

2.1.13. "CONTROL OPER Level 2" window for Normal Mode

This window is called up by pressing the "NEXT CONTROL" control keys in the "CONTROL Level 1" window when the transmitter is in normal mode.

It provides access to a restricted number of commands and information and is only available in Normal Mode.

OPTIMUM FAMILY OR ULTIMATE FAMILY



AFFINTY FAMILY

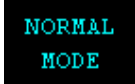
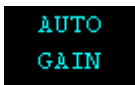


CONTROL KEYS	FUNCTIONS	DISPLAY/COMMENTS
MODIFY PASSWD	Calls up the "MODIFY PASSWD" window.	Command is disabled while the PCL is locked (disabled).
RF LEVEL	Calls up the "RF LEVEL" window.	
HOUR COUNTER	Calls up the "HOUR COUNTER" window.	
STATUS	Calls up the "STATUS" window.	
CONTROL	Calls up the "CONTROL Level 1" window.	
EXCITER	Calls up the "EXCITER Level 1" window.	
AMPLI	Calls up the "AMPLIFIERS" window. (a)	
INTLOCK	Calls up the «INTERLOCK» window (a)	
PSUPPLY	Calls up the "POWER SUPPLY" window. (a)	

CONTROL KEYS	FUNCTIONS	DISPLAY/COMMENTS
	Calls up the "AFFINITY" window. (b)	

(a): Not Visible for AFFINITY family

(b): Not Visible for OPTIMUM or ULTIMATE families

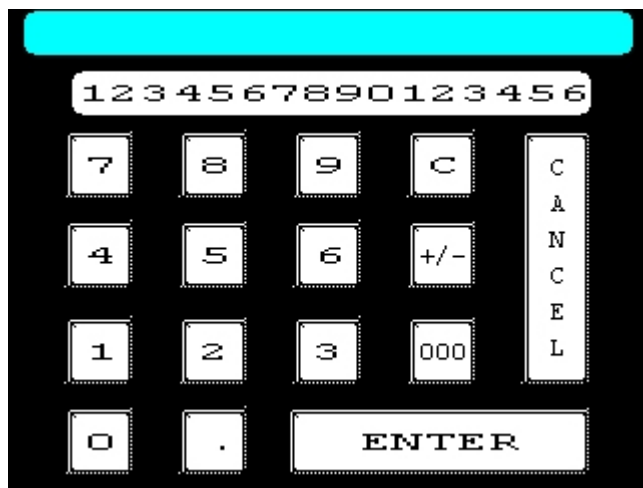
MESSAGE	FUNCTIONS	DISPLAY/COMMENTS
 / 	Displays the current operating mode of the transmitter (<i>maintenance mode or normal mode</i>).	The "NORMAL MODE" message window must be displayed. Blinking message to indicate that the maintenance mode is operating.
 / 	Displays, which gain control mode (manual or automatic) is currently picked up by the transmitter.	AUTO GAIN / MANUAL GAIN

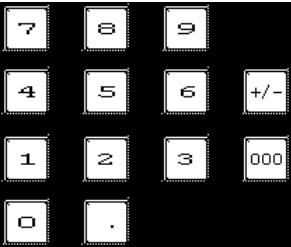
2.1.14. "NUMERICAL VALUE" window

This window is called up after:

- ◆ a request to change parameters from one of the PCL windows,
- ◆ an enter password command or a change password command.

It is used to input data.



CONTROL KEYS	FUNCTIONS	DISPLAY/COMMENTS
	Validates the entry and calls back the previous window.	
	Used to insert parameter value. Numeric keys.	
	Cancels the entry and calls back the previous window.	
	Cancels the last digit entry.	

MESSAGE	FUNCTIONS	DISPLAY/COMMENTS
Examples: COMPOSER LE MOT DE PASSE COURANT ENTER IP ADRESS 1234567890123456	Shows the window title. Displays the value of the parameter during entry.	The title shows the name of the selected parameter. When entering a password, an asterisk (*) is displayed each time a numeric key is pressed.

2.1.15. "RF LEVEL" window

This window is called up by the "RF LEVEL" control keys in either the "CONTROL MAINT Level 2" window or the "CONTROL OPER Level 2" window.

This window displays the reflected and forward power values, as well as the quality variables of the RF feedback signal.

OPTIMUM FAMILY or ULTIMATE FAMILY

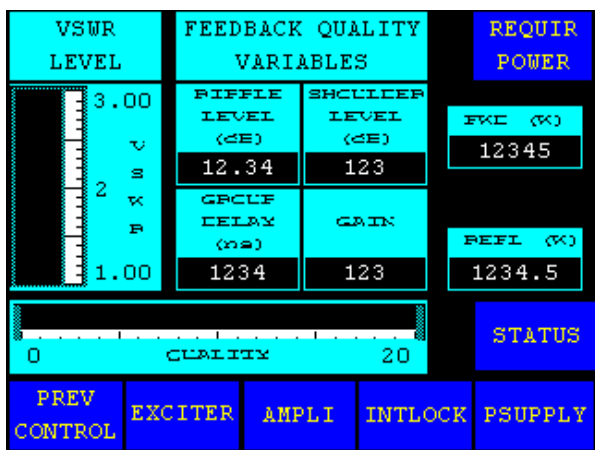


Figure 20 : Maintenance mode and MFN mode operation

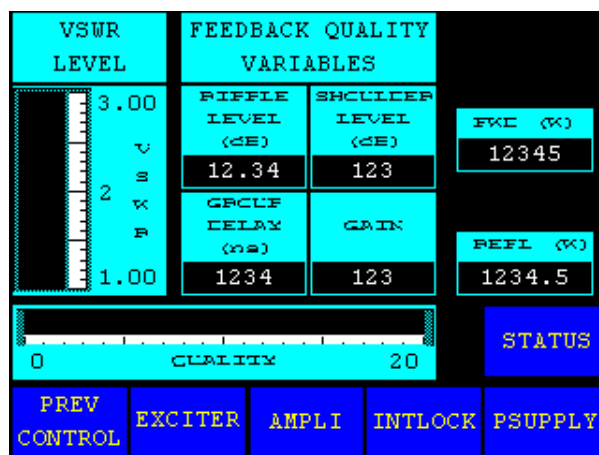


Figure 21 : Normal mode or SFN mode operation and MediaFLO modulator

AFFINTY FAMILY

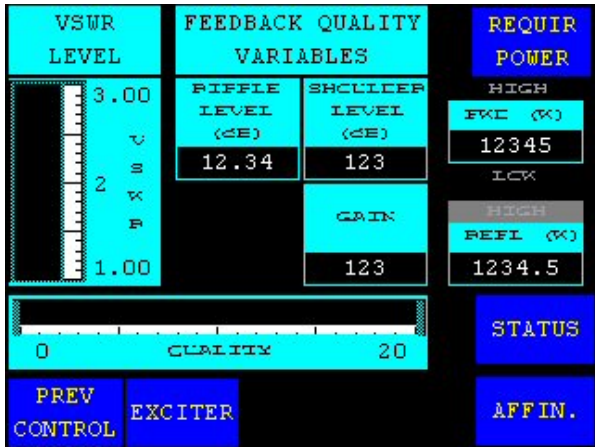


Figure 22 : Maintenance mode and MFN mode operation

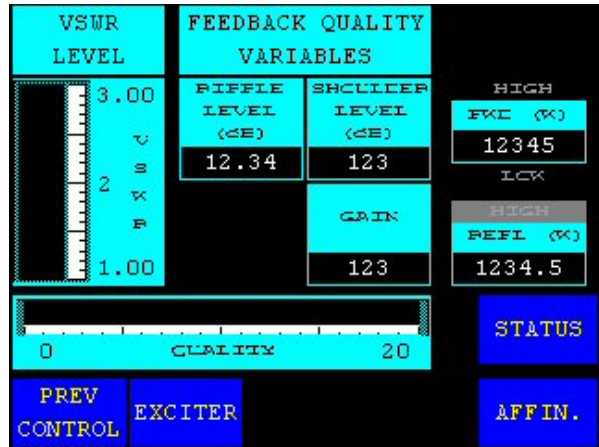


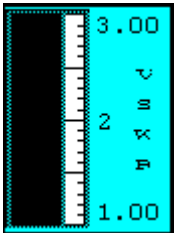
Figure 23 : Normal mode or SFN mode operation

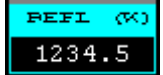
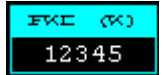
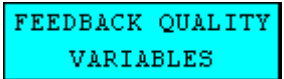
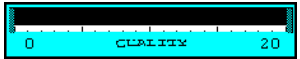
CONTROL KEYS	FUNCTIONS	DISPLAY/COMMENTS
	Calls up the "REQUIRED POWER" window. (3)	ATSC transmitter This control keys is available in Maintenance mode only. Control key invisible in Normal mode only. DVB-T transmitters This control keys is available in Maintenance mode and MFN mode operation only. Control key invisible in Normal mode or SFN mode operation.
	Calls up the "TRANSMITTER STATUS" window.	
	Calls up windows as follows: "CONTROL MAINT Level 2", if the system is in maintenance mode, "CONTROL OPER Level 2", if the system is in normal mode.	
	Calls up the "EXCITER Level 1" window.	
	Calls up the "AMPLIFIERS" window. (a)	
	Calls up the «INTERLOCK» window (a)	
	Calls up the "POWER SUPPLY" window. (a)	
	Calls up the "AFFINITY" window. (b)	

(a): Not Visible for AFFINITY family

(b): Not Visible for OPTIMUM or ULTIMATE families

(3): Unavailable for MediaFLO modulator

MESSAGE	FUNCTIONS	DISPLAY/COMMENTS
	Gives the parameter name.	
	Displays the antenna SWR (before RF filter unit).	

