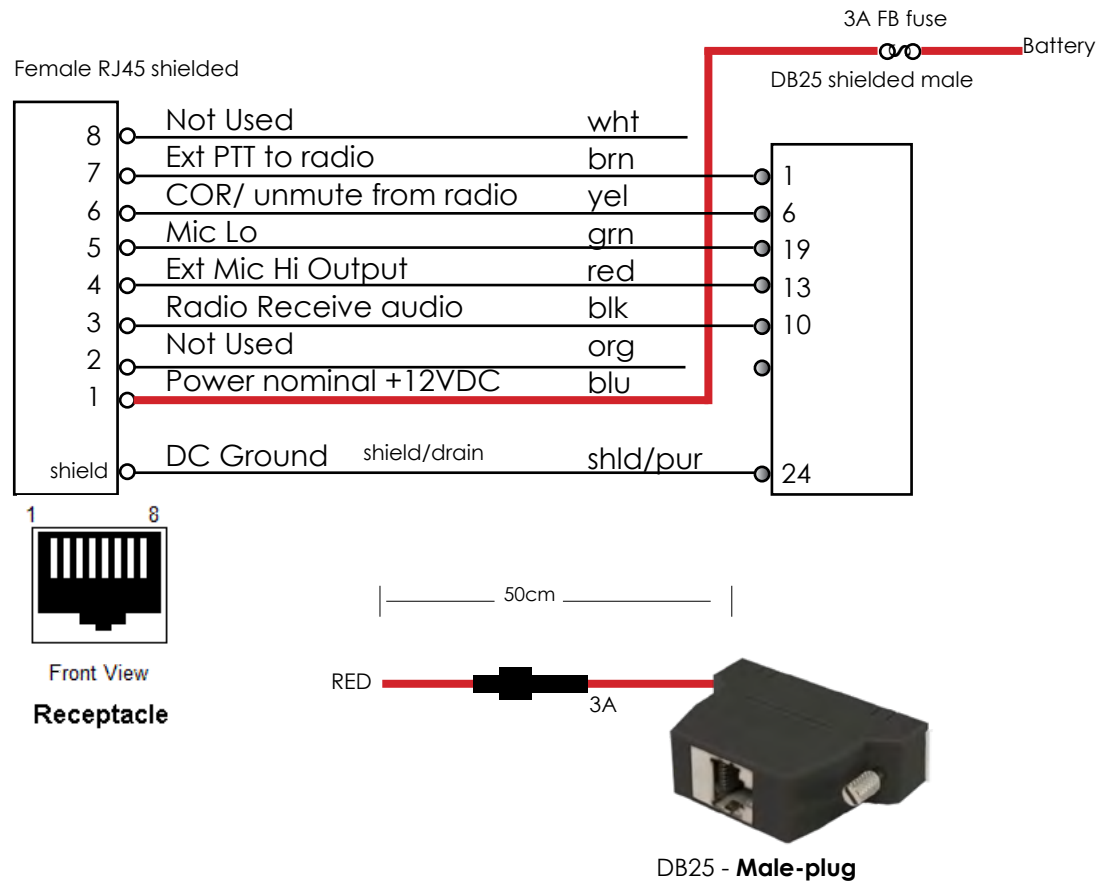


Front View

Receptacle



XCA-JM Interface cable: for EFJohnson Viking VM900 Male DB25 for EFJ pigtail UDDI/PVP



Always check the radio service manual and radio programming guide details to ensure the right connections are provided on the designated pins*.
Note: some radios require standard jumpers to be fitted to allow External Mic Audio to be enabled.

* also refer x10dr lite service manual at:
www.x10dr.com/lite page 12.

