Masterclock®

Multi-functional Master Clocks

MCR-TCG Module

Key Features

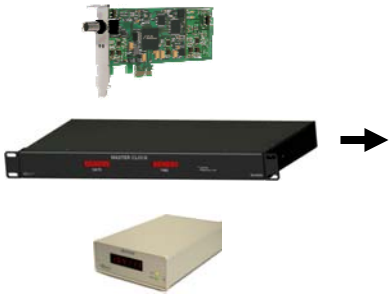
- Generates SMPTE & IRIG time codes
- Software controlled
- Optional Advanced Time Code Generation (see below)
- Locks to most accurate time source (GPS Receiver, Time Code Reader, NTP Client, HSO)
- May be added to **MCR1000**, **MCR5000** or **MCRPCIe**

Additional Option MCR-TCGA

Advanced Time Code Generation Firmware

Provides IRIG-A and IRIG-E waveforms

Masterclock's MCR-TCG (Time Code Generator) is an add-in module option for Master Clock Reference devices which provides generation of SMPTE or IRIG-B time code.
Affordable price and flexible order options make this a popular add-in for providing time code in broadcast, industry, power distribution and monitoring as well as for specialized military applications.
The TCG option is software controlled and locks to the most accurate time reference.
Advanced time code generation is an optional feature to provide IRIG-A and IRIG-E waveform generation.
Each MCR may be ordered with an MCR-TCG module option.



Optional Interconnects:
BNC9 female adapter, Terminal Block adapter (MCR1000)
BNC female, 3 POS Terminal Block (MCR5000, MCRPCIe)

Specifications		Time Codes Generated			Additional Time Codes with Advanced TCG Option			
Format		SMPTE 12M	IRIG-B DCLS	IRIG-B AM	IRIG-A DCLS	IRIG-A AM	IRIG-E DCLS	IRIG-E AM
Rate		24,25, 30 fps NDF	1kHz, 1mS	1kHz, 1mS	10kHz, 0.1mS	10kHz, 0.1mS	100Hz, 10mS	100Hz, 10mS
Output Level @ 600Ω		4Vpp (5.2 dBm)	3 Vp (2.7 dBm)	4Vpp (5.2 dBm)	3 Vp (2.7 dBm)	4Vpp (5.2 dBm)	3 Vp (2.7 dBm)	4Vpp (5.2 dBm)
Output Level @ 50 Ω		3Vpp (13.5dBm)	1.75Vp (8.8dBm)	3Vpp (13.5dBm)	1.75Vp (8.8dBm)	3Vpp (13.5dBm)	1.75Vp (8.8dBm)	3Vpp (13.5dBm)
Mark to Space Ratio		NA	NA	3.3:1	NA	3.3:1	NA	3.3:1
Gain		1	1	1	1	1	1	1
Number of Outputs SE: Single Ended - Unbalanced Differential- Balanced (*excludes model MCR1000)		1SE *1DIFF	1SE *1DIFF	1SE *1DIFF	1SE *1DIFF	1SE *1DIFF	1SE *1DIFF	1SE *1DIFF
Type		NDF	DCLS	AM 1kHz	DCLS	AM 10kHz	DCLS	AM 100Hz
ENCODING		None, Leitch Date, SMPTE 309M	None or IEEE 1344 year or IRIG STD 200-04		None or IEEE 1344 year or IRIG STD 200-04		None or IEEE 1344 year or IRIG STD 200-04	
IRIG Coded Expression IRIG STD 200-04	0 BCD_{TOY}, CF,SBS	NA	B000	B120	A000	A130	E000	E110
	1 BCD_{TOY}, CF	NA	B001	B121	A001	A131	E001	E111
	2 BCD_{TOY}	NA	B002	B122	A002	A132	E002	E112
	3 BCD_{TOY},SBS	NA	B003	B123	A003	A133	E003	E113
	4 BCD_{TOY}, BCD_{Year}, CF,SBS (IEEE-1344 –1995 Encoding)	NA	B004	B124	A004	A134	E004	E114
	5 BCD_{TOY}, BCD_{Year}, CF	NA	B005	B125	A005	A135	E005	E115
	6 BCD_{TOY}, BCD_{Year},	NA	B006	B126	A006	A136	E006	E116
	7 BCD_{TOY}, BCD_{Year}, SBS	NA	B007	B127	A007	A137	E007	E117

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