MESSAGE	FUNCTIONS	DISPLAY/COMMENTS
	Indicates a higher value than the threshold value.	<u>Flashes</u> if the reflected power (reverse power) exceeds 3% of calibrated power <u>Otherwise</u> not visible. The threshold value (3%) is unchanging
	Displays the reflected (reverse) RF power value.	This value is expressed in watts or as a percentage of calibrated power value according with your installation choice
	Indicates a higher value than the high alarm threshold value.	<u>Flashes</u> if the transmitted power exceeds the maximum power threshold value. <u>Otherwise</u> not visible. The alarm threshold is set using the «RF THRESHOLD» window.
	Displays the transmitted RF power value.	This value is expressed in watts or as a percentage of the calibrated power value according with your installation choice
	Indicates a lower value than the low alarm threshold value.	<u>Flashes</u> if the transmitted power is lower than the minimum power threshold value. <u>Otherwise</u> not visible. The alarm threshold is set using the «RF THRESHOLD» window.
	Gives the parameter name.	
	Displays the measured in-band ripple value.	Available in Adaptive mode only.
	Displays the measured shoulder level value.	Available in Adaptive mode only.
	Displays the measured group delay level value (4).	Available in Adaptive mode only.
	Displays the measured gain value.	Available in Adaptive mode only. The nominal value is 128.
	Displays the calculated quality assessment of the transmitter.	Available in Adaptive mode only. The quality assessment depends on the following measured parameters and quality threshold levels : ♦ Power level ♦ Shoulder level ♦ Ripple level The "QUALITY THRESHOLD SETTINGS" window is accessible in installation mode.

(4): MediaFLO modulator only

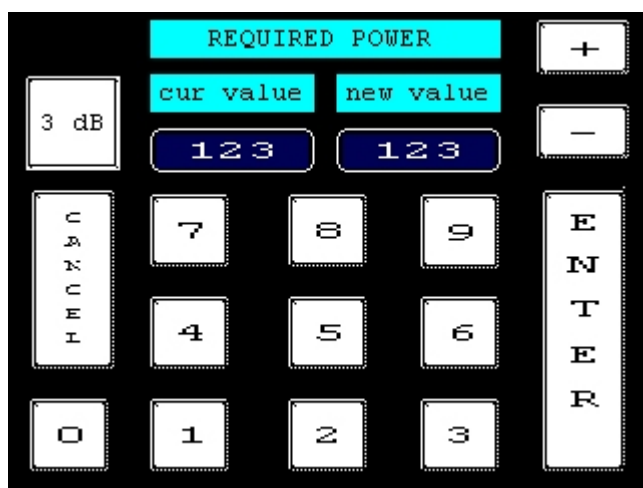
2.1.16. "REQUIRED POWER" window

The «REQ PWR» controls key in either the «RF LEVEL» window or the «TRANSMITTER STATUS» window calls it up when the transmitter is in maintenance mode.

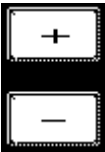
Note: This window is not available for MediaFlo modulator.

This window is used to input the required Power. This is the power level required by an operator (local or remote). The operator can modify this level at any time. Range of variation :

- ◆ $0.25 * \text{Calibred Power} \leq \text{Required power} \leq 1.12 * \text{Calibred Power}$
- ◆ With Required power $\leq$ Maximum Power



CONTROL KEYS	FUNCTIONS	DISPLAY/COMMENTS
REQUIRED POWER	Shows the window title.	
cur value 123	Displays the actual value of the required power during entry.	
new value 123	Displays the value of the required power during entry.	Before selecting a new value to modify the value displays is equal to current value.
3 dB	Selects a reduction in power Displays last selection made by the operator or by the system (automatic power reduction).	0dB, 3dB, 6dB For safety reasons, the PCL should be locked when a power reduction to -3dB or -6dB has been commanded. Command is displayed while the PCL is locked
7 8 9 4 5 6 0 1 2 3	Used to insert new value of required power. Numeric keys.	

CONTROL KEYS	FUNCTIONS	DISPLAY/COMMENTS
	Used to adjust slightly new value of required power.	
	Cancels the entry and calls back the previous window.	
	Validates the entry and calls back the previous window.	

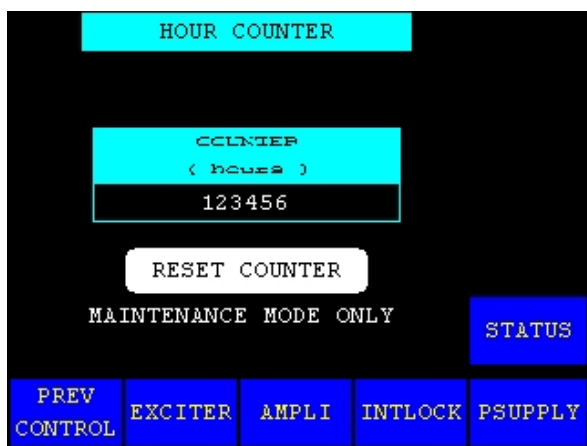
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2.1.17. "HOUR COUNTER" window

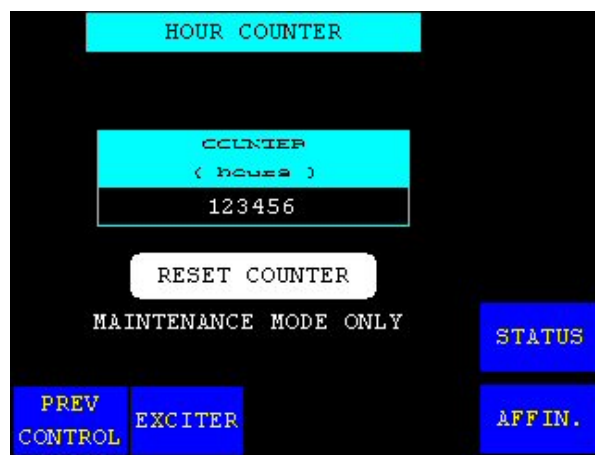
This window is called up by pressing the "HOUR COUNTER" control keys in the "CONTROL MAINT Level 2" window or in the "CONTROL OPER Level 2" window.

It displays a read-out of the elapsed time counter which shows the actual time during which the transmitter has been in operation. This value will also be the actual time during which the cooling system has been in operation.

