

Annex C (Functions and Commands)

Remote and manual control functions

Function	Remote Control Command	Remote Control Parameter	*RST Value	SCPI Info	Page 4.	Manual Control	Menu	Page 3.
Basic functions								
Offset correction	[SENSe:]FREQuency[:CW FIXed]:AFC	ON OFF	OFF	SCPI	64	Hardkey: AFC 2fold toggle ON OFF	every	16
Bandwidth	[SENSe:]BANDwidth BWIDth[:RESolution]	UP DOWN MIN MAX bandwidth in Hz	120 kHz	SCPI	58	Hardkey: BW + and -	every	13
Attenuation display	INPut:ATTenuation:STATe?		depending on level	SCPI	38	Indirect by scaling of level bar meter	with level bar display	8
Attenuation selection	INPut:ATTenuation:AUTO INPut:ATTenuation:STATe	ON OFF ON OFF	ON	SCPI	38	Hardkey: ATT 3fold toggle: OFF ON AUTO	every	15
Receive frequency	[SENSe:]FREQuency	Frequency 10 kHz to 3 GHz	98.5 MHz	SCPI	64	Rollkey if FRQ active or entry of value and acknowledgement by FRQ	every	6
Volume	SYSTem:AUDio:VOLume	0...1 MIN MAX	0.2	no SCPI	103	VOL digital potentiometer	every	20
Modulation mode	[SENSe:]DEModulation	AM FM PULSe A1 CW LSB USB	FM	no SCPI	61	Hardkey: MOD + and -	every	13
Level measurement	[SENSe:]DETEctor[:FUNCTion]	PAverage POSitive FAST	PAverage	SCPI	62	Hardkey: LEV 3fold toggle AVG PEAK FAST	every	16
Squelch ON/OFF	OUTPut:SQUelch[:STATe]	ON OFF	OFF	no SCPI	48	Hardkey: SQU 2fold toggle ON OFF	every	14
Squelch value	OUTPut:SQUelch:THReshold[:UPPer]	-30...+110[dBuV] MIN MAX	10 dB μ V	no SCPI	50	MST digital potentiometer: if SQU active, value displayed below hardkey	every	14
Squelch value increment	OUTPut:SQUelch:THReshold[:UPPer] :STEP[:INCRement]	0.1...10[dB] MIN MAX	1 dB	no SCPI	50	Stepwidth for manual control always 1 dB		14

Function	Remote Control Command	Remote Control Parameter	*RST Value	SCPI Info	Page 4.	Manual Control	Menu	Page 3.
Test key	no direct equivalent		none			Loop test as long as key is pressed	every	20
Tone ON/OFF	OUTPut:TONE	ON OFF	OFF	no SCPI	51	Hardkey: TONE 2fold toggle ON OFF	every	14
Tone value	OUTPut:TONE:THReshold	-14...+94[dBuV] MIN MAX	15 dB μ V	no SCPI	52	MST digital potentiometer: if TONE active, value displayed below hardkey	every	14
Tone value increment	OUTPut:TONE:THR:STEP	0...10[dB] MIN MAX	1 dB	no SCPI	53	Stepwidth for manual control always 1 dB		14
Gain control mode	[SENSe:]GCONtrol:MODE	FIXed MGC AUTO AGC	AUTO	no SCPI	79	Hardkey: MGC 2fold toggle ON OFF	every	14
Gain control value	[SENSe:]GCONtrol[:FIXed MGC]	-30...+110[dBuV] MIN MAX	50 dB μ V	no SCPI	78	MST digital potentiometer: if MGC active, value displayed below hardkey	every	14
Increment of gain control value	[SENSe:]GCONtrol[:FIXed MGC]:STEP[:INCRement]	1...10[dB] MIN MAX	1 dB	no SCPI	78	Stepwidth for manual control always 1 dB	every	14
MSCAN								
Number of scans	[SENSe:]MSCan:COUNT	1..1000 INFinity MINimum MAXimum	INFinity	no SCPI	82	Hardkey SEL: CYCLES Rollkey: 1...1000	M-SCAN :CONFIG	27
Erase all memories	MEMory:CLEar	MEM0, MAXimum	none	no SCPI	42	Softkey: DELETE...ALL	M-SCAN :CONFIG	27
Erase specific memory	MEMory:CLEar	<name><name>: MEM0...MEM999	none	no SCPI	42	Softkey: DELETE...CURRENT	M-SCAN :CONFIG	27
Reset memory for MSCAN	MEMory:CONTents:MPAR	<name>,<ACT> ON<name>: MEM0...MEM999	none	no SCPI	43	Softkey: SUPP	M-SCAN :CONFIG	27
Set memory for MSCAN	MEMory:CONTents:MPAR	<name>,<ACT> ON <name>: MEM0...MEM999	none	no SCPI	43	Softkey: ACTIVATE	M-SCAN :CONFIG	27