XCA-R25M Interface cable: for Relm/Bendix King P25 mobiles



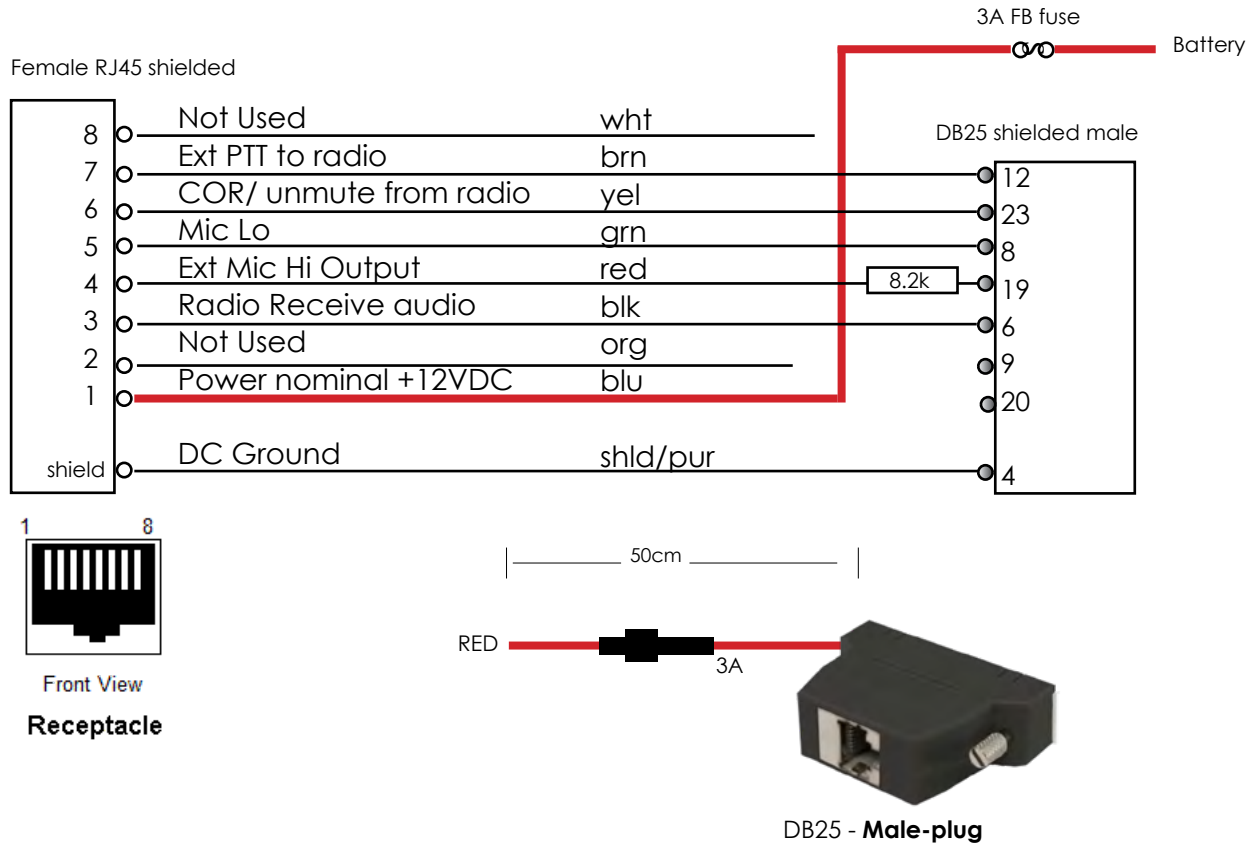
Always check the radio service manual and radio programming guide details to ensure the right connections are provided on the designated pins*.

Note: some radios require standard jumpers to be fitted to allow External Mic Audio to be enabled.