OPTIMUM FAMILY OR ULTIMATE FAMILY



AFFINTY FAMILY



CONTROL KEYS	FUNCTIONS	DISPLAY/COMMENTS
RESET COUNTER	Resets the elapsed time counter to zero.	Command is disabled in Normal mode or while the PCL is locked (disabled).
STATUS	Calls up the "TRANSMITTER STATUS" window.	
PREV CONTROL	Calls up windows as follows: "CONTROL MAINT Level 2", if the system is in maintenance mode, "CONTROL OPER Level 2", if the system is in normal mode.	
EXCITER	Calls up the "EXCITER Level 1" window.	
AMPLI	Calls up the "AMPLIFIERS" window. (a)	
INTLOCK	Calls up the «INTERLOCK» window (a)	
PSUPPLY	Calls up the "POWER SUPPLY" window. (a)	
AFFIN.	Calls up the "AFFINITY" window. (b)	

(a): Not Visible for AFFINITY family

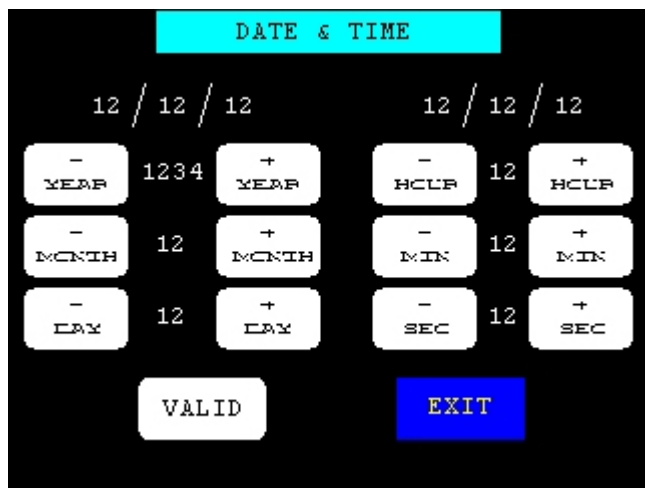
(b): Not Visible for OPTIMUM or ULTIMATE families

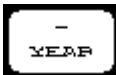
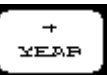
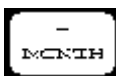
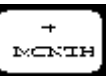
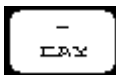
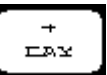
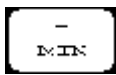
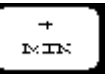
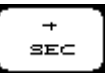
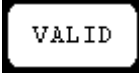
MESSAGE	FUNCTIONS	DISPLAY/COMMENTS
HOUR COUNTER	Gives the window name.	
COUNTER (hours) 123456	Displays the actual time during which the transmitter has been in operation since it was last reset.	The counter is reset to zero when the "RESET COUNTER" command in this window is activated. The counter value is stored in the CPU; if the CPU is replaced, the counter value will no longer give a true representation of the transmitter operating time.

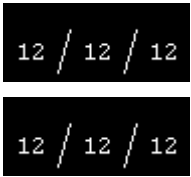
2.1.18. DATE & TIME" window

It is called up by pressing the "DATE" control keys in the "CONTROL MAINT Level 2" window. It is only accessible when the transmitter is in maintenance mode.

This window is used to update the date and time.



CONTROL KEYS	FUNCTIONS	DISPLAY/COMMENTS
 / 	Increments or decrements the year.	These commands are locked out: if the PCL is locked, while the number resulting from the increment or decrement is being displayed between the two control keys.
 / 	Increments or decrements the month.	
 / 	Increments or decrements the day.	
 / 	Increments or decrements the hour.	
 / 	Increments or decrements the minutes.	
 / 	Increments or decrements the seconds.	
	Validates the date and time displayed and recalls the "CONTROL MAINT Level 2" window.	
	Recalls the "CONTROL MAINT Level 2" window without updating the date and time.	

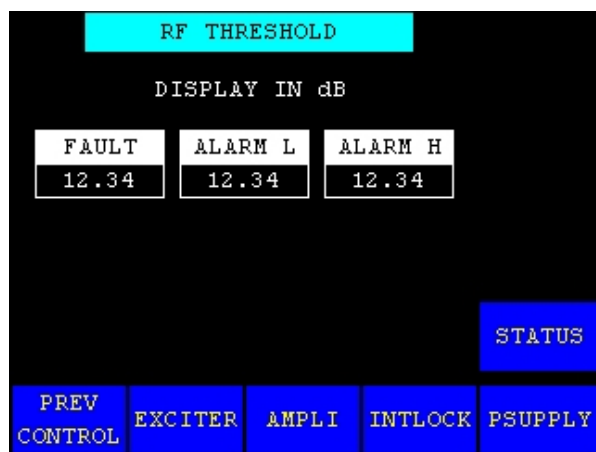
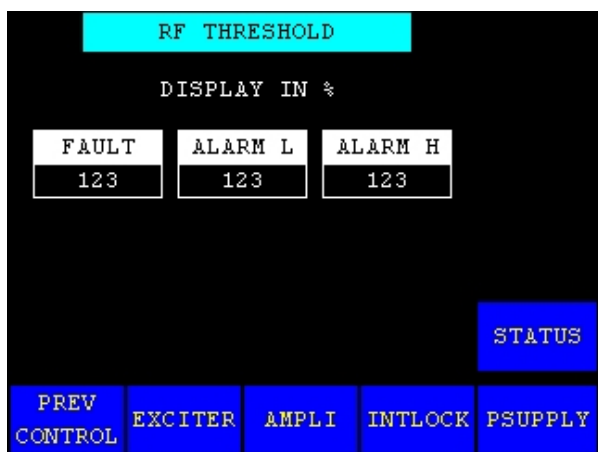
MESSAGE	FUNCTIONS	DISPLAY/COMMENTS
DATE & TIME	Gives the window name.	
	Displays date and time values used by the Central Control Unit.	The date and time values are frozen to values which correspond to the instant when the "DATE" button in the "CONTROL MAINT Level 2" window was pressed. For <u>ATSC transmitter</u>, the display of date is following : Month / Day / Year. For <u>DVDT transmitter</u>, the display of date is following : Day / Month / Year.

2.1.19. "RF THRESHOLD" window

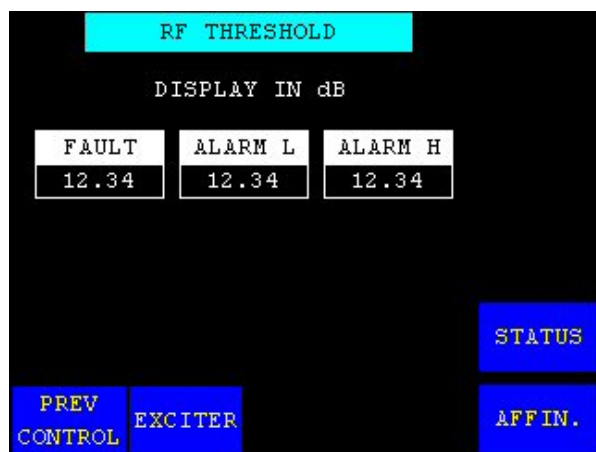
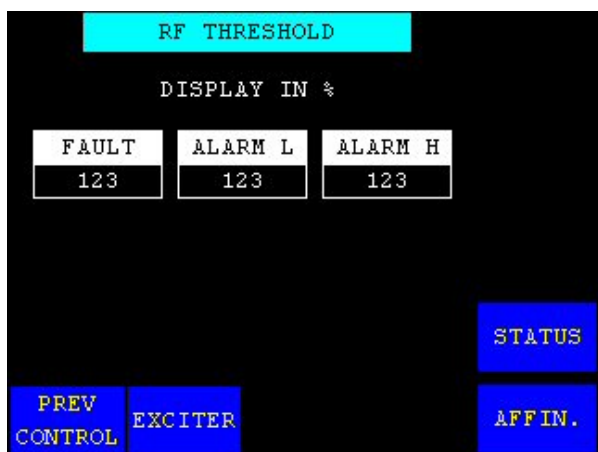
This window is called up by pressing the "RF THRES" control keys in the "CONTROL MAINT Level 2" window. It is only accessible in maintenance mode.

It provides for adjusting the thresholds for triggering the alarm and fault signals which draw the operator's attention to the RF power level status using the PCL "Alarm" indicator lamp.

OPTIMUM FAMILY OR ULTIMATE FAMILY



AFFINTY FAMILY



CONTROL KEYS	FUNCTIONS	DISPLAY/COMMENTS
	Calls up the "NUMERICAL VALUE" window in which the high alarm threshold value can be changed. Displays the high alarm threshold for the RF power level.	Commands are disabled while the PCL is locked (disabled). This value is expressed in dB or as a percentage of the calibrated power value according with your installation choice DISPLAY IN dB / DISPLAY IN %
	Calls up the "NUMERICAL VALUE" window in which the low alarm threshold value can be changed. Displays the low alarm threshold for the RF power level.	

CONTROL KEYS	FUNCTIONS	DISPLAY/COMMENTS
ALARM H 12.34	Calls up the "NUMERICAL VALUE" window in which the fault threshold value can be changed. Displays the fault threshold for the RF power level.	
STATUS	Calls up the "STATUS" window.	
PREV CONTROL	Calls up the "CONTROL MAINT Level 2" window.	
EXCITER	Calls up the "EXCITER Level 1" window.	
AMPLI	Calls up the "AMPLIFIERS" window. (a)	
INTLOCK	Calls up the «INTERLOCK» window (a)	
PSUPPLY	Calls up the "POWER SUPPLY" window. (a)	
AFFIN.	Calls up the "AFFINITY" window. (b)	

(a): Not Visible for AFFINITY family

(b): Not Visible for OPTIMUM or ULTIMATE families

MESSAGE	FUNCTIONS	DISPLAY/COMMENTS
RF THRESHOLD	Gives the window name.	