Function	Remote Control Command	Remote Control Parameter	*RST Value	SCPI Info	Page 4.	Manual Control	Menu	Page 3.
Replace contents of memory by receiver settings	MEMory :EXCHange	<name> RX, <name> RX <name>: MEM0...MEM999	none	no SCPI	45	Softkey: RX<->MEM	M-SCAN :CONFIG	27
Squelch from memory	OUTPut:SQUelch:CONTRol	MEMory NONE	MEMory	no SCPI	49	Hardkey SEL: SQ FROM MEM ON/OFF	M-SCAN :CONFIG	27
Start scan downwards from stop frequency	[SENSe:]FREQuency:MODE [SENSe:] MSCan:DIRection INITiate:CONM[:IMMediate] or *TRG	MSCan DOWN	CW UP	SCPI	71	Softkey: RUN- receive frequency outside scan range	M-SCAN and M-SCAN :CONFIG	26
Start scan upwards from start frequency	[SENSe:]FREQuency:MODE [SENSe:] MSCan:DIRection INITiate:CONM[:IMMediate] or *TRG	MSCan UP	CW UP	SCPI	71	Softkey: RUN+ receive frequency outside scan range	M-SCAN and M-SCAN :CONFIG	26
Stop scan	ABORT		none	SCPI	18	Softkey: STOP	M-SCAN	26
Continue scan downwards from instantaneous frequency	[SENSe:]FREQuency:MODE [SENSe:] MSCan:DIRection INITiate:CONM[:IMMediate] or *TRG	MSCan DOWN	CW UP	SCPI	71	Softkey: RUN- receive frequency in scan range	M-SCAN and M-SCAN :CONFIG	26
Continue scan upwards from instantaneous frequency	[SENSe:]FREQuency:MODE [SENSe:] MSCan:DIRection INITiate:CONM[:IMMediate] or *TRG	MSCan UP	CW UP	SCPI	71	Softkey: RUN+ receive frequency in scan range	M-SCAN and M-SCAN :CONFIG	26
Dwell time	[SENSe:]MSCan:DWELl	0..10[s] INFinity	0.5 s	no SCPI	83	Hardkey SEL: T_DWELL Rollkey: 0.0...10.0/infinite sec	M-SCAN :CONFIG	27
Continue scan under signal control	[SENSe:]MSCan:HOLD:TIME [SENSe:]MSCan:CONTRol[:ON]	0..10[s] "STOP:SIGNal" "STOP:SIGNal"	0.0 " "	no SCPI	84	Hardkey SEL: T_NOSIG Rollkey: combination of ON/OFF function and value: 0.0...10.0 sec	M-SCAN :CONFIG	27

Function	Remote Control Command	Remote Control Parameter	*RST Value	SCPI Info	Page 4.	Manual Control	Menu	Page 3.
Memory functions								
Instrument settings -> memory	MEMory:COpy	<src_name> RX, <dest_name> RX especially: RX, <dest_name> dest_name: MEM0...MEM999	none	no SCPI	42	Hardkey: SAVE acts on current memory or: editor entry of memory number and then hardkey: SAVE	every	16
Memory -> instrument settings	MEMory:COpy	<src_name> RX, <dest_name> RX especially: <src_name>, RX src_name: MEM0...MEM999	none	no SCPI	42	Hardkey: RCL acts on current memory or: editor entry of memory number and then hardkey: SAVE	every	16
Contents of memories	MEMory:CONtents	<name>, <mem_paras> <packed_struct>name: MEM0 to MEM999 RX CURRENT	none	no SCPI	43	Cannot be edited directly	M-SCAN :CONFIG	27
Number of memory	MSCan:CHANnel	<dest_name> dest_name: MEM0 to MEM999	MEM0	no SCPI	80	Rollkey: if MEM active or entry of number to be confirmed by MEM or entry of number and then hardkey: SAVE or RCL or : by means of MSCAN	every	18
Status of memory	MEMory:CONtents	<ACT>	none		43	Symbolic display beside memory number: '[]'=data in memory '[+]'=data in memory and set for query ' + ' empty and set for query ' ' empty and not set	every	11
Define target memory	MEMory:COpy	RX, CURRENT NEXT	none	no SCPI	42	Hardkey SEL: KEYS SAVE Rollkey: CURRENT MEM / NEXT FREE / CURRENT MEM+ACT / NEXT FREE+ACT	SETUP : KEYS	16

