REV.	DESCRIPTION	DRAWN / APPD.	DATE / DATE

1a. Data Acquisition Cable Assy: (Black Box Assy. CBPS 51737) 42 each
1 12 Pair 24 AWG shielded cable (Belden type 9734 computer cable)
2 Connectors: AMP DB25 connector with metal shell, one end pins the other sockets
3 Signal: DC to 1.25MHz. (a detector electronics signal with a 280nSec rise time)
_/‾_ or \ Integrated Pulse
4 Length: 50 feet

1b. Data Acquisition Cable Assy: (Black Box Assy. CBPS 51737) 42 each
1 12 Pair 24 AWG shielded cable (Belden type 9734 computer cable)
2 Connectors: AMP DB25 connector with metal shell, both ends sockets
3 Signal: DC to 1.25MHz. (a detector electronics signal with a 280nSec rise time)
_/‾_ or \ Integrated Pulse
4 Length: 50 feet

1c. 48 Connectors: (Spectrum 56-725-002) mounted on 24 inch by 12 inch brass plate in turn mounted in wall of RF enclosure. Pins of connectors inside RF enclosure, sockets outside

2a. DC Power Cable Assy: 4 each
1 6 conductors of 8 AWG (Belden 9908, 84 #27 Tinned CU, Nom PVC Insulation)
2 Connectors: Amphenol Model #'s: 97-3102A-24-10xx, 97-3101A-24-10xx
3 DC voltages: +15V (1A), +15V (15A), -15V (15A)
4 Length: 25 feet or 35 feet, dependent upon power supply rack location

2b. DC Power Cable Assy: 4 each
1 6 conductors of 8 AWG (Belden 9908, 84 #27 Tinned CU, Nom PVC Insulation)
2 Connectors: Amphenol Model #'s: 97-3102A-24-10xx, 97-3101A-24-10xx
3 DC voltages: +5V (3A), +15V (15A), -15V (15A)
4 Length: 25 feet or 35 feet, dependent upon power supply rack location

3. DC Voltage/Sense & Current Monitor Cable: 4 each
1 18 Pair 24 AWG shielded cable (Belden type 8118)
2 Connectors: 8 amp type 205168-1, DB37 connector with metal shield
3 DC sense voltages of 5, +15, -15, and current monitoring signals of <= +150mV
4 Length: 25 feet or 35 feet, dependent upon power supply rack location

4. Detector Cable Assy: (Black Box Assy. CBCC31212) 42 each
1 25 pair 24 AWG shielded cable (Belden 9995 Low voltage computer cable)
2 Connectors: AMP DB50 connector with metal shell
3a Detector output: DC to 3.5MHz. _/\ Integrated spike with rise time <= 100nSec
3b Detector input: DC bias of +/-5V
4 Length: 3 feet

5. Same as 1 above except 3 feet length 42 each

6. Same as 2a & 2b above except 3 feet length 4 each

7. Same as 3 above except 3 feet length 4 each

8. Computer to GPIB Interface Cable:
1 Cable E57891 Type CLZ (Black Box EXN□2MIEEE-488 Cable) 1C/24AWG & 22C/26 AWG
2 Connectors: AMP TYPE IEEE-488
3 Signal: Data & Address Pulses
4 Length: 10 feet

9. GPIP Interface to FE Crates and DAQ Crates:
1 Cable Belden T9M28364 Mass Term Cable, E34972 64C28 Shielded
2 Connectors: Panduit 120-964-455
3 Signal: Data & Address Pulses
4 Length: 6 feet

10. Fibre □ptic Cable:
1
2
3 Signal: Data & Address Pulses
4 Length: 50 feet

11. Stripline Cable:
1
2
3a Detector output: DC to 3.5MHz. Integrated spike with rise time <= 100nSec
3b Detector input: DC bias of +/-5V
4 Length: 10 feet

12. Muon Veto Cables - Signal:
1 Cable: RG58
2 Connectors: BNC
3 Signal: <5V, 100nSec pulse
4 Length: 80 feet

13. Muon Veto Cables - High voltage:
1 Cable: RG59
2 Connectors: SHV
3 Signal: <2500VDC, <2mA
4 Length: 80 feet

14a. Cryogenic Data Acquisition Cable Assy: (Inside the RFI/EMI Enclosure) 42 each
1 12 Pair 24 AWG shielded cable (Belden type 9734 computer cable)
2 Connectors: AMP DB25 connector with metal shell, one end pins the other sockets
3 Signal: DC to 1KHz
4 Length: ?? feet