2.1.20. "QUALITY THRESHOLD SETTINGS" window

It is called up by pressing the "QUALITY THRESHOLD" control keys in the " CONTROL MAINT Level 2" window. It is only accessible in maintenance mode.

This window is used to change the quality threshold levels stored in the CPU card.

OPTIMUM FAMILY or ULTIMATE FAMILY

POWER (dB)	
-12.34	
SHOULDERS (dB)	
-12.34	
RIPPLE (dB)	
12.34	
STATUS	
PREV CONTROL	EXCITER
AMPLI	INTLOCK
PSUPPLY	

AFFINITY FAMILY

POWER (dB)	
-12.34	
SHOULDERS (dB)	
-12.34	
RIPPLE (dB)	
12.34	
STATUS	
PREV CONTROL	EXCITER
AFFIN.	

CONTROL KEYS	FUNCTIONS	SELECTIONS AVAILABLE/COMMENTS
STATUS	Calls up the "TRANSMITTER STATUS" window.	
PREV CONTROL	Calls up the "CONTROL MAINT Level 2" window.	
EXCITER	Calls up the "EXCITER Level 1" window.	
AMPLI	Calls up the "AMPLIFIERS" window. (a)	
INTLOCK	Calls up the «INTERLOCK» window (a)	
PSUPPLY	Calls up the "POWER SUPPLY" window. (a)	
AFFIN.	Calls up the "AFFINITY" window. (b)	
POWER (dB) -12.34	Displays the quality threshold for the power level. Pressing this key calls up the "NUMERICAL VALUE" window in which this quality threshold can be changed. Displays last selection.	For each parameter, the quality threshold is assessed over a scale of 20, the cubic root of the product of the three assessments (Power, Shoulders, Ripple) providing the overall quality assessment of the transmitter. This overall quality assessment is available to the operator in the "RF LEVEL" screen.

CONTROL KEYS	FUNCTIONS	SELECTIONS AVAILABLE/COMMENTS
STATUS	Calls up the "TRANSMITTER STATUS" window.	
PREV CONTROL	Calls up the "CONTROL MAINT Level 2" window.	
EXCITER	Calls up the "EXCITER Level 1" window.	
AMPLI	Calls up the "AMPLIFIERS" window. (a)	
INTLOCK	Calls up the «INTERLOCK» window (a)	
PSUPPLY	Calls up the "POWER SUPPLY" window. (a)	
AFFIN.	Calls up the "AFFINITY" window. (b)	
SHOULDERS {dB} -12.34	Displays the quality threshold for the shoulder level. Pressing this key calls up the "NUMERICAL VALUE" window in which this quality threshold can be changed. Displays last selection.	The quality threshold is the maximum permissible deviation (in dB) from a set point before the occurrence of a major fault (overall quality assessment of 13/20), which produces a transmitter changeover in an N+1 or Passive Reserve system. In SD or DD systems, no changeover is performed.
RIPPLE {dB} 12.34	Displays the quality threshold for the ripple level. Pressing this key calls up the "NUMERICAL VALUE" window in which this quality threshold can be changed. Displays last selection.	The set point (Shoulder, Ripple) is the parameter threshold beyond which the MODAP performs a correction. The set points can be defined in the "CONTROL MAINT Level 3" window. The power set point is the nominal power of the transmitter, it is fixed and is available to the operator in the "INSTALLATION PARAMETERS Level 1" window.

(a): Not Visible for AFFINITY family

(b): Not Visible for OPTIMUM or ULTIMATE families

2.1.21. "COFDM or 8VSB PARAMETERS" window

This window is called up by pressing the "MODUL PARAM." control keys in the "CONTROL MAINT Level 2" window. It is only accessible in maintenance mode.

It is used to change the COFDM or 8VSB modulator card configuration parameters stored in the CPU card.

The COFDM window is only available with an internal COFDM modulator (DVB-T Transmitter).

Note :

♦ MODAP Version only

To set up a new parameter configuration of the modulator, the three corrections (ALE, LUT and OLDC) should be set to the FIXED mode. The control keys can be defined in the "MISCELLANEOUS" windows and "CONTROL MAINT Level 4" windows.

♦ SIRIUS Version only

To set up a new parameter configuration of the modulator, the two corrections (ALE, and LUT) should be set to the FIXED mode. The control keys can be defined in the "MISCELLANEOUS" window.

COFDM MODULATOR

OPTIMUM FAMILY OR ULTIMATE FAMILY

CONTEL 16 QAM	CARRIER 8 K	INTERVAL 1/8	SFN
HP CODE RATE 2/3	DATA PRBS17		CLOCK EXTERN
Tx ID 12345	TX LENGTH (100ns) 1234567890		
VALID		CANCEL	STATUS
PREV CONTROL	EXCITER	AMPLI	INTLOCK PSUPPLY

AFFINTY FAMILY

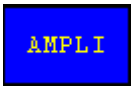
CONTEL 16 QAM	CARRIER 8 K	INTERVAL 1/8	SFN
HP CODE RATE 2/3	DATA PRBS17		CLOCK EXTERN
Tx ID 12345	TX LENGTH (100ns) 1234567890		
VALID		CANCEL	STATUS
PREV CONTROL	EXCITER	AFFIN.	

8VSB MODULATOR

DATA PRBS17		GPS EXTERN
VALID		STATUS
PREV CONTROL	EXCITER	AMPLI INTLOCK PSUPPLY

CONTROL KEYS	FUNCTIONS	SELECTIONS AVAILABLE/COMMENTS
CONSTEL 16 QAM	Selects the constellation type used by the modulator. Displays last selection.	CONSTEL 64-QAM/16-QAM /QPSK 64-QAM : 64-bit representation 16-QAM : 16-bit representation QPSK (4-QAM) : 4-bit representation
CARRIER 8 K	Selects the number of transmitted carriers. Displays last selection.	CARRIER 8K/2K
INTERVAL 1/8	Selects the guard interval used by the COFDM modulator. Displays last selection.	INTERVAL 1/32; 1/16; 1/8; 1/4
HP CODE RATE 2/3	Selects the High Priority code rate of the modulation. Displays last selection.	HP CODE RATE 7/8; 5/6; 3/4; 2/3; 1/2
SFN / MFN	Selects the network type. Displays last selection.	SFN / MFN
Tx ID 12345	Selects the transmitter ID number in an SFN network. (*) Displays last selection.	This value allows to address the content of the MIP to this identified Tx. Pressing this key calls up the "NUMERICAL VALUE" window in which this identification number can be changed.
TX LENGTH (100ns) 1234567890	Selects the offset delay value. (*)	This value can be changed by the MIP. Pressing this key calls up the "NUMERICAL VALUE" window in which this time can be changed.
DATA PRBS17	Selects the input signal type of the modulator	Data PRBS 15 / Data PRBS 17 / Data PRBS 20 / Data PRBS 23 / Data input ASI / Data DVB_SPI (MODAP version only) <u>In SFN mode</u> , the "Data PRBS" control keys are not validated by the system.
CLOCK EXTERN	Selects the clock type of the exciter.	CLOCK Internal / CLOCK External <u>In SFN mode</u> , CLOCK external is used.
CANCEL	Cancels a selection.	
VALID	Validates a selection.	
STATUS	Calls up the "STATUS" window.	
PREV CONTROL	Calls up the "CONTROL MAINT Level 2" window.	
EXCITER	Calls up the "EXCITER Level 1" window.	

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CONTROL KEYS	FUNCTIONS	SELECTIONS AVAILABLE/COMMENTS
	Calls up the "AMPLIFIERS" window. (a)	
	Calls up the «INTERLOCK» window (a)	
	Calls up the "POWER SUPPLY" window. (a)	
	Calls up the "AFFINITY" window. (b)	

(*): Icon is only available in SFN mode with an internal COFDM modulator.

(a): Not Visible for AFFINITY family

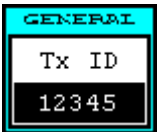
(b): Not Visible for OPTIMUM or ULTIMATE families

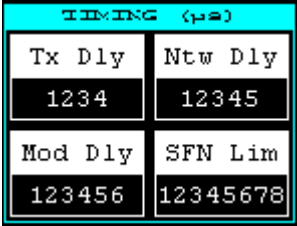
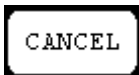
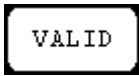
2.1.22. "FLO 1 PARAMETERS" window

This window is called up by pressing the "MODUL PARAM." control keys in the "CONTROL MAINT Level 2" window. It is only accessible in maintenance mode.