Function	Remote Control Command	Remote Control Parameter	*RST Value	SCPI Info	Page 4.	Manual Control	Menu	Page 3.
FSCAN								
Number of sweeps	[SENSe:]SWEep:COUNT	1...1000 INFINity MINimum MAXimum	INFINity	SCPI	89	Hardkey SEL: CYCLES Rollkey: 1...1000	F-SCAN :CONFIG	30
Start frequency	[SENSe:]FREQuency:START	10 kHz...3 GHz	20 MHz	SCPI	72	Hardkey SEL: F-START " <-" Rollkey: 10 kHz...3GHz	F-SCAN :CONFIG	30
Step frequency	[SENSe:]SWEep:STEP	100 Hz...10 MHz	10 kHz	SCPI	92	Hardkey SEL: F-STEP "<->" Rollkey: 100 Hz... 10 MHz	F-SCAN :CONFIG	30
Stop frequency	[SENSe:]FREQuency:STOP	10 kHz...3 GHz	650 MHz	SCPI	74	Hardkey SEL: F-STOP " ->" Rollkey: 10 kHz...3GHz	F-SCAN :CONFIG	30
Start sweep downwards from stop frequency	[SENSe:]FREQuency:MODE [SENSe:]SWEep:DIRectioN INITiate[:IMMediate]	SWEep DOWN	CW UP	SCPI	71	Softkey: RUN- receive frequency outside of sweep range	F-SCAN and F-SCAN :CONFIG	29
Start sweep upwards from start frequency	[SENSe:]FREQuency:MODE [SENSe:]SWEep:DIRectioN INITiate[:IMMediate]	SWEep UP	CW UP	SCPI	71	Softkey: RUN+ receive frequency outside of sweep range	F-SCAN and F-SCAN :CONFIG	29
Stop sweep	ABORt		none	SCPI	18	Softkey: STOP	F-SCAN	29
Continue sweep downwards from instantaneous frequency	[SENSe:]FREQuency:MODE [SENSe:]SWEep:DIRectioN INITiate:CONM[:IMMediate]	SWEep DOWN	CW UP	SCPI	71	Softkey: RUN- receive frequency in sweep range	F-SCAN and F-SCAN :CONFIG	29
Continue sweep upwards from instantaneous frequency	[SENSe:]FREQuency:MODE [SENSe:]SWEep:DIRectioN INITiate:CONM[:IMMediate]	SWEep UP	CW UP	SCPI	71	Softkey: RUN+ receive frequency in sweep range	F-SCAN and F-SCAN :CONFIG	29
Dwell time	[SENSe:]SWEep:DWELI	0..10[s] INFINity	0.5 s	no SCPI	91	Hardkey SEL: T_DWELL Rollkey: 0.0...10.0/infinite sec	F-SCAN :CONFIG	30
Continue sweep under signal control	[SENSe:]SWEep:HOLD:TIME [SENSe:]SWEep:CONTRol[:ON]	0..10[s] "STOP:SIGNal" "STOP:SIGNal"	0.0 " "	no SCPI	91	Hardkey SEL: T_NOSIG Rollkey: combination of ON/OFF function and value: 0.0...10.0 sec	F-SCAN :CONFIG	30

Function	Remote Control Command	Remote Control Parameter	*RST Value	SCPI Info	Page 4.	Manual Control	Menu	Page 3.
FSCAN SUPP								
Number of suppressed ranges	no command		none			SUPPRESSED FREQUENCY RANGES 0...100, only display parameter	F-SCAN :CONFIG :SUPP	31
Index of suppress table	TRACe:POINts?	SSTART SSTOP the result is always 100	none	SCPI	118	Hardkey SEL: INDEX Rollkey: 0...99	F-SCAN :CONFIG :SUPP	31
Suppress channel	[SENSe:]SWEep:SUPPress		none	no SCPI	93	Softkey: SUPP suppresses a frequency range depending on the current bandwidth	F-SCAN	29
Erase all entries in suppress table	TRACe[:DATA] TRACe[:DATA]	SSTART, 0 SSTOP,0	none	SCPI	112	Softkey: DEL ALL	F-SCAN :CONFIG :SUPP	31
Erase a line in suppress table	TRACe:VALue	SSTART, index, 0	none	SCPI	119	Softkey: DELETE	F-SCAN :CONFIG :SUPP	31
Sort frequency ranges	[SENSe:]SWEep:SUPPress:SORT		none	no SCPI	93	Softkey: SORT	F-SCAN :CONFIG :SUPP	31
Start frequency of suppressed frequency range	TRACe:VALue	SSTART, index, frequency value	none	SCPI	119	Hardkey SEL: F-START Rollkey: 10 kHz ..3GHz	F-SCAN :CONFIG :SUPP	31
Stop frequency of suppressed frequency range	TRACe:VALue	SSTOP, index, frequency value	none	SCPI	119	Hardkey SEL: F-STOP Rollkey: 10 kHz ..3GHz	F-SCAN :CONFIG :SUPP	31

