Thomson CSF, ER-104-A transceiver

Control Box



Upper: ER-104-A Lower: Collins 618T

Note: identical connectors



ER-104-A front view



ER-104-A rear view (case removed) Note: connector *ER-104* and 618T are identical. The *ER-104-A* and its control box fit straight in the 618T-2 mounting. The *ER-104-A* can't be combined with the 618T control box!!!





Inside "ENTRÉE AUX RECEPT" connector

Front-left and Front-right [See: Abb. 53, page 85 of manual] "SHIFT" conn. possibly for F1 mode.

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Top view, front part (left: driver & PA unit, right: Power Supply unit).





Bottom view.



Control- and Receiver unit removed from chassis.



Components below receiver connectors in chassis.



Top view of **Driver & PA**

See page x



Top view of Controland Receiver unit.

| | | IR R 010 0 | 20 | |
|---|--|--|---|-----|
| • | ● J27001 J27003 J27002 R 010 027 ● AMPLI | 3,75 - 19,75 | J25003 J25092 J25004 J25001 MOD. © R010025 © J25004 EM.2-3 |] @ |
| | AMPLI D'ASSERVISSEMENT R 010 028 | 1 ^{ere} M.F. R 01 0 026 | J 26 001 O J 26 002 O J 26 003 | |
| • | ● MOD. EM. 1 J24 002 ■ R 010 024 | J 29 001 | AMPLI B.F. R 010 029 | |
| | TELECOMM | ANDE | R DICC33 | - |
| • | 2eme M.F. HLTRES 1750 KHz | | H.F. 1 R 010 021 | |
| | R 010 031 J 31001 J 31002 J 31003 R 010 031 J 31002 J 31003 2000 M.F. AMPLI | | H.F. 2 R 010 022 | |
| - | J 32 002 J 32 001 AMPLI 1750 K | Hz | H.F. 3 R 010 023 | |



Receiver modules. (Accessible by removing the cover on the right side of the TRX.



R 010 010 Cover control unit, left-back side of trx.



Note that this number also exists on the top-front of the trx. Probably there are different versions of the ER-104.



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Modules of the **control unit**, left-back side of trx.

| | | PILOTE I | R010010 | |
|--|-----------|--------------|--|-----------|
| | 15 | GH 3 | J13002 🔘 🔘 J13001 | R010013 |
| | | BOUCLE HAUTE | A suffer the | R010015 |
| | 1 all the | GH2 | | R 010 012 |
| | PENDULE | DECODAGE | and the second sec | R 010 018 |
| | R 010 069 | BOUCLE BASSE | J18 002 J18 001 | R010016 |
| | | GH1 | | R 010 011 |
| | | DIVISEL 8 | | R010014 |





R 010 021 **HF1** [Abb.4 pag.31]



R 010 022 **HF2** [Abb.4 pag.31]





R 010 023 **HF3** [Abb.4 pag.31]





R 010 026 1st IF [Abb.5 pag.32]





R 010 027

Amplifier 3,75 – 19,75 MHz

[Abb.6 pag.33]



R 010 031 **2nd IF** [Abb.7 pag.34]

1/2

892





R 010 031 **2nd IF** [Abb.7 pag.34]

2/2



R 010 032 Amplifier 1750 kHz [Abb.8 pag.32]



R 010 029 Amplifier- Squelch- Clipping [Abb.9 pag.36]





R 010 024 Modulator (ME.1) [Abb.10 pag.37]





R 010 025 *Modulator (EM. 2-3)* [*Abb.11 pag.38*]



Driver & Power Amplifier unit

[Abb.12 pag.39] & [Abb.14 pag.41]



Detail base of V1 4CX250



R 010 538 PA-Driver stage

[Abb.13 pag.40]







R 010 043 **ALC** [Abb.15 pag.42]





R 010 028 Servo Amplifier [Abb.16 pag.43]





R 010 069 **1** *MHz* Oscillator

[Abb.17 pag.44]





R 010 014 DIVISEUR, Frequency divider

[Abb.18+18a pag.45+56]



R 010 017 GHO, Overtone generator O



1/2





R 010 017 GHO, Overtone generator O





R 010 011 GH1, Overtone generator 1

[Abb.20 pag.50]





R 010 012 GH2, Overtone generator 2 [Ab

[Abb.21 pag.51] & [Abb.22 pag.52]





R 010 016 BOUCLE Basse, Oscillator lower band. [Abb.23 pag.53]



R 010 018 MHz decoder

[Abb.24 pag.54]



R 010 013 GH3, Overtone generator 3

[Abb.25+25a pag.55+56]

1/2



R 010 013 GH3, Overtone generator 3 [Abb.25+25a pag.55+56]





R 010 015 BOUCLE Houte, Oscillator higher band.

[Abb.26 pag.57]



R 010 033 TELECOMMANDE Remote Control [Abb.28-29-30 pag.60] 1/2



R 010 033 TELECOMMANDE Remote Control [Abb.28-29-30 pag.60] 2/2





Components in compartment above rear connector.



Motor B3 for S1-S2

ALC Driver stage [Abb.13 pag.40] [Abb.15 pag.42]

Driver & Power Amplifier unit

[Abb.12 pag.39] & [Abb.14 pag.41]



Detail base of V1 4CX250



R 010 538 PA-Driver stage

[Abb.13 pag.40]







R 010 043 ALC [Abb.15 pag.42]



End of version 1. Version 2 is coming up...