It is used to change the MediaFLO modulator card configuration parameters stored in the CPU card.

GENERAL		INPUT		TIMING (µs)	
Tx ID	WA PID	Tx Dly	Ntw Dly		
12345	1234	1234	12345		
	LA PID	Mod Dly	SFN Lim		
	1234	123456	12345678		
DATA SRC		CLOCK SRC			
DATA	GPS	VALID		CANCEL	
PRBS	EXTERN	NEXT SCREEN		STATUS	
PREV CONTROL	EXCITER	AMPLI	INTLOCK	PSUPPLY	

CONTROL KEYS	FUNCTIONS	SELECTIONS AVAILABLE/COMMENTS
	Selects the transmitter ID number in an SFN network. Displays last selection.	This value allows addressing the content of the MIP to this identified Tx. Pressing this key calls up the "NUMERICAL VALUE" window in which this identification number can be changed.
	Selects the input signal type of the modulator	ASI / PRBS
	Selects the clock type of the exciter.	CLOCK Internal / GPS Internal / GPS External
	Selects the process PID number.	♦ WA PID : This value is programmed Wide Area content process identification (PID). If the wide area PID value in the incoming transport stream matches this value, the stream is forwarded to the channelizer as wide area content. Otherwise, the stream is ignored. ♦ LA PID : This value is programmed Local Area content process identification (PID). If the local area PID value in the incoming transport stream matches this value, the stream is forwarded to the channelizer as local area content. Otherwise, the stream is ignored. Pressing this key calls up the "NUMERICAL VALUE" window in which this PID number can be changed.

CONTROL KEYS	FUNCTIONS	SELECTIONS AVAILABLE/COMMENTS
	Selects the delay value.	♦ Mod Dly: The number of clock cycles corresponding to the delay through the FLO modulator core. This is set to align the start of superframe at the RF output to the GPS 1PPS. ♦ TX Dly: This value is the latency associated with the transmit hardware. It's used to compensate for the transmit delay in order to synchronize transmissions from multiple sites in an SFN network. ♦ Ntw Dly: This value is the latency associated with the geographic separation of transmitters. It's used to synchronize transmissions from multiple sites in an SFN network. ♦ SFN lim: If the absolute value of the system clock integrity count is greater than this limit, it is out of range and an alarm generated. Pressing this key calls up the "NUMERICAL VALUE" window in which this value can be changed.
	Cancels a selection.	
	Validates a selection.	
	Calls up the "FLO 2 MODULATOR PARAMETERS" window.	
	Calls up the "STATUS" window.	
	Calls up the "CONTROL MAINT Level 2" window.	
	Calls up the "EXCITER Level 1" window.	
	Calls up the "AMPLIFIERS" window.	
	Calls up the «INTERLOCK» window	
	Calls up the "POWER SUPPLY" window.	

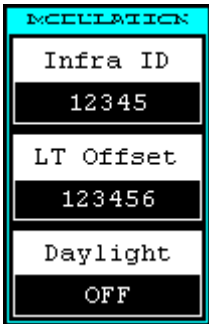
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2.1.23. "FLO 2 PARAMETERS" window

This window is called up by pressing the "NEXT SCREEN." control keys in the "FLO 1 MODULATOR PARAMETERS" window. It is only accessible in maintenance mode.

It is used to change the MediaFLO modulator card configuration parameters stored in the CPU card.

MODULATION		CHANNELIZER		
Infra ID 12345	Nat Len 1234	Loc Len 1234		VALID
LT Offset 123456	PP Len 1234	Fr1 Len 1234		CANCEL
Daylight OFF	WID Val 12	LID Val 12		NEXT SCREEN
				STATUS
PREV CONTROL	EXCITER	AMPLI	INTLOCK	PSUPPLY

CONTROL KEYS	FUNCTIONS	SELECTIONS AVAILABLE/COMMENTS
	Selects values of the modulation parameters.	♦ Infra ID: This value is inserted into the infrastructure ID field of the Local system parameters message. The network sets this field to the identifier assigned to the local area infrastructure. ♦ LT Offset: This value is inserted into the local time offset field of the local system parameters message. Pressing this key calls up the "NUMERICAL VALUE" window in which this PID number can be changed. ♦ Daylight: ON / OFF This indicator is inserted into the daylight field of the local system parameters message. ON: Local transmitter time is daylight saving time.

CONTROL KEYS	FUNCTIONS	SELECTIONS AVAILABLE/COMMENTS
	Selects values of the channelizer parameters.	♦ Nat Len: Exciter initialization register indicates National Length. ♦ Loc Len: Exciter initialization register indicates Local Length. ♦ PP Len: Exciter initialization register indicates Positioning Pilot Length. ♦ Fr1 Len: Exciter initialization register indicates FrameLength. ♦ WID Val: Exciter initialization register indicates WID scrambler sequence number. ♦ LID Val: Exciter initialization register indicates LID scrambler sequence number. Pressing this key calls up the "NUMERICAL VALUE" window in which this value can be changed.
	Cancels a selection.	
	Validates a selection.	
	Calls up the "CONTROL MAINT Level 2" window.	
	Calls up the "STATUS" window.	
	Calls up the "FLO 1 MODULATOR PARAMETERS" window.	
	Calls up the "EXCITER Level 1" window.	
	Calls up the "AMPLIFIERS" window.	
	Calls up the «INTERLOCK» window	
	Calls up the "POWER SUPPLY" window.	

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2.1.24. "MISCELLANEOUS" window

This window is called up by pressing the "MISC PARAM." control keys in the "CONTROL MAINT Level 2" window. It is only accessible in maintenance mode.

It is used to change the ADAPT exciter operation configuration parameters stored in the CPU card.

OPTIMUM FAMILY OR ULTIMATE FAMILY

IN PROGRESS	IN PROGRESS	IN PROGRESS
LIN. COR	N.LIN COR	ADAPT PARAM
ADAPT MODE	ADAPT MODE	
GPS MUTE (h)	1PPS	10MHZ EXT
	MUTE	MUTE
	MPEG	FOLDBACK
	MUTE	DISABLE
VALID CANCEL STATUS		
PREV CONTROL	EXCITER	AMPLI INTLOCK PSUPPLY

AFFINTY FAMILY

LIN. COR	N.LIN COR	FOLDBACK
ADAPT MODE	ADAPT MODE	DISABLE
GPS MUTE (h)	1PPS	10MHZ EXT
	MUTE	MUTE
	MPEG	
	MUTE	
VALID CANCEL STATUS		
PREV CONTROL	EXCITER	AFFIN.

CONTROL KEYS	FUNCTIONS	DISPLAY/COMMENTS
LIN. COR ADAPT MODE OR IN PROGRESS LIN. COR ADAPT MODE	Toggles between fixed and adaptive correction of signal distortion. Displays last selection.	LIN. COR ADAPT MODE / LIN. COR FIXED MODE The text colour of control key is grey when you select the adaptive mode. Command is disabled while the PCL is locked (disabled).
N.LIN COR ADAPT MODE OR IN PROGRESS N.LIN COR ADAPT MODE	Displays the current operating mode of the LUT. Displays last selection.	N. LIN COR ADAPT MODE / N.LIN COR FIXED MODE The text colour of control key is grey when you select the adaptive mode. Command is disabled while the PCL is locked (disabled).
IN PROGRESS ADAPT PARAM	Selects the coefficients of the corrections for antenna exciter.	SAVE / RECALL Press this control key and validation ◆ SAVEL: Allows saving coefficients into tables of corrections. ◆ RECALL: Allows loading corrections by using coefficients beforehand recorded. Recalls the coefficients of the last save.