Function	Remote Control Command	Remote Control Parameter	*RST Value	SCPI Info	Page 4.	Manual Control	Menu	Page 3.
DSCAN								
Speed	[SENSe:]FREQuency:DSCan:SPEEd	LOW NORMAl HIGH	NORMAl	no SCPI	68			
Start frequency	[SENSe:]FREQuency:DSCan:STARt	10 kHz to 2.999985750 GHz	85 MHz	no SCPI	69	Hardkey SEL: F-START " <-" Rollkey: 10 kHz to 3GHz	D-SCAN	32
Stop frequency	[SENSe:]FREQuency:DSCan:STOP	24.250 kHz to 3 GHz	110 MHz	no SCPI	69	Hardkey SEL: F-STOP " ->" Rollkey: 10 kHz to 3GHz	D-SCAN	32
Mark frequency	[SENSe:]FREQuency:DSCan:MARKer	10 kHz to 3 GHz	98.5 MHz	no SCPI	66	Hardkey SEL: FREQ " ^" Rollkey: 10 kHz to 3GHz	D-SCAN	32
Center frequency	[SENSe:]FREQuency:DSCan:CENTer	17.125 kHz to 2.999992875 GHz	97.5 MHz	no SCPI	65	Hardkey SEL: F-CENTER "-> <-" Rollkey: 10 kHz to 3GHz	D-SCAN	32
Span frequency	[SENSe:]FREQuency:DSCan:SPAN	14.250 kHz to 2.999990000 GHz	25 MHz	no SCPI	67	Hardkey SEL: F-SPAN " <->" Rollkey: 10 kHz to 3GHz	D-SCAN	32
Start DSCAN	[SENSe:]FREQuency:MODE INITiate[:IMMediate]	DSCan	CW	SCPI	71	Softkey: <u>RUN</u> / STOP	D-SCAN	32
Stop DSCAN	ABORt		none	SCPI	18	Softkey: RUN / <u>STOP</u>	D-SCAN	32
Normal or differential mode	no command		NORM			Softkey: NORM / DIFF	D-SCAN :CONFIG	33
Bandwidth zoom mode	[SENSe:]FREQuency:DSCan :RESolution:AUTO[?]	ON OFF	OFF	no SCPI	66	Softkey: BW ZOOM	D-SCAN	32
Marker frequency to next signal peak	CALCulate:DSCan:MARKer:MAXimum :NEXT		none	no SCPI	66	Softkey: MARKER TO PEAK	D-SCAN	32
Marker frequency to absolute signal peak	CALCulate:DSCan:MARKer:MAXimum :[PEAK]		none	no SCPI	66			
Reference level	[SENSe:]VOLTage:AC:RANGE	UP DOWN MIN MAX 0 to +110[dBuV]	70 dB μ V	SCPI	94	Softkey: REF	D-SCAN :CONFIG	33
Spectrum display maximum values or current values	CALCulate:DSCan:AVERAge:TYPE[?]	MAXimum OFF		no SCPI	22	Softkey: MAX / CLRWRT	D-SCAN :CONFIG	33
Clear spectrum	CALCulate:DSCan:CLEar		none	no SCPI	22	none		

Function	Remote Control Command	Remote Control Parameter	*RST Value	SCPI Info	Page 4.	Manual Control	Menu	Page 3.
Start, stop, marker frequency or span, center, marker frequency	no command					Softkey: <-> -> <-	D-SCAN :CONFIG	33
Spectrum display range in dB	no command		60 [dB]			Softkey: RNG 20 RNG 40 RNG 60 RNG 80	D-SCAN [:CONFIG]	33
DSCAN speed	[SENSe]:FREQuency:DSCan:SPEEd[?]	LOW NORMal HIGH MTIME	NORMal	no SCPI	68	Hardkey SEL:D-SCAN SPEED Rollkey: MTIME PER CHANNEL LOW NORMAL HIGH	D-SCAN :CONFIG	33
Number of runs	[SENSe]:DSCan:COUNT[?]	1 to 1000 MINimum MAXimum INFINITY	INFINITY	SCPI	63	Hardkey SEL: CYCLES Rollkey: 1 to 1000	D-SCAN :CONFIG	33
Measuring time	MEASure:TIME[?]	0.5 to 900 sec MINimum MAXimum DEFAULT	DEFAULT	SCPI	41	Hardkey SEL: MEASURE TIME Rollkey: DEFAULT 0.5 to 900	D-SCAN :CONFIG	33
Receiver configuration								
Antenna name	ROUTE:PATH:CATalog? ROUTE:PATH[:DEFine] ROUTE:PATH:DELete:ALL ROUTE:PATH:DELete[:NAME] ROUTE:SELect	<name>, <channel_list> <name>, <channel_list>	none	SCPI	55	Hardkey SEL: ANTENNA CODE Softkey: <- -> Rollkey: ABCDEFGHIJKLM (13 characters)	RX-CONF :ANT /ATT	37
Antenna number	ROUTE:CLOSe ROUTE:CLOSe:STATe? ROUTE:OPEN:ALL	<channel_list>	0	SCPI	54	Hardkey SEL: ANTENNA NUMBER Rollkey: 0..99	RX-CONF :ANT /ATT	37
Output ports at AUX connector X8	OUTPut:AUXMode	FREQuency ANTCtrl	ANTCtrl	no SCPI	46	Hardkey SEL: AUX OUTPUT Umschaltung: FREQ / ANT+CTRL	RX-CONF :ANT	
K-factor table passive or active antenna	[SENSe]:CORRection:ANTenna[?]	ACTIVE PASSive	PASSive	SCPI		Softkey: ANT PAS ANT ACT	RX_CONF :ANT / ATT	37

