

TFI-7



HDTV / SDTV FORMAT IDENTIFIER

INSTRUCTION BOOK
IB643301

TFI-7 HDTV / SDTV FORMAT IDENTIFIER

DESCRIPTION

DISPLAY FORMATS

INPUT SIGNALS AND CONNECTORS

CARE AND MAINTENANCE

BATTERIES

ENCLOSURE

AUXILIARY EQUIPMENT

DESCRIPTION:

The TFI-7 is a hand-held meter used to identify the picture format of any HDTV, EDTV and SDTV video signal. With the push of a button this pocket sized hand-held meter measures and displays the video format of component (YPbPr), (RGB), composite (CVBS) and S-VIDEO (YC) video inputs. Simply connect a video source or any sync source to the input connector and push the button to measure the format. This can also be used with any black level sync output source to measure the output format of other types of signals. The display for progressive "p" types of formats will indicate with a solid blue LED next to the printed format. All interlace types of formats will display a fast flashing LED to visually indicate that an interlace signal is being received. The 1080PsF signal will indicate a split field as an interlace signal.

DISPLAY FORMATS:

The TFI-7 meter measures and displays the following formats.

HDTV		EDTV		SDTV	
1080i	(SMPTE 274M)	480p	(ITU-R BT.1358)	NTSC	(SMPTE 170M)
1080p	(SMPTE 274M)	576p	(ITU-R BT.1358)	PAL	(ITU-R BT.470)
1080PsF	(SMPTE RP 211)			480i	(SMPTE 267M)
720p	(SMPTE 296M)			576i	(ITU-R BT.601)

* 1080PsF is a Progressive Segmented Frame video signal and reads as 1080i. See the note on last page.

INPUT SIGNALS AND CONNECTORS:

The meter is equipped with three input connectors, a BNC female, an RCA female, and a female S-VIDEO type connector to input the video signal.

The BNC type connector is used to input CVBS (base-band composite) video signals. It can also be used to input YPbPr signals by connecting to the "Y" channel that has the sync signal on it. Only the channel that has the sync signal on it should be connected for proper operation.

The RCA type connector is used for RGB signals. The RGB signal format is measured using one of the three channels, the Chroma/Sync channel, normally the "G" or Green with Sync or any channel can be measured as long as it has the synchronization signal on it.

The S-VIDEO connector is used to input (Y/C) S-VIDEO sources for measurement.

INPUT SIGNALS AND CONNECTORS: (cont.)

You can connect any video source with a synchronization signal to any one of the connectors and read the format of that video signal. So if you have a CVBS signal on an RCA connector or an S-VIDEO signal using two BNC connectors or any other mating of connectors, you can simply connect whichever connector you happen to have to the meter and measure the format of your video.

Do not use more than one connector at a time, as this would cause cross talk between signal connectors and double termination of the video sources will prevent the meter from reading correctly.

BATTERIES:

A battery compartment door allows easy access to the 9 Volt battery that powers the device. One alkaline 9 Volt "transistor" battery is used. If the unit will not power up the battery must be replaced by a fresh 9 Volt battery.

The battery is located in the case with access provided by a sliding plastic cover plate that has an arrow printed on it. Slide in the direction of the arrow to open. When replacing the cover, place it flat into the grooves so that both ends engage when closing.

ENCLOSURE:

The comfort grip hand-held case is made of flame retardant ABS plastic with a flame rating of 94-5VA. The meter comes with an impact resistant rubber boot to protect it during daily use.

CARE AND MAINTENANCE:

No routine maintenance or test procedures are required other than battery replacement. Attempts at field repair or adjustment will void the warranty.

The TFI-7 is a precision measuring instrument and should be treated accordingly. While it can withstand ordinary everyday indoor use, it should not be left outside in the rain or otherwise mistreated. It is not waterproof. The battery should be removed if it is placed into storage to prevent leakage of corrosive fluids from batteries as they discharge and age.

CARE AND MAINTENANCE: (cont.)

Replace batteries at least once a year even if ordinary use does not discharge the battery because old batteries may leak and cause corrosion damage.

If the TFI-7 fails to operate even after battery replacement, or does not read a known video signal correctly, call the factory for a Return Authorization Number and return it to the factory for repair.

AUXILIARY EQUIPMENT:

The MC1, MC2, and MC3 are Protective Carry Cases to house and protect the TFI-7 and your other test meters while being transported. These are very rugged water resistant ABS cases with foam-lined interiors suitable for transporting this meter and other test equipment. You can order these carry cases as an option.



* 1080PsF is a high definition video format that has 1080 lines of vertical resolution using a Progressive Segmented Frame. The frame is sub-divided into two fields. One field is for the odd numbered lines and the other is for the even numbered lines. This format appears like an interlaced 1080i signal and this meter reads it as 1080i.