CONTROL KEYS	FUNCTIONS	DISPLAY/COMMENTS
FOLDBACK DISABLE	Selects the reflected (reserve) power control mode.	Control key available according to your installation mode FOLDBACK ENABLED: When the reflected power value is higher than the threshold value (3%) the power control is progressively produce through an algorithm. FOLDBACK DISABLED: When the reflected power value is higher than the threshold value (3%) the power control is produce by stairway (-3dB, -6dB and halt 'no power')
GPS MUTE (h)	Displays the actual time during which the transmitter has been in operation since the GPS was muted (Absent). (1) Displays last selection.	Range of variation: From 0 to 99 hours In case of the value of display is 0 hour, the transmitter is still working (not mute).
1PPS MUTE	Selects the 1PPS changeover mode. Displays last selection.	MUTE / NOT MUTE Icon is available in SFN mode only. NOT MUTE: In case of disable of 1 PPS signal the transmitter is still working. The SFN network is disturbs MUTE: In case of disable of 1 PPS signal the transmitter is stopped. When the 1 PPS signal reappear with 10MHz signal present the transmitter start alone.
10MHZ EXT MUTE	Selects the 10MHz EXT changeover mode. Displays last selection.	MUTE / NOT MUTE Icon is available in SFN mode only. Visible for External GPS only, Control key used: CLK SOURCE NOT MUTE: In case of disable of 10Mhz signal the transmitter is still working. The SFN network is disturbs MUTE: In case of disable of 10MHz signal the transmitter is stopped. When the 10Mhz signal reappear with 1 PPS signal present the transmitter start alone.
MPEG MUTE	Selects the input signal changeover mode. (1) Displays last selection.	MUTE / PRBS SFN mode: this control key has no effect. The icon is only available in MFN mode MFN mode: this control key is used to select the input signal switching mode.
VALID	Validates a selection.	
CANCEL	Cancels a selection.	
STATUS	Calls up the "TRANSMITTER STATUS" window.	
PREV CONTROL	Calls up the "CONTROL MAINT Level 3" window.	

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CONTROL KEYS	FUNCTIONS	DISPLAY/COMMENTS
EXCITER	Calls up the "EXCITER Level 1" window.	
AMPLI	Calls up the "AMPLIFIERS" window. (a)	
INTLOCK	Calls up the «INTERLOCK» window (a)	
PSUPPLY	Calls up the "POWER SUPPLY" window. (a)	
AFFIN.	Calls up the "AFFINITY" window. (b)	

(a): Not Visible for AFFINITY family

(b): Not Visible for OPTIMUM or ULTIMATE families

(1): Not Visible for MediaFLO modulator

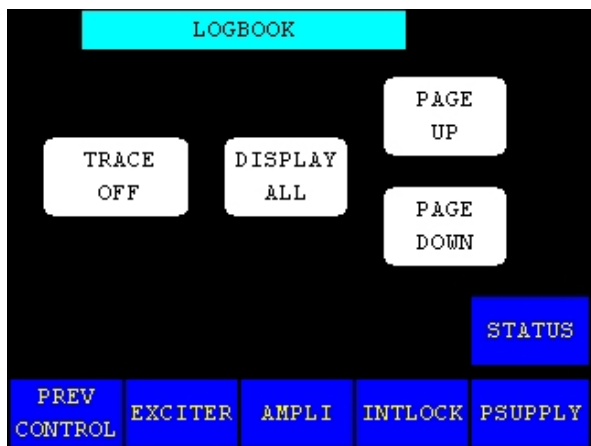
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2.1.25. "LOGBOOK" window

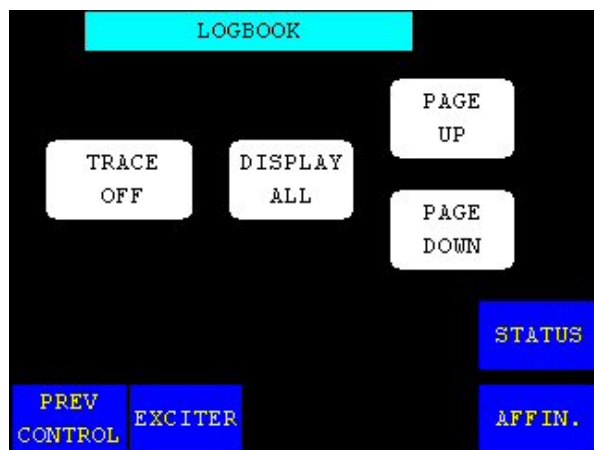
This window is called up by pressing the "LOGBOOK" control keys in the "CONTROL MAINT Level 2" window.

It controls the downloading of the log book data to a terminal. This window is only accessible when the transmitter is in maintenance mode.

OPTIMUM FAMILY OR ULTIMATE FAMILY



AFFINTY FAMILY



CONTROL KEYS	FUNCTIONS	DISPLAY/COMMENTS
	Selects the type of information flow to the log book terminal. Displays the type of information flow selected.	TRACE OFF / TRACE ON <u>TRACE ON</u> : the log book output is continuous, data regarding each event is sent in a real time to the logbook terminal. <u>TRACE OFF</u> : the three other buttons are operational. Command is disabled while the PCL is locked (disabled).
	Displays all events stored in the log book.	Command is disabled while the PCL is locked (disabled).
	Displays the 20 events ahead of the last events accessed by the operator.	Command is disabled while the PCL is locked (disabled).
	Displays the 20 events which follow on from the last events accessed by the operator.	Command is disabled while the PCL is locked (disabled).
	Calls up the "TRANSMITTER STATUS" window.	
	Calls up the "CONTROL Level 2" window.	
	Calls up the "EXCITER Level 1" window.	

CONTROL KEYS	FUNCTIONS	DISPLAY/COMMENTS
	Calls up the "AMPLIFIERS" window. (a)	
	Calls up the «INTERLOCK» window (a)	
	Calls up the "POWER SUPPLY" window. (a)	
	Calls up the "AFFINITY" window. (b)	

(a): Not Visible for AFFINITY family

(b): Not Visible for OPTIMUM or ULTIMATE families

INDICATOR LAMPS AND MESSAGE DISPLAYS	FUNCTIONS	DISPLAY/COMMENTS
	Gives the window name.	

2.1.26. "EXCITER Level 1" window, or "EXCITER PANEL" window, MODAP version ONLY

From other windows it can be called up by pressing the "EXCITER" key.

This window, which is called "EXCITER PANEL" in an SD transmitter, displays the status of the exciter cards. It also provides for selecting an exciter and configuring the changeover mode for the exciters *.

OPTIMUM FAMILY OR ULTIMATE FAMILY

EXCITER A OK		SUBST READY		EXCITER B OK	
ON	ON AIR			OFF	ON LOAD
MPEG	GAIN	EXTERN		MPEG	GAIN
PRESENT	12345678	GPS CK		PRESENT	12345678
RF ON				RF OFF	
EXC A	AUTO	CANCEL			
EMB	CH OVER	VALID			
		STATUS			
CONTROL	EXCITER NEXT	AMPLI	INTLOCK	PSUPPLY	

Figure 24 : Dual Drive Transmitter

EXCITER A				MODUL	
RF ON					
ON	ANTENNE	MCU	CK	LAF	CK
MPEG	GAIN	CLIC	CK	PREAMP	CK
PRESENT	12345678	SYNTH	10 MHz	INT	CK
		CLIC	CK	LASI	CK
GPS EXTERN CK					
		STATUS			
CONTROL	EXCITER	AMPLI	INTLOCK	PSUPPLY	

Figure 25 : Single Drive Transmitter

AFFINTY FAMILY

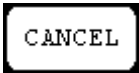
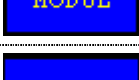
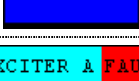
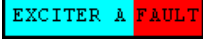
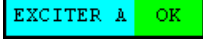
EXCITER A OK		SUBST READY		EXCITER B OK	
ON	ON AIR			OFF	ON LOAD
MPEG	GAIN	EXTERN		MPEG	GAIN
PRESENT	12345678	GPS CK		PRESENT	12345678
NOT COMPLIANT				NOT COMPLIANT	
EXC A	AUTO	CANCEL			
EXCITER	CH OVER	VALID			
		STATUS			
CONTROL	EXCITER NEXT	AFFIN.			

Figure 26 : Dual Drive Transmitter

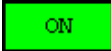
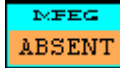
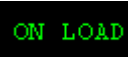
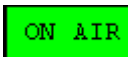
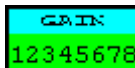
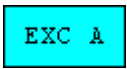
EXCITER A				MODUL	
NOT COMPLIANT					
ON	ANTENNE	MCU	CK	LAF	CK
MPEG	GAIN	CLIC	CK	PREAMP	CK
PRESENT	12345678	SYNTH	10 MHz	INT	CK
		CLIC	CK	LASI	CK
GPS EXTERN CK					
		STATUS			
CONTROL	EXCITER	AFFIN.			