Function	Remote Control Command	Remote Control Parameter	*RST Value	SCPI Info	Page 4.	Manual Control	Menu	Page 3.
AF balance left-right	SYSTem:AUDIo:BALAnce	-0.5...0.5	0.0	no SCPI	101	Hardkey SEL: BALANCE Rollkey: bar -50...+50	RX_CONF:AF	39
Loudspeaker	SYSTem:SPEaker:STATe	ON OFF	ON	no SCPI	108	Hardkey SEL: SPEAKER Rollkey: ON / OFF	RX_CONF:AF	39
Reference frequency	[SENSe:]ROSCillator:EXTernal:FREQuency? [SENSe:]ROSCillator[:INTernal]:FREQuency? [SENSe:]ROSCillator:SOURce	Answer always 10 MHz Answer always 10 MHz INTernal EXTernal	10 MHz INTernal	SCPI	86	Switchover INTERNAL / EXTERNAL	SETUP:REF	54
Tone operating mode	OUTPut:TONE:CONTRol	ONLY WITHAf	ONLY	no SCPI	52	Hardkey SEL: TONE Rollkey: ONLY / WITH AF	RX_CONF:AF	39
Measuring functions								
Measuring time	MEASure:TIME[?]	0.5 to 900 sec MINimum MAXimum DEFault	DEFault	SCPI	41	Hardkey SEL: MEASURE TIME Rollkey: DEFAULT 0.5 to 900	RX_CONF:MEASURE	38
Measuring mode	MEASure:MODE[?]	CONTInuous PERiodic	CONTInuous	SCPI	40	Softkey:CONTIN PERIODIC	RX_CONF:MEASURE	38

Function	Remote Control Command	Remote Control Parameter	*RST Value	SCPI Info	Page 4.	Manual Control	Menu	Page 3.
System								
Hardware options	*OPT?	-> SU -> BP -> ER > CM -> FS	none	SCPI	16	IF_PAN BATTERY PACK ERAM Coverage Measurement Field Strength	Start screen and RX-CONF :SYSTEM	40
Enter option code	SYSTem:SECurity:OPTion	<option_code>	none	no SCPI	107	Softkey: INSTALL	RX-CONF :SYSTEM :SW OPT	40
Software options	*OPT?	-> DS	none	SCPI	16	DIGI SCAN OPTION	RX-CONF :SYSTEM :SW OPT	40
Erase password			none			Softkey: DEL PW	RX-CONF :SYSTEM : :PROTECT	40
Enter password			none			Softkey: EDIT PW entry of an 8-digit numeral	RX-CONF :SYSTEM :PROTECT	40
Password status			none			PASSWORD STATUS display: ON OFF	RX-CONF :SYSTEM :PROTECT	40
Reset -> default setting	*RST		none	SCPI	3	Softkey: RESET	RX-CONF :SYSTEM	40
Serial number	*IDN?		none	SCPI	16	Display only	RX-CONF :SYSTEM	40
Software date	DIAGnostic:INFO:SDATe?		none	SCPI	24	Display only	RX-CONF :SYSTEM	40
Software version	DIAGnostic:INFO:SVERsion? or : *IDN?	<numeric suffix>:1...5	none	SCPI	24	Display only	RX-CONF :SYSTEM	40

Function	Remote Control Command	Remote Control Parameter	*RST Value	SCPI Info	Page 4.	Manual Control	Menu	Page 3.
Display								
Offset display	[SENSe:]FUNctIon[:ON] [SENSe:]FUNctIon[:ON]:COUNT? [SENSe:]DATA?	"FREquency:OFFSet"	VOLTage:AC	SCPI	76	Symbolic display: value in HZ in range +_1/2 BW or: numeric x.xx kHz	DEFAULT	9
Type of offset display	no command		none			Hardkey SEL: TUNING AID, Rollkey: SYMBOLIC NUMERIC IF PAN	DISPLAY:CONFIG	45
Remote control light	active in case of data traffic		none			DATA: display at the bottom left	if KEYBOARD LOCKED	10
Display mode LCD: normal/inverse	DISPlay:CMAP: DEFAULT DISPlay:CMAP	DEFAULT NORMAl INVerted	NORMAl	SCPI	29	Hardkey SEL: DISPLAY MODE Rollkey: NORMAL, INVERSE	DISPLAY:DEFAULT:CONFIG	45
Display types	DISPlay:MENU[:NAME]	<menu_name>menu_name: DEFAULT, IFPAN, LEVEL, FREQ	DEFAULT	SCPI	32	Softkeys :DEFAULT, IF-PAN, LEVEL, TONE, FREQ, (display also maintained in basic menu)	DISPLAY	45
Backlighting switch-off time	DISPlay:BRIGhtness:DWELl	30 60 120 180 600 1200 INF[sec]	INFinity	no SCPI	28	Hardkey SEL: SWITCH OFF Rollkey: NEVER, ½ MIN to 20 MIN	DISPLAY:DEFAULT:CONFIG	45
Backlighting intensity	DISPlay:BRIGhtness	0..1	1.0	SCPI	27	Hardkey SEL: ILLUMINATION Rollkey: OFF, STEP1 to STEP6	DISPLAY:DEFAULT:CONFIG	45
Level display	[SENSe:]FUNctIon[:ON] [SENSe:]DATA?	VOLTage:AC	VOLTage:AC	SCPI	78	Symbolic display as a bar: -30 to 60 dBµV -10 to 80 dBµV 10 to 100 dBµV (or 0 to 90 dBµV 20 to 110 dBµV 40 to 130 dBµV at ATT ON) or numerically	DISPLAY:LEVEL:CONFIG	8
Field strength display with SW option EB200FS only	[SENSe:]FUNctIon[:ON] SENSe:DATA?	"FSTRength"	"VOLTage:AC"	SCPI	78	Numerical display in dBµV/m	DISPLAY:LEVEL:CONFIG	9

