

Thomson 450 MHz data transceiver 6-19-09
From: Timmermans Jos [Jos.Timmermans@grassvalley.com]
Sent: Friday, June 19, 2009 8:36 AM
To: Terre Wolak Intertek
Cc: Yas Ken
Subject: RE: Thomson 450 MHz data transceiver only FCC ID: R45-GC801701

Importance: High

Attachments: Data Link Tree.xls.zip; Data Link Tree.JPG.zip; P1010051.JPG.zip; P1010049.JPG.zip; 392249630771.v3.0.b501.pdf.zip

Dear Terre,

Referring to your mail please find attached and below the requested information about the 450 MHz data transceiver FCC ID: R45-GC801701.

Review of this application is complete and the following points are noted:

ADMINISTRATIVE

1. Information on the DC voltage and current to the final UHF RF stage is required per 2.1033(c)(8). Please provide.

Final UHF RF stage on HD TX FSK MODULE 16832562AB is powered with 3.3V and draws roughly 8 mA

It feeds the RF input of the DATA AMPLIFIER ASSY 46072229AA which is powered with 12V and draws roughly 300 mA

2. A parts list for the UHF radio is needed per 2.1033(c)(9). Please provide.

See attached Excel file "Data Link Tree.xls" for updated tree information and part lists

See attached photo "Data Link Tree.jpg" to identify subparts

3. Some sides of internal PCBs are not shown per 2.1033(c)(12). If a particular PCB is not part of the UHF radio, please advise and we do not need additional photos. Otherwise:

a) PCB #16832029CB, bottom side not shown and is needed.
This PCB is NOT part of the UHF Radio concerned by FCC 74D

b) PCB #16832061AB top is obscured by daughter card. Photo is needed with daughter card removed; also, underside of daughter card.
This PCB is NOT part of the UHF Radio concerned by FCC 74D

c) PCB #16831870AC shows a shield attached. An additional photo is needed with the shield removed.

Thomson 450 MHz data transceiver 6-19-09
This PCB has been replaced by new PCB number is 3922 406 54451 with module (daughter board) HD TX FSK MODULE 16832562AB.

See attached photos "P1010051.jpg" for shielding side and "P1010049.jpg" for the other side

4. Some RF exposure guidance is needed in the User Guide for the camera and the AMU/remote pickup.

a) Can the AMU/remote pickup be considered as a "mobile" installation - that is, the closest user distance will be > 20 cm? Yes

b) The data radio in the camera is a "portable" application, where the user will be < 20 cm from the antenna. What is a realistic closest approach - 5 cm? Yes, However please note that the data Radio in the Camera is RECEIVE ONLY (no TRANSMIT)

5. This will not be a composite application, as no certification is required for the wireless video component.

TECHNICAL

1. Upon certification, the Grant will list the frequency range as 450.65 MHz - 455.85 MHz. These are the center frequencies of the two lowest and highest 25 kHz channels, which are allowed to be combined to form 50 kHz channels. This agrees with the 50 kHz step frequency programming of the UHF radio module, and with the permitted range of frequencies under FCC Part 74D.

Certification can proceed when the points above are addressed.

EDITORIAL These points were noted during review. They are not regulatory:

1. User Guide, p. 60, Camera Install Menu "454...462 GHz" should be MHz.
2. User Guide, p. 74 the UHF bandwidth is listed as 150 kHz. That is not allowed under FCC 74D rules, and it is larger than the 32.5 kHz actually measured.
3. User Guide, p. 74 Applicable standards, radio: FCC Part 74 should be added.

With respect to the mentioned points: The user's guide have been corrected. Please see the attached updated user manual

I'm assuming that with above all administrative and technical needs with respect to FCC certification have been fulfilled.

In the case still additional information is required please let me know.

Thomson 450 MHz data transceiver 6-19-09

With best regards,

Jos Timmermans

Jos Timmermans
Product manager Cameras

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From: Yas Ken
Sent: 30 mei 2009 03:47
To: Timmermans Jos
Subject: FW: Thomson 450 MHz data transceiver only FCC ID: R45-GC801701

Jos:

After our review, and prior to certification, the following is required, per below.
It continues.

Ken

Kenneth Yas
Market Development Manager-Americas
Camera Products

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From: Terre Wolak Intertek [mailto:terre.wolak@intertek.com]
Sent: Friday, May 29, 2009 12:01 PM
To: Yas Ken
Cc: Roland Gubisch Intertek
Subject: FW: Thomson 450 MHz data transceiver only FCC ID: R45-GC801701

Ken,

Please address reviewer's comments below.

Regards,

Terre

Terre Wolak

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Best wishes,

Roland

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