Figure 27 : Single Drive Transmitter

CONTROL KEYS	FUNCTIONS	DISPLAY/COMMENTS
EXCITER	Selects the exciter to be connected to the amplifier channel (exciter to antenna). (*)	Command is disabled while the PCL is locked (disabled).
CH OVER	Selects the exciter changeover mode (Automatic or Manual). (*)	Command is disabled while the PCL is locked (disabled).
VALID	Validates a selection. (*)	

CONTROL KEYS	FUNCTIONS	DISPLAY/COMMENTS
	Cancels a selection. (*)	
	Calls up the "TRANSMITTER STATUS" window.	
	Calls up the "CONTROL Level 1" window.	
	Calls up the "EXCITER Level 2" window. (*)	
	Calls up the "EXCITER PANEL" window. (**)	
	Calls up the "AMPLIFIERS" window. (a)	
	Calls up the «INTERLOCK» window (a)	
	Calls up the "POWER SUPPLY" window. (a)	
	Calls up the "AFFINITY" window. (b)	
	Calls up the "DASI STATUS" window (**)	This control keys is available and visible in case of DASI board is fitted according with your installation choice
	Calls up the "OLDC STATUS" window. (**)	This control keys is available and visible in case of OLDC board is fitted according with your installation choice
	Calls up the "MODULATOR " window, in case of a DVB-T Transmitter. (**)	This control keys is not used in case of an ATSC Transmitter.
	Calls up the " ADAPT PARAMETERS " window. (**)	
 	Indicates the exciter status (proper operation or fault).	EXCITER A OK / EXCITER B OK EXCITER. A FAULT / EXCITER. B FAULT (1)
 Or 	Indicates whether the exciter delivered the RF power to a load, or on-air. Indicates the consistency between the CPU software configuration and that of the MODAP.	RF ON: RF signal on the exciter output. RF OFF: RF signal absence on the exciter output. NOT COMPLIANT <u>Flashes</u> if the CPU software configuration is not consistent with that of the MODAP. Red square is blinking of light. <u>Otherwise</u> not visible.

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CONTROL KEYS	FUNCTIONS	DISPLAY/COMMENTS
  / 	Indicates the overall status of the exciter.	    Exciter "ON" status is displayed in green. Exciter "" status is displayed in yellow PSU FLT : MODAP Power supply is faulty, the status is displayed in red. MISSING : DAP card is missing, the status is displayed in red.
 / 	Indicates presence or absence of an MPEG2 input signal on the relevant exciter.	MPEG PRESENT / MPEG MISSING (1)
 / 	Indicates whether the exciter is connected to a load, or on-air.	ON LOAD / ON AIR
	Indicates the current transmission power level.	PWR= 0 dB / PWR= -3dB / PWR= -6 dB / PWR= STOPPED Exciter levels of -3 dB and -6 dB and the HALT indication are displayed in reverse video. STOPPED : The transmitter is switched off-air when there is an SWR fault or OVERDRIVE fault on the power amplifiers.
	Indicates the exciter selected. (*)	EXC A / EXC B Flashes until the "EXCITER SEL" command is either validated or cleared.
	Indicates the exciter changeover mode. (*)	MAN / AUTO Flashes until the "CH OVER" command is either validated or cleared. MAN (Manual) : only when operator gives a command. AUTO : when the selected exciter is faulty. A manual changeover can be commanded regardless of which changeover mode has been selected.

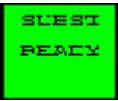
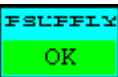
(*) : Only in Double Drive Version

(**) : Single Drive Version

(1) : A fault-free status is displayed in normal video (on black background or green background in case of colour tactile screen). A faulty status is displayed in reverse video (on white background or on red background in case of colour tactile screen).

(a): Not Visible for AFFINITY family

(b): Not Visible for OPTIMUM or ULTIMATE families

MESSAGES	FUNCTIONS	DISPLAY/COMMENTS
	Indicates the exciter changeover status in automatic mode.	READY : the changeover system is ready for an automatic switch over. DONE : the changeover system is no longer available and it is necessary to change the exciter selected or to carry out a transmitter "RESET" (in this latter case, care must be taken because fault data for all faults which have disappeared will be erased together with their consequences; similarly for all selections carried out on the PCL). FAULT : an attempt to carry out an automatic changeover has failed and the buzzer will be triggered.
	Indicates the external GPS changeover status.	CK : the changeover system is ready for an automatic switch over. The free contact of the external GPS is closed. ALARM : the changeover system is no longer available. The free contact of the external GPS is opened. FAULT : an attempt to carry out an automatic changeover has failed. The free contact of the external GPS is opened In case of disable GPS signal the transmitter is stopped after a delay time according to "GPS MUTE (h) " control key in the "MISCELLANEOUS" window.
	Indicates the status of the very low voltage power supply of the exciter. (2)	P. SUPPLY OK / P. SUPPLY FAULT (1)

- (1) A fault-free status is displayed in normal video (on black background or on green background in case of colour tactile screen). A faulty status is displayed in reverse video (on white background or on red background in case of colour tactile screen).
- (2) Only Single Drive version.

2.1.27. "EXCITER Level 2" window, MODAP version ONLY

This window is called up by pressing the "EXCITER NEXT" control keys in the "EXCITER Level 1" window.

It displays the status of the exciter signals. This window is only available in **Double Drive Transmitters**.

OPTIMUM FAMILY OR ULTIMATE FAMILY

EXCITER A		EXCITER B		MODUL
MCEUL CK	LAF CK	MCEUL CK	LAF CK	ADAPT
CLIC CK	FREAME CK	CLIC CK	FREAME CK	
SYNTH CK	10 MHz EXT	SYNTH CK	10 MHz EXT	OLDC
CLIC CK	LASI CK	CLIC CK	LASI CK	
				STATUS
CONTROL	EXCITER	AMPLI	INTLOCK	PSUPPLY

AFFINTY FAMILY

EXCITER A		EXCITER B		MODUL
MCEUL CK	LAF CK	MCEUL CK	LAF CK	ADAPT
CLIC CK	FREAME CK	CLIC CK	FREAME CK	
SYNTH CK	10 MHz EXT	SYNTH CK	10 MHz EXT	OLDC
CLIC CK	LASI CK	CLIC CK	LASI CK	
				STATUS
CONTROL	EXCITER			AFFIN.

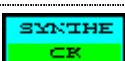
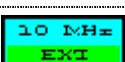
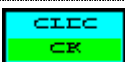
CONTROL KEYS	FUNCTIONS	DISPLAY/COMMENTS
STATUS	Calls up the "TRANSMITTER STATUS" window.	
CONTROL	Calls up the "CONTROL Level 1" window.	
EXCITER	Calls up the "EXCITER Level 1" window.	
AMPLI	Calls up the "AMPLIFIERS" window. (a)	
INTLOCK	Calls up the «INTERLOCK» window (a)	
PSUPPLY	Calls up the "POWER SUPPLY" window. (a)	
AFFIN.	Calls up the "AFFINITY" window. (b)	
MODUL	Calls up the "MODULATOR " window, in case of a DVB-T Transmitter	This control keys is not used in case of an ATSC Transmitter.
ADAPT	Calls up the " ADAPT PARAMETERS " window.	
OLDC	Calls up the "OLDC STATUS" window.	This control keys is available and visible in case of OLDC board is fitted according with your installation choice

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CONTROL KEYS	FUNCTIONS	DISPLAY/COMMENTS
	Calls up the "DASI STATUS" window	This control keys is available and visible in case of DASI board is fitted according with your installation choice

(a): Not Visible for AFFINITY family

(b): Not Visible for OPTIMUM or ULTIMATE families

MESSAGE	FUNCTIONS	DISPLAY/COMMENTS
	Shows the double column of the relevant exciter. (*) Indicates which exciter is selected and which is on-air, as well as the status (fault-free or faulty) of both exciters (1).	EXCITER A / EXCITER B Message is displayed on green background: Exciter selected
		Message is displayed on yellow background: Exciter non selected
	Indicates the overall status of the COFDM modulator.	MODULAT OK / MODULAT FAULT (1)
	Indicates the overall status of the DAP.	DAP OK / DAP FAULT (1)
	Indicates the overall status of the CUDC.	CUDC OK / CUDC FAULT (1)
	Indicates the overall status of the preamplifier.	PREAMP OK / PREAMP FAULT (1)
	Indicates the overall status of the RF synthesiser.	SYNTHE OK / SYNTHE FAULT (1)
	Indicates the status of the 10 MHz drive oscillator.	10 MHz EXT / 10 MHz INT <u>First case:</u> "10 MHz INT" control keys in "INSTALLATION PARAMETERS Level 1" window is selected. ♦ A status message (10 MHz ext or 10 MHz INT) is displayed in normal video (on black background). <u>Second case:</u> "10 MHz EXT" control keys in "INSTALLATION PARAMETERS Level 1" window is selected. ♦ A status message (10 MHz EXT) is displayed in normal video (on black background). ♦ A fault message (10 MHz INT) is displayed in reverse video (on white background).
	Indicates the overall status of the OLDC unit.	OLDC OK / OLDC FAULT (1)
	Indicates the overall status of the DASI board.	DASI OK / DASI FAULT (1)

- (1) A fault free status is displayed in normal video (on black background or on green background in case of colour tactile screen). A faulty status is displayed in reverse video (on white background or on red background in case of colour tactile screen).