14b. Cryogenic Data Acquisition Cable Assy: (□utside the RFI/EMI Enclosure) 42 each
1 12 Pair 24 AWG shielded cable (Belden type 9734 computer cable)
2 Connectors: AMP DB25 connector with metal shell, one end pins the other sockets
3 Signal: DC to 1kHz. (a detector electronics signal with a 280nSec rise time)
4 Length: ?? feet

14c. Cryogenic Data Acquisition Cable Assy: (RFI/EMI Enclosure Filter) 14 & Plus 6 spares
1 See Fermilab Drawing XXXX-MD-387303 for details
2 Signal: DC to 1kHz

15a. Scintillation Calibration Fibers: 60 & Plus 40 spares
1 Cable: # conductors (Mfg. Part #???)
2 Connectors: Mfg. Part #???
3 Length: 50 feet

15b. Steel Nipple (Mounted on 12c.)
1 1" Dia. X 12" long (Mfg. Part #???)

16a. RTF Crate DC Power Cable Assy: (Electronics Room) 4 required
1 6 conductors of 8 AWG (Belden 9908, 84 #27 Tinned CU, Nom PVC Insulation)
2 Connectors: Amphenol Model #'s: 97-3102A-24-10xx, 324045 connected to filter
3 DC voltages: +15V (15mA), +15V (15A), -15V (15A)
4 Length: 8 feet

16b. RTF Crate DC Power Cable Assy: (Electronics Room) 4 required
1 6 conductors of 8 AWG (Belden 9908, 84 #27 Tinned CU, Nom PVC Insulation)
2 Connectors: Amphenol Model #'s: 97-3102A-24-10xx, 324045 connected to filter
3 DC voltages: +15V (11A), +15V (15A), -15V (15A)
4 Length: 8 feet

17. RTF Crate DC Voltage Current Sense Cable: (Electronics Room) 4 required
1 18 Pair 24 AWG shielded cable (Belden type 8118)
2 Connectors: AMP DB50 connector with metal shell
3 Signal: DC to 1kHz
4 Length: 8 feet

18. RTF Backplane to Slow ADC Cable: (Electronics Room) 16 required
1 96 Cond 30AWG (Pancon #099F30V96CR or ERNI #913049)
2 Connectors: Ribbon cable connector (ERNI #913031 or ITW/Pancon 120-96435F)
3 Signal:
4 Length: 8 feet

19. RTF Scaler Cable: (Electronics Room) 8 required
1 34 Cond 30AWG (3M Part #3365/34 or Spectra-Strip #843-191-2801-034)
2 Connectors: AMP Ribbon cable connector (AMP #746288-8) w/strain relief (AMP #499252-8)
3 Signal: DC to 1kHz
4 Length: 8 feet

20. RTF front panel to Fast ADC's Cable: (Electronics Room) 42 required
1 6 Cond flat coax cable, 50ohm (AMP #137131-1)
2 Connectors: (AMP #226298-6 one end & lemo coax (LEM□ #FFA.00.250.CTA27) the other end
3 Signal: DC to 1kHz
4 Length: 4 feet

21. RTF Crate Left and Right Trigger Conditioner Backplane Cable: (Electronics Room) 8 required
1 50 Cond 30AWG (3M Part #3365/50 or Spectra-Strip #843-191-2801-050)
2 Connectors: AMP D-Sub (AMP #746789-1) one end (AMP #1-746288-0) w/strain relief (AMP #499252-4) the other end
3 Signal: DC to 1kHz
4 Length: 4 inches

NOTE: THIS INFORMATION RELATES TO
DRAWINGS #XXXX-EE-387319-1
& #XXXX-EE-387319-3

ORIGINATOR	V. JOHNSON	5/29/98	CHECKED	
DRAWN	N. CUNY	5/29/98	APPROVED	

FERMI NATIONAL ACCELERATOR LABORATORY
UNITED STATES DEPARTMENT OF ENERGY

CRYOGENIC DARK MATTER
SEARCH CABLEING
SCHEMATIC DIAGRAM

SCALE	SOFTWARE	DRAWING NUMBER	REV.
NONE	AUTOCAD	XXXX-EE-387319-2	