Function	Remote Control Command	Remote Control Parameter	*RST Value	SCPI Info	Page 4.	Manual Control	Menu	Page 3.
IFPAN								
Frequency range of panorama display	FREQuency:SPAN	UP DOWN MIN MAX frequency range 0.15 to 1000 kHz	none		72	Hardkey SEL: PAN RANGE Rollkey: ±12.5, 25, 50, 100, 250, 500 kHz	DISPLAY :CONFIG	45
Selection of the averaging process for the IF panorama data	CALCulate:IFPan:AVERAge:TYPE	MINimum MAXimum SCALar	SCALar	SCPI	19	Softkeys : MIN MAX AVG CLRWRT	DISPLAY :IFPAN :CONFIG	47
Setting the averaging time for the IF panorama data	CALCulate:IFPan:AVERAge:TIME or: MEASure:TIME[?]	0.5 to 900 [s]	0.2 [s]	SCPI	19		DISPLAY :IFPAN :CONFIG	47
Restart of the process MIN- or MAX-Hold	CALCulate:IFPan:CLEar		none	SCPI	20	Softkeys: MIN or MAX	DISPLAY :IFPAN :CONFIG	47
Scaling of the IF panoramic display by REF and RNG on the LCD	no command		REF: 60 dBµV RNG: 80 dB			Hardkey SEL:REF or RNG Rollkey: xx dB	DISPLAY :IFPAN :CONFIG	47
Centering on absolute level maximum	CALCulate:IFPan:MARKer:MAXimum:[PEAK]		none	SCPI	21	none	DISPLAY :IFPAN :CONFIG	47
Centering on left level maximum	CALCulate:IFPan:MARKer:MAXimum:LEFT		none	SCPI	21	Softkeys: left Max to Mark	DISPLAY :IFPAN :CONFIG	47
Centering on right level maximum	CALCulate:IFPan:MARKer:MAXimum:RIGHT		none	SCPI	21	Softkeys: right Max to Mark	DISPLAY :IFPAN :CONFIG	47
Large IF panorama	no command		none			DISPLAY : IF-PAN		10
Small IF panorama	no command		none			TUNING AID IF-PAN		10

Function	Remote Control Command	Remote Control Parameter	*RST Value	SCPI Info	Page 4.	Manual Control	Menu	Page 3.
Messages								
Error beep	SYSTem:BEEPer:VOLume	0...1 (OFF 0.5 1)	1	SCPI	104	Hardkey SEL: MESSAGE BEEP Rollkey: OFF / QUIET / LOUD	SETUP :MESSAGE	53
Error display time	no command		none			Hardkey SEL: MESSAGE DISPLAY Rollkey: DURATION 1...5 SEC / infinite	SETUP :MESSAGE	53
Error messages	SYSTem:ERRor? STATus:QUEue[:NEXT]?		none	SCPI	105	Display covers softkeys, 40 characters	every	12
Component error	no command		none			Hardkey SEL: COMPONENT FAILURE Rollkey: ON OFF	SETUP :MESSAGE	53
Warnings	no command		none			Hardkey SEL: USER WARNINGS Rollkey: ON / OFF	SETUP :MESSAGE	53

Function	Remote Control Command	Remote Control Parameter	*RST Value	SCPI Info	Page 4.	Manual Control	Menu	Page 3.
Operating elements								
Disable display	DISPlay:ENABle	ON OFF	ON	SCPI	30	No manual control, no dynamic display => increase in performance	REMOTE CONTROLLED	56
Info string display lock	DISPlay:ENABle:LABel	"string with 24 characters max"	"CONTROLLED BY REMOTE"	no SCPI	31	No manual control, display of string entered via remote interface	REMOTE CONTROLLED	56
Info string key lock	SYSTem:KLOCK:LABel	"string with 24 characters max"	"KEYBOARD LOCKED BY REMOTE!"	no SCPI	107	No manual control, display of string entered via remote interface	KEYLOCK	59
Key click	no command		none			Hardkey SEL: KEYS KEYCLICK Rollkey: OFF, SOUND1...3, QUIET/ LOUD	SETUP :KEYS	52
Rollkey progression	no command		none			Hardkey SEL: ROLLKEY PROGRESSION Rollkey: OFF....Step1...9	SETUP :KEYS	52
Rollkey stepwidth	[SENSe:]FREQuency:STEP	<numeric value>numeric value: 1 Hz..1MHz	1 kHz	SCPI	73	Hardkey SEL: ROLLKEY INCR VALUE Rollkey: 1 Hz to 1MHz	SETUP :KEYS	52
Lock keyboard	SYSTem:KLOCK	ON OFF	OFF	SCPI	106	No manual control, only display	KEYLOCK	59

Function	Remote Control Command	Remote Control Parameter	*RST Value	SCPI Info	Page 4.	Manual Control	Menu	Page 3.
LAN Interface								
LAN gateway	none		none			Hardkey SEL: GATEWAY Rollkey: xxx.xxx.xxx.xxx	SETUP :REMOTE	56
LAN IP address	none		none			Hardkey SEL: IP-ADDRESS Rollkey: xxx.xxx.xxx.xxx	SETUP :REMOTE	56
LAN port	none		none			Hardkey SEL: PORT Rollkey: xxx.xxx.xxx.xxx	SETUP :REMOTE	56
LAN subnet mask	none		none			Hardkey SEL: SUBNETMASK Rollkey: xxx.xxx.xxx.xxx	SETUP :REMOTE	56
RS232 interface (PPP)								
RS232 baud rate	no command	150 300 600 1200 2400 4800 9600 19200 38400 57600 115200	none			Hardkey SEL: BAUDRATE Rollkey: 50 to 115k	SETUP :REMOTE :PPP	57
RS232 IP address	none		none			Hardkey SEL: IP-ADDRESS Rollkey: xxx.xxx.xxx.xxx	SETUP :REMOTE :PPP	57
RS232 port	none		none			Hardkey SEL: PORT Rollkey: xxx.xxx.xxx.xxx	SETUP :REMOTE :PPP	57
Apply	none		none			Softkey: APPLY	SETUP :REMOTE :PPP	57
Standard	none					Softkey: STANDARD	SETUP :REMOTE :PPP	57
User-programmable byte at rear-panel connector	OUTPut:BITaux[1 2 3 4 5 6 7 8]:[:STATe] OUTPut:BYTaux[:STATe]	ON OFF 0...255 #B0...#B1111111 #Q0...#Q377 #H0...#H0FF	0	no SCPI	47	CTRL	SETUP :AUX	55

Function	Remote Control Command	Remote Control Parameter	*RST Value	SCPI Info	Page 4.	Manual Control	Menu	Page 3.
RS232 interface (standard)								
Baud rate	no command	150 300 600 1200 2400 4800 9600 19200 38400 57600 115200	none			Hardkey SEL: BAUDRATE Rollkey: 50...115k	SETUP :REMOTE :STANDARD	58
Frame	none		none			Hardkey SEL: FRAME Rollkey: 7 8 BIT 1 2 STOP	SETUP :REMOTE :STANDARD	58
Parity	none		none			Hardkey SEL: PARITY Rollkey: NO ODD EVEN	SETUP :REMOTE :STANDARD	58
Handshake	none		none			Hardkey SEL: HANDSHAKE Rollkey: NO ODD EVEN	SETUP :REMOTE :STANDARD	58
Apply	none		none			Softkey: APPLY	SETUP :REMOTE :STANDARD	58
PPP	none		none			Softkey: PPP	SETUP :REMOTE :STANDARD	58
Binary transmission with byte escaping	SYSTem:COMMunicate: SERial:BYTeesc SYSTem:COMMunicate: SERial:BYTeesc?	ON OFF	OFF		105			
Rear panel interfaces								
User-programmable byte at rear-panel connector	OUTPut:BITaux[1 2 3 4 5 6 7 8]:[STATE] OUTPut:BYTaux[:STATE]	ON OFF 0...255 #B0...#B1111111 #Q0...#Q377 #H0...#H0FF	0	no SCPI	47	CTRL	SETUP :AUX	55
Output ports at AUX socket X8	OUTPut:AUXMode	FREQUency ANTCtrl	ANTCtrl	no SCPI	46	Hardkey SEL: OUTPUT Switchover FREQ / ANT+CTRL	SETUP :AUX	55

Function	Remote Control Command	Remote Control Parameter	*RST Value	SCPI Info	Page 4.	Manual Control	Menu	Page 3.
Power source								
Residual capacity BATTERY 1 and BATTERY 2	no command		none			Only display in %	SETUP :POWER	54
Status battery BATTERY 1 and BATTERY 2	no command		none			Only display: IN USE, CHARGING, NOT EQUIPPED, NOT IN USE	SETUP :POWER	54
Remaining time	no command		none			Only display: TIME TO EMPTY	SETUP :POWER	54
Power source	no command		none			Only display: DC X1, DC X2, BATTERY PACK	SETUP :POWER	54
Data formats								
Memory data formats	FORMat:MEMory	ASCIi PACKed	ASCIi	no SCPI	35			
Status register format	FORMat:SREGister	ASCIi BINary HEXadecimal	ASCIi	SCPI	35			
Digital AF	SYSTem:AUDio:REMote:MODE	0 equals OFF 1...12 PCM format 13 GSM 6.10 compression	0	no SCPI	102			
Trace								
Query trace data	TRACe[:DATA]?	MTRACE ITRACE IFPAN SSTART SSTOP	none	SCPI	112			
Set trace data source	TRACe:FEED:CONTRol	MTRACE ITRACE, ALWays SQUelch NEVer	NEVer	SCPI	116			
Set trace data source	TRACe:FEED:CONTRol	IFPAN, ALWays NEVer	NEVer	SCPI	116			
Set trace element	TRACe:VALue	SSTART SSTOP, index, frequency value	none	SCPI	119			
Trace configuration	TRACe:FEED?	MTRACE ITRACE IFPAN SSTART SSTOP	none	SCPI	116			

Function	Remote Control Command	Remote Control Parameter	*RST Value	SCPI Info	Page 4.	Manual Control	Menu	Page 3.
Load trace	TRACe[:DATA]	SSTART SSTOP, frequency value(s)	none	SCPI	112			
Adapt trace length	TRACe:POINts:AUTO?	MTRACE ITRACE IFPAN SSTART SSTOP	none	SCPI	118			
Query trace warning limit	TRACe:LIMit[:UPPer]?	MTRACE ITRACE IFPAN SSTART SSTOP	none	no SCPI	117			
Set trace warning limit	TRACe:LIMit[:UPPer]	MTRACE ITRACE, 0..100[PCT]	50 PCT	no SCPI	117			
Number of trace results	TRACe:POINts?	MTRACE ITRACE SSTART SSTOP	none	SCPI	118			
Trace name	TRACe:CATalog?		none	SCPI	112			
Status reporting - operation								
Main register Condition section	STATus:OPERation:CONDition?		none	SCPI	97			
Main register Enable section	STATus:OPERation:ENABLE	0..32767 #H0..#H7FFF #B0..#B1111111111111111	none	SCPI	97			
Main register Event section	STATus:OPERation[:EVENT]?		none	SCPI	98			
Main register Negative Transition filter	STATus:OPERation:NTRansition	0..32767 #H0..#H7FFF #B0..#B1111111111111111	none	SCPI	98			
Main register Positive Transition filter	STATus:OPERation:PTRansition	0..32767 #H0..#H7FFF #B0..#B1111111111111111	none	SCPI	99			
Set status register to default values	STATus:PRESet		none	SCPI	100			

Function	Remote Control Command	Remote Control Parameter	*RST Value	SCPI Info	Page 4.	Manual Control	Menu	Page 3.
Status reporting - operation - sweep								
Sweep status Condition section	STATus:OPERation:SWEEping:CONDition?		none	SCPI	136			
Sweep status Enable section	STATus:OPERation:SWEEping:ENABle	0..32767 #H0..#H7FFF #B0..#B1111111111111111	none	SCPI	136			
Sweep status Event section	STATus:OPERation:SWEEping[:EVENT]?		none	SCPI	136			
Sweep status Negative Transition filter	STATus:OPERation:SWEEping:NTRansition	0..32767 #H0..#H7FFF #B0..#B1111111111111111	none	SCPI	136			
Sweep status Positive Transition filter	STATus:OPERation:SWEEping:PTRansition	0..32767 #H0..#H7FFF #B0..#B1111111111111111	none	SCPI	136			
Status reporting - extension								
Receiver status Condition section	STATus:EXTension:CONDition?		none		139			
Receiver status Enable section	STATus:EXTension:ENABle	0..32767 #H0..#H7FFF #B0..#B1111111111111111	none	SCPI	139			
Receiver status Event section	STATus:EXTension[:EVENT]?		none	SCPI	139			
Receiver status Negative Transition filter	STATus:EXTension:NTRansition	0..32767 #H0..#H7FFF #B0..#B1111111111111111	none	SCPI	139			
Receiver status Positive Transition filter	STATus:EXTension:PTRansition	0..32767 #H0..#H7FFF #B0..#B1111111111111111	none	SCPI	139			

Function	Remote Control Command	Remote Control Parameter	*RST Value	SCPI Info	Page 4.	Manual Control	Menu	Page 3.
Status reporting - questionable								
Questionable status Condition section	STATus:QUEStionable:CONDition?		none	SCPI	137			
Questionable status Enable section	STATus:QUEStionable:ENABle	0..32767 #H0..#H7FFF #B0..#B1111111111111111	none	SCPI	137			
Questionable status Event section	STATus:QUEStionable[:EVENT]?		none	SCPI	137			
Questionable status Negative Transition filter	STATus:QUEStionable:NTRansition	0..32767 #H0..#H7FFF #B0..#B1111111111111111	none	SCPI	137			
Questionable status Positive Transition filter	STATus:QUEStionable:PTRansition	0..32767 #H0..#H7FFF #B0..#B1111111111111111	none	SCPI	137			
Status reporting - trace								
Trace status Condition section	STATus:TRACe:CONDition?		none	SCPI	138			
Trace status Enable section	STATus:TRACe:ENABle	0..32767 #H0..#H7FFF #B0..#B1111111111111111	none	SCPI	138			
Trace status Event section	STATus:TRACe[:EVENT]?		none	SCPI	138			
Trace status Negative Transition filter	STATus:TRACe:NTRansition	0..32767 #H0..#H7FFF #B0..#B1111111111111111	none	SCPI	138			
Trace status Positive Transition filter	STATus:TRACe:PTRansition	0..32767 #H0..#H7FFF #B0..#B1111111111111111	none	SCPI	138			