2.1.28. "EXCITER Level 1" window, or "EXCITER PANEL" window, SIRIUS version ONLY

From other windows it can be called up by pressing the "EXCITER" key.

This window, which is called "EXCITER PANEL" in an SD transmitter, displays the status of the exciter cards. It also provides for selecting an exciter and configuring the changeover mode for the exciters *.

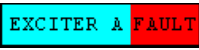
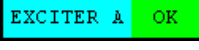
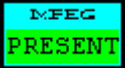
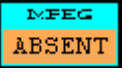
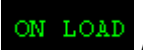
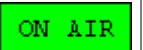
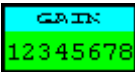
EXCITER A OK		SUBST READY		EXCITER B OK	
ON	ON AIR			OFF	ON LOAD
MPEG	GAIN	EXTERN		MPEG	GAIN
PRESENT	12345678	GPS		PRESENT	12345678
RF ON		CK		RF OFF	
EXC A	AUTO	CANCEL			
EMB	CH OVER	VALID			
		STATUS			
CONTROL	EXCITER NEXT	AMPLI	INTLOCK	PSUPPLY	

Figure 28 : Dual Drive Transmitter

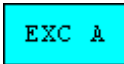
EXCITER A				MODUL	
RF ON					
ON	ANTENNE	MCEUL	TS	ADAPT	
		CK	CK		
MPEG	GAIN	TX	PREAMP	DASI	
PRESENT	12345678	CK	CK		
		SYNTH	10 MHz	SETTING	
		CK	INT		
		GPS	1PPS	STATUS	
		CK	PRESENT		
		SWITCH	CAG		
		CK	CK		
		FILE IC	FILE NIC		
		CK	CK		
CONTROL	EXCITER	AMPLI	INTLOCK	PSUPPLY	

Figure 29 : Single Drive Transmitter

CONTROL KEYS	FUNCTIONS	DISPLAY/COMMENTS
EXCITER (*)	Selects the exciter to be connected to the amplifier channel (exciter to antenna).	Command is disabled while the PCL is locked (disabled).
CH OVER (*)	Selects the exciter changeover mode (Automatic or Manual).	Command is disabled while the PCL is locked (disabled).
VALID (*)	Validates a selection.	
CANCEL (*)	Cancels a selection.	
STATUS	Calls up the "TRANSMITTER STATUS" window.	
CONTROL	Calls up the "CONTROL Level 1" window.	
EXCITER NEXT (*)	Calls up the "EXCITER Level 2" window.	
EXCITER (**)	Calls up the "EXCITER PANEL" window.	
AMPLI	Calls up the "AMPLIFIERS" window.	

CONTROL KEYS	FUNCTIONS	DISPLAY/COMMENTS
	Calls up the «INTERLOCK» window	
	Calls up the "POWER SUPPLY" window.	
 (**)	Calls up the "DASI STATUS" window	This control keys is available and visible in case of DASI board is fitted according with your installation choice
	Calls up the "SETTING" window	
 (**)	Calls up the "MODULATOR " window, in case of a DVB-T Transmitter	This control keys is not used in case of an ATSC Transmitter.
 (**)	Calls up the " ADAPT PARAMETERS " window.	
 	Indicates the exciter status (proper operation or fault).	EXCITER A OK / EXCITER B OK EXCITER. A FAULT / EXCITER. B FAULT (1)
 /  Or 	Indicates whether the exciter delivered RF power to a load or on-air. Indicates the consistency between the CPU software configuration and that of the SIRIUS exciter.	RF ON: RF signal on the exciter output RF OFF: RF signal absence on the exciter output NOT COMPLIANT Flashes if the CPU software configuration is not consistent with that of the SIRIUS exciter. Red square is blinking of light. <u>Otherwise</u> not visible.
  / 	Indicates the overall status of the exciter.	    Exciter "ON" status is displayed in green. Exciter "" status is displayed in yellow PSU FLT : Exciter Power supply is faulty, the status is displayed in red. MISSING : DIGITAL card is missing, the status is displayed in orange.
 / 	Indicates presence or absence of an MPEG2 input signal on the relevant exciter.	MPEG PRESENT / MPEG MISSING (1)
 / 	Indicates whether the exciter is connected to a load, or on-air.	ON LOAD / ON AIR
	Indicates the current transmission power level.	PWR= 0 dB / PWR= -3dB / PWR= -6 dB / PWR= STOPPED Exciter levels of -3 dB and -6 dB and the HALT indication are displayed in reverse video. STOPPED : The transmitter is switched off-air when there is an SWR fault or OVERDRIVE fault on the power amplifiers.

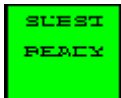
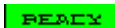
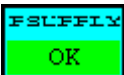
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CONTROL KEYS	FUNCTIONS	DISPLAY/COMMENTS
 (*)	Indicates the exciter selected.	EXC A / EXC B Flashes until the "EXCITER SEL" command is either validated or cleared.
 (*)	Indicates the exciter changeover mode.	MAN / AUTO Flashes until the "CH OVER" command is either validated or cleared. <u>MAN</u> (Manual) : only when operator gives a command. <u>AUTO</u> : when the selected exciter is faulty. A manual changeover can be commanded regardless of which changeover mode has been selected.

(*) : Only in Double Drive Version

(**) : Single Drive Version

(1) : A fault-free status is displayed in normal video (on black background or green background in case of colour tactile screen). A faulty status is displayed in reverse video (on white background or on red background in case of colour tactile screen).

MESSAGES	FUNCTIONS	DISPLAY/COMMENTS
	Indicates the exciter changeover status in automatic mode.	 : the changeover system is ready for an automatic switch over.  : the changeover system is no longer available and it is necessary to change the exciter selected or to carry out a transmitter "RESET" (in this latter case, care must be taken because fault data for all faults which have disappeared will be erased together with their consequences; similarly for all selections carried out on the PCL).  : an attempt to carry out an automatic changeover has failed and the buzzer will be triggered.
	Indicates the external GPS changeover status.	 : the changeover system is ready for an automatic switch over. The free contact of the external GPS is closed.  : the changeover system is no longer available. The free contact of the external GPS is opened.  : an attempt to carry out an automatic changeover has failed. The free contact of the external GPS is opened In case of disable GPS signal the transmitter is stopped after a delay time according to "GPS MUTE (h) " control key in the "MISCELLANEOUS" window.
 (2)	Indicates the status of the very low voltage power supply of the exciter.	P. SUPPLY OK / P. SUPPLY FAULT (1)

(3) A fault-free status is displayed in normal video (on black background or on green background in case of colour tactile screen). A faulty status is displayed in reverse video (on white background or on red background in case of colour tactile screen).

(4) Only Single Drive version.

2.1.29. "EXCITER Level 2" window, SIRIUS version ONLY

This window is called up by pressing the "EXCITER NEXT" control keys in the "EXCITER Level 1" window.

It displays the status of the exciter signals. This window is only available in **Double Drive Transmitters**.

EXCITER A		EXCITER B		MODUL
MCELL	TS	MCELL	TS	ADAPT
CK	CK	CK	CK	
TX	PREAMP	TX	PREAMP	DASI
CK	CK	CK	CK	
SYNTH	10 MHz	SYNTH	10 MHz	SETTING
CK	INT	CK	INT	
GFS	1FFS	GFS	1FFS	STATUS
CK	ASENT	CK	ASENT	
SWITCH	CAG	SWITCH	CAG	CONTROL
CK	CK	CK	CK	
FIE IC	FIE NIC	FIE IC	FIE NIC	EXCITER
CK	CK	CK	CK	
CONTROL		AMPLI		PSUPPLY

CONTROL KEYS	FUNCTIONS	DISPLAY/COMMENTS
STATUS	Calls up the "TRANSMITTER STATUS" window.	
CONTROL	Calls up the "CONTROL Level 1" window.	
EXCITER	Calls up the "EXCITER Level 1" window.	
AMPLI	Calls up the "AMPLIFIERS" window.	
INTLOCK	Calls up the «INTERLOCK» window	
PSUPPLY	Calls up the "POWER SUPPLY" window.	
MODUL	Calls up the "MODULATOR " window, in case of a DVB-T Transmitter	This control keys is not used in case of an ATSC Transmitter.
ADAPT	Calls up the " ADAPT PARAMETERS " window.	
SETTING	Calls up the "SETTINGS" window.	
DASI	Calls up the "DASI STATUS" window	This control keys is available and visible in case of DASI board is fitted according with your installation choice