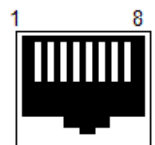
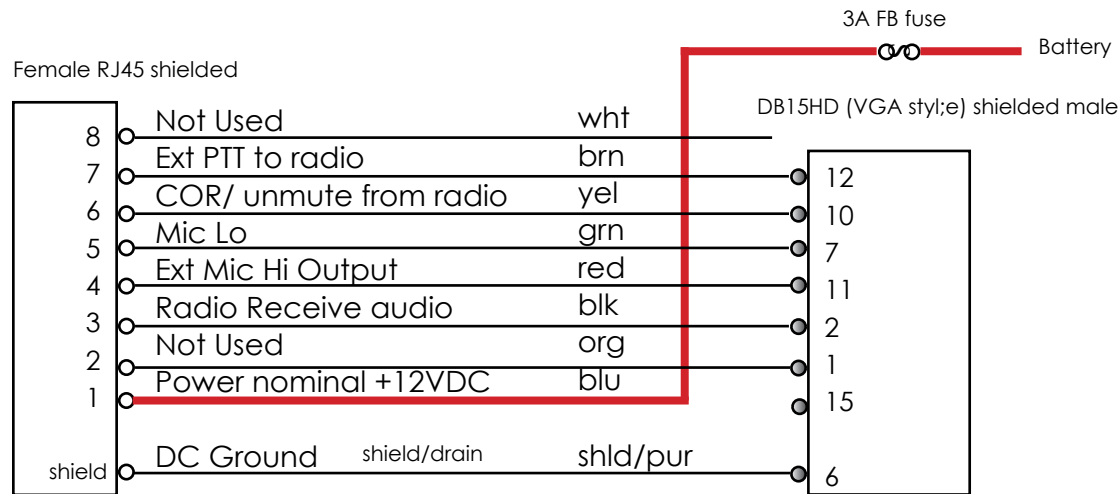
* also refer x10dr lite service manual at:
www.x10dr.com/lite page 12.

Notes:

Program radio Pin 23 for "cor".(radio speaker unmute)

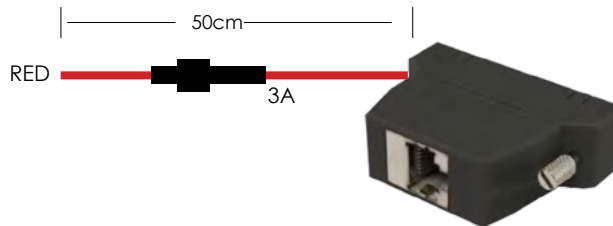


XCA-R15M Interface cable: for Relm/Bendix King P25 mobiles



Front View

Receptacle



DB-15-HD (VGA style)-M
D-SUB CONNECTOR

Always check the radio service manual and radio programming guide details to ensure the right connections are provided on the designated pins*.

Note: some radios require standard jumpers to be fitted to allow External Mic Audio to be enabled.

* also refer x10dr lite service manual at:

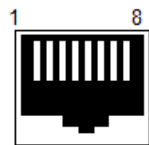
www.x10dr.com/lite page 12.

XCA-U25M DB25 Male

Unterminated Interface Adaptor:

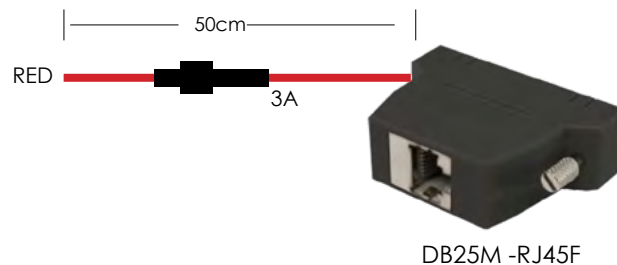


Female RJ45
shielded



Front View

Receptacle



Always check the radio service manual and radio programming guide details to ensure the right connections are provided on the designated pins*.

Note: some radios require standard jumpers to be fitted to allow External Mic Audio to be enabled.

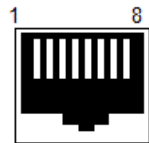
* also refer x10dr lite service manual at:
www.x10dr.com/lite page 12.

XCA-U15M DB15 Male

Unterminated Interface Adaptor:

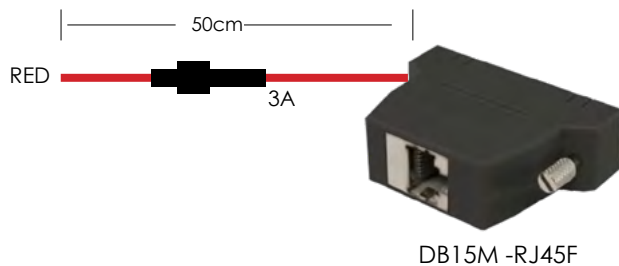


Female RJ45
shielded



Front View

Receptacle



Always check the radio service manual and radio programming guide details to ensure the right connections are provided on the designated pins*.

Note: some radios require standard jumpers to be fitted to allow External Mic Audio to be enabled.

* also refer x10dr lite service manual at:
www.x10dr.com/